Nebraska Department of Environmental Quality

Certification that Nebraska's State Implementation Plan (SIP) Meets the Infrastructure SIP Requirements for the 2012 Annual Fine Particulate Matter (PM2.5) National Ambient Air Quality Standard (NAAQS) as Detailed in Section 110(a)(2) of the Federal Clean Air Act (CAA) as Amended in 1990

Applicable Clean Air Act Section	**State Implementation Plan Requirement**	**Nebraska Evidence of Compliance**
§110(a)(2)	*Each implementation plan submitted by a state under this chapter shall be adopted by the State after reasonable notice and public hearing.* *Each plan shall:*	The Nebraska Department of Environmental Quality (NDEQ) published this infrastructure SIP on its website for 30 days to solicit comment. The NDEQ also held a public hearing on December XX, 2015. An affidavit is attached along with the notice (Attachment 1).
§110 (a)(2)(A)	*include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Act;*	Section 81-1504 of the Nebraska Environmental Protection Act (NEPA; Attachment 2) specifies that the NDEQ has the power and duty to develop programs for the prevention, control, and abatement of new and existing sources of air pollution. Section 81-1505 specifies that the Nebraska Environmental Quality Council (EQC) is charged with the adoption and promulgation of rules and regulations which set air quality standards within the state. The 2012 annual PM2.5 standards specified in 40 CFR Part

		50.18 was adopted into Nebraska Administrative Code Title 129, Chapter 4, section 001.02 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp). These changes in Title 129 were submitted as a SIP revision to EPA Region VII on February 24, 2014 (Attachment 3). On November 6, 2013, Governor Heineman submitted to EPA Region VII, a designation recommendation of "attainment/unclassifiable" for the entire state of Nebraska (Attachment 4). On August 19, 2014, Governor Heineman received a letter from the Region VII administrator, Karl Brooks (Attachment 5), notifying the Governor of his decision to designate all areas of Nebraska as "attainment/unclassifiable." Provisions under Title 129, Chapter 17, section 007 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) specify that the Department requires sufficient information in construction permit applications to determine if new or modified sources will interfere directly or indirectly with attainment or maintenance of National Primary or Secondary Ambient Air Quality Standards. Nebraska adopted the appropriate significance thresholds for PM2.5 (10 tons per year of direct emissions; 40 tons per year of sulfur dioxide emissions; 40 tons per year of nitrogen oxide emissions) in Title 129, Chapter 19, section 010.06 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp).
§110 (a)(2)(B)	*provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to-* *(i) monitor, compile, and analyze data on ambient*	Nebraska complies with 40 CFR Part 50, Appendix L with regards to the appropriate regulatory monitoring, compiling, and analysis of data on ambient air quality, relative to the 2012 PM 2.5 NAAQS.

	air quality, and *(ii) upon request, make such information available to the Administrator;*	The ambient air monitoring network plan is developed and administered by the NDEQ Compliance Section. Three agencies are involved in the day-to-day operation of the ambient monitoring network: NDEQ, Lincoln/Lancaster County Health Department (LLCHD), and Douglas County Health Department (DCHD). Nebraska currently monitors PM2.5 at seven sites, with one site being the Omaha NCore site. Nebraska does not intend to utilize more monitoring sites unless required under the EPA's implementation strategy. The timely submission of data into the Air Quality System (AQS) database is addressed in Attachment D of the ambient air monitoring network plan (Attachment 6). Sections 81-1527 and 84-712 of NEPA (Attachment 2) identify policies for the availability of records to the general public and specify that the Administrator or Regional Administrator of the Environmental Protection Agency or his or her delegates have availability to inspect the confidential records of the department concerning a given source.
§110 (a)(2)(C)	*include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter;*	Section 81-1504 of NEPA (Attachment 2) details the measures available regarding the enforcement of subparagraph (A). Section 81-1505(12)(a) provides the duty of adopting and promulgating a construction permit program to the EQC that requires the owner or operator of an air contaminant source to obtain a permit prior to construction. Chapter 19 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) specifies the Prevention of Significant Deterioration of Air Quality (PSD) permit program utilized by Nebraska. Chapter 17 of Title 129 details Nebraska's state construction permit program.

		Additionally, Chapter 17, section 013 of Title 129 specifies the requirements for construction or modification of sources in nonattainment areas. At this time, EPA Region VII has designated all areas of Nebraska as "attainment/unclassifiable." Facilities located within Lancaster County are required to obtain construction permits from LLCHD. Facilities within the City limits of Omaha are required to obtain construction permits from Omaha Air Quality Control (OAQC).
§110 (a)(2)(D)	*contain adequate provisions-* *(i) prohibiting, consistent with the provisions of Title I, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will-* *(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or* *(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility,* *(ii) insuring compliance with the applicable requirements of section 126 and 115 (relating to interstate and international pollution abatement);*	Nebraska is currently required to comply with the requirements of the Cross State Air Pollution Rule (CSAPR) which was designed to address earlier versions of the PM2.5 and ozone standards. Nebraska sources subject to that rule have already started to comply effective January 1, 2015. EPA's modeling to support the CSAPR rule showed that Nebraska had a significant contribution, defined by EPA as being more than 0.35 ug/m^3 (relevant to the 2006 24-hr PM2.5 standard), to one monitor in Milwaukee, WI. That monitor was non-attainment for the 2006 24-hr PM2.5 standard of 35 ug/m^3. The Milwaukee linkage was the only linkage for Nebraska under the CSAPR rule. EPA's modeling showed that Nebraska did not contribute significantly to any non-attainment areas for the 2006 annual PM2.5 standard of 15 ug/m^3. Looking at EPA's modeling to support CSAPR in the context of the revised 2012 annual PM2.5 NAAQS standard of 12 ug/m^3, the following can be concluded: • Nebraska does not contribute significantly to any states who EPA has modeled to have monitors with design values above 12 ug/m^3; and

		• Nebraska does not contribute significantly to any areas that EPA has designated as non-attainment for the 2012 PM2.5 annual NAAQS. (Attachment 7) Therefore, at this time, NDEQ asserts that the existing SIP, along with CSAPR, is adequate to assure Nebraska has met its obligations under the "good neighbor" provisions. To address Section 110(a)(2)(D)(i)(II) obligations, Chapter 19 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) contains Nebraska's PSD program. The program ensures that Nebraska does not interfere with measures required by any other state to prevent significant deterioration of air quality, including visibility. Additionally, Chapter 14, Section 010 of Title 129 specifies public participation procedures, as well as the requirement that NDEQ provide notice to any other state or local air quality agencies, regional land use planning agencies, state, federal land managers and Indian governing bodies whose lands may be affected by emissions from any new or modified PSD source.
§110 (a)(2)(E)	*Provide-* *(i) necessary assurances that the State (or, except where the Administrator deems appropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such*	Sections 81-1501 through 81-1507 of NEPA (Attachment 2) allow for adequate personnel, funding, and authority to carry out the approved State Implementation Plan. Section 81-1503 of the Revised Statutes of Nebraska specifies the requirements for the EQC. Section 128 (a)(1) of the Clean Air Act is not applicable in Nebraska as the EQC does not approve permits or enforcement orders. All permits and enforcement orders are issued by the NDEQ Director or their designee. Section 81-1503 (7) of NEPA (Attachment 2) limits the scope of the EQC's authority with regards to the administration of

	implementation plan or portion thereof), *(ii) requirements that the State comply with the requirements respecting State boards under section 128, and* *(iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;*	the NDEQ to submitting a list of candidates to the Governor from which the Governor will select a Director for the NDEQ. Once appointed by the Governor, the Director becomes a contracted state employee and is not accountable to the EQC. Section 128 (a)(2) of the CAA applies to the head of an executive agency with similar powers as a state board. Therefore, the conflict of interest clause in Section 128 (a)(2) is pertinent. The conflict of interest requirements that are applicable to the NDEQ are specified in section 49-1493(13) of the Nebraska Political Accountability and Disclosure Act (Attachment 8) and in Chapter 2 of Title 4, Nebraska Accountability and Disclosure Commission (Attachment 9). The conflict of interest clauses apply to the Director, Deputy Directors, and Air Quality Division Administrator of the NDEQ. Chapter 7 of Title 115, Nebraska Rules of Practice and Procedure (Attachment 10) identifies the process of handling contested case hearings. Contested case hearings are administered by the Director or an appointed Hearing Officer. The EQC is not involved in the process. NDEQ's demonstration of Section 128(a)(2) requirements was covered and accepted in previous infrastructure SIP submissions and has not changed. The NDEQ designates authority through an EPA-approved delegation agreement to the OAQC for the city of Omaha and LLCHD for Lancaster County for permitting and enforcement of SIP requirements. The NDEQ also designates authority to the DCHD for the administration of the air quality monitoring network in Douglas County. These delegations have not

		been changed since the last infrastructure SIP submittal and therefore are not included with this certification.
§110 (a)(2)(F)	*require, as may be prescribed by the Administrator-* *(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,* *(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and* *(iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to the Act, which reports shall be available at reasonable times for public inspection;*	Section 81-1505 (12)(o) of NEPA (Attachment 2) specifies that the EQC shall adopt and promulgate rules and regulations for air pollution control which shall include requirements for owner or operator testing and monitoring of emissions. Chapter 8, section 004 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) requires that each Title V permit specify the necessary methods of testing and requirements concerning the use, maintenance, and installation of monitoring equipment. Chapter 19, section 020 of Title 129 states the requirements for air quality analysis to be conducted by PSD construction permit applicants, including pre-application and post-construction monitoring. 81-1505 (12)(l) of NEPA (Attachment 2) states that the EQC shall adopt provisions for periodic reporting of emissions, and Chapter 6 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) provides the requirements for emissions reporting, including operations that are required to submit reports and the frequency of the reports. 81-1504 (15)(a) of NEPA (Attachment 2) provides NDEQ the authority to require access to existing and available records relating to (i) emissions or discharges which cause or contribute to air, land, or water pollution or (ii) the monitoring of such emissions or discharges. Chapter 35 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) specifies the reporting requirements for excess emissions from any source.

		81-1505 (16) of NEPA (Attachment 2) specifies that the person responsible for operating any air contaminant source of which the rules and regulations require reporting shall make reports available containing information as may be required by the department concerning the quality and quantity of discharges and emissions, location, size, and height of contaminant outlets, processes employed, fuels used, and the nature and time periods or duration of discharges and emissions, and such other information as is relevant to air pollution. Chapter 7, section 004 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) details that emissions data shall not be entitled to confidential protection. Chapter 19, section 024.04 of Title 129 requires that all information that must be maintained by a source for their PSD permit be available to the general public.
§110 (a)(2)(G)	*provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;*	Chapter 38 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) provides for the authority specified in section 303 of the Clean Air Act. Appendix I of Title 129 specifies the actual emergency plan.
§110 (a)(2)(H)	*provide for revision of such plan-* *(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and* *(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it*	Sections 81-1501 through 81-1532 of NEPA (Attachment 2) authorize the EQC to adopt changes to the SIP as necessary. It adopts such changes in accordance with NEPA sections 84-901 through 84-932. EPA has designated all areas of Nebraska as "attainment/unclassifiable" with regards to the 2012 PM2.5 NAAQS, therefore, the NDEQ has not been required to revise the SIP.

	implements or to otherwise comply with any additional requirements established under this Act;	
§110 (a)(2)(I)	*in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D (relating to nonattainment areas);*	Chapter 17, section 013 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) specifies the requirements for construction or modification of sources in nonattainment areas. EPA has designated all areas of Nebraska as "attainment/unclassifiable" with regards to the 2012 PM2.5 NAAQS, therefore, the NDEQ has not been required to revise the SIP.
§110 (a)(2)(J)	*meet the applicable requirements of section 7421 of this title (relating to consultation), section 7427 of this title (relating to public notification), and part C of this subchapter (relating to prevention of significant deterioration of air quality and visibility protection);*	Section 81-1504 (3) of NEPA (Attachment 2) allows the NDEQ to advise, consult, cooperate, and contract with affected groups and political subdivisions, and Section 81-1504 (18) specifies that the NDEQ shall provide consultation to local units of government. Section 81-1504 (6) of NEPA (Attachment 2) states that the NDEQ is to collect and disseminate information and conduct educational and training programs relating to air, water, and land pollution and the prevention, control, and abatement of such pollution. The NDEQ updates the Air Division website, www.deq.ne.gov, with information as needed. The Grants, Planning, and Outreach Unit moderates the Air Quality Listserv which is used to provide regular updates to the regulated community and other interested parties on information and developments relating to air quality compliance. The NDEQ releases an annual report entitled Annual Report to the Legislature, in which Chapter 4 covers the activities of the Air Division (Attachment 11). This report is available to the public from the NDEQ website

		(http://deq.ne.gov/publica.nsf/Pubs.xsp). Chapter 19 of Title 129 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) details Nebraska's PSD program and Chapter 43 contains Nebraska's Visibility Protection regulations. Nebraska also continues to participate in the Central States Regional Air Resources Agencies (CENSARA) consortium. This is a regional group of states who manage air quality resources. They will facilitate working with other regional groups on visibility related matters.
§110 (a)(2)(K)	*provide for-* *(i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and* *(ii) the submission, upon request, of data related to such air quality modeling to the Administrator;*	Title 129, Chapter 17, sections 007-009 and Chapter 19, section 019 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp) detail the modeling requirements for Nebraska's State and Federal Construction Permitting programs, respectively. 81-1527 of NEPA (Attachment 2) identifies policies for the availability of records and specifies that all records shall be available for public inspection except for confidential records. Additionally, the Administrator or Regional Administrator of the Environmental Protection Agency or his or her delegates shall have availability to inspect the confidential records of the department concerning a given source. This includes any data related to air quality modeling.
§110 (a)(2)(L)	*require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover-* *(i) the reasonable costs of reviewing and acting*	The requirement for each major stationary source to pay fees sufficient to cover all reasonable direct and indirect costs of the developing and administering the air permitting program is detailed in Title 129, Chapter 29 (http://deq.ne.gov/RuleAndR.nsf/Title_129.xsp). Section 81-1505.04 of NEPA (Attachment 2) provides the authority for

	upon any application for such a permit, and *(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter V of this chapter; and*	the NDEQ to collect emission fees.
§110 (a)(2)(M)	*provide for consultation and participation by local political subdivisions affected by the plan.*	Section 81-1504 (3) of NEPA (Attachment 2) allows the NDEQ to advise, consult, cooperate, and contract with affected groups and political subdivisions. Section 81-1504 (18) specifies that the NDEQ shall provide technical assistance and consultation to local units of government and encourage them to handle air pollution issues in their jurisdiction.

Public Records

84-712. Public records; free examination; memorandum and abstracts; copies; fees.

(1) Except as otherwise expressly provided by statute, all citizens of this state and all other persons interested in the examination of the public records as defined in section 84-712.01 are hereby fully empowered and authorized to (a) examine such records, and make memoranda, copies using their own copying or photocopying equipment in accordance with subsection (2) of this section, and abstracts therefrom, all free of charge, during the hours the respective offices may be kept open for the ordinary transaction of business and (b) except if federal copyright law otherwise provides, obtain copies of public records in accordance with subsection (3) of this section during the hours the respective offices may be kept open for the ordinary transaction of business.

(2) Copies made by citizens or other persons using their own copying or photocopying equipment pursuant to subdivision (1)(a) of this section shall be made on the premises of the custodian of the public record or at a location mutually agreed to by the requester and the custodian.

(3)(a) Copies may be obtained pursuant to subdivision (1)(b) of this section only if the custodian has copying equipment reasonably available. Such copies may be obtained in any form designated by the requester in which the public record is maintained or produced, including, but not limited to, printouts, electronic data, discs, tapes, and photocopies. This section shall not be construed to require a custodian to copy any public record that is available to the requester on the custodian's web site on the Internet. The custodian of the public record is required to provide the location of the public record on the Internet to the requester. If the requester does not have reasonable access to the Internet due to lack of computer, lack of Internet availability, or inability to use a computer or the Internet, the custodian shall produce copies for the requester.

(b) Except as otherwise provided by statute, the public body, public entity, or public official which is the custodian of a public record may charge a fee for providing copies of such public record pursuant to subdivision (1)(b) of this section, which fee shall not exceed the actual added cost of making the copies available. For purposes of this subdivision, (i) for photocopies, the actual added cost of making the copies available shall not exceed the amount of the reasonably calculated actual added cost of the photocopies, which may include a reasonably apportioned cost of the supplies, such as paper, toner, and equipment, used in preparing the copies, as well as any additional payment obligation of the custodian for time of contractors necessarily incurred to comply with the request for copies, (ii) for printouts of computerized data on paper, the actual added cost of making the copies available shall include the reasonably calculated actual added cost of computer run time and the cost of materials for making the copy, and (iii) for electronic data, the actual added cost of making the copies available shall include the reasonably calculated actual added cost of the computer run time, any necessary analysis and programming by the public body, public entity, public official, or third-party information technology services company contracted to provide computer services to the public body, public entity, or public official, and the production of the report in the form furnished to the requester.

(c) The actual added cost used as the basis for the calculation of a fee for records shall not include any charge for the existing salary or pay obligation to the public officers or employees with respect to the first four cumulative hours of searching, identifying, physically redacting, or copying. A special service charge reflecting the calculated labor cost may be included in the fee for time required in excess of four cumulative hours, since that large a request may cause some delay or disruption of the other responsibilities of the custodian's office, except that the fee for records shall not include any charge for the services of an attorney to review the requested public records seeking a legal basis to withhold the public records from the public.

(d) State agencies which provide electronic access to public records through a portal established under section 84-1204 shall obtain approval of their proposed reasonable fees for such records pursuant

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to sections 84-1205.02 and 84-1205.03, if applicable, and the actual added cost of making the copies available may include the approved fee for the portal.

(e) This section shall not be construed to require a public body or custodian of a public record to produce or generate any public record in a new or different form or format modified from that of the original public record.

(f) If copies requested in accordance with subdivision (1)(b) of this section are estimated by the custodian of such public records to cost more than fifty dollars, the custodian may require the requester to furnish a deposit prior to fulfilling such request.

(4) Upon receipt of a written request for access to or copies of a public record, the custodian of such record shall provide to the requester as soon as is practicable and without delay, but not more than four business days after actual receipt of the request, an estimate of the expected cost of the copies and either (a) access to or, if copying equipment is reasonably available, copies of the public record, (b) if there is a legal basis for denial of access or copies, a written denial of the request together with the information specified in section 84-712.04, or (c) if the entire request cannot with reasonable good faith efforts be fulfilled within four business days after actual receipt of the request due to the significant difficulty or the extensiveness of the request, a written explanation, including the earliest practicable date for fulfilling the request, an estimate of the expected cost of any copies, and an opportunity for the requester to modify or prioritize the items within the request. The requester shall have ten business days to review the estimated costs, including any special service charge, and request the custodian to fulfill the original request, negotiate with the custodian to narrow or simplify the request, or withdraw the request. If the requester does not respond to the custodian within ten business days, the custodian shall not proceed to fulfill the request. The four business days shall be computed by excluding the day the request is received, after which the designated period of time begins to run. Business day does not include a Saturday, a Sunday, or a day during which the offices of the custodian of the public records are closed.

Source:R.S.1866, c. 44, § 1, p. 297; R.S.1913, § 5595; C.S.1922, § 4902; Laws 1925, c. 146, § 1, p. 381; Laws 1927, c. 193, § 1, p. 551; C.S.1929, § 84-712; R.S.1943, § 84-712; Laws 1961, c. 454, § 3, p. 1383; Laws 1979, LB 86, § 1; Laws 2000, LB 628, § 1; Laws 2012, LB719, § 6; Laws 2013, LB363, § 1.

84-712.01. Public records; right of citizens; full access; fee authorized.

(1) Except when any other statute expressly provides that particular information or records shall not be made public, public records shall include all records and documents, regardless of physical form, of or belonging to this state, any county, city, village, political subdivision, or tax-supported district in this state, or any agency, branch, department, board, bureau, commission, council, subunit, or committee of any of the foregoing. Data which is a public record in its original form shall remain a public record when maintained in computer files.

(2) When a custodian of a public record of a county provides to a member of the public, upon request, a copy of the public record by transmitting it from a modem to an outside modem, a reasonable fee may be charged for such specialized service. Such fee may include a reasonable amount representing a portion of the amortization of the cost of computer equipment, including software, necessarily added in order to provide such specialized service. This subsection shall not be construed to require a governmental entity to acquire computer capability to generate public records in a new or different form when that new form would require additional computer equipment or software not already possessed by the governmental entity.

(3) Sections 84-712 to 84-712.03 shall be liberally construed whenever any state, county, or political subdivision fiscal records, audit, warrant, voucher, invoice, purchase order, requisition, payroll, check, receipt, or other record of receipt, cash, or expenditure involving public funds is involved in order that the

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citizens of this state shall have the full right to know of and have full access to information on the public finances of the government and the public bodies and entities created to serve them.

Source: Laws 1961, c. 454, § 2, p. 1383; Laws 1979, LB 86, § 2; Laws 1994, LB 1275, § 12; Laws 2000, LB 628, § 2.

84-712.02. Public records; claimants before United States Department of Veterans Affairs; certified copies free of charge.

When it is requested by any claimant before the United States Department of Veterans Affairs or his or her agent or attorney that certified copies of any public record be furnished for the proper and effective presentation of any such claim in such department, the officer in charge of such public records shall furnish or cause to be furnished to such claimant or his or her agent or attorney a certified copy thereof free of charge.

Source: Laws 1961, c. 454, § 4, p. 1384; Laws 1991, LB 2, § 30.

84-712.03. Public records; denial of rights; remedies.

(1) Any person denied any rights granted by sections 84-712 to 84-712.03 may elect to:

(a) File for speedy relief by a writ of mandamus in the district court within whose jurisdiction the state, county, or political subdivision officer who has custody of the public record can be served; or

(b) Petition the Attorney General to review the matter to determine whether a record may be withheld from public inspection or whether the public body that is custodian of such record has otherwise failed to comply with such sections, including whether the fees estimated or charged by the custodian are actual added costs or special service charges as provided under section 84-712. This determination shall be made within fifteen calendar days after the submission of the petition. If the Attorney General determines that the record may not be withheld or that the public body is otherwise not in compliance, the public body shall be ordered to disclose the record immediately or otherwise comply. If the public body continues to withhold the record or remain in noncompliance, the person seeking disclosure or compliance may (i) bring suit in the trial court of general jurisdiction or (ii) demand in writing that the Attorney General bring suit in the name of the state in the trial court of general jurisdiction for the same purpose. If such demand is made, the Attorney General shall bring suit within fifteen calendar days after its receipt. The requester shall have an absolute right to intervene as a full party in the suit at any time.

(2) In any suit filed under this section, the court has jurisdiction to enjoin the public body from withholding records, to order the disclosure, and to grant such other equitable relief as may be proper. The court shall determine the matter de novo and the burden is on the public body to sustain its action. The court may view the records in controversy in camera before reaching a decision, and in the discretion of the court other persons, including the requester, counsel, and necessary expert witnesses, may be permitted to view the records, subject to necessary protective orders.

(3) Proceedings arising under this section, except as to the cases the court considers of greater importance, shall take precedence on the docket over all other cases and shall be assigned for hearing, trial, or argument at the earliest practicable date and expedited in every way.

Source: Laws 1961, c. 454, § 5, p. 1384; Laws 1977, LB 39, § 316; Laws 1979, LB 86, § 3; Laws 2000, LB 628, § 3; Laws 2013, LB363, § 2.

84-712.04. Public records; denial of rights; public body; provide information.

(1) Any person denied any rights granted by sections 84-712 to 84-712.03 shall receive in written form from the public body which denied the request for records at least the following information:

(a) A description of the contents of the records withheld and a statement of the specific reasons for the denial, correlating specific portions of the records to specific reasons for the denial, including

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citations to the particular statute and subsection thereof expressly providing the exception under section 84-712.01 relied on as authority for the denial;

(b) The name of the public official or employee responsible for the decision to deny the request; and

(c) Notification to the requester of any administrative or judicial right of review under section 84-712.03.

(2) Each public body shall maintain a file of all letters of denial of requests for records. This file shall be made available to any person on request.

Source: Laws 1979, LB 86, § 4; Laws 1983, LB 3, § 1.

84-712.05. Records which may be withheld from the public; enumerated.

The following records, unless publicly disclosed in an open court, open administrative proceeding, or open meeting or disclosed by a public entity pursuant to its duties, may be withheld from the public by the lawful custodian of the records:

(1) Personal information in records regarding a student, prospective student, or former student of any educational institution or exempt school that has effectuated an election not to meet state approval or accreditation requirements pursuant to section 79-1601 when such records are maintained by and in the possession of a public entity, other than routine directory information specified and made public consistent with 20 U.S.C. 1232g, as such section existed on February 1, 2013, and regulations adopted thereunder;

(2) Medical records, other than records of births and deaths and except as provided in subdivision (5) of this section, in any form concerning any person; records of elections filed under section 44-2821; and patient safety work product under the Patient Safety Improvement Act;

(3) Trade secrets, academic and scientific research work which is in progress and unpublished, and other proprietary or commercial information which if released would give advantage to business competitors and serve no public purpose;

(4) Records which represent the work product of an attorney and the public body involved which are related to preparation for litigation, labor negotiations, or claims made by or against the public body or which are confidential communications as defined in section 27-503;

(5) Records developed or received by law enforcement agencies and other public bodies charged with duties of investigation or examination of persons, institutions, or businesses, when the records constitute a part of the examination, investigation, intelligence information, citizen complaints or inquiries, informant identification, or strategic or tactical information used in law enforcement training, except that this subdivision shall not apply to records so developed or received relating to the presence of and amount or concentration of alcohol or drugs in any body fluid of any person;

(6) Appraisals or appraisal information and negotiation records concerning the purchase or sale, by a public body, of any interest in real or personal property, prior to completion of the purchase or sale;

(7) Personal information in records regarding personnel of public bodies other than salaries and routine directory information;

(8) Information solely pertaining to protection of the security of public property and persons on or within public property, such as specific, unique vulnerability assessments or specific, unique response plans, either of which is intended to prevent or mitigate criminal acts the public disclosure of which would create a substantial likelihood of endangering public safety or property; computer or communications network schema, passwords, and user identification names; guard schedules; lock combinations; or public utility infrastructure specifications or design drawings the public disclosure of which would create a substantial likelihood of endangering public safety or property, unless otherwise provided by state or federal law;

(9) The security standards, procedures, policies, plans, specifications, diagrams, access lists, and other security-related records of the Lottery Division of the Department of Revenue and those persons or entities with which the division has entered into contractual relationships. Nothing in this subdivision shall allow the division to withhold from the public any information relating to amounts paid persons or

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entities with which the division has entered into contractual relationships, amounts of prizes paid, the name of the prize winner, and the city, village, or county where the prize winner resides;

(10) With respect to public utilities and except as provided in sections 43-512.06 and 70-101, personally identified private citizen account payment and customer use information, credit information on others supplied in confidence, and customer lists;

(11) Records or portions of records kept by a publicly funded library which, when examined with or without other records, reveal the identity of any library patron using the library's materials or services;

(12) Correspondence, memoranda, and records of telephone calls related to the performance of duties by a member of the Legislature in whatever form. The lawful custodian of the correspondence, memoranda, and records of telephone calls, upon approval of the Executive Board of the Legislative Council, shall release the correspondence, memoranda, and records of telephone calls which are not designated as sensitive or confidential in nature to any person performing an audit of the Legislature. A member's correspondence, memoranda, and records of confidential telephone calls related to the performance of his or her legislative duties shall only be released to any other person with the explicit approval of the member;

(13) Records or portions of records kept by public bodies which would reveal the location, character, or ownership of any known archaeological, historical, or paleontological site in Nebraska when necessary to protect the site from a reasonably held fear of theft, vandalism, or trespass. This section shall not apply to the release of information for the purpose of scholarly research, examination by other public bodies for the protection of the resource or by recognized tribes, the Unmarked Human Burial Sites and Skeletal Remains Protection Act, or the federal Native American Graves Protection and Repatriation Act;

(14) Records or portions of records kept by public bodies which maintain collections of archaeological, historical, or paleontological significance which reveal the names and addresses of donors of such articles of archaeological, historical, or paleontological significance unless the donor approves disclosure, except as the records or portions thereof may be needed to carry out the purposes of the Unmarked Human Burial Sites and Skeletal Remains Protection Act or the federal Native American Graves Protection and Repatriation Act;

(15) Job application materials submitted by applicants, other than finalists, who have applied for employment by any public body as defined in section 84-1409. For purposes of this subdivision, (a) job application materials means employment applications, resumes, reference letters, and school transcripts and (b) finalist means any applicant (i) who reaches the final pool of applicants, numbering four or more, from which the successful applicant is to be selected, (ii) who is an original applicant when the final pool of applicants numbers less than four, or (iii) who is an original applicant and there are four or fewer original applicants;

(16) Records obtained by the Public Employees Retirement Board pursuant to section 84-1512;

(17) Social security numbers; credit card, charge card, or debit card numbers and expiration dates; and financial account numbers supplied to state and local governments by citizens; and

(18) Information exchanged between a jurisdictional utility and city pursuant to section 66-1867.

Source: Laws 1979, LB 86, § 5; Laws 1983, LB 108, § 1; Laws 1983, LB 565, § 1; Laws 1993, LB 579, § 6; Laws 1993, LB 590, § 6; Laws 1993, LB 719, § 2; Laws 1994, LB 1061, § 7; Laws 1994, LB 1224, § 88; Laws 1995, LB 343, § 7; Laws 1995, LB 509, § 6; Laws 1999, LB 137, § 1; Laws 2002, LB 276, § 7; Laws 2004, LB 236, § 1; Laws 2004, LB 868, § 3; Laws 2005, LB 361, § 37; Laws 2007, LB389, § 1; Laws 2009, LB188, § 8; Laws 2009, LB658, § 7; Laws 2011, LB230, § 1; Laws 2013, LB410, § 17.

Cross References

- **Patient Safety Improvement Act,** see section 71-8701.
- **Unmarked Human Burial Sites and Skeletal Remains Protection Act,** see section 12-1201.

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84-712.06. Public record; portion provided; when.

Any reasonably segregable public portion of a record shall be provided to the public as a public record upon request after deletion of the portions which may be withheld.

Source: Laws 1979, LB 86, § 6.

84-712.07. Public records; public access; equitable relief; attorney's fees; costs.

The provisions of sections 84-712, 84-712.01, 84-712.03 to 84-712.09, and 84-1413 pertaining to the rights of citizens to access to public records may be enforced by equitable relief, whether or not any other remedy is also available. In any case in which the complainant seeking access has substantially prevailed, the court may assess against the public body which had denied access to their records, reasonable attorney fees and other litigation costs reasonably incurred by the complainant.

Source: Laws 1979, LB 86, § 7.

84-712.08. Records; federal government; exception.

If it is determined by any federal department or agency or other federal source of funds, services, or essential information, that any provision of sections 84-712, 84-712.01, 84-712.03 to 84-712.09, and 84-1413 would cause the denial of any funds, services, or essential information from the United States Government which would otherwise definitely be available to an agency of this state, such provision shall be suspended as to such agency, but only to the extent necessary to prevent denial of such funds, services, or essential information.

Source: Laws 1979, LB 86, § 8.

84-712.09. Violation; penalty.

Any official who shall violate the provisions of sections 84-712, 84-712.01, and 84-712.03 to 84-712.08 shall be subject to removal or impeachment and in addition shall be deemed guilty of a Class III misdemeanor.

Source: Laws 1979, LB 86, § 10.

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Administrative Procedure Act

84-901. Terms, defined.

For purposes of the Administrative Procedure Act:

(1) Agency shall mean each board, commission, department, officer, division, or other administrative office or unit of the state government authorized by law to make rules and regulations, except the Adjutant General's office as provided in Chapter 55, the courts including the Nebraska Workers' Compensation Court, the Commission of Industrial Relations, the Legislature, and the Secretary of State with respect to the duties imposed by the act;

(2) Rule or regulation shall mean any rule, regulation, or standard issued by an agency, including the amendment or repeal thereof whether with or without prior hearing and designed to implement, interpret, or make specific the law enforced or administered by it or governing its organization or procedure. Rule or regulation shall not include (a) rules and regulations concerning the internal management of the agency not affecting private rights, private interests, or procedures available to the public or (b) permits, certificates of public convenience and necessity, franchises, rate orders, and rate tariffs and any rules of interpretation thereof. For purposes of the act, every rule and regulation which prescribes a penalty shall be presumed to have general applicability or to affect private rights and interests;

(3) Contested case shall mean a proceeding before an agency in which the legal rights, duties, or privileges of specific parties are required by law or constitutional right to be determined after an agency hearing;

(4) Ex parte communication shall mean an oral or written communication which is not on the record in a contested case with respect to which reasonable notice to all parties was not given. Filing and notice of filing provided under subdivision (6)(d) of section 84-914 shall not be considered on the record and reasonable notice for purposes of this subdivision. Ex parte communication shall not include:

(a) Communications which do not pertain to the merits of a contested case;

(b) Communications required for the disposition of ex parte matters as authorized by law;

(c) Communications in a ratemaking or rulemaking proceeding; and

(d) Communications to which all parties have given consent; and

(5) Hearing officer shall mean the person or persons conducting a hearing, contested case, or other proceeding pursuant to the act, whether designated as the presiding officer, administrative law judge, or some other title designation.

Source: Laws 1945, c. 255, § 1, p. 795; Laws 1947, c. 350, § 1, p. 1097; Laws 1951, c. 342, § 1, p. 1128; Laws 1959, c. 456, § 1, p. 1510; Laws 1974, LB 819, § 11; Laws 1978, LB 44, § 1; Laws 1981, LB 130, § 1; Laws 1986, LB 992, § 1; Laws 1987, LB 253, § 1; Laws 1994, LB 414, § 135; Laws 1994, LB 446, § 14.

84-901.01. Adoption and promulgation of rules and regulations; time; failure to adopt and promulgate; explanation; contents; hearing by standing committee of the Legislature; effect of legislative changes.

(1) When legislation is enacted requiring the adoption and promulgation of rules and regulations by an agency, such agency shall adopt and promulgate such rules and regulations within one year after the public hearing required under subsection (2) of section 84-907. Such time shall not include the time necessary for submission of the rules and regulations to the Attorney General pursuant to section 84-905.01 or submission of the rules and regulations to the Governor pursuant to section 84-908. Any agency which does not adopt and promulgate such rules and regulations as required by this section shall submit an explanation to the Executive Board of the Legislative Council and the standing committee of the Legislature which has subject matter jurisdiction over the issue involved in the legislation, stating the reasons why it has not adopted such rules and regulations as required by this section, the date by which the agency expects to adopt such rules and regulations, and any suggested statutory changes that may enable the agency to adopt such rules and regulations.

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(2) If such agency has not adopted and promulgated such rules and regulations within three years after the operative or effective date of such enacting legislation, the standing committee of the Legislature which has subject matter jurisdiction over the matters included in the legislation shall hold a public hearing to determine the reason that such rules and regulations have not been enacted.

(3) The changes made to the Administrative Procedure Act by Laws 2011, LB617, shall not affect the validity or effectiveness of a rule or regulation adopted prior to May 25, 2011.

(4) The changes made to this section by Laws 2013, LB242, shall apply to legislation enacted before, on, or after September 6, 2013.

Source: Laws 2011, LB617, § 1; Laws 2012, LB782, § 227; Laws 2013, LB222, § 42; Laws 2013, LB242, § 2.

84-901.02. Repealed. Laws 1986, LB 992, § 11.

84-902. Agency; rules and regulations; certified copies filed with Secretary of State; manner; open to public inspection.

(1) Each agency shall file in the office of the Secretary of State a certified copy of the rules and regulations in force and effect in such agency. The Secretary of State shall keep a permanent file of all such rules and regulations. Such file shall be updated and kept current upon receipt of any rules and regulations adopted, amended, or repealed and filed with the Secretary of State as provided in the Administrative Procedure Act and shall be open to public inspection during regular business hours of his or her office. The Secretary of State, in order to maintain and keep such files current, shall be empowered to require new and amended rules and regulations to be filed as complete file pages and to remove all superseded pages to a separate file.

(2) Rules and regulations filed with the Secretary of State pursuant to the Administrative Procedure Act shall be filed in the manner and form prescribed by the Secretary of State. The Secretary of State shall issue instructions to all state agencies setting forth the format to be followed by all agencies in submitting rules and regulations to the Secretary of State. Such instructions shall provide for a uniform page size, a generally uniform and clear indexing system, and annotations including designation of enabling legislation and court or agency decisions interpreting the particular rule or regulation. For good cause shown, the Secretary of State may grant exceptions to the uniform page size requirement and the general indexing instructions for any agency.

Source: Laws 1945, c. 255, § 2, p. 795; Laws 1947, c. 350, § 2, p. 1098; Laws 1973, LB 134, § 1; Laws 1974, LB 604, § 1; Laws 1976, LB 615, § 1; Laws 1978, LB 44, § 8; Laws 1986, LB 992, § 2; Laws 1987, LB 253, § 2; Laws 2004, LB 915, § 1.

84-903. Agency; rules and regulations; publish.

Each agency shall cause its rules and regulations to be published in such manner as the agency shall determine to bring, as far as practicable, the existence and scope of the rules and regulations to the attention of all persons affected thereby.

Source: Laws 1945, c. 255, § 3, p. 795; Laws 1987, LB 253, § 3.

84-904. Repealed. Laws 1986, LB 992, § 11.

84-905. Agency; rules and regulations; availability required; price.

Each agency shall make copies of the rules and regulations in force and effect for such agency available to all interested persons on request, at a price fixed to cover costs of publication and mailing, except that any such agency may furnish the same without charge if funds are available. No rule or regulation shall be effective unless copies thereof are available for distribution by the agency to persons requesting the same.

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Source: Laws 1945, c. 255, § 5, p. 795; Laws 1947, c. 350, § 4, p. 1099; Laws 1967, c. 618, § 2, p. 2071; Laws 1969, c. 837, § 2, p. 3161; Laws 1973, LB 134, § 3; Laws 1987, LB 253, § 4.

84-905.01. Rule or regulation; review by Attorney General.

A copy of each amendment or rule or regulation to be adopted under the Administrative Procedure Act, prior to the date of filing with the Secretary of State, shall be submitted to the Attorney General for his or her consideration as to the statutory authority and constitutionality of such amendment or rule or regulation and his or her approval or disapproval thereof, including a determination as to whether or not the rule or regulation submitted is substantially different from the published proposed rule or regulation. If the amendment or rule or regulation to be filed is approved as to legality by the Attorney General, he or she shall so indicate with his or her stamp of approval which shall be dated and signed.

Source: Laws 1947, c. 350, § 5, p. 1099; Laws 1969, c. 837, § 3, p. 3161; Laws 1974, LB 604, § 3; Laws 1986, LB 992, § 3; Laws 1987, LB 253, § 5; Laws 1994, LB 446, § 17.

84-906. Rule or regulation; when valid; presumption; limitation of action.

(1) No rule or regulation of any agency shall be valid as against any person until five days after such rule or regulation has been filed with the Secretary of State. No rule or regulation required under the Administrative Procedure Act to be filed with the Secretary of State shall remain valid as against any person until the certified copy of the rule or regulation has been so filed on the date designated and in the form prescribed by the Secretary of State. The filing of any rule or regulation shall give rise to a rebuttable presumption that it was duly and legally adopted.

(2) A rule or regulation adopted after August 1, 1994, shall be invalid unless adopted in substantial compliance with the provisions of the act, except that inadvertent failure to mail a notice of the proposed rule or regulation to any person shall not invalidate a rule or regulation.

(3) Any action to contest the validity of a rule or regulation on the grounds of its noncompliance with any provision of the act shall be commenced within four years after the effective date of the rule or regulation.

(4) The changes made to the act by Laws 1994, LB 446, shall not affect the validity or effectiveness of a rule or regulation adopted prior to August 1, 1994, or noticed for hearing prior to such date.

(5) The changes made to the act by Laws 2005, LB 373, shall not affect the validity or effectiveness of a rule or regulation adopted prior to October 1, 2005, or noticed for hearing prior to such date.

Source: Laws 1945, c. 255, § 6, p. 796; Laws 1947, c. 350, § 6, p. 1100; Laws 1973, LB 134, § 4;Laws 1986, LB 992, § 4; Laws 1987, LB 253, § 6; Laws 1994, LB 446, § 18; Laws 2005, LB 373, § 2.

84-906.01. Official rulemaking or regulationmaking record; agency maintain; contents.

(1) An agency shall maintain an official rulemaking or regulationmaking record for each rule or regulation it adopts or proposes by publication of a notice. The record and materials incorporated by reference shall be available for public inspection and shall be maintained for at least four years after the effective date of the rule or regulation.

(2) The record shall contain:

(a) Copies of all publications with respect to the rule or regulation;

(b) Copies of any portions of the public rulemaking or regulationmaking docket containing entries relating to the rule or regulation;

(c) All written petitions, requests, submissions, and comments received by the agency and all other written materials prepared by or for the agency in connection with the proposal or adoption of the rule or regulation;

(d) Any official transcript of oral presentations made in a proceeding about the proposed rule or regulation or, if not transcribed, any tape recording or stenographic record of those presentations, and any memorandum prepared by the hearing officer summarizing the contents of those presentations;

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(e) A copy of the rule or regulation and the concise explanatory statement filed with the Secretary of State;

(f) All petitions for adoption of, exceptions to, amendments of, or repeal or suspension of, the rule or regulation;

(g) A copy of any comments on the rule or regulation filed by a legislative committee; and

(h) A description, including an estimated quantification, of the fiscal impact on state agencies, political subdivisions, and regulated persons.

(3) Upon judicial review, the record required by this section shall constitute the official agency rulemaking or regulationmaking record with respect to a rule or regulation. Except as provided in section 84-907.04 or as otherwise required by law, the agency rulemaking or regulationmaking record need not constitute the exclusive basis for agency action on that rule or regulation or for judicial review thereof.

Source: Laws 1994, LB 446, § 19; Laws 2005, LB 373, § 3.

84-906.02. Public comments; notice; agency; powers.

In addition to seeking information by other methods and before publication of a notice under section 84-907, an agency is encouraged to and may solicit comments from the public on a subject matter of possible rule or regulation making by causing notice to be published in a newspaper of general circulation of the subject matter and indicating where, when, and how persons may comment.

Source: Laws 1994, LB 446, § 20.

84-906.03. Secretary of State; duties.

It shall be the duty of the Secretary of State:

(1) To establish and cause to be compiled, indexed by subject, and published a codification system for all rules and regulations filed to be designated the Nebraska Administrative Code.

(2) To cause the Nebraska Administrative Code to be computerized to facilitate agencies in revision of their rules and regulations and provide research capabilities; and

(3) To distribute a current copy of existing rules and regulations as accepted by him or her as filed to the State Library and to each county law library of the State of Nebraska making a request for a copy of such rules and regulations; to distribute, on a regular basis, copies of all modifications or amendments to agency rules and regulations as accepted by him or her as filed to the State Library and to each county law library of the State of Nebraska which requests copies of all modifications or amendments; to distribute at least four current copies of any rules and regulations accepted by him or her as filed to the Nebraska Publications Clearinghouse to meet the needs of the Nebraska publications depository system; to distribute on a regular basis at least four copies of all modifications or amendments to agency rules and regulations accepted by him or her as filed to the Nebraska Publications Clearinghouse to meet the needs of the Nebraska publications depository system; to distribute a current copy of any existing rules and regulations as accepted by him or her as filed to all interested persons on request at a price fixed to cover costs of printing, handling, and mailing; and to distribute, on a regular basis, copies of any or all modifications or amendments to agency rules and regulations as accepted by him or her as filed to all interested persons on request at a price fixed to cover costs of printing, handling, and mailing.

Source: Laws 1973, LB 134, § 6; Laws 1975, LB 267, § 1; Laws 1980, LB 712, § 1; Laws 1981, LB 130, § 2; Laws 1982, LB 784, § 1; Laws 1986, LB 992, § 5.

84-906.04. Secretary of State; maintain docket for pending proceedings; contents.

(1) The Secretary of State shall maintain a current public rulemaking or regulationmaking docket for each pending rulemaking or regulationmaking proceeding. A rulemaking or regulationmaking proceeding is pending from the time it is commenced by publication of a notice of proposed rule or regulation

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making to the time it is terminated by publication of a notice of termination or the rule or regulation becoming effective.

(2) For each rulemaking or regulationmaking proceeding, the docket shall indicate:

(a) The subject matter of the proposed rule or regulation;

(b) A citation to all published notices relating to the proceeding;

(c) The name and address of agency personnel with whom people may communicate regarding the proposed rule or regulation;

(d) Where written comments on the proposed rule or regulation may be inspected;

(e) The time during which written comments may be made;

(f) The names of persons who have submitted written comments on the proposed rule or regulation;

(g) Where the description of the fiscal impact may be inspected and obtained;

(h) The current status of the proposed rule or regulation and any agency determinations with respect thereto;

(i) Any known timetable for agency decisions or other action in the proceeding;

(j) The date of the rule's or regulation's adoption;

(k) The date of the rule's or regulation's filing, indexing, and publication; and

(l) The operative date of the rule or regulation if such date is later than the effective date prescribed in sections 84-906 and 84-911.

Source: Laws 1994, LB 446, § 16.

84-906.05. Rule or regulation; judicial notice.

(1) Every court of this state may take judicial notice of any rule or regulation that is signed by the Governor and filed with the Secretary of State pursuant to section 84-906.

(2) The court may inform itself of such rules and regulations in such manner as it may deem proper, and the court may call upon counsel to aid it in obtaining such information.

Source: Laws 1974, LB 604, § 5; Laws 1986, LB 992, § 6; Laws 1987, LB 253, § 7; Laws 1999, LB 320, § 1.

84-906.06. Repealed. Laws 1982, LB 784, § 2.

84-907. Rule or regulation; adoption; amendment; repeal; hearing; notice; procedure.

(1) No rule or regulation shall be adopted, amended, or repealed by any agency except after public hearing on the question of adopting, amending, or repealing such rule or regulation. Notice of such hearing shall be given at least thirty days prior thereto to the Secretary of State and by publication in a newspaper having general circulation in the state. All such hearings shall be open to the public.

(2) The public hearing on a rule or regulation that is required to be adopted, amended, or repealed based upon a legislative bill shall be held within twelve months after the effective or operative date of the legislative bill. If there is more than one applicable effective or operative date, the twelve-month period shall be calculated using the latest date. In addition to the requirements of section 84-906.01, draft copies or working copies of all rules and regulations to be adopted, amended, or repealed by any agency shall be available to the public in the office of the Secretary of State at the time of giving notice. The notice shall include: (a) A declaration of availability of such draft or work copies for public examination; (b) a short explanation of the purpose of the proposed rule or regulation or the reason for the amendment or repeal of the rule or regulation; and (c) a description, including an estimated quantification, of the fiscal impact on state agencies, political subdivisions, and persons being regulated or an explanation of where the description of the fiscal impact may be inspected and obtained. No person may challenge the validity of any rule or regulation, the adoption, amendment, or repeal of any rule or regulation, or any determination of the applicability of any rule or regulation on the basis of the explanation or description provided pursuant to subdivisions (b) and (c) of this subsection.

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(3) Any agency adopting, amending, or repealing a rule or regulation may make written application to the Governor who may, upon receipt of a written showing of good cause, waive the notice of public hearing. For purposes of this subsection, good cause shall include, but not be limited to, a showing by the agency that:

(a) Compliance with the requirements of this section would result in extreme hardship on the citizens of this state;

(b) An emergency exists which must be remedied immediately; or

(c) A timely filing or publication of notice of a public hearing or the public hearing was prevented by some unforeseeable event beyond the immediate control of the agency and that the parties affected have not and will not suffer material injury as a result of the agency's action.

(4) Whenever public notice is waived, the agency shall, so far as practicable, give notice to the public of the proposed rule or regulation change and of the rule or regulation as finally adopted or changed.

Source: Laws 1953, c. 359, § 1, p. 1138; Laws 1977, LB 462, § 1; Laws 1978, LB 585, § 1; Laws 1980, LB 846, § 1; Laws 1986, LB 992, § 7; Laws 1987, LB 253, § 8; Laws 1987, LB 487, § 1; Laws 1994, LB 446, § 21; Laws 2005, LB 373, § 4; Laws 2011, LB617, § 2.

84-907.01. Rule or regulation; public hearing; notice to subscribers.

The Secretary of State shall establish and maintain a list of subscribers who wish to receive notice of public hearing on the question of adopting, amending, or repealing any rule or regulation of any agency and shall provide such notice to such subscribers at cost to be assessed against each subscriber.

Source: Laws 1977, LB 462, § 2; Laws 1986, LB 992, § 8; Laws 1987, LB 253, § 9.

84-907.02. Secretary of State; collection and disbursement of funds.

The Secretary of State shall collect payments and make disbursements of such funds as may be necessary to carry out section 84-907.01.

Source: Laws 1977, LB 462, § 3; Laws 1986, LB 992, § 9.

84-907.03. Secretary of State Administration Cash Fund; created; use; investment.

There is hereby created the Secretary of State Administration Cash Fund. The fund shall consist of revenue received to defray costs as authorized in sections 25-3308 and 84-901 to 84-908. The revenue shall be collected by the Secretary of State and remitted to the State Treasurer for credit to the fund. The fund shall be used to (1) offset expenses incurred as a result of sections 84-901 to 84-908, (2) administer the Address Confidentiality Act, (3) administer the Nebraska Uniform Athlete Agents Act, and (4) administer the Nonrecourse Civil Litigation Act.

Any money in the fund available for investment shall be invested by the state investment officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act.

Source: Laws 1994, LB 1194, § 8; Laws 1995, LB 7, § 148; Laws 2003, LB 228, § 15; Laws 2009, LB292, § 20; Laws 2010, LB1094, § 10.

Cross References

- **Address Confidentiality Act,** see section 42-1201.
- **Nebraska Capital Expansion Act,** see section 72-1269.
- **Nebraska State Funds Investment Act,** see section 72-1260.
- **Nebraska Uniform Athlete Agents Act,** see section 48-2601.
- **Nonrecourse Civil Litigation Act,** see section 25-3301.

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84-907.04. Proposed rule or regulation; explanatory statement; contents; use; agency; written report; contents.

(1) At the time an agency finalizes a proposed rule or regulation and prior to submission to the Secretary of State, Attorney General, and Governor, the agency shall attach to the proposed rule or regulation a concise explanatory statement containing:

(a) Its reasons for adopting the rule or regulation;

(b) An indication of any change between the text of the proposed rule or regulation contained or referenced in the published notice and the text of the rule or regulation to be adopted, with the reasons for any change; and

(c) When procedural rules differ from the model rules, the agency's reasons why relevant portions of the model rules were impracticable under the circumstances.

(2) Only the reasons contained in the concise explanatory statement may be used by an agency as justifications for the adoption of the rule or regulation in any proceeding in which its validity is at issue.

(3) The agency shall also attach to the proposed rule or regulation a written report that includes a summary of the testimony offered at the public hearing and that lists any specific issues or questions that were presented by individuals or representatives of organizations at the hearing or in written testimony submitted as part of the public hearing process. The report shall also include a response from the agency proposing the regulatory change to the questions and issues that were presented by individuals or representatives of organizations at the hearing or in written testimony submitted as part of the public hearing process. The written report shall also be submitted to the Executive Board of the Legislative Council. The chairperson of the executive board or committee staff member of the executive board shall refer each written report received pursuant to this subsection for review (a) to the chairperson of the standing committee of the Legislature which has subject matter jurisdiction over the issue involved in the rule or regulation or which has traditionally handled the issue and (b) if practicable, to the member of the Legislature who was the primary sponsor of a legislative bill that granted the agency the rulemaking authority if the member is still serving or, if the legislative bill was amended to include the rulemaking authority, to the member of the Legislature who was the primary sponsor of the amendment that granted rulemaking authority if the member is still serving.

Source: Laws 1994, LB 446, § 22; Laws 2014, LB719, § 1.

Effective Date: July 18, 2014

84-907.05. Proposed rule or regulation; substantially different from published notice; considerations; limitation on agency.

(1) An agency may not adopt a rule or regulation that is substantially different from the proposed rule or regulation contained or referenced in the published notice. An agency may terminate a rulemaking or regulationmaking proceeding and commence a new rulemaking or regulationmaking proceeding for the purpose of adopting a substantially different rule or regulation.

(2) In determining whether a rule or regulation is substantially different from the proposed rule or regulation contained or referenced in the published notice, the following shall be considered:

(a) The extent to which all persons affected by the adopted rule or regulation should have had adequate notice from the published notice and the proposed rule or regulation contained or referenced in the published notice that their interests would be affected;

(b) The extent to which the subject matter of the adopted rule or regulation or the issues determined by the rule or regulation are different from the subject matter or issues involved in the proposed rule or regulation contained or referenced in the published notice; and

(c) The extent to which the effects of the adopted rule or regulation differ from the effects of the proposed rule or regulation contained or referenced in the published notice had it been adopted instead.

Source: Laws 1994, LB 446, § 23.

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84-907.06. Adoption, amendment, or repeal of rule or regulation; notice to Executive Board of the Legislative Council.

Whenever an agency proposes to adopt, amend, or repeal a rule or regulation, (1) at least thirty days before the public hearing, when notice of a proposed rule or regulation is sent out, or (2) at the same time the agency applies to the Governor for a waiver of the notice of public hearing, the agency shall send to the Executive Board of the Legislative Council (a) a copy of the hearing notice required by section 84-907, (b) if applicable, a draft copy of the rule or regulation, and (c) the information provided to the Governor pursuant to section 84-907.09.

Source: Laws 1994, LB 446, § 24; Laws 2005, LB 373, § 5; Laws 2012, LB782, § 228; Laws 2013, LB222, § 43.

84-907.07. Executive Board of the Legislative Council; standing committees of the Legislature; powers and duties.

The chairperson of the Executive Board of the Legislative Council or committee staff member of the board shall refer materials received pursuant to section 84-907.06 for review (1) to the chairperson of the standing committee of the Legislature which has subject matter jurisdiction over the issue involved in the rule or regulation or which has traditionally handled the issue and (2) if practicable, to the member of the Legislature who was the primary sponsor of the legislative bill that granted the agency the rulemaking authority if the member is still serving or, if the legislative bill was amended to include the rulemaking authority, to the primary sponsor of the amendment granting rulemaking authority if the member is still serving. The committee or committee chairperson of such standing committee of the Legislature having subject matter jurisdiction may submit a written or oral statement at the public hearing on the rule or regulation or, if the Governor authorizes a waiver of the notice of public hearing, may submit a written statement to the agency and to the Secretary of State to be entered in the records relating to the rule or regulation.

Source: Laws 1994, LB 446, § 25; Laws 2005, LB 373, § 6.

84-907.08. Petition to adopt a rule or regulation; form; procedure.

Any person may petition an agency requesting the adoption of a rule or regulation. Each agency shall prescribe by rule or regulation the form of the petition and the procedure for its submission, consideration, and disposition. Within sixty days after submission of a petition, the agency shall (1) deny the petition in writing, stating its reasons therefor, (2) initiate rulemaking or regulationmaking proceedings in accordance with the Administrative Procedure Act, or (3) if otherwise lawful, adopt a rule or regulation.

Source: Laws 1994, LB 446, § 26.

84-907.09. Adoption, amendment, or repeal of rule or regulation; provide information to Governor.

Whenever an agency proposes to adopt, amend, or repeal a rule or regulation, (1) at least thirty days before the public hearing, when notice of a proposed rule or regulation is sent out, or (2) at the same time the agency applies to the Governor for a waiver of the notice of public hearing under section 84-907, the agency shall provide to the Governor for review (a) a description of the proposed rule or regulation and the entity or entities it will impact, (b) an explanation of the necessity of the proposed rule or regulation, including the identification of the specific legislative bill if applicable, or the authorizing statute when there is no legislative bill applicable, (c) a statement that the proposed rule or regulation is consistent with legislative intent, (d) a statement indicating whether the proposed rule or regulation is the result of a state mandate on a local governmental subdivision and if the mandate is funded, (e) a statement indicating if the proposed rule or regulation is the result of a federal mandate on state

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government or on a local governmental subdivision and if the mandate is funded, (f) a description, including an estimated quantification, of the fiscal impact on state agencies, political subdivisions, and regulated persons, (g) a statement that the agency will solicit public comment on the proposed rule or regulation before the public hearing, and (h) a statement indicating whether or not the agency has utilized the negotiated rulemaking process as provided for in the Negotiated Rulemaking Act with respect to the proposed rule or regulation.

Source: Laws 2005, LB 373, § 1; Laws 2011, LB617, § 3.

Cross References

- **Negotiated Rulemaking Act,** see section 84-921.

84-907.10. Member of the Legislature; complaint; procedure.

(1) If any member of the Legislature feels aggrieved by a rule or regulation or by the proposed adoption, amendment, or repeal of a rule or regulation pursuant to section 84-907.06 or believes that (a) a rule or regulation or the adoption, amendment, or repeal of a rule or regulation is in excess of the statutory authority or jurisdiction of the agency, is unconstitutional, is inconsistent with the legislative intent of the authorizing statute, or creates an undue burden in a manner that significantly outweighs its benefit to the public, (b) circumstances have changed since the passage of the statute which a rule or regulation implements, or (c) a rule or regulation or an amendment or repeal overlaps, duplicates, or conflicts with federal, state, or local laws, rules, regulations, or ordinances, the member may file a complaint with the Chairperson of the Executive Board of the Legislative Council. The complaint shall explain in detail the member's contentions.

(2) The chairperson of the executive board or a committee staff member of the executive board shall refer the complaint to the chairperson of the standing committee of the Legislature which has subject matter jurisdiction over the issue involved in the rule or regulation or which has traditionally handled the issue and, if practicable, to the member of the Legislature who was the primary sponsor of the legislative bill that granted the agency the rulemaking authority if the member is still serving or, if the legislative bill was amended to include the rulemaking authority, to the primary sponsor of the amendment granting rulemaking authority if the member is still serving.

(3) The standing committee and primary sponsor of the legislative bill or amendment granting rulemaking authority may consider the complaint and, if such committee or primary sponsor concludes that the complaint has merit, then such committee or primary sponsor may request a written response from the agency which shall include, but not be limited to (a) a description of the amendment or rule or regulation, (b) when applicable, a description of the legislative intent of the statute granting the agency rulemaking authority and a statement explaining how the rule or regulation or the adoption, amendment, or repeal of the rule or regulation is within the authority or jurisdiction of the agency, is constitutional, is consistent with legislative intent, or is not an undue burden, (c) if the description required in subdivision (b) of this subsection is inapplicable, an explanation as to why the rule or regulation or the adoption, amendment, or repeal is necessary, and (d) an explanation of the extent to which and how any public comment was taken into consideration by the agency with respect to the rule or regulation or the adoption, amendment, or repeal. The agency shall respond within sixty days of a request, and such response shall be a public record.

(4) Nothing in this section shall be construed to prohibit the adoption or promulgation of the rule or regulation in accordance with other provisions of the Administrative Procedure Act.

Source: Laws 2005, LB 373, § 7; Laws 2014, LB719, § 2.

Effective Date: July 18, 2014

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84-908. Rule or regulation; adoption; amendment; repeal; considerations; when effective; approval by Governor; filing.

(1) No adoption, amendment, or repeal of any rule or regulation shall become effective until the same has been approved by the Governor and filed with the Secretary of State after a hearing has been set on such rule or regulation pursuant to section 84-907. When determining whether to approve the adoption, amendment, or repeal of any rule or regulation relating to an issue of unique interest to a specific geographic area, the Governor's considerations shall include, but not be limited to: (a) Whether adequate notice of hearing was provided in the geographic area affected by the rule or regulation. Adequate notice shall include, but not be limited to, the availability of copies of the rule or regulation at the time notice was given pursuant to section 84-907; and (b) whether reasonable and convenient opportunity for public comment was provided for the geographic area affected by the rule or regulation. If a public hearing was not held in the affected geographic area, reasons shall be provided by the agency to the Governor. Any rule or regulation properly adopted by any agency shall be filed with the Secretary of State.

(2) No agency shall utilize, enforce, or attempt to enforce any rule or regulation or proposed rule or regulation unless the rule, regulation, or proposed rule or regulation has been approved by the Governor and filed with the Secretary of State after a hearing pursuant to section 84-907.

Source: Laws 1953, c. 359, § 2, p. 1138; Laws 1972, LB 373, § 1; Laws 1974, LB 604, § 4; Laws 1975, LB 316, § 1; Laws 1978, LB 44, § 10; Laws 1986, LB 992, § 10; Laws 1987, LB 253, § 10; Laws 1987, LB 189, § 1; Laws 2013, LB242, § 3.

84-908.01. Repealed. Laws 1986, LB 992, § 11.
84-908.02. Repealed. Laws 1986, LB 992, § 11.
84-908.03. Repealed. Laws 1986, LB 992, § 11.
84-908.04. Repealed. Laws 1986, LB 992, § 11.
84-908.05. Repealed. Laws 1986, LB 992, § 11.

84-909. Agency; rules and regulations governing procedure; adoption.

In addition to other requirements imposed by law:

(1) Each agency shall adopt rules and regulations governing the formal and informal procedures prescribed or authorized by the Administrative Procedure Act. Such rules and regulations shall include rules of practice before the agency together with forms and instructions; and

(2) To assist interested persons dealing with it, each agency shall so far as deemed practicable supplement its rules and regulations with descriptive statements of its procedures.

Source: Laws 1959, c. 456, § 2, p. 1511; Laws 1980, LB 846, § 2; Laws 1987, LB 253, § 11; Laws 1994, LB 446, § 33.

84-909.01. Model rules of procedure; Attorney General; agency; duties.

In accordance with the rulemaking and regulationmaking requirements of the Administrative Procedure Act, the Attorney General shall prepare and promulgate model rules of procedure appropriate for use by as many agencies as possible and shall file the model rules with the Secretary of State. The model rules shall deal with all general functions and duties performed in common by several agencies. For rules of procedure adopted on or after August 1, 1994, each agency shall adopt as many of the model rules as is practicable under its circumstances. To the extent an agency adopts the model rules, it shall do so in accordance with the rulemaking and regulationmaking requirements of the act. Any agency adopting a rule of procedure that differs from the model rules shall include in the explanatory statement provided for in section 84-907.04 a finding stating the reasons why the relevant portions of the model rules were impracticable under the circumstances.

Source: Laws 1994, LB 446, § 15.

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84-910. Agency; notification to Legislative Performance Audit Committee; contents; format.

On or before July 1 of each year, each agency shall notify the Legislative Performance Audit Committee of the status of all rules and regulations pending before the agency which have not been adopted and promulgated. If an additional appropriation was made with respect to legislation enacted to provide funding for or additional staff to implement a program for which rules and regulations are required to be adopted, the notification shall include what the funding has been used for and what functions the staff have been performing while such rules and regulations are pending. The format of the notification shall be established by the committee no later than June 1, 2011, and shall be updated thereafter.

Source: Laws 2011, LB617, § 4; Laws 2012, LB782, § 229; Laws 2013, LB222, § 44.

84-911. Validity of rule or regulation; declaratory judgment; procedure.

(1) The validity of any rule or regulation may be determined upon a petition for a declaratory judgment thereon addressed to the district court of Lancaster County if it appears that the rule or regulation or its threatened application interferes with or impairs or threatens to interfere with or impair the legal rights or privileges of the petitioner. The agency shall be made a party to the proceeding. The declaratory judgment may be rendered whether or not the petitioner has first requested the agency to pass upon the validity of the rule or regulation in question.

(2) The court shall declare the rule or regulation invalid if it finds that it violates constitutional provisions, exceeds the statutory authority of the agency, or was adopted without compliance with the statutory procedures. For purposes of this subsection, statutory procedures shall not include procedures provided under the Negotiated Rulemaking Act.

Source: Laws 1959, c. 456, § 4, p. 1511; Laws 1987, LB 253, § 13; Laws 1994, LB 446, § 34.

Cross References

- **Negotiated Rulemaking Act,** see section 84-921.

84-912. Repealed. Laws 1994, LB 446, § 40.

84-912.01. Petition for declaratory order; issuance by agency; duties; effect.

(1) Any person may petition an agency for a declaratory order as to the applicability to specified circumstances of a statute, rule, regulation, or order within the primary jurisdiction of the agency. An agency shall issue a declaratory order in response to a petition for that order unless the agency determines that issuance of the order under the circumstances would be contrary to a rule or regulation adopted in accordance with subsection (2) of this section. An agency may not issue a declaratory order that would substantially prejudice the rights of a person who would be a necessary party and who does not consent in writing to the determination of the matter by a declaratory order proceeding.

(2) Each agency shall issue rules or regulations that provide for: (a) The form, contents, and filing of petitions for declaratory orders; (b) the procedural rights of persons in relation to the petitions; (c) the disposition of the petitions; and (d) notice to necessary parties for matters set for hearing or specified proceedings. The rules or regulations shall describe the classes of circumstances in which the agency will not issue a declaratory order and be consistent with the public interest and with the general policy of the Administrative Procedure Act to facilitate and encourage agency issuance of reliable advice.

(3) Persons who qualify for intervention and file timely petitions for intervention according to agency rules and regulations may intervene in proceedings for declaratory orders.

(4) Within thirty days after receipt of a petition for a declaratory order, an agency shall, in writing:

(a) Issue an order or agree to issue a declaratory order by a specified time declaring the applicability of the statute, rule, regulation, or order in question to the specified circumstances;

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(b) Set the matter for specified proceedings; or

(c) Decline to issue a declaratory order, stating the reasons for its action.

(5) A copy of all orders issued in response to a petition for a declaratory order shall be mailed promptly to the petitioner and any other parties.

(6) A declaratory order shall have the same status and binding effect as any other order issued in a contested case. A declaratory order shall contain the names of all parties to the proceeding on which it is based, the particular facts on which it is based, and the reasons for its conclusion.

(7) If an agency has not issued a declaratory order within sixty days after receipt of a petition therefor, the petition shall be deemed to have been denied.

Source: Laws 1994, LB 446, § 27.

84-912.02. Petition for intervention; hearing officer or designee; grant petition; conditions; powers and duties; order.

(1) A hearing officer or designee shall grant a petition for intervention if:

(a) The petition is submitted in writing to the hearing officer or designee, with copies mailed to all parties named in the hearing officer's notice of the hearing, at least five days before the hearing;

(b) The petition states facts demonstrating that the petitioner's legal rights, duties, privileges, immunities, or other legal interests may be substantially affected by the proceeding or that the petitioner qualifies as an intervenor under any provision of law; and

(c) The hearing officer or designee determines that the interests of justice and the orderly and prompt conduct of the proceedings will not be impaired by allowing the intervention.

(2) The hearing officer or designee may grant a petition for intervention at any time upon determining that the intervention sought is in the interests of justice and will not impair the orderly and prompt conduct of the proceedings.

(3) If a petitioner qualifies for intervention, the hearing officer or designee may impose conditions upon the intervenor's participation in the proceedings, either at the time that intervention is granted or at any subsequent time. Conditions may include:

(a) Limiting the intervenor's participation to designated issues in which the intervenor has a particular interest demonstrated by the petition;

(b) Limiting the intervenor's use of discovery, cross-examination, and other procedures so as to promote the orderly and prompt conduct of the proceedings; and

(c) Requiring two or more intervenors to combine their presentation of evidence and argument, cross-examination, discovery, and other participation in the proceedings.

(4) The hearing officer or designee, at least twenty-four hours before the hearing, shall issue an order granting or denying each pending petition for intervention, specifying any conditions and briefly stating the reasons for the order. The hearing officer or designee may modify the order at any time, stating the reasons for the modification. The hearing officer or designee shall promptly give notice of an order granting, denying, or modifying intervention to the petitioner for intervention and to all parties.

Source: Laws 1994, LB 446, § 28.

84-912.03. Tax Equalization and Review Commission; exemption.

Sections 84-912.01 and 84-913 to 84-919 do not apply to the Tax Equalization and Review Commission.

Source: Laws 1995, LB 490, § 190; Laws 2004, LB 973, § 68.

Cross References

- **Tax Equalization and Review Commission Act,** see section 77-5001.

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84-913. Contested cases; notice of hearing; record; transcript.

In any contested case all parties shall be afforded an opportunity for hearing after reasonable notice. The notice shall state the time, place, and issues involved, but if, by reason of the nature of the proceeding, the issues cannot be fully stated in advance of the hearing or if subsequent amendment of the issues is necessary, they shall be fully stated as soon as practicable. Opportunity shall be afforded all parties to present evidence and argument with respect thereto. The agency shall prepare an official record, which shall include testimony and exhibits, in each contested case, but it shall not be necessary to transcribe shorthand notes unless requested for purpose of rehearing, in which event the transcript and record shall be furnished by the agency upon request and tender of the cost of preparation. Informal disposition may also be made of any contested case by stipulation, agreed settlement, consent order, or default. Each agency shall adopt appropriate rules and regulations for notice and hearing in contested cases.

Source: Laws 1959, c. 456, § 6, p. 1512; Laws 1969, c. 838, § 1, p. 3162; Laws 1987, LB 253, § 15.

84-913.01. Hearing officer; prehearing conference; procedure.

(1) The hearing officer designated to conduct the hearing may determine, subject to the agency's rules and regulations, whether a prehearing conference will be conducted. If the conference is conducted:

(a) The hearing officer shall promptly notify the agency of the determination that a prehearing conference will be conducted. The agency may assign another hearing officer for the prehearing conference; and

(b) The hearing officer for the prehearing conference shall set the time and place of the conference and give reasonable written notice to all parties and to all persons who have filed written petitions to intervene in the matter. The agency shall give notice to other persons entitled to notice.

(2) The notice shall include:

(a) The names and mailing addresses of all parties and other persons to whom notice is being given by the hearing officer;

(b) The name, official title, mailing address, and telephone number of any counsel or employee who has been designated to appear for the agency;

(c) The official file or other reference number, the name of the proceeding, and a general description of the subject matter;

(d) A statement of the time, place, and nature of the prehearing conference;

(e) A statement of the legal authority and jurisdiction under which the prehearing conference and the hearing are to be held;

(f) The name, official title, mailing address, and telephone number of the hearing officer for the prehearing conference; and

(g) A statement that a party who fails to attend or participate in a prehearing conference, hearing, or other stage of a contested case or who fails to make a good faith effort to comply with a prehearing order may be held in default under the Administrative Procedure Act.

The notice may include any other matters that the hearing officer considers desirable to expedite the proceedings.

Source: Laws 1994, LB 446, § 29.

84-913.02. Hearing officer; prehearing conference; powers and duties; orders.

(1) The hearing officer shall conduct the prehearing conference, as may be appropriate, to deal with such matters as exploration of settlement possibilities, preparation of stipulations, clarification of issues, rulings on identity and limitation of the number of witnesses, objections to proffers of evidence, determination of the extent to which direct evidence, rebuttal evidence, or cross-examination will be presented in written form and the extent to which telephone, television, or other electronic means will be

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used as a substitute for proceedings in person, order of presentation of evidence and cross-examination, rulings regarding issuance of subpoenas, discovery orders, and protective orders, and such other matters as will promote the orderly and prompt conduct of the hearing. The hearing officer shall issue a prehearing order incorporating the matters determined at the prehearing conference.

(2) If a prehearing conference is not held, a hearing officer for the hearing may issue a prehearing order, based on the pleadings, to regulate the conduct of the proceedings.

Source: Laws 1994, LB 446, § 30.

84-913.03. Hearing officer; prehearing conference and hearing; how conducted.

The hearing officer may conduct all or part of the prehearing conference and the hearing by telephone, television, or other electronic means if each participant in the conference or hearing has an opportunity to participate in, to hear, and, if technically feasible, to see the entire proceeding while it is taking place. This section does not apply to a prehearing conference or a hearing held under sections 60-498.01 to 60-498.04.

Source: Laws 1994, LB 446, § 31; Laws 2003, LB 209, § 20.

84-913.04. Proceedings; limitation on participation.

(1) A person who has served as investigator, prosecutor, or advocate in a contested case or in its prehearing stage may not serve as hearing officer or assist or advise a hearing officer in the same proceeding except as provided in subsection (3) of this section.

(2) A person who is subject to the authority, direction, or discretion of one who has served as investigator, prosecutor, or advocate in a contested case or in its prehearing stage may not serve as hearing officer or assist or advise a hearing officer in the same proceeding except as provided in subsection (3) of this section.

(3) If all parties consent, a person who has served as, or who is subject to the authority, direction, or discretion of one who has served as, investigator, prosecutor, or advocate in a contested case or in its prehearing stage may assist a hearing officer in the preparation of orders.

(4) A person who has participated in a determination of probable cause or other equivalent preliminary determination in a contested case may serve as hearing officer or assist or advise a hearing officer in the same proceeding.

(5) A person may serve as hearing officer at successive stages of the same contested case.

Source: Laws 1994, LB 446, § 32.

84-914. Contested cases; evidence; procedure; ex parte communications.

In contested cases:

(1) An agency may admit and give probative effect to evidence which possesses probative value commonly accepted by reasonably prudent persons in the conduct of their affairs and exclude incompetent, irrelevant, immaterial, and unduly repetitious evidence. An agency shall give effect to the rules of privilege recognized by law. Any party to a formal hearing before an agency, from which a decision may be appealed to the courts of this state, may request that the agency be bound by the rules of evidence applicable in district court by delivering to the agency at least three days prior to the holding of the hearing a written request therefor. Such request shall include the requesting party's agreement to be liable for the payment of costs incurred thereby and upon any appeal or review thereof, including the cost of court reporting services which the requesting party shall procure for the hearing. All costs of a formal hearing shall be paid by the party or parties against whom a final decision is rendered;

(2) The hearing officer or a designee, at the request of any party or upon the hearing officer's own motion, may administer oaths and issue subpoenas, discovery orders, and protective orders in

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accordance with the rules of civil procedure except as may otherwise be prescribed by law. Subpoenas and orders issued under this subsection may be enforced by the district court;

(3) All evidence including records and documents in the possession of the agency of which it desires to avail itself shall be offered and made a part of the record in the case. No factual information or evidence other than the record shall be considered in the determination of the case. Documentary evidence may be received in the form of copies or excerpts or incorporated by reference;

(4) Every party shall have the right of cross-examination of witnesses who testify and shall have the right to submit rebuttal evidence;

(5) An agency may take official notice of cognizable facts and in addition may take official notice of general, technical, or scientific facts within its specialized knowledge and the rules and regulations adopted and promulgated by such agency. Parties shall be notified either before or during the hearing or by reference in preliminary reports or otherwise of material so noticed. Parties shall be afforded an opportunity to contest facts so noticed. The record shall contain a written record of everything officially noticed. An agency may utilize its experience, technical competence, and specialized knowledge in the evaluation of the evidence presented to it; and

(6)(a) No party in a contested case or other person outside the agency having an interest in the contested case shall make or knowingly cause to be made an ex parte communication to the hearing officer or to an agency head or employee who is or may reasonably be expected to be involved in the decisionmaking process of the contested case.

(b) No hearing officer or agency head or employee who is or may reasonably be expected to be involved in the decisionmaking process of the contested case shall make or knowingly cause to be made an ex parte communication to any party in a contested case or other person outside the agency having an interest in the contested case.

(c) No agency head or employee engaged in the investigation or enforcement of a contested case shall make or knowingly cause to be made an ex parte communication to a hearing officer or agency head or employee who is or may reasonably be expected to be involved in the decisionmaking process of the contested case.

(d) The hearing officer or agency head or employee who is or may reasonably be expected to be involved in the decisionmaking process of the contested case who receives or who makes or knowingly causes to be made an ex parte communication set forth in subdivisions (6)(a) through (c) of this section shall file in the record of the contested case (i) all such written communications, (ii) memoranda stating the substance of all such oral communications, and (iii) all written responses and memoranda stating the substance of all oral responses to all the ex parte communications. The filing shall be made within two working days of the receipt or making of the ex parte communication. Notice of the filing, with an opportunity to respond, shall be given to all parties of record.

(e) The prohibitions of subdivision (6) of this section shall apply beginning at the time notice for hearing is given. An agency may designate an earlier time, but such earlier time shall be required to be set forth in the agency's rules of procedure.

(f) The prohibitions contained in subdivisions (6)(a) and (b) of this section shall not apply to ex parte communications to or from an elected official. However, the disclosure requirements contained in subdivision (6)(d) of this section shall apply to ex parte communications to or from an elected official.

Source: Laws 1959, c. 456, § 7, p. 1513; Laws 1967, c. 618, § 3, p. 2072; Laws 1987, LB 253, § 16; Laws 1994, LB 414, § 136; Laws 1994, LB 446, § 35.

84-915. Contested cases; orders; findings of fact; conclusions of law; notification.

Every decision and order adverse to a party to the proceeding, rendered by an agency in a contested case, shall be in writing or stated in the record and shall be accompanied by findings of fact and conclusions of law. The findings of fact shall consist of a concise statement of the conclusions upon each contested issue of fact. Parties to the proceeding shall be notified of the decision and order in

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person or by mail. A copy of the decision and order and accompanying findings and conclusions shall be delivered or mailed upon request to each party or his or her attorney of record.

Source: Laws 1959, c. 456, § 8, p. 1513; Laws 1987, LB 253, § 17.

84-915.01. Official record of contested cases; agency maintain; contents; use.

(1) An agency shall maintain an official record of each contested case under the Administrative Procedure Act for at least four years following the date of the final order.

(2) The agency record shall consist only of:

(a) Notices of all proceedings;

(b) Any pleadings, motions, requests, preliminary or intermediate rulings and orders, and similar correspondence to or from the agency pertaining to the contested case;

(c) The record of the hearing before the agency, including all exhibits and evidence introduced during such hearing, a statement of matters officially noticed by the agency during the proceeding, and all proffers of proof and objections and rulings thereon; and

(d) The final order.

(3) Except as otherwise provided by law, the physical custody of the agency record shall be maintained by the agency. The agency shall permit the parties to inspect the agency record and obtain copies of the agency record.

(4) Except as otherwise provided by law, the agency record shall constitute the exclusive basis for agency action in contested cases under the act and for judicial review thereof.

Source: Laws 1994, LB 446, § 36; Laws 2006, LB 1115, § 41.

84-916. Act; intent.

The Administrative Procedure Act is intended to constitute an independent act establishing minimum administrative procedure for all agencies.

Source: Laws 1959, c. 456, § 10, p. 1514; Laws 1987, LB 253, § 18.

84-917. Contested case; appeal; right to cross-appeal; procedure.

(1) Any person aggrieved by a final decision in a contested case, whether such decision is affirmative or negative in form, shall be entitled to judicial review under the Administrative Procedure Act. Nothing in this section shall be deemed to prevent resort to other means of review, redress, or relief provided by law.

(2)(a)(i) Proceedings for review shall be instituted by filing a petition in the district court of the county where the action is taken within thirty days after the service of the final decision by the agency. All parties of record shall be made parties to the proceedings for review. If an agency's only role in a contested case is to act as a neutral factfinding body, the agency shall not be a party of record. In all other cases, the agency shall be a party of record. Summons shall be served within thirty days of the filing of the petition in the manner provided for service of a summons in section 25-510.02. If the agency whose decision is appealed from is not a party of record, the petitioner shall serve a copy of the petition and a request for preparation of the official record upon the agency within thirty days of the filing of the petition. The court, in its discretion, may permit other interested persons to intervene.

(ii) The filing of a petition for review shall vest in a responding party of record the right to a cross-appeal against any other party of record. A respondent shall serve its cross-appeal within thirty days after being served with the summons and petition for review.

(b) A petition for review shall set forth: (i) The name and mailing address of the petitioner; (ii) the name and mailing address of the agency whose action is at issue; (iii) identification of the final decision at issue together with a duplicate copy of the final decision; (iv) identification of the parties in the contested case that led to the final decision; (v) facts to demonstrate proper venue; (vi) the petitioner's

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reasons for believing that relief should be granted; and (vii) a request for relief, specifying the type and extent of the relief requested.

(3) The filing of the petition or the service of summons upon such agency shall not stay enforcement of a decision. The agency may order a stay. The court may order a stay after notice of the application therefor to such agency and to all parties of record. If the agency has found that its action on an application for stay or other temporary remedies is justified to protect against a substantial threat to the public health, safety, or welfare, the court may not grant relief unless the court finds that: (a) The applicant is likely to prevail when the court finally disposes of the matter; (b) without relief, the applicant will suffer irreparable injuries; (c) the grant of relief to the applicant will not substantially harm other parties to the proceedings; and (d) the threat to the public health, safety, or welfare relied on by the agency is not sufficiently serious to justify the agency's action in the circumstances. The court may require the party requesting such stay to give bond in such amount and conditioned as the court may direct.

(4) Within thirty days after service of the petition or within such further time as the court for good cause shown may allow, the agency shall prepare and transmit to the court a certified copy of the official record of the proceedings had before the agency. Such official record shall include: (a) Notice of all proceedings; (b) any pleadings, motions, requests, preliminary or intermediate rulings and orders, and similar correspondence to or from the agency pertaining to the contested case; (c) the transcribed record of the hearing before the agency, including all exhibits and evidence introduced during such hearing, a statement of matters officially noticed by the agency during the proceeding, and all proffers of proof and objections and rulings thereon; and (d) the final order appealed from. The agency shall charge the petitioner with the reasonable direct cost or require the petitioner to pay the cost for preparing the official record for transmittal to the court in all cases except when the petitioner is not required to pay a filing fee. The agency may require payment or bond prior to the transmittal of the record.

(5)(a) When the petition instituting proceedings for review was filed in the district court before July 1, 1989, the review shall be conducted by the court without a jury on the record of the agency, and review may not be obtained of any issue that was not raised before the agency unless such issue involves one of the grounds for reversal or modification enumerated in subdivision (6)(a) of this section. When the petition instituting proceedings for review is filed in the district court on or after July 1, 1989, the review shall be conducted by the court without a jury de novo on the record of the agency.

(b)(i) If the court determines that the interest of justice would be served by the resolution of any other issue not raised before the agency, the court may remand the case to the agency for further proceedings.

(ii) The agency shall affirm, modify, or reverse its findings and decision in the case by reason of the additional proceedings and shall file the decision following remand with the reviewing court. The agency shall serve a copy of the decision following remand upon all parties to the district court proceedings. The agency decision following remand shall become final unless a petition for further review is filed with the reviewing court within thirty days after the decision following remand being filed with the district court. The party filing the petition for further review shall serve a copy of the petition for further review upon all parties to the district court proceeding in accordance with the rules of pleading in civil actions promulgated by the Supreme Court pursuant to section 25-801.01 within thirty days after the petition for further review is filed. Within thirty days after service of the petition for further review or within such further time as the court for good cause shown may allow, the agency shall prepare and transmit to the court a certified copy of the official record of the additional proceedings had before the agency following remand.

(6)(a) When the petition instituting proceedings for review was filed in the district court before July 1, 1989, the court may affirm the decision of the agency or remand the case for further proceedings, or it may reverse or modify the decision if the substantial rights of the petitioner may have been prejudiced because the agency decision is:

(i) In violation of constitutional provisions;

(ii) In excess of the statutory authority or jurisdiction of the agency;

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(iii) Made upon unlawful procedure;

(iv) Affected by other error of law;

(v) Unsupported by competent, material, and substantial evidence in view of the entire record as made on review; or

(vi) Arbitrary or capricious.

(b) When the petition instituting proceedings for review is filed in the district court on or after July 1, 1989, the court may affirm, reverse, or modify the decision of the agency or remand the case for further proceedings.

(7) The review provided by this section shall not be available in any case where other provisions of law prescribe the method of appeal.

Source: Laws 1963, c. 531, § 1, p. 1664; Laws 1969, c. 838, § 2, p. 3162; Laws 1983, LB 447, § 102; Laws 1987, LB 253, § 19; Laws 1988, LB 352, § 186; Laws 1989, LB 213, § 1; Laws 1997, LB 165, § 5; Laws 2006, LB 1115, § 42; Laws 2008, LB1014, § 69; Laws 2009, LB35, § 32.

84-918. District court decision; appeal.

(1) An aggrieved party may secure a review of any judgment rendered or final order made by the district court under the Administrative Procedure Act by appeal to the Court of Appeals.

(2) When the petition instituting proceedings for review was filed in the district court before July 1, 1989, the appeal shall be taken in the manner provided by law for appeals in civil cases and shall be heard de novo on the record.

(3) When the petition instituting proceedings for review is filed in the district court on or after July 1, 1989, the appeal shall be taken in the manner provided by law for appeals in civil cases. The judgment rendered or final order made by the district court may be reversed, vacated, or modified for errors appearing on the record.

Source: Laws 1963, c. 531, § 2, p. 1665; Laws 1987, LB 253, § 20; Laws 1989, LB 213, § 2; Laws 1991, LB 732, § 158.

84-919. Act; exclusive means of judicial review.

Except as otherwise provided by law, the Administrative Procedure Act establishes the exclusive means of judicial review of a final decision of any agency in a contested case.

Source: Laws 1963, c. 531, § 3, p. 1666; Laws 1987, LB 253, § 21; Laws 1988, LB 352, § 187.

84-919.01. Negotiated Rulemaking Act; use by agency.

Prior to the formal rulemaking procedure of section 84-907, agencies may use the procedures of the Negotiated Rulemaking Act to permit the direct participation of affected persons in the development of proposed rules and regulations. Negotiated rulemaking may be used to resolve controversial issues prior to the formal rulemaking of the Administrative Procedure Act. To be effective, such proposed rules and regulations shall be adopted pursuant to the Administrative Procedure Act in the form proposed by the negotiated rulemaking committee or as amended by the agency.

Source: Laws 1994, LB 446, § 37.

Cross References

- **Negotiated Rulemaking Act,** see section 84-921.

84-920. Act, how cited.

Sections 84-901 to 84-920 shall be known and may be cited as the Administrative Procedure Act.

Source: Laws 1987, LB 253, § 22; Laws 1994, LB 446, § 38; Laws 1995, LB 490, § 191; Laws 2005, LB 373, § 8; Laws 2011, LB617, § 5.

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Negotiated Rulemaking Act

84-921. Act, how cited.

Sections 84-921 to 84-932 shall be known and may be cited as the Negotiated Rulemaking Act.

Source: Laws 1994, LB 446, § 1.

84-922. Purpose of act.

The purpose of the Negotiated Rulemaking Act is to establish a framework for the conduct of negotiated rulemaking consistent with the Administrative Procedure Act. It is the intent of the Legislature that state agencies, whenever appropriate, use the negotiated rulemaking process to resolve controversial issues prior to the commencement of the formal rulemaking process of the Administrative Procedure Act. Negotiated rulemaking is not a substitute for the requirements of the Administrative Procedure Act but may be used as a supplemental procedure to permit the direct participation of affected interests in the development of new rules or the amendment or repeal of existing rules. A consensus agreement on a proposed rule reached by a negotiated rulemaking committee may be modified by an agency as a result of the subsequent formal rulemaking process. This section shall not be construed as an attempt to limit innovation and experimentation with the negotiated rulemaking process.

Source: Laws 1994, LB 446, § 2.

Cross References

- **Administrative Procedure Act,** see section 84-920.

84-923. Terms, defined.

For purposes of the Negotiated Rulemaking Act:

(1) Agency shall have the same meaning as in section 84-901;

(2) Consensus shall mean unanimous concurrence among the interests represented on a negotiated rulemaking committee unless the committee agrees upon another specified definition;

(3) Convenor shall mean a person who impartially assists an agency in determining whether establishment of a negotiated rulemaking committee is feasible and appropriate for a particular rulemaking procedure;

(4) Facilitator shall mean a person who impartially aids in the discussions and negotiations among the members of a negotiated rulemaking committee to develop a proposed rule. A facilitator shall not have decisionmaking authority;

(5) Interest shall mean, with respect to an issue or matter, multiple parties that have a similar point of view or that are likely to be affected in a similar manner;

(6) Negotiated rulemaking shall mean rulemaking through the use of a negotiated rulemaking committee;

(7) Negotiated rulemaking committee or committee shall mean an advisory committee established to consider and discuss issues for the purpose of reaching a consensus in the development of a proposed rule;

(8) Person shall mean an individual, partnership, limited liability company, corporation, association, governmental subdivision, agency, or public or private organization of any character; and

(9) Rule shall mean rule or regulation as defined in section 84-901.

Source: Laws 1994, LB 446, § 3.

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84-924. Negotiated rulemaking committee; establishment; agency director; use of negotiated rulemaking procedure; determination; considerations; convenor; duties.

(1) An agency may establish a negotiated rulemaking committee to negotiate and develop a proposed rule if the agency director determines that the use of the negotiated rulemaking procedure is in the public interest. In making that determination, the agency director shall consider whether:

(a) There is a need for a rule;

(b) There are a limited number of identifiable interests that will be significantly affected by the rule;

(c) There is a reasonable likelihood that a committee can be convened with a balanced representation of persons who:

(i) Can adequately represent the interests identified; and

(ii) Are willing to negotiate in good faith to reach a consensus on the proposed rule;

(d) There is a reasonable likelihood that a committee will reach a consensus on the proposed rule within a fixed period of time;

(e) The negotiated rulemaking procedure will not unreasonably delay the notice of proposed formal rulemaking and the issuance of the final rule pursuant to the Administrative Procedure Act;

(f) The agency has adequate resources and is willing to commit those resources, including technical assistance, to the committee; and

(g) The agency, to the maximum extent possible consistent with the legal obligations of the agency, will use the consensus of the committee as the basis for the rule proposed by the agency in the formal rulemaking process of the Administrative Procedure Act.

(2) An agency may use the services of a convenor to assist in making the determination of need pursuant to subsection (1) of this section and to assist the agency in:

(a) Identifying persons who will be significantly affected by a proposed rule; and

(b) Conducting discussions with affected persons on the issues of concern and ascertaining whether the establishment of a negotiated rulemaking committee is feasible and appropriate for the particular rulemaking.

(3) The convenor shall report findings and make recommendations to the agency. Upon request of the agency, the convenor shall ascertain the names of persons who are willing and qualified to represent the interests that will be significantly affected by the proposed rule. The report and any recommendations of the convenor shall be made available to the public upon request.

Source: Laws 1994, LB 446, § 4.

Cross References

- **Administrative Procedure Act,** see section 84-920.

84-925. Petition to use negotiated rulemaking committee; procedure; exception.

(1) Except as provided in subsection (2) of this section, any person may petition an agency to request the use of a negotiated rulemaking committee in the development or revision of a rule. Each agency shall prescribe the form of the petition and the procedure for its submission, consideration, and disposition. Within sixty days after submission of a petition, the agency shall (a) deny the petition in writing stating its reasons therefor or (b) initiate the negotiated rulemaking procedure.

(2) A person committed to or otherwise incarcerated in a Department of Correctional Services facility may not petition the Department of Correctional Services to request the use of a negotiated rulemaking committee.

Source: Laws 1994, LB 446, § 5.

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84-926. Negotiated rulemaking committee established; agency; duties; Secretary of State; duties.

(1) If an agency decides to establish a negotiated rulemaking committee, the agency shall:

(a) Give notice to the Secretary of State; and

(b) Publish the notice in a newspaper having general circulation in the state and, as appropriate, in other newspapers and publications.

(2) The notice shall include:

(a) An announcement that the agency intends to establish a negotiated rulemaking committee to negotiate and develop a proposed rule;

(b) A description of the subject and scope of the rule to be developed and the issues to be considered;

(c) A list of interests likely to be significantly affected by the proposed rule;

(d) A list of the persons proposed to represent the affected interests and the agency;

(e) A proposed schedule for completing the work of the committee; and

(f) An explanation of how a person may apply for or nominate another person for membership on the committee.

(3) The Secretary of State shall establish and maintain a list of subscribers who wish to receive notice of an agency's intent to establish a negotiated rulemaking committee and shall provide such notice to such subscribers at a cost to be assessed against each subscriber. The Secretary of State shall collect payments and make disbursements of such funds as may be necessary to carry out the notification required by this subsection.

(4) The agency shall provide a period of at least thirty days for the submission of comments upon and applications for membership on a negotiated rulemaking committee.

Source: Laws 1994, LB 446, § 6.

84-927. Negotiated rulemaking committee; establishment; notice of decision; agency support; termination.

(1) If, after considering comments and applications for membership on the negotiated rulemaking committee submitted pursuant to section 84-926, the agency determines that a negotiated rulemaking committee can adequately represent the interests of the persons that will be significantly affected by a proposed rule and that it is feasible and appropriate in the particular rulemaking, the agency may establish a negotiated rulemaking committee.

(2) If, after considering comments and applications submitted pursuant to section 84-926, the agency decides not to establish a negotiated rulemaking committee, the agency shall notify the persons who commented on or applied for membership on the negotiated rulemaking committee of the reasons for the decision. The agency shall also publish a notice of the decision not to establish a negotiated rulemaking committee in a newspaper having general circulation in the state and, as appropriate, in other newspapers and publications.

(3) The agency shall provide appropriate administrative support to the negotiated rulemaking committee, including technical assistance and support.

(4) A negotiated rulemaking committee shall terminate upon the adoption of the final rule under consideration by the agency pursuant to the Administrative Procedure Act unless the agency, after consulting the committee, or the committee itself specifies an earlier termination date.

Source: Laws 1994, LB 446, § 7.

Cross References

- **Administrative Procedure Act,** see section 84-920.

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84-928. Negotiated rulemaking committee; membership; procedure.

(1) A negotiated rulemaking committee may by consensus expand its membership, either by contacting and recruiting persons whose participation the committee believes is essential to the success of the negotiated rulemaking process or upon reviewing a petition submitted pursuant to subsection (2) of this section.

(2) Persons who will be significantly affected by a proposed rule and who believe that their interests will not be adequately represented by any person on a negotiated rulemaking committee may petition for or nominate another person for membership on the negotiated rulemaking committee. Each petition or nomination shall be submitted to the negotiated rulemaking committee and shall include:

(a) The name of the petitioner or nominee and a description of the interests the person represents;

(b) Evidence that the petitioner or nominee is authorized to represent parties related to the interests the person proposes to represent;

(c) A written commitment that the petitioner or nominee will actively participate in good faith in the development of the rule under consideration; and

(d) An explanation of reasons that the persons already on the negotiated rulemaking committee do not adequately represent the interests of the person submitting the petition or nomination.

(3) Upon receiving a petition, a negotiated rulemaking committee shall decide by consensus at its next meeting whether or not to expand its membership.

Source: Laws 1994, LB 446, § 8.

84-929. Negotiated rulemaking committee; powers and duties; consensus; procedure; report; contents.

(1) A negotiated rulemaking committee shall consider the matter proposed by the agency for consideration and shall attempt to reach consensus concerning a proposed rule and any other matter the committee determines is relevant to the proposed rule.

(2) The person representing the agency on a negotiated rulemaking committee shall participate in the deliberations of the committee with the same rights and responsibilities of other members of the committee and shall be authorized to fully represent the agency in the discussions and negotiations of the committee.

(3) A negotiated rulemaking committee may adopt procedures or ground rules for the operation of the committee.

(4) If a negotiated rulemaking committee achieves consensus on a proposed rule at the conclusion of the negotiations, the committee shall transmit to the agency that established the committee a report containing the proposed rule.

(5) If a negotiated rulemaking committee does not reach a consensus on the proposed rule, the committee shall transmit to the agency a report specifying areas in which the committee reached consensus and the issues that remain unresolved. The committee may include in the report any other information, recommendations, or materials that the committee considers appropriate. Any member of the committee may include as an addendum to the report additional information, recommendations, or materials.

Source: Laws 1994, LB 446, § 9.

84-930. Facilitator; selection; duties.

(1) An agency may nominate a person to serve as a facilitator for the negotiations of the negotiated rulemaking committee, subject to the approval of the committee by consensus. If the committee does not approve the agency's nomination for facilitator, the agency shall submit a substitute nomination. If the committee does not approve the substitute nomination of the agency for facilitator, the committee shall select by consensus a person to serve as facilitator. A person designated to represent the agency in substantive issues may not serve as facilitator or presiding officer for the committee.

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(2) A facilitator approved or selected by a negotiated rulemaking committee shall:

(a) Preside at the meetings of the committee in an impartial manner;

(b) Impartially assist the members of the committee in conducting discussions and negotiations and achieving consensus; and

(c) Manage the keeping of minutes and records.

Source: Laws 1994, LB 446, § 10.

84-931. Convenor or facilitator; contract authorized; state employee; disqualification; members of negotiated rulemaking committee; expenses; per diem; grants or gifts.

(1) An agency may employ or enter into a contract for the services of an organization or individual to serve as a convenor or facilitator for a negotiated rulemaking committee or may use the services of a state employee to act as a convenor or facilitator for a committee.

(2) An agency shall determine whether a person under consideration as a convenor or facilitator of a negotiated rulemaking committee has any financial or other interest that would preclude the person from serving in an impartial and independent manner. A person disqualified under this criterion shall be dropped from further consideration.

(3) Members of a negotiated rulemaking committee shall be responsible for their own expenses of participation. However, an agency may pay for a committee member's actual and necessary expenses incurred in serving on the committee as provided in sections 81-1174 to 81-1177 and a reasonable per diem rate of compensation if:

(a) The committee member certifies a lack of adequate financial resources to participate in the committee; and

(b) The agency determines that the committee member's participation in the committee is necessary to ensure an adequate representation of the interests of the members.

(4) An agency may accept grants or gifts from any source to fund the negotiated rulemaking process if:

(a) Information on the name of the person giving the grant or gift and the amount of the grant or gift is available to the public;

(b) The grant or gift is given to and accepted by the agency without placing any condition on the membership of a negotiated rulemaking committee or the outcome of the negotiated rulemaking process; and

(c) There is consensus among the members of the negotiated rulemaking committee that the acceptance of the grant or gift will not diminish the integrity of the negotiated rulemaking process.

Source: Laws 1994, LB 446, § 11.

84-932. Agency action; judicial review; limitation; negotiated rule; judicial review; treatment.

Any agency action relating to establishing, assisting, or terminating a negotiated rulemaking committee under the Negotiated Rulemaking Act shall not be subject to judicial review. Nothing in this section shall bar judicial review if such judicial review is otherwise provided by law. A rule which is the product of negotiated rulemaking prior to formal adoption pursuant to the Administrative Procedure Act and is later subject to judicial review shall not be accorded greater deference by a court than a rule which is the product of the rulemaking procedure of the Administrative Procedure Act alone.

Source: Laws 1994, LB 446, § 12.

Cross References

- **Administrative Procedure Act,** see section 84-920.

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Environmental Protection Act

81-1501. Department; declaration of legislative purpose.

Whereas the water, land, and air of this state are among its most precious resources and the pollution thereof becomes a menace to the health and welfare of each person, and the public in general, in this state and whereas pollution of these resources in this state is likewise a concern in adjoining states, the public policy of this state is hereby declared to be:

(1) To conserve the water in this state and to protect and improve the quality of water for human consumption, wildlife, fish and other aquatic life, industry, recreation, and other productive, beneficial uses;

(2) To achieve and maintain such a reasonable degree of purity of the natural atmosphere of this state that human beings and all other animals and plants which are indigenous to this state will flourish in approximately the same balance as they have in recent history and to adopt and promulgate laws, rules, and regulations and enforce uniformly the same in such a manner as to give meaningful recognition to the protection of each element of the environment, air, water, and land;

(3) To cooperate with other states and the federal government to accomplish the objectives set forth in the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act; and

(4) To protect human health through environmental enforcement.

Source: Laws 1971, LB 939, § 1; Laws 1987, LB 152, § 1; Laws 1992, LB 1257, § 75; Laws 1994, LB 570, § 4; Laws 1998, LB 1209, § 17.

Cross References

- Integrated Solid Waste Management Act, see section 13-2001.
- Livestock Waste Management Act, see section 54-2416.

81-1502. Terms, defined.

For purposes of the Environmental Protection Act, unless the context otherwise requires:

(1) Air contaminant or air contamination shall mean the presence in the outdoor atmosphere of any dust, fume, mist, smoke, vapor, gas, other gaseous fluid, or particulate substance differing in composition from or exceeding in concentration the natural components of the atmosphere;

(2) Air pollution shall mean the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration as are or may tend to be injurious to human, plant, or animal life, property, or the conduct of business;

(3) Chairperson shall mean the chairperson of the Environmental Quality Council and council shall mean the Environmental Quality Council;

(4) Complaint shall mean any charge, however informal, to or by the council, that any person or agency, private or public, is polluting the air, land, or water or is violating the Environmental Protection Act or any rule or regulation of the department in respect thereof;

(5) Control and controlling shall include prohibition and prohibiting as related to air, land, or water pollution;

(6) Department shall mean the Department of Environmental Quality, which department is hereby created;

(7) Director shall mean the Director of Environmental Quality, which position is hereby established;

(8) Disposal system shall mean a system for disposing of wastes, including hazardous wastes, either by surface or underground methods, and includes sewerage systems and treatment works, disposal wells and fields, and other systems;

(9) Emissions shall mean releases or discharges into the outdoor atmosphere of any air contaminant or combination thereof;

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(10) Person shall mean any: Individual; partnership; limited liability company; association; public or private corporation; trustee; receiver; assignee; agent; municipality or other governmental subdivision; public agency; other legal entity; or any officer or governing or managing body of any public or private corporation, municipality, governmental subdivision, public agency, or other legal entity;

(11) Rule or regulation shall mean any rule or regulation of the department;

(12) Sewerage system shall mean pipelines, conduits, pumping stations, force mains, and all other constructions, devices, appurtenances, and facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal;

(13) Treatment works shall mean any plant or other works used for the purpose of treating, stabilizing, or holding wastes;

(14) Wastes shall mean sewage, industrial waste, and all other liquid, gaseous, solid, radioactive, or other substances which may pollute or tend to pollute any air, land, or waters of the state;

(15) Refuse shall mean putrescible and nonputrescible solid wastes, except body wastes, and includes garbage, rubbish, ashes, incinerator ash, incinerator residue, street cleanings, and solid market and industrial wastes;

(16) Garbage shall mean rejected food wastes, including waste accumulation of animal, fruit, or vegetable matter used or intended for food or that attend the preparation, use, cooking, dealing in, or storing of meat, fish, fowl, fruit, or vegetables, and dead animals rejected by rendering plants;

(17) Rubbish shall mean nonputrescible solid wastes, excluding ashes, consisting of both combustible and noncombustible wastes, such as paper, cardboard, tin cans, yard clippings, wood, glass, bedding, crockery, or litter of any kind that will be a detriment to the public health and safety;

(18) Junk shall mean old scrap, copper, brass, iron, steel, rope, rags, batteries, paper, trash, rubber debris, waste, dismantled or wrecked automobiles, or parts thereof, and other old or scrap ferrous or nonferrous material;

(19) Land pollution shall mean the presence upon or within the land resources of the state of one or more contaminants or combinations of contaminants, including, but not limited to, refuse, garbage, rubbish, or junk, in such quantities and of such quality as will or are likely to (a) create a nuisance, (b) be harmful, detrimental, or injurious to public health, safety, or welfare, (c) be injurious to plant and animal life and property, or (d) be detrimental to the economic and social development, the scenic beauty, or the enjoyment of the natural attractions of the state;

(20) Water pollution shall mean the manmade or man-induced alteration of the chemical, physical, biological, or radiological integrity of water;

(21) Waters of the state shall mean all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state;

(22) Point source shall mean any discernible confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or vessel or other floating craft from which pollutants are or may be discharged;

(23) Effluent limitation shall mean any restriction, including a schedule of compliance, established by the council on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into waters of the state;

(24) Schedule of compliance shall mean a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard;

(25) Hazardous waste shall mean a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or (b) pose a substantial present or potential hazard to human or animal health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed;

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(26) Solid waste shall mean any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, and mining operations and from community activities. Solid waste shall not include slag, a product that is a result of the steel manufacturing process and is managed as an item of value in a controlled manner and not as a discarded material; solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.; or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.;

(27) Storage, when used in connection with hazardous waste, shall mean the containment of hazardous waste, either on a temporary basis or for a period of years, in such manner as not to constitute disposal of such hazardous waste;

(28) Manifest shall mean the form used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment, or storage;

(29) Processing shall mean to treat, detoxify, neutralize, incinerate, biodegrade, or otherwise process a hazardous waste to remove such waste's harmful properties or characteristics for disposal in accordance with regulations established by the council;

(30) Well shall mean a bored, drilled, or driven shaft or a dug hole, the depth of which is greater than the largest surface dimension of such shaft or hole;

(31) Injection well shall mean a well into which fluids are injected;

(32) Fluid shall mean a material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or other form or state;

(33) Mineral production well shall mean a well drilled to promote extraction of mineral resources or energy, including, but not limited to, a well designed for (a) mining of sulfur by the Frasch process, (b) solution mining of sodium chloride, potash, phosphate, copper, uranium, or any other mineral which can be mined by this process, (c) in situ combustion of coal, tar sands, oil shale, or any other fossil fuel, or (d) recovery of geothermal energy for the production of electric power. Mineral production well shall not include any well designed for conventional oil or gas production, for use of fluids to promote enhanced recovery of oil or natural gas, or for injection of hydrocarbons for storage purposes;

(34) Mineral exploration hole shall mean a hole bored, drilled, driven, or dug in the act of exploring for a mineral other than oil and gas;

(35) Solution mining shall mean the use of an injection well and fluids to promote the extraction of mineral resources;

(36) Uranium shall mean tri-uranium oct-oxide;

(37) Solid waste management facility shall mean a facility as defined in section 13-2010; and

(38) Livestock waste control facility shall have the same meaning as in section 54-2417.

Source: Laws 1971, LB 939, § 2; Laws 1972, LB 1435, § 1; Laws 1973, LB 538, § 1; Laws 1980, LB 853, § 1; Laws 1981, LB 216, § 2; Laws 1983, LB 356, § 2; Laws 1984, LB 742, § 1; Laws 1984, LB 1078, § 1; Laws 1986, LB 1008, § 1; Laws 1992, LB 1257, § 76; Laws 1993, LB 121, § 538; Laws 1994, LB 570, § 5; Laws 1998, LB 1209, § 18; Laws 2004, LB 916, § 25; Laws 2013, LB203, § 1.

81-1503. Environmental Quality Council; membership; appointment; compensation; Director of Environmental Quality; appointment; oath; duties.

(1) (a) The Environmental Quality Council is hereby created.

(b) Until April 28, 2005, the council shall consist of sixteen members to be appointed by the Governor with the advice and consent of the Legislature as follows:

(i) One representative of the food products manufacturing industry;

(ii) One representative of conservation;

(iii) One representative of the agricultural processing industry;

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(iv) One representative of the automotive or petroleum industry;
(v) One representative of the chemical industry;
(vi) One representative of heavy industry;
(vii) One representative of the power generating industry;
(viii) One representative of agriculture actively engaged in crop production;
(ix) One representative of labor;
(x) One professional engineer experienced in control of air and water pollution and solid wastes;
(xi) One physician knowledgeable in the health aspects of air, water, and land pollution;
(xii) One representative from county government;
(xiii) Two representatives from municipal government, one of whom shall represent cities other than those of the primary or metropolitan class;
(xiv) One representative of the livestock industry; and
(xv) One representative of the public at large.
(c) On and after April 28, 2005, the council shall consist of seventeen members to be appointed by the Governor with the advice and consent of the Legislature as follows:
(i) One representative of the food products manufacturing industry;
(ii) One representative of conservation;
(iii) One representative of the agricultural processing industry;
(iv) One representative of the automotive or petroleum industry;
(v) One representative of the chemical industry;
(vi) One representative of heavy industry;
(vii) One representative of the power generating industry;
(viii) One representative of agriculture actively engaged in crop production;
(ix) One representative of labor;
(x) One professional engineer experienced in control of air and water pollution and solid wastes;
(xi) One physician knowledgeable in the health aspects of air, water, and land pollution;
(xii) One representative from county government;
(xiii) Two representatives from municipal government, one of whom shall represent cities other than those of the primary or metropolitan class;
(xiv) One representative of the livestock industry;
(xv) One representative of minority populations; and
(xvi) One biologist.
(d)(i) Except as otherwise provided in this subdivision, members of the council serving on April 28, 2005, shall continue to serve on the council as representatives of the entity they were appointed to represent until their current terms of office expire and their successors are appointed and confirmed. The member representing the public at large shall serve until the member representing minority populations is appointed.
(ii) The Governor shall appoint members pursuant to subdivisions (1)(c)(xv) and (1)(c)(xvi) of this section within ninety days after April 28, 2005.
(2) Members shall serve for terms of four years. All appointments shall be subject to confirmation by the Legislature when initially made. As the term of an appointee to the council expires, the succeeding appointee shall be a representative of the same segment of the public as the previous appointee. In the case of appointees to vacancies occurring from unexpired terms, each successor shall serve out the term of his or her predecessor. Members whose terms have expired shall continue to serve until their successors have been appointed. All members shall be citizens and residents of the State of Nebraska.
(3) Members may be removed by the Governor for inefficiency, neglect of duty, or misconduct in office but only after delivering to the member a copy of the charges and affording him or her an opportunity to be publicly heard in person or by counsel, in his or her own defense, upon not less than ten days' notice. Such hearing shall be held before the Governor. When a member is removed, the Governor shall file, in the office of the Secretary of State, a complete statement of all charges made against such member and the findings thereon, together with a complete record of the proceedings.

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(4) The council shall elect from its members a chairperson and a vice-chairperson, who shall hold office at the pleasure of the council. The vice-chairperson shall serve as chairperson in case of the absence or disability of the chairperson. The director shall serve as secretary of the council and shall keep all records of meetings of and actions taken by the council. He or she shall be promptly advised as to such actions by the chairperson.

(5) The members of the council, while engaged in the performance of their official duties, shall receive a per diem of forty dollars while so serving, including travel time. In addition, members of the council shall receive reimbursement for actual and necessary expenses as provided in sections 81-1174 to 81-1177.

(6) The council shall hold at least two regular meetings each year, at a time and place fixed by the council and shall keep a record of its proceedings which shall be open to the public for inspection. Special meetings may be called by the chairperson. Such special meetings must be called by him or her upon receipt of a written request signed by two or more members of the council. Written notice of the time and place of all meetings shall be mailed in advance to the office of each member of the council by the secretary. A majority of the members of the council shall constitute a quorum.

(7) The council shall submit to the Governor a list of names from which he or she shall appoint the Director of Environmental Quality who shall be experienced in air, water, and land pollution control and who may be otherwise an employee of state government. The director shall be responsible for administration of the department and all standards, rules, and regulations adopted pursuant to Chapter 81, article 15, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act. All such standards, rules, and regulations shall be adopted by the council after consideration of the recommendations of the director. All grants to political subdivisions under the control of the department shall be made by the director in accordance with priorities established by the council, unless otherwise directed by statute. A majority of the members of the council shall constitute a quorum for the transaction of business. The affirmative vote of a majority of all members of the council shall be necessary for the adoption of standards, rules, and regulations.

(8) Before the director enters upon the duties of his or her office, he or she shall take and subscribe to the constitutional oath of office and shall, in addition thereto, swear and affirm that he or she holds no other public office nor any position under any political committee or party, that he or she has not during the two years immediately prior to his or her appointment received a significant portion of his or her income directly or indirectly from permitholders or applicants for a permit under the Environmental Protection Act, and that he or she will not receive such income during his or her term as director, except that such requirements regarding income prior to the term of office shall not apply to employees of any agency of the State of Nebraska or any political subdivision which may be a permitholder under the Environmental Protection Act. Such oath and affirmation shall be filed with the Secretary of State.

Source: Laws 1971, LB 939, § 3; Laws 1972, LB 1435, § 2; Laws 1974, LB 1029, § 1; Laws 1979, LB 321, § 2; Laws 1981, LB 204, § 195; Laws 1983, LB 356, § 3; Laws 1992, LB 1257, § 77; Laws 1998, LB 1209, § 19; Laws 2005, LB 351, § 1; Laws 2012, LB760, § 1.

Cross References

- Integrated Solid Waste Management Act, see section 13-2001.
- Livestock Waste Management Act, see section 54-2416.

81-1504. Department; powers; duties.

The department shall have and may exercise the following powers and duties:

(1) To exercise exclusive general supervision of the administration and enforcement of the Environmental Protection Act, the Integrated Solid Waste Management Act, the Livestock Waste Management Act, and all rules and regulations and orders promulgated under such acts;

(2) To develop comprehensive programs for the prevention, control, and abatement of new or existing pollution of the air, waters, and land of the state;

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(3) To advise and consult, cooperate, and contract with other agencies of the state, the federal government, and other states, with interstate agencies, and with affected groups, political subdivisions, and industries in furtherance of the purposes of the acts;

(4) To act as the state water pollution, air pollution, and solid waste pollution control agency for all purposes of the Clean Water Act, as amended, 33 U.S.C. 1251 et seq., the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., and any other federal legislation pertaining to loans or grants for environmental protection and from other sources, public or private, for carrying out any of its functions, which loans and grants shall not be expended for other than the purposes for which provided;

(5) To encourage, participate in, or conduct studies, investigations, research, and demonstrations relating to air, land, and water pollution and causes and effects, prevention, control, and abatement of such pollution as it may deem advisable and necessary for the discharge of its duties under the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act, using its own staff or private research organizations under contract;

(6) To collect and disseminate information and conduct educational and training programs relating to air, water, and land pollution and the prevention, control, and abatement of such pollution;

(7) To issue, modify, or revoke orders (a) prohibiting or abating discharges of wastes into the air, waters, or land of the state and (b) requiring the construction of new disposal systems or any parts thereof or the modification, extension, or adoption of other remedial measures to prevent, control, or abate pollution;

(8) To administer state grants to political subdivisions for solid waste disposal facilities and for the construction of sewage treatment works and facilities to dispose of water treatment plant wastes;

(9) To (a) hold such hearings and give notice thereof, (b) issue such subpoenas requiring the attendance of such witnesses and the production of such evidence, (c) administer such oaths, and (d) take such testimony as the director deems necessary, and any of these powers may be exercised on behalf of the director by a hearing officer designated by the director;

(10) To require submission of plans, specifications, and other data relative to, and to inspect construction of, disposal systems or any part thereof prior to issuance of such permits or approvals as are required by the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act;

(11) To issue, continue in effect, revoke, modify, or deny permits, under such conditions as the director may prescribe and consistent with the standards, rules, and regulations adopted by the council, (a) to prevent, control, or abate pollution, (b) for the discharge of wastes into the air, land, or waters of the state, and (c) for the installation, modification, or operation of disposal systems or any parts thereof;

(12) To require proper maintenance and operation of disposal systems;

(13) To exercise all incidental powers necessary to carry out the purposes of the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act;

(14) To establish bureaus, divisions, or sections for the control of air pollution, water pollution, mining and land quality, and solid wastes which shall be administered by full-time salaried bureau, division, or section chiefs and to delegate and assign to each such bureau, division, or section and its officers and employees the duties and powers granted to the department for the enforcement of Chapter 81, article 15, the Integrated Solid Waste Management Act, the Livestock Waste Management Act, and the standards, rules, and regulations adopted pursuant thereto;

(15)(a) To require access to existing and available records relating to (i) emissions or discharges which cause or contribute to air, land, or water pollution or (ii) the monitoring of such emissions or discharges; and

(b) To require, for purposes of developing or assisting the development of any regulation or enforcing any of the provisions of the Environmental Protection Act which pertain to hazardous waste, any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous waste, upon request of any officer, employee, or representative of the department, to furnish

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information relating to such waste and any permit involved. Such person shall have access at all reasonable times to a copy of all results relating to such waste;

(16) To obtain such scientific, technical, administrative, and operational services including laboratory facilities, by contract or otherwise, as the director deems necessary;

(17) To encourage voluntary cooperation by persons and affected groups to achieve the purposes of the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act;

(18) To encourage local units of government to handle air, land, and water pollution problems within their respective jurisdictions and on a cooperative basis and to provide technical and consultative assistance therefor;

(19) To consult with any person proposing to construct, install, or otherwise acquire an air, land, or water contaminant source or a device or system for control of such source, upon request of such person, concerning the efficacy of such device or system or concerning the air, land, or water pollution problem which may be related to the source, device, or system. Nothing in any such consultation shall be construed to relieve any person from compliance with the Environmental Protection Act, the Integrated Solid Waste Management Act, the Livestock Waste Management Act, rules and regulations in force pursuant to the acts, or any other provision of law;

(20) To require all persons engaged or desiring to engage in operations which result or which may result in air, water, or land pollution to secure a permit prior to installation or operation or continued operation;

(21) To enter and inspect, during reasonable hours, any building or place, except a building designed for and used exclusively for a private residence;

(22) To receive or initiate complaints of air, water, or land pollution, hold hearings in connection with air, water, or land pollution, and institute legal proceedings in the name of the state for the control or prevention of air, water, or land pollution, and for the recovery of penalties, in accordance with the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act;

(23) To delegate, by contract with governmental subdivisions which have adopted local air, water, or land pollution control programs approved by the council, the enforcement of state-adopted air, water, or land pollution control regulations within a specified region surrounding the jurisdictional area of the governmental subdivisions. Prosecutions commenced under such contracts shall be conducted by the Attorney General or county attorneys as provided in the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act;

(24) To conduct tests and take samples of air, water, or land contaminants, fuel, process materials, or any other substance which affects or may affect discharges or emissions of air, water, or land contaminants from any source, giving the owner or operator a receipt for the sample obtained;

(25) To develop and enforce compliance schedules, under such conditions as the director may prescribe and consistent with the standards, rules, and regulations adopted by the council, to prevent, control, or abate pollution;

(26) To employ the Governor's Keep Nebraska Beautiful Committee for such special occasions and projects as the department may decide. Reimbursement of the committee shall be made from state and appropriate federal matching funds for each assignment of work by the department as provided in sections 81-1174 to 81-1177;

(27) To provide, to the extent determined by the council to be necessary and practicable, for areawide, selective, and periodic inspection and testing of motor vehicles to secure compliance with applicable exhaust emission standards for a fee not to exceed five dollars to offset the cost of inspection;

(28) To enforce, when it is not feasible to prescribe or enforce any emission standard for control of air pollutants, the use of a design, equipment, a work practice, an operational standard, or a combination thereof, adequate to protect the public health from such pollutant or pollutants with an ample margin of safety;

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(29) To establish the position of public advocate to be located within the department to assist and educate the public on departmental programs and to carry out all duties of the ombudsman as provided in the Clean Air Act, as amended, 42 U.S.C. 7661f;

(30) Under such conditions as it may prescribe for the review, recommendations, and written approval of the director, to require the submission of such plans, specifications, and other information as it deems necessary to carry out the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act or to carry out the rules and regulations adopted pursuant to the acts. When deemed necessary by the director, the plans and specifications shall be prepared and submitted by a professional engineer licensed to practice in Nebraska;

(31) To carry out the provisions of the Petroleum Products and Hazardous Substances Storage and Handling Act; and

(32) To consider the risk to human health and safety and to the environment in evaluating and approving plans for remedial action.

Source: Laws 1971, LB 939, § 4; Laws 1972, LB 1435, § 3; Laws 1973, LB 254, § 1; Laws 1974, LB 1029, § 2; Laws 1979, LB 342, § 1; Laws 1980, LB 853, § 2; Laws 1981, LB 204, § 196; Laws 1983, LB 356, § 4; Laws 1984, LB 1078, § 2; Laws 1986, LB 217, § 15; Laws 1992, LB 1257, § 78; Laws 1994, LB 570, § 6; Laws 1996, LB 1226, § 13; Laws 1997, LB 622, § 124; Laws 1998, LB 1209, § 20.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.
- **Petroleum Products and Hazardous Substances Storage and Handling Act,** see section 81-15,117.

81-1504.01. Department of Environmental Quality; reports required; contents.

The Department of Environmental Quality shall provide the following information to the Governor and to the Clerk of the Legislature by December 1 of each year:

(1) A report by type of service or aid provided by the use and distribution of federal funds received by the department. The report shall also include user fees, permit fees, license fees, and application fees authorized by the federal Environmental Protection Agency as follows:

(a) Actual expenditure of each grant or authorized fees for the most recently completed state fiscal year, including state matching funds;

(b) Current budget and planned use and distribution of each grant and authorized fees for the current state fiscal year, including state matching funds;

(c) A summary of the projected funding level of each grant and authorized fees and the impact of federal mandates and regulations upon the future use of each grant and authorized fees; and

(d) Program summaries including statistical summaries when applicable for the most recently completed state fiscal year and program activity goals for the current state fiscal year;

(2) A summary of regulations of the federal Environmental Protection Agency which the department is required to implement and which do not include federal funding assistance and the possible financial impact to the state and political subdivisions;

(3) A report by type of service or aid provided by the use and distribution of state general and cash funds, including user fees, permit fees, license fees, and application fees, to carry out activities that are not funded by federal grants as follows:

(a) Actual expenditure of state funds, by agency sections, for the most recently completed state fiscal year, including a breakdown of expenditures by personal services, operations, travel, capital outlay, and consulting and contractual services;

(b) Current budget and planned use and distribution of state funds, by agency sections, for the current state fiscal year, including a breakdown of expenditures for personal services, operations, travel, capital outlay, and consulting and contractual services;

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(c) A summary of projected program funding needs based upon the statutory requirements and public demand for services and the department's assessment of anticipated needs statewide; and

(d) Program summaries including statistical summaries when applicable for the most recently completed state fiscal year and program activity goals for the current state fiscal year;

(4) A report regarding staff turnover by job class and the department's assessment of its ability to hire and retain qualified staff considering the state's personnel pay plan;

(5) A report listing the method used by each new or existing licensee, permittee, or other person who is required by the department to establish proof of financial responsibility; and

(6) A report for the previous state fiscal year relating to the purpose of the Nebraska Litter Reduction and Recycling Act and of funds credited to the Nebraska Litter Reduction and Recycling Fund.

The reports and summaries submitted to the Clerk of the Legislature shall be submitted electronically.

Source: Laws 1991, LB 528, § 1; Laws 1993, LB 3, § 47; Laws 1993, LB 203, § 1; Laws 1994, LB 1034, § 2; Laws 2003, LB 143, § 9; Laws 2007, LB79, § 1; Laws 2012, LB782, § 201.

Cross References

- **Nebraska Litter Reduction and Recycling Act,** see section 81-1534.

81-1504.02. Department; establish telephone line.

The department shall establish a telephone line to provide information on the department's programs and requirements and to report complaints and suspected violations of the various environmental statutes and regulations which the department administers, as well as complaints regarding the department's regulation and enforcement activities. The department may charge a fee for the use of such a telephone line.

Source: Laws 1998, LB 1209, § 29.

81-1504.03. Grants or loans; restrictions.

No disbursements from grants or loans administered pursuant to the Environmental Protection Act shall be made for projects related to tire-derived fuel.

Source: Laws 2001, LB 461, § 9.

81-1505. Council; rules and regulations; standards of air, land, and water quality.

(1) In order to carry out the purposes of the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act, the council shall adopt and promulgate rules and regulations which shall set standards of air, water, and land quality to be applicable to the air, waters, and land of this state or portions thereof. Such standards of quality shall be such as to protect the public health and welfare. The council shall classify air, water, and land contaminant sources according to levels and types of discharges, emissions, and other characteristics which relate to air, water, and land pollution and may require reporting for any such class or classes. Such classifications and standards made pursuant to this section may be made for application to the state as a whole or to any designated area of the state and shall be made with special reference to effects on health, economic and social factors, and physical effects on property. Such standards and classifications may be amended as determined necessary by the council.

(2) In adopting the classifications of waters and water quality standards, the primary purpose for such classifications and standards shall be to protect the public health and welfare and the council shall give consideration to:

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(a) The size, depth, surface area, or underground area covered, the volume, direction, and rate of flow, stream gradient, and temperature of the water;

(b) The character of the area affected by such classification or standards, its peculiar suitability for particular purposes, conserving the value of the area, and encouraging the most appropriate use of lands within such area for domestic, agricultural, industrial, recreational, and aquatic life purposes;

(c) The uses which have been made, are being made, or are likely to be made, of such waters for agricultural, transportation, domestic, and industrial consumption, for fishing and aquatic culture, for the disposal of sewage, industrial waste, and other wastes, or other uses within this state and, at the discretion of the council, any such uses in another state on interstate waters flowing through or originating in this state;

(d) The extent of present pollution or contamination of such waters which has already occurred or resulted from past discharges therein; and

(e) Procedures pursuant to section 401 of the Clean Water Act, as amended, 33 U.S.C. 1251 et seq., for certification by the department of activities requiring a federal license or permit which may result in a discharge.

(3) In adopting effluent limitations or prohibitions, the council shall give consideration to the type, class, or category of discharges and the quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable or other waters of the state, including schedules of compliance, best practicable control technology, and best available control technology.

(4) In adopting standards of performance, the council shall give consideration to the discharge of pollutants which reflect the greatest degree of effluent reduction which the council determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, when practicable, a standard permitting no discharge of pollutants.

(5) In adopting toxic pollutant standards and limitations, the council shall give consideration to the combinations of pollutants, the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms.

(6) In adopting pretreatment standards, the council shall give consideration to the prohibitions or limitations to noncompatible pollutants, prohibitions against the passage through a publicly owned treatment works of pollutants which would cause interference with or obstruction to the operation of publicly owned treatment works, damage to such works, and the prevention of the discharge of pollutants therefrom which are inadequately treated.

(7) In adopting treatment standards, the council shall give consideration to providing for processes to which wastewater shall be subjected in a publicly owned wastewater treatment works in order to make such wastewater suitable for subsequent use.

(8) In adopting regulations pertaining to the disposal of domestic and industrial liquid wastes, the council shall give consideration to the minimum amount of biochemical oxygen demand, suspended solids, or equivalent in the case of industrial wastewaters, which must be removed from the wastewaters and the degree of disinfection necessary to meet water quality standards with respect to construction, installation, change of, alterations in, or additions to any wastewater treatment works or disposal systems, including issuance of permits and proper abandonment, and requirements necessary for proper operation and maintenance thereof.

(9)(a) The council shall adopt and promulgate rules and regulations for controlling mineral exploration holes and mineral production and injection wells. The rules and regulations shall include standards for the construction, operation, and abandonment of such holes and wells. The standards shall protect the public health and welfare and air, land, water, and subsurface resources so as to control, minimize, and eliminate hazards to humans, animals, and the environment. Consideration shall be given to:

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(i) Area conditions such as suitability of location, geologic formations, topography, industry, agriculture, population density, wildlife, fish and other aquatic life, sites of archeological and historical importance, mineral, land, and water resources, and the existing economic activities of the area including, but not limited to, agriculture, recreation, tourism, and industry;

(ii) A site-specific evaluation of the geologic and hydrologic suitability of the site and the injection, disposal, and production zones;

(iii) The quality of the existing ground water, the effects of exemption of the aquifer from any existing water quality standards, and requirements for restoration of the aquifer;

(iv) Standards for design and use of production facilities, which shall include, but not be limited to, all wells, pumping equipment, surface structures, and associated land required for operation of injection or production wells; and

(v) Conditions required for closure, abandonment, or restoration of mineral exploration holes, injection and production wells, and production facilities in order to protect the public health and welfare and air, land, water, and subsurface resources.

(b) The council shall establish fees for regulated activities and facilities and for permits for such activities and facilities. The fees shall be sufficient but shall not exceed the amount necessary to pay the department for the direct and indirect costs of evaluating, processing, and monitoring during and after operation of regulated facilities or performance of regulated activities.

(c) With respect to mineral production wells, the council shall adopt and promulgate rules and regulations which require restoration of air, land, water, and subsurface resources and require mineral production well permit applications to include a restoration plan for the air, land, water, and subsurface resources affected. Such rules and regulations may provide for issuance of a research and development permit which authorizes construction and operation of a pilot plant by the permittee for the purpose of demonstrating the permittee's ability to inject and restore in a manner which meets the standards required by this subsection and the rules and regulations.

The rules and regulations adopted and promulgated may also provide for issuance of a commercial permit after a finding by the department that the injection and restoration procedures authorized by the research and development permit have been successful in demonstrating the applicant's ability to inject and restore in a manner which meets the standards required by this subsection and the rules and regulations.

(d) For the purpose of this subsection, unless the context otherwise requires, restoration shall mean the employment, during and after an activity, of procedures reasonably designed to control, minimize, and eliminate hazards to humans, animals, and the environment, to protect the public health and welfare and air, land, water, and subsurface resources, and to return each resource to a quality of use consistent with the uses for which the resource was suitable prior to the activity.

(10) In adopting livestock waste control regulations, the council shall consider the discharge of livestock wastes into the waters of the state or onto land not owned by the livestock operator, conditions under which permits for such operations may be issued, including design, location, and proper management of such facilities, protection of ground water from such operations, and revocation, modification, or suspension of such permits for cause and all requirements of the Livestock Waste Management Act.

(11) In adopting regulations for the issuance of permits under the National Pollutant Discharge Elimination System created by the Clean Water Act, as amended, 33 U.S.C. 1251 et seq., the council shall consider when such permits shall be required and exemptions, application and filing requirements, terms and conditions affecting such permits, notice and public participation, duration and review of such permits, and monitoring, recording, and reporting under the system.

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(12) The council shall adopt and promulgate rules and regulations for air pollution control which shall include:

(a) A construction permit program which requires the owner or operator of an air contaminant source to obtain a permit prior to construction. Application fees shall be according to section 81-1505.06;

(b) An operating permit program consistent with requirements of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., and an operating permit program for minor sources of air pollution, which programs shall require permits for both new and existing sources;

(c) Provisions for operating permits to be issued after public notice, to be terminated, modified, or revoked for cause, and to be modified to incorporate new requirements;

(d) Provisions for applications to be on forms provided by the department and to contain information necessary to make a determination on the appropriateness of issuance or denial. The department shall make a completeness determination in a timely fashion and after such determination shall act on the application within time limits set by the council. Applications for operating permits shall include provisions for certification of compliance by the applicant;

(e) Requirements for operating permits which may include such conditions as necessary to protect public health and welfare, including, but not limited to (i) monitoring and reporting requirements on all sources subject to the permit, (ii) payment of annual fees sufficient to pay the reasonable direct and indirect costs of developing and administering the air quality permit program, (iii) retention of records, (iv) compliance with all air quality standards, (v) a permit term of no more than five years from date of issuance, (vi) any applicable schedule of compliance leading to compliance with air quality regulations, (vii) site access to the department for inspection of the facility and records, (viii) emission limits or control technology requirements, (ix) periodic compliance certification, and (x) other conditions necessary to carry out the purposes of the Environmental Protection Act. For purposes of this subsection, control technology shall mean a design, equipment, a work practice, an operational standard which may include a requirement for operator training or certification, or any combination thereof;

(f) Classification of air quality control regions;

(g) Standards for air quality that may be established based upon protection of public health and welfare, emission limitations established by the United States Environmental Protection Agency, and maximum achievable control technology standards for sources of toxic air pollutants. For purposes of this subdivision, maximum achievable control technology standards shall mean an emission limit or control technology standard which requires the maximum degree of emission reduction that the council, taking into consideration the cost of achieving such emission reduction, any health and environmental impacts not related to air quality, and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which the standard applies through application of measures, processes, methods, systems, or techniques, including, but not limited to, measures which accomplish one or a combination of the following:

(i) Reduce the volume of or eliminate emissions of the pollutants through process changes, substitution of materials, or other modifications;

(ii) Enclose systems or processes to eliminate emissions; or

(iii) Collect, capture, or treat the pollutants when released from a process, stack, storage, or fugitive emission point;

(h) Restrictions on open burning and fugitive emissions;

(i) Provisions for issuance of general operating permits, after public notice, for sources with similar operating conditions and for revoking such general authority to specific permittees;

(j) Provisions for implementation of any emissions trading programs as defined by the department. Such programs shall be consistent with the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., and administered through the operating permit program;

(k) A provision that operating permits will not be issued if the Environmental Protection Agency objects in a timely manner;

(l) Provisions for periodic reporting of emissions;

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(m) Limitations on emissions from process operations, fuel-burning equipment, and incinerator emissions and such other restrictions on emissions as are necessary to protect the public health and welfare;

(n) Time schedules for compliance;

(o) Requirements for owner or operator testing and monitoring of emissions;

(p) Control technology requirements when it is not feasible to prescribe or enforce an emission standard; and

(q) Procedures and definitions necessary to carry out payment of the annual emission fee set in section 81-1505.04.

(13)(a) In adopting regulations for hazardous waste management, the council shall give consideration to generation of hazardous wastes, labeling practices, containers used, treatment, storage, collection, transportation including a manifest system, processing, resource recovery, and disposal of hazardous wastes. It shall consider the permitting, licensing, design and construction, and development and operational plans for hazardous waste treatment, storage, and disposal facilities, and conditions for licensing or permitting of hazardous waste treatment, storage, and disposal areas. It shall consider modification, suspension, or revocation of such licenses and permits, including requirements for waste analysis, site improvements, fire prevention, safety, security, restricted access, and covering and handling of hazardous liquids and materials. Licenses and permits for hazardous waste, treatment, storage, and disposal facilities shall not be issued until certification by the State Fire Marshal as to fire prevention and fire safety has been received by the department. The council shall further consider the need at treatment, storage, or disposal facilities for required equipment, communications and alarms, personnel training, and contingency plans for any emergencies that might arise and for a coordinator during such emergencies.

In addition the council shall give consideration to (i) ground water monitoring, (ii) use and management of containers and tanks, (iii) surface impoundments, (iv) waste piles, (v) land treatment, (vi) incinerators, (vii) chemical or biological treatment, (viii) landfills including the surveying thereof, and (ix) special requirements for ignitable, reactive, or incompatible wastes.

In considering closure and postclosure of hazardous waste treatment, storage, or disposal facilities, the council shall consider regulations that would result in the owner or operator closing his or her facility so as to minimize the need for future maintenance, and to control, minimize, or eliminate, to the extent necessary to protect humans, animals, and the environment, postclosure escape of hazardous waste, hazardous waste constituents, and leachate to the ground water or surface waters, and to control, minimize, or eliminate, to the extent necessary to protect humans, animals, and the environment, waste decomposition to the atmosphere. In considering corrective action for hazardous waste treatment, storage, or disposal facilities, the council shall consider regulations that would require the owner or operator, or any previous owner or operator with actual knowledge of the presence of hazardous waste at the facility, to undertake corrective action or such other response measures necessary to protect human health or the environment for all releases of hazardous waste or hazardous constituents from any treatment, storage, or disposal facility or any solid waste management unit at such facility regardless of the time at which waste was placed in such unit.

Such regulations adopted pursuant to this subsection shall in all respects comply with the Environmental Protection Act and the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq.

(b) In adopting regulations for hazardous waste management, the council shall consider, in addition to criteria in subdivision (a) of this subsection, establishing criteria for (i) identifying hazardous waste including extraction procedures, toxicity, persistence, and degradability in nature, potential for accumulation in tissue, flammability or ignitability, corrosiveness, reactivity, and generation of pressure through decomposition, heat, or other means, and other hazardous characteristics, (ii) listing all materials it deems hazardous and which should be subject to regulation, and (iii) locating treatment, storage, or disposal facilities for such wastes. In adopting criteria for flammability and ignitability of

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wastes pursuant to subdivision (b)(i) of this subsection, no regulation shall be adopted without the approval of the State Fire Marshal.

(c) In adopting regulations for hazardous waste management, the council shall establish a schedule of fees to be paid to the director by licensees or permittees operating hazardous waste processing facilities or disposal areas on the basis of a monetary value per cubic foot or per pound of the hazardous wastes, sufficient but not exceeding the amount necessary to reimburse the department for the costs of monitoring such facilities or areas during and after operation of such facilities or areas. The licensees may assess a cost against persons using the facilities or areas. The director shall remit any money collected from fees paid to him or her to the State Treasurer who shall credit the entire amount thereof to the General Fund.

(d) In adopting regulations for solid waste disposal, the council shall consider storage, collection, transportation, processing, resource recovery, and disposal of solid waste, developmental and operational plans for solid waste disposal areas, conditions for permitting of solid waste disposal areas, modification, suspension, or revocation of such permits, regulations of operations of disposal areas, including site improvements, fire prevention, ground water protection, safety and restricted access, handling of liquid and hazardous materials, insect and rodent control, salvage operations, and the methods of disposing of accumulations of junk outside of solid waste disposal areas. Such regulations shall in all respects comply with the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq.

(14) In adopting regulations governing discharges or emissions of oil and other hazardous materials into the waters, in the air, or upon the land of the state, the council shall consider the requirements of the Integrated Solid Waste Management Act, methods for prevention of such discharges or emissions, and the responsibility of the discharger or emitter for cleanup, toxicity, degradability, and dispersal characteristics of the substance.

(15) In adopting regulations governing composting and composting sites, the council shall give consideration to:

(a) Approval of a proposed site by the local governing body, including the zoning authority, if any, prior to issuance of a permit by the department;

(b) Issuance of permits by the department for such composting operations, with conditions if necessary;

(c) Submission of construction and operational plans by the applicant for a permit to the department, with approval of such plans before issuance of such permit;

(d) A term of up to ten years for such permits;

(e) Renewal of permits if the operation has been in substantial compliance with composting regulations adopted pursuant to this subsection, permit conditions, and operational plans;

(f) Review by the department of materials to be composted, including chemical analysis when found by the department to be necessary;

(g) Inspections of such compost sites by the department. Operations out of compliance with composting regulations, permit conditions, or operational plans shall be given a reasonable time for voluntary compliance, and failure to do so within the specified time shall result in a hearing after notice is given, at which time the owner or operator shall appear and show cause why his or her permit should not be revoked;

(h) Special permits of the department for demonstration projects not to exceed six months;

(i) Exemptions from permits of the department; and

(j) The Integrated Solid Waste Management Act.

(16) Any person operating or responsible for the operation of air, water, or land contaminant sources of any class for which the rules and regulations of the council require reporting shall make reports containing information as may be required by the department concerning quality and quantity of discharges and emissions, location, size, and height of contaminant outlets, processes employed, fuels

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used, and the nature and time periods or duration of discharges and emissions, and such other information as is relevant to air, water, or land pollution and is available.

(17) Prior to adopting, amending, or repealing standards and classifications of air, water, and land quality and rules and regulations under the Integrated Solid Waste Management Act or the Livestock Waste Management Act, the council shall, after due notice, conduct public hearings thereon. Notice of public hearings shall specify the waters or the area of the state for which standards of air, water, or land are sought to be adopted, amended, or repealed and the time, date, and place of such hearing. Such hearing shall be held in the general area to be affected by such standards. Such notice shall be given in accordance with the Administrative Procedure Act.

(18) Standards of quality of the air, water, or land of the state and rules and regulations adopted under the Integrated Solid Waste Management Act or the Livestock Waste Management Act or any amendment or repeal of such standards or rules and regulations shall become effective upon adoption by the council and filing in the office of the Secretary of State. In adopting standards of air, water, and land quality or making any amendment thereof, the council shall specify a reasonable time for persons discharging wastes into the air, water, or land of the state to comply with such standards and upon the expiration of any such period of time may revoke or modify any permit previously issued which authorizes the discharge of wastes into the air, water, or land of this state which results in reducing the quality of such air, water, or land below the standards established therefor by the council.

(19) All standards of quality of air, water, or land and all rules and regulations adopted pursuant to law by the council prior to May 29, 1981, and applicable to specified air, water, or land are hereby approved and adopted as standards of quality of and rules and regulations for such air, water, or land.

(20) In addition to such standards as are heretofore authorized, the council shall adopt and promulgate rules and regulations to set standards of performance, effluent standards, pretreatment standards, treatment standards, toxic pollutant standards and limitations, effluent limitations, effluent prohibitions, and quantitative limitations or concentrations which shall in all respects conform with and meet the requirements of the National Pollutant Discharge Elimination System in the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.

(21)(a) The council shall adopt and promulgate rules and regulations requiring all new or renewal permit or license applicants regulated under the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act to establish proof of financial responsibility by providing funds in the event of abandonment, default, or other inability of the permittee or licensee to meet the requirements of its permit or license or other conditions imposed by the department pursuant to the acts. The council may exempt classes of permittees or licensees from the requirements of this subdivision when a finding is made that such exemption will not result in a significant risk to the public health and welfare.

(b) Proof of financial responsibility shall include any of the following made payable to or held in trust for the benefit of the state and approved by the department:

(i) A surety bond executed by the applicant and a corporate surety licensed to do business in this state;

(ii) A deposit of cash, negotiable bonds of the United States or the state, negotiable certificates of deposit, or an irrevocable letter of credit of any bank or other savings institution organized or transacting business in the United States in an amount or which has a market value equal to or greater than the amount of the bonds required for the bonded area under the same terms and conditions upon which surety bonds are deposited;

(iii) An established escrow account; or

(iv) A bond of the applicant without separate surety upon a satisfactory demonstration to the director that such applicant has the financial means sufficient to self-bond pursuant to bonding requirements adopted by the council consistent with the purposes of this subdivision.

(c) The director shall determine the amount of the bond, deposit, or escrow account which shall be reasonable and sufficient so the department may, if the permittee or licensee is unable or unwilling to do so and in the event of forfeiture of the bond or other financial responsibility methods, arrange to rectify

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any improper management technique committed during the term of the permit or license and assure the performance of duties and responsibilities required by the permit or license pursuant to law, rules, and regulations.

(d) In determining the amount of the bond or other method of financial responsibility, the director shall consider the requirements of the permit or license or any conditions specified by the department, the probable difficulty of completing the requirements of such permit, license, or conditions due to such factors as topography, geology of the site, and hydrology, and the prior history of environmental activities of the applicant.

This subsection shall apply to hazardous waste treatment, storage, or disposal facilities which have received interim status.

(22) The council shall adopt and promulgate rules and regulations no more stringent than the provisions of section 1453 et seq. of the federal Safe Drinking Water Act, as amended, 42 U.S.C. 300j-13 et seq., for public water system source water assessment programs.

The council may adopt and promulgate rules and regulations to implement a source water petition program no more stringent than section 1454 et seq. of the federal Safe Drinking Water Act, as amended, 42 U.S.C. 300j-14 et seq.

Source: Laws 1971, LB 939, § 5; Laws 1972, LB 1435, § 4; Laws 1973, LB 538, § 2; Laws 1974, LB 1029, § 3; Laws 1979, LB 342, § 2; Laws 1980, LB 853, § 3; Laws 1981, LB 216, § 3; Laws 1983, LB 356, § 5; Laws 1984, LB 1078, § 3; Laws 1986, LB 1008, § 2; Laws 1992, LB 1257, § 79; Laws 1993, LB 623, § 3; Laws 1994, LB 570, § 7; Laws 1994, LB 1031, § 1; Laws 1997, LB 517, § 25; Laws 1998, LB 1209, § 21; Laws 1999, LB 784, § 1; Laws 2001, LB 126, § 1; Laws 2001, LB 667, § 49; Laws 2004, LB 449, § 1; Laws 2006, LB 872, § 3; Laws 2011, LB30, § 1.

Cross References

- **Administrative Procedure Act,** see section 84-920.
- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.

81-1505.01. Department of Environmental Quality Cash Fund; created; use; investment.

There is hereby created the Department of Environmental Quality Cash Fund which shall be used to pay the expenses of the department. The department shall remit all fees collected pursuant to subsection (9) of section 81-1505 and section 81-1521.09 to the State Treasurer for credit to the fund. Any fee collected pursuant to section 81-1521.09 shall be used to pay the expenses related to the notice of intent for which the fee was paid. Any money in the fund available for investment shall be invested by the state investment officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act.

Source: Laws 1983, LB 356, § 8; Laws 1987, LB 114, § 1; Laws 1992, LB 1257, § 80; Laws 1993, LB 3, § 48; Laws 1994, LB 1066, § 112; Laws 1995, LB 429, § 2.

Cross References

- **Nebraska Capital Expansion Act,** see section 72-1269.
- **Nebraska State Funds Investment Act,** see section 72-1260.

81-1505.02. Mineral exploration holes; rules and regulations.

The council may adopt and promulgate rules and regulations governing mineral exploration holes prior to August 1, 1983, but such rules and regulations shall not be effective until such date.

The council shall adopt and promulgate rules and regulations authorized by the amendments made by Laws 1983, LB 356, to subsection (9) of section 81-1505 within one hundred twenty days of May 26, 1983. All requirements of the Environmental Protection Act shall apply to any permit application

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regardless of the date of submission, except that the department shall continue to diligently process any application submitted prior to May 26, 1983.

Source: Laws 1983, LB 356, § 9.

81-1505.03. Small Business Compliance Advisory Panel; created; members; duties; expenses.

(1) There is hereby created the Small Business Compliance Advisory Panel. The panel shall consist of the following:

(a) Two members who are not owners or representatives of owners of small business stationary sources of air emissions selected by the Governor to represent the general public;

(b) Four members selected by the Legislature who are owners or who represent owners of small business stationary sources of air emissions; and

(c) One member selected by the director.

(2) The panel shall be responsible for all requirements of the Clean Air Act, 42 U.S.C. 7401 et seq., as such act existed on January 1, 2004. Members shall be reimbursed for their actual and necessary expenses as provided in sections 81-1174 to 81-1177. The panel shall conduct its meetings in accordance with the Open Meetings Act and shall submit an annual report to the Governor no later than January 1 of each year. The panel shall receive necessary staff support from the department.

Source: Laws 1992, LB 1257, § 81; Laws 2004, LB 821, § 31.

Cross References

- **Open Meetings Act,** see section 84-1407.

81-1505.04. Annual emission fee; payment; amount; adjustment; allocation of costs; department; duties; report.

(1)(a) The department shall collect an annual emission fee from major sources of air pollution. Each major source shall pay the emission fee for regulated pollutants in the amount of twenty-five dollars per ton per pollutant or as adjusted pursuant to this section. The fee shall be based upon the amount of emissions of each regulated pollutant as reported or estimated by the source in the previous calendar year, but fees shall not be paid on amounts in excess of four thousand tons per year for any regulated pollutant.

(b) Beginning with calendar year 2001 emissions, fees shall not be paid for a mid-sized electric generation facility on amounts in excess of four hundred tons per year for any regulated pollutant.

(c) A mid-sized electric generation facility owned by a municipality shall continue to be considered a separate mid-sized electric generation facility for purposes of this section even if the facility is subsequently permitted with another general unit larger than one hundred fifteen megawatts under separate ownership. Each facility under separate ownership shall be considered a separate major source for purposes of this section.

(d) For purposes of this section, mid-sized electric generation facility means a facility that:

(i) Uses coal as the primary source of fuel in the facility's largest generation unit;

(ii) Has a name plate generating capacity of between seventy and one hundred fifteen megawatts in the facility's largest generation unit; and

(iii) Is not operating in a political subdivision which has been delegated the authority to enforce the air quality permit program within its jurisdiction.

(2)(a) The emission fee may be increased or decreased annually by the department by the percentage difference between the Consumer Price Index for the most recent year ending before the beginning of such year and the Consumer Price Index for the year 1989 or as required to pay all reasonable direct and indirect costs of developing and administering the air quality permit program. For purposes of this section, Consumer Price Index means the change in the price of goods and services for

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all urban consumers published by the United States Department of Labor at the close of the twelve-month period ending on August 31 of each year.

(b) For purposes of this section, reasonable direct and indirect costs of developing and administering the air quality permit program, as required under the federal Clean Air Act, as the act existed on May 31, 2001, 42 U.S.C. 7661a through f, include:

(i) Consideration of any associated overhead charges for personnel, equipment, buildings, and vehicles;

(ii) Reviewing and acting on any application for a permit or permit revision;

(iii) Implementing and enforcing the terms of any permit, not including any court costs or other costs associated with any formal enforcement action;

(iv) Emissions and ambient monitoring, including adequate resources to audit and inspect source-operated monitoring programs;

(v) Preparing generally applicable regulations or guidance;

(vi) Modeling, analyses, or demonstrations;

(vii) Preparing inventories and tracking emissions;

(viii) Developing and implementing any emissions trading programs as defined by the department; and

(ix) Providing support to sources under the Small Business Compliance Advisory Panel.

(c) The council shall establish procedures for the method of calculation and payment of the emission fee in a manner consistent with this section and shall establish the definition of or a table listing the pollutants which are regulated pollutants and a definition of major source. Such definitions or listing shall comply with and not be more stringent than the requirements of the federal Clean Air Act, as the act existed on May 31, 2001, 42 U.S.C. 7401 et seq.

(3) On or before January 1 of each year, the department shall submit electronically a report to the Legislature in sufficient detail to document all direct and indirect program costs incurred in the previous fiscal year in carrying out the air quality permit program. The Appropriations Committee of the Legislature shall review such report in its analysis of executive programs in order to verify that revenue generated from emission fees was used solely to offset appropriate and reasonable costs associated with the air quality permit program. The report shall identify costs incurred by the department to administer the permit program for each major source. In addition, the department shall identify costs incurred by primary activity not specific to a major source.

(4) The department shall administer a cost tracking system which shall show costs for each major source and costs for each primary activity that is not specific to a major source. The department shall consult with interested parties regarding identification of primary activities to be tracked by the cost tracking system.

Source: Laws 1992, LB 1257, § 82; Laws 1996, LB 634, § 1; Laws 2001, LB 461, § 7; Laws 2005, LB 94, § 1; Laws 2006, LB 872, § 4; Laws 2011, LB156, § 1; Laws 2012, LB782, § 202.

81-1505.05. Clean Air Title V Cash Fund; created; use; investment.

The Clean Air Title V Cash Fund is created. The department shall remit all fees collected pursuant to section 81-1505.04 to the State Treasurer for credit to the fund. Any fee collected pursuant to section 81-1505.04 shall be used solely to pay the reasonable direct and indirect costs required to develop and administer the air quality permit program, including expenses of the Small Business Compliance Advisory Panel. Any money in the fund available for investment shall be invested by the state investment officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act.

Source: Laws 1995, LB 429, § 1.

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Cross References

- **Nebraska Capital Expansion Act,** see section 72-1269.
- **Nebraska State Funds Investment Act,** see section 72-1260.

81-1505.06. Air quality construction permit; fees; Air Quality Permit Cash Fund; created; use; investment.

(1) Beginning January 1, 2005, each application for an air quality construction permit required by rules and regulations adopted pursuant to subsection (12) of section 81-1505 shall be accompanied by an application fee. If fees are required under more than one subdivision of this subsection, the application shall be accompanied by the one fee which is the highest of the applicable fees. The application fee shall be based on potential to emit, as defined in such rules and regulations, in accordance with the following schedule:

(a) Three thousand dollars for facilities that directly emit or have the potential to emit one hundred tons per year or more of any air pollutant, except hazardous air pollutants;

(b) Three thousand dollars for facilities that directly emit or have the potential to emit ten tons per year or more of any single hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants;

(c) One thousand five hundred dollars for facilities that directly emit or have the potential to emit fifty tons per year or more but less than one hundred tons per year of any air pollutant, except hazardous air pollutants;

(d) One thousand five hundred dollars for facilities that directly emit or have the potential to emit (i) two and one-half tons per year or more but less than ten tons per year of any single hazardous air pollutant or (ii) ten tons per year or more but less than twenty-five tons per year of any combination of hazardous air pollutants;

(e) Two hundred fifty dollars for facilities that directly emit or have the potential to emit less than fifty tons per year of any air pollutant, except hazardous air pollutants; and

(f) Two hundred fifty dollars for facilities that directly emit or have the potential to emit (i) less than two and one-half tons per year of any single hazardous air pollutant and (ii) less than ten tons per year of any combination of hazardous air pollutants.

(2) All application fees collected under this section shall be remitted to the State Treasurer for credit to the Air Quality Permit Cash Fund, which fund is hereby created. The Air Quality Permit Cash Fund shall be used for purposes identified in subsection (12) of section 81-1505. Any money in the fund available for investment shall be invested by the state investment officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act.

(3) For purposes of this section, (a) air pollutant means particulate matter with a diameter of ten microns or less, sulfur dioxide or sulfur trioxide or any combination of the two, oxides of nitrogen, volatile organic compounds, and carbon monoxide and (b) hazardous air pollutant means any pollutant defined as such in rules and regulations adopted pursuant to subsection (12) of section 81-1505.

Source: Laws 2004, LB 449, § 2.

Cross References

- **Nebraska Capital Expansion Act,** see section 72-1269.
- **Nebraska State Funds Investment Act,** see section 72-1260.

81-1506. Unlawful acts.

(1) It shall be unlawful for any person:

(a) To cause pollution of any air, waters, or land of the state or to place or cause to be placed any wastes in a location where they are likely to cause pollution of any air, waters, or land of the state; or

(b) To discharge or emit any wastes into any air, waters, or land of the state which reduce the quality of such air, waters, or land below the air, water, or land quality standards established therefor by the

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council. Any such action is hereby declared to be a public nuisance. An animal feeding operation is not a nuisance if:

(i) Reasonable techniques are employed to keep dust, noise, insects, and odor at a minimum;

(ii) It is in compliance with applicable regulations adopted by the council and zoning regulations of the local governing body having jurisdiction; and

(iii) The action is brought by or on behalf of a person whose date of lawful possession of the land claimed to be affected by an animal feeding operation is subsequent to the issuance of an appropriate permit by the department for such operation or is subsequent to the operation of the feedlot and an onsite inspection by the department is made, before or after filing of the suit, and the inspection reveals that no permit is required for such operation.

(2) It shall be unlawful for any person to:

(a) Discharge any pollutant into waters of the state without obtaining a permit as required by the National Pollutant Discharge Elimination System created by the Clean Water Act, as amended, 33 U.S.C. 1251 et seq., and by rules and regulations adopted and promulgated pursuant to section 81-1505;

(b) Construct, install, modify, or operate any disposal system or part thereof or any extension or addition thereto without obtaining necessary permits from the department;

(c) Increase in volume or strength any waste in excess of permitted discharges specified under any existing permit;

(d) Construct, install, or operate any industrial, commercial, or other facility or extend, modify, or add to any such facility if the operation would cause an increase in the discharge or emission of wastes into the air, waters, or land of the state or would otherwise cause an alteration of the physical, chemical, or biological properties of any air, waters, or land of the state in a manner that is not lawfully authorized; or

(e) Construct or use any new outlet for the discharge or emission of any wastes into the air, waters, or land of the state without the necessary permit.

(3) It shall be unlawful for any person to:

(a) Construct or operate a solid waste management facility without first obtaining a permit required under the Environmental Protection Act or under the Integrated Solid Waste Management Act and the rules and regulations adopted and promulgated by the council pursuant to the acts;

(b) Violate any term or condition of a solid waste management facility permit;

(c) Violate any rule or regulation adopted and promulgated by the council pursuant to the Environmental Protection Act or the Integrated Solid Waste Management Act; or

(d) After October 1, 1993, dispose of any solid waste at any location other than a solid waste management facility holding a current permit issued by the department pursuant to the Integrated Solid Waste Management Act.

(4) It shall be unlawful to:

(a) Construct or operate an air pollution source without first obtaining a permit required under the Environmental Protection Act and the rules and regulations adopted and promulgated by the council pursuant to subsection (12) of section 81-1505;

(b) Violate any term or condition of an air pollution permit or any emission limit set in the permit; or

(c) Violate any emission limit or air quality standard established by the council.

(5) It shall be unlawful for any person to:

(a) Construct or operate an animal feeding operation without first obtaining a permit if required under the Livestock Waste Management Act or under the Environmental Protection Act and the rules and regulations adopted and promulgated by the council pursuant to such acts;

(b) Violate any provision of the Livestock Waste Management Act;

(c) Violate any term or condition of an animal feeding operation permit; or

(d) Violate any rule or regulation adopted and promulgated by the council pursuant to the Environmental Protection Act or the Livestock Waste Management Act.

(6) Nothing in this section shall be construed to authorize the department to specify the type, design, method of installation, or type of construction of any equipment of manufacturing processes.

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Source: Laws 1971, LB 939, § 6; Laws 1972, LB 1435, § 5; Laws 1974, LB 1029, § 4; Laws 1977, LB 132, § 1; Laws 1980, LB 915, § 1; Laws 1983, LB 356, § 6; Laws 1992, LB 1257, § 83; Laws 1993, LB 623, § 4; Laws 1994, LB 570, § 8; Laws 1998, LB 1209, § 22; Laws 2004, LB 916, § 26.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.

81-1507. Director; violations; hearings; orders.

(1) Whenever the director has reason to believe that a violation of any provision of the Environmental Protection Act, the Integrated Solid Waste Management Act, the Livestock Waste Management Act, a rule or regulation pursuant to such acts, or any order of the department has occurred, he or she may cause a written complaint to be served upon the alleged violator or violators or he or she may bring a criminal or civil action under section 81-1508.01 or 81-1508.02. The complaint shall specify the provision of the act, rule or regulation, or order alleged to be violated and the facts alleged to constitute a violation thereof and shall order that necessary corrective action be taken within a reasonable time to be prescribed in such order. Any such order shall become final unless each person named therein requests in writing a hearing before the director no later than thirty days after the date such order is served. In lieu of such order, the director may require that the alleged violator appear before the director at a time and place specified in the notice and answer the charges complained of. The notice shall be delivered to the alleged violator or violators in accordance with the provisions of subsection (5) of this section not less than thirty days before the time set for the hearing.

Whenever, on the basis of any information, the director determines that there is or has been a release of hazardous waste or hazardous constituents into the environment from a facility authorized to operate under the Environmental Protection Act or from a facility subject to hazardous waste management regulations adopted and promulgated under the act, the director may issue an order requiring the owner or operator to monitor, investigate, and undertake corrective action or such other response at the facility or beyond the facility boundary where necessary to protect human health and the environment. In the case of any facility or site not in operation at the time a determination is made to require corrective action, if the director finds that the owner could not reasonably be expected to have actual knowledge of the presence of hazardous waste at the site, the director may issue an order requiring any previous owner or operator who could reasonably be expected to have actual knowledge to carry out the necessary monitoring, investigation, and corrective action.

(2) The director shall afford an opportunity for a fair hearing, in accordance with the provisions of the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act, to the alleged violator or violators at the time and place specified in the notice or any modification thereof. On the basis of the evidence produced at the hearing, the director or hearing officer shall make findings of fact and conclusions of law and enter such order as in his or her opinion will best further the purposes of the acts and shall give written notice of such order to the alleged violator and to such other persons who appear at the hearing and make written request for notice of the order. If the hearing is held before any person other than the director, such person shall transmit a record of the hearing together with findings of fact and conclusions of law to the director. The director, prior to entering his or her order on the basis of such record, shall provide opportunity to the parties to submit for his or her consideration exceptions to the findings or conclusions and supporting reasons for such exceptions. The order of the director shall become final and binding on all parties unless appealed to the courts as provided in section 81-1509 within thirty days after notice has been sent to the parties.

(3) Any person who is denied a permit by the director or who has such permit revoked or modified shall be afforded an opportunity for a fair hearing as provided in subsection (2) of this section in connection therewith upon written application to the director within thirty days after receipt of notice from

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the director of such denial, revocation, or modification. On the basis of such hearing the director shall affirm, modify, or revoke his or her previous determination.

(4) Whenever the director finds that an emergency exists requiring immediate action to protect the public health and welfare, the director may, without notice or hearing, issue an order reciting the existence of such an emergency and requiring that such action be taken as the director deems necessary to meet the emergency. Notwithstanding the provisions of subsection (2) of this section, such order shall be effective immediately. Any person to whom such order is directed shall comply therewith immediately but on application to the director shall be afforded a hearing as soon as possible and not later than ten days after such application by such affected person. On the basis of such hearing, the director shall continue such order in effect, revoke it, or modify it.

(5) Except as otherwise expressly provided, any notice, order, or other instrument issued by or under authority of the director shall be served on any person affected thereby in a manner provided for service of a summons in a civil action. Proof of service shall be filed in the office of the department.

Every certificate or affidavit of service made and filed as provided in this section shall be prima facie evidence of the facts therein stated, and a certified copy thereof shall have like force and effect.

(6) The hearings provided for in this section may be conducted by the director or by any member of the department acting in his or her behalf, or the director may designate hearing officers who shall have the power and authority to conduct such hearings in the name of the director at any time and place. A verbatim record of the proceedings of such hearings shall be taken and filed with the director, together with findings of fact and conclusions of law made by the director or hearing officer. Witnesses who are subpoenaed shall receive the same fees as in civil actions in the district court and mileage as provided in section 81-1176. In case of contumacy or refusal to obey a notice of hearing or subpoena issued under the provisions of this section, the district court shall have jurisdiction, upon application of the director, to issue an order requiring such person to appear and testify or produce evidence as the case may require and any failure to obey such order of the court may be punished by such court as contempt thereof.

If requested to do so by any party concerned with such hearing, the full stenographic notes, or tapes of an electronic transcribing device, of the testimony presented at such hearing shall be taken and filed. The stenographer shall, upon the payment of the stenographer's fee allowed by the court therefor, furnish a certified transcript of the whole or any part of the stenographer's notes to any party to the action requiring and requesting the same.

Source: Laws 1971, LB 939, § 7; Laws 1972, LB 1435, § 6; Laws 1974, LB 1029, § 5; Laws 1981, LB 204, § 197; Laws 1983, LB 447, § 99; Laws 1987, LB 152, § 2; Laws 1992, LB 1257, § 84; Laws 1998, LB 1209, § 23; Laws 1999, LB 784, § 2; Laws 1999, LB 789, § 1.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2401.

81-1508. Violations of Environmental Protection Act, Integrated Solid Waste Management Act, or Livestock Waste Management Act; civil penalties; injunctions.

(1) Any person who violates any of the provisions of the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act, fails to perform any duty imposed by either act or any rule or regulation issued thereunder, or violates any order or determination of the director promulgated pursuant to either act and causes the death of fish or other wildlife shall, in addition to the penalties provided in sections 81-1508.01 and 81-1508.02, be liable to pay to the state an additional amount equal to the sum of money reasonably necessary to restock waters with fish or replenish such wildlife as determined by the director after consultation with the Game and Parks Commission. Such amount may be recovered by the director on behalf of the state in a civil action

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brought in the district court of the county in which such violation or failure to perform the duty imposed occurred.

(2) Except as provided for in subsection (3) of this section for the handling, storage, treatment, transportation, or disposal of solid or hazardous waste, in addition to the penalties provided by this section and sections 81-1508.01 and 81-1508.02, the director, whenever he or she has reason to believe that any person, firm, or corporation is violating or threatening to violate any provision of the acts, any rule or regulation adopted and promulgated thereunder, or any order of the director, may petition the district court for an injunction. It shall be the duty of each county attorney or the Attorney General to whom the director reports a violation to cause appropriate proceedings to be instituted without delay to assure compliance with the acts.

(3) Upon receipt of evidence that the handling, storage, treatment, transportation, or disposal of any solid waste or hazardous waste is presenting an imminent and substantial endangerment to the health of humans or animals or to the environment, the director may petition the district court for an injunction to immediately restrain any person from contributing to the alleged acts, to stop such handling, storage, treatment, transportation, or disposal, and to take such other action as may be necessary. It shall be the duty of each county attorney or the Attorney General to whom the director reports a violation to cause appropriate proceedings to be instituted without delay to assure compliance with the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act.

Source: Laws 1971, LB 939, § 8; Laws 1972, LB 1435, § 7; Laws 1973, LB 538, § 3; Laws 1979, LB 342, § 3; Laws 1981, LB 216, § 4; Laws 1983, LB 356, § 7; Laws 1984, LB 1078, § 4; Laws 1987, LB 565, § 1; Laws 1991, LB 413, § 1; Laws 1992, LB 1257, § 85; Laws 1994, LB 570, § 9; Laws 1998, LB 1209, § 24.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.

81-1508.01. Violations of Environmental Protection Act, Integrated Solid Waste Management Act, or Livestock Waste Management Act; criminal penalties.

(1) Any person who violates the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act by knowingly and willfully committing any of the following offenses shall be guilty of a Class IV felony:

(a) Violating any water pollution control law, rule, or regulation adopted pursuant to the National Pollutant Discharge Elimination System created by the Clean Water Act, as amended, 33 U.S.C. 1251 et seq., or any permit or permit condition or limitation or failing to obtain a permit as required by the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act;

(b) Violating any air pollution control law, rule, regulation, permit, license, or permit or license condition or limitation;

(c) Violating any hazardous waste control law, rule, regulation, permit, license, or permit or license condition or limitation;

(d) Violating any mineral production, mineral exploration, or injection control law, rule, regulation, permit, license, or permit or license condition or limitation;

(e) Making any false statement, representation, or certification in any application, label, manifest, record, report, plan, or other document required to be filed or maintained by the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts;

(f) Falsifying, tampering with, or rendering inaccurate any monitoring device or method used or required for compliance with any permit or license or the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts; or

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(g) Transporting hazardous waste to an unpermitted facility.

(2) Any person who violates the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act by knowingly and willfully committing any of the following offenses shall be guilty of a Class I misdemeanor:

(a) Violating any solid waste control law, rule, regulation, permit, license, or permit or license condition or limitation; or

(b) Violating any livestock waste control law, rule, regulation, permit, license, or permit or license condition or limitation.

(3) Any person who knowingly and willfully violates any other provision of the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or any rule or regulation adopted and promulgated pursuant to such acts shall be guilty of a Class III misdemeanor.

(4) Each violation under this section shall be actionable. In case of a continuing violation, each day shall constitute a separate offense. Any person who knowingly and willfully violates this section shall be subject to personal liability under this section. In assessing the amount of any fine, the court shall consider the degree and extent of the violation, the size of the operation, and any economic benefit derived from noncompliance.

Source: Laws 1994, LB 570, § 10; Laws 1998, LB 1209, § 25.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.

81-1508.02. Unlawful acts; civil penalty.

(1) It shall be unlawful for any person:

(a) To refuse the right of entry and inspection to any authorized representative of the department when the representative is acting under the provisions of a permit issued by the department;

(b) To violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts;

(c) To make any false statement, representation, or certification in any application, label, record, report, plan, or other document required to be filed or maintained by such acts, rules, or regulations;

(d) To falsify, tamper with, or render inaccurate any monitoring device or method used or required for compliance with a permit or license or such acts, rules, or regulations; or

(e) To violate any other provision of or fail to perform any other duty imposed by such acts, rules, or regulations.

(2) Each violation of this section or of section 81-1506 shall subject a person to a civil penalty of no more than ten thousand dollars per day. In case of a continuing violation, each day shall constitute a separate offense. In assessing the amount of the fine, the court shall consider the degree and extent of the violation, the size of the operation, and any economic benefit derived from noncompliance.

Source: Laws 1994, LB 570, § 11; Laws 1998, LB 1209, § 26; Laws 1999, LB 789, § 2.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2401.

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81-1509. Appeal; procedure.

An appeal may be taken from any final decision of the director, and the appeal shall be in accordance with the Administrative Procedure Act.

Source: Laws 1971, LB 939, § 9; Laws 1972, LB 1435, § 8; Laws 1974, LB 1029, § 6; Laws 1979, LB 321, § 3; Laws 1988, LB 352, § 174.

Cross References

- **Administrative Procedure Act,** see section 84-920.

81-1510. Director; voluntary compliance; records.

(1) The director shall make every effort to obtain voluntary compliance through warning, conference, or any other appropriate means prior to initiating enforcement proceedings, except that such requirement shall not be construed to alter enforcement duties or requirements of the director and the department.

(2) The director may require the maintenance of records relating to the operation of disposal systems, and any authorized representative of the director may examine and copy any such records or memoranda pertaining to the operation of disposal systems. Copies of such records shall be submitted to the director upon request.

Source: Laws 1971, LB 939, § 10; Laws 1972, LB 1435, § 9; Laws 1992, LB 1257, § 86.

81-1511. Department; inspections; search warrants.

Any duly authorized officer, employee, or representative of the director may at any reasonable time, with the consent of the person or persons in control of an air, land, or water contaminant source, enter and inspect any property, premise, or place on or at which such a contaminant source is located or being constructed, installed, or established for the purpose of ascertaining the state of compliance with the Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act and rules and regulations in force pursuant to the acts. A suitably restricted search warrant, upon a showing of probable cause in writing and upon oath or affirmation, may be issued by the district court as provided by law to such officer, employee, or representative of the department for the purpose of enabling him or her to make such inspection. No person shall refuse entry or access to any authorized representative of the department who requests entry for purposes of inspection and who presents appropriate credentials and warrants. No person shall obstruct, hamper, or interfere with any such inspection. Nothing in this section shall be construed to prevent prompt inspection without consent or appropriate warrant in acute and compelling emergency situations when there is neither sufficient time nor opportunity to obtain a search warrant. If requested, the owner or operator of the premises shall receive a report setting forth all facts found which relate to compliance status.

Source: Laws 1971, LB 939, § 11; Laws 1972, LB 1435, § 10; Laws 1987, LB 152, § 3; Laws 1992, LB 1257, § 87; Laws 1998, LB 1209, § 27.

Cross References

- **Inspection of grain warehouses,** department, duties, see section 88-550.
- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.

81-1512. Department; emergency powers.

Nothing in the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act shall be construed to limit any power which the Governor or any other

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officer may have to declare an emergency and act on the basis of such declaration if such power is conferred by statute or constitutional provision or inheres in the office.

Source: Laws 1971, LB 939, § 12; Laws 1987, LB 152, § 4; Laws 1992, LB 1257, § 88; Laws 1998, LB 1209, § 28.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Livestock Waste Management Act,** see section 54-2416.

81-1513. Variances from rules or regulations; notice; conditions for granting; appeal.

(1) Any person who owns or is in control of any plant, building structure, process, or equipment may apply to the director for a variance from rules or regulations. The director may grant such variance if he or she finds that the emissions or discharges occurring or proposed to occur do not endanger or tend to endanger human health or safety or that compliance with the rules or regulations from which variance is sought would produce serious hardship without equal or greater benefits to the public. In making such findings the director shall give due consideration to all the facts and circumstances bearing upon the reasonableness of the emissions or discharges involved including, but not limited to:

(a) The character and degree of injury to or interference with the health and physical property of the people;

(b) The social and economic value of the source of the air, water, or land pollution;

(c) The question of priority of location in the area involved; and

(d) The technical practicability and economic reasonableness of reducing or eliminating the emissions or discharges resulting from such source.

(2) No variance shall be granted until the director has considered the relative interests of the applicant, other owners of property likely to be affected by the discharges, and the general public. Before any variance is granted, the director shall give public notice of an application for such variance immediately upon receipt of such application and in accordance with the rules and regulations of the department. The notice shall be published in a newspaper of general circulation in the county in which the plant, building structure, process, or equipment on which the proposed variance is located.

(3) Any variance or renewal thereof shall be granted within the requirements of subsection (1) of this section, for time periods and under conditions consistent with the reasons therefor, and within the following limitations:

(a) If the variance is granted on the ground that there is no practicable means known or available for the adequate prevention, abatement, or control of the air, water, or land pollution involved, it shall be only until the necessary means for prevention, abatement, or control become known and available and subject to the taking of any substitute or alternate measures that the director may prescribe;

(b) If the variance is granted on the ground that compliance with the particular requirement or requirements from which variance is sought will necessitate the taking of measures which, because of their extent or cost, must be spread over a considerable period of time, it shall be for a period not to exceed such reasonable time as, in the view of the director, is requisite for the taking of the necessary measures. A variance granted on the ground specified in this section shall contain a timetable for the taking of action in an expeditious manner and shall be conditioned on adherence to such timetable; and

(c) If the variance is granted on the ground that it is justified to relieve or prevent hardship of a kind other than that provided for in subdivision (a) or (b) of this subsection, it shall be for not more than one year.

(4) Any variance granted pursuant to this section may be renewed on terms and conditions and for periods which would be appropriate on initial granting of a variance. If complaint is made to the director on account of the variance, no renewal thereof shall be granted unless the director finds that renewal is justified. No renewal shall be granted except on application therefor. Any such application shall be made at least thirty days prior to the expiration of the variance. Immediately upon receipt of an application for renewal and before approving the renewal application, the director shall give public notice of such

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application in accordance with rules and regulations of the department. The public notice shall be published in a newspaper of general circulation in the county in which the plant, building structure, process, or equipment on which the variance is located.

(5) A variance or renewal shall not be a right of the applicant or holder thereof but shall be in the discretion of the director. The granting or denial of a variance or a renewal shall be by final order of the director. Any person adversely affected by such an order may appeal the decision, and the appeal shall be in accordance with the Administrative Procedure Act.

(6) Nothing in this section and no variance or renewal granted pursuant to this section shall be construed to prevent or limit the application of the emergency provisions and procedures of section 81-1507 to any person or his or her property.

(7) No variance shall be granted which will sanction any violation of state or federal statutes or regulations.

Source: Laws 1971, LB 939, § 13; Laws 1972, LB 1435, § 11; Laws 1974, LB 1029, § 7; Laws 1988, LB 352, § 175; Laws 2006, LB 975, § 19.

Cross References

- **Administrative Procedure Act,** see section 84-920.

81-1514. Land resources; public policy.

It is hereby declared to be the public policy of the State of Nebraska to achieve and maintain such a reasonable degree of purity of the land resources of the state as will protect human health and safety, and, to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of the state, protect the scenic beauty of the state, facilitate the enjoyment of the natural attractions of the state, and to provide for the prevention, abatement and control of new or existing land pollution.

Source: Laws 1971, LB 939, § 14.

81-1515. Repealed. Laws 1972, LB 1435, § 16.

81-1516. Refuse, garbage, and rubbish; disposal; conditions.

No person shall dispose of any refuse, garbage, or rubbish at any place except a disposal area for which a permit has been issued as provided by the Environmental Protection Act or, on and after October 1, 1993, in a facility for which a permit has been issued under the Integrated Solid Waste Management Act. Nothing in either act and no act of the director shall usurp the legal right of a local governing body to develop and enforce local ordinances, codes, or rules and regulations on solid waste disposal equal to or more stringent than the provisions of the acts as necessary to protect the public health and welfare and the environment, and the provisions of the acts shall not relieve the applicant from obtaining a permit from a local governing body when required or relieve the person owning or operating a disposal area from responsibility for securing proper zoning permits or complying with all applicable local ordinances, codes, or rules and regulations not in conflict with the provisions of the acts.

Source: Laws 1971, LB 939, § 16; Laws 1987, LB 152, § 5; Laws 1992, LB 1257, § 89.

Cross References

- **Garbage and solid waste disposal facilities,** construction and operation by cities of the first and second classes and villages, see sections 19-2101 to 19-2111.
- **Integrated Solid Waste Management Act,** see section 13-2001.
- **Solid waste disposal areas and facilities,** siting approval from city, village, or county, see sections 13-1701 to 13-1714.

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81-1517. Repealed. Laws 1992, LB 1257, § 105.
81-1518. Repealed. Laws 1992, LB 1257, § 105.
81-1519. Repealed. Laws 1992, LB 1257, § 105.
81-1520. Repealed. Laws 1992, LB 1257, § 105.
81-1521. Repealed. Laws 1974, LB 1029, § 10.
81-1521.01. Transferred to section 81-1521.15.
81-1521.02. Transferred to section 81-1521.17.
81-1521.03. Transferred to section 81-1521.20.
81-1521.04. Transferred to section 81-1521.21.
81-1521.05. Transferred to section 81-1521.22.
81-1521.06. Transferred to section 81-1521.23.
81-1521.07. Repealed. Laws 1987, LB 152, § 12.

81-1521.08. Hazardous waste; terms, defined.

For purposes of sections 81-1521.08 to 81-1521.23, unless the context otherwise requires:

(1) Chief executive officer shall mean the mayor, city manager, or chairperson of the board of trustees of a municipality;

(2) Commercial hazardous waste management facility shall mean a hazardous waste management facility which accepts hazardous waste for treatment, storage, or disposal which is generated by any person other than the person which owns or operates such facility;

(3) Committee shall mean the specific site review committee established in response to a notice of intent filed pursuant to section 81-1521.09;

(4) Hazardous waste management facility shall mean all contiguous land, and structures, other appurtenances, and improvements on the land, used for the treatment, storage, or disposal of hazardous waste. A hazardous waste management facility may consist of several treatment, storage, or disposal operational units such as one or more landfills or surface impoundments or any combination of such operational units;

(5) Municipality shall mean an incorporated city or village; and

(6) Other definitions found in section 81-1502 shall apply.

Source: Laws 1987, LB 114, § 2.

81-1521.09. Hazardous waste; commercial hazardous waste management facility; notice of intent to apply for permit; fee; site review committee; director; appoint designee.

(1) Commencing on June 30, 1988, any person who desires a permit for a commercial hazardous waste management facility shall, at least one hundred eighty days prior to making application therefor, file a notice of intent with the director on a form provided by the director. The notice of intent shall include such information as prescribed by the director and shall be accompanied by a fee established by the department in an amount sufficient, but not in excess of the amount necessary, to pay the department for the direct and indirect costs of processing the notice of intent and to pay the costs and expenses specified in section 81-1521.12. Within fifteen days of receipt of a notice of intent, the director shall notify the appropriate local officials and shall establish a specific site review committee. The purpose of establishing the committee shall be to provide for early public involvement in the consideration of a proposed facility.

(2) The director may appoint a designee to carry out duties assigned to the director related to a notice of intent or an application for a permit except the duty to make the decision required by section 81-1521.19. If the applicant is an individual, the application shall include the applicant's social security number.

Source: Laws 1987, LB 114, § 3; Laws 1997, LB 752, § 225.

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81-1521.10. Hazardous waste; site review committee; membership.

(1) The committee shall consist of twelve members, six of whom shall be local members and six of whom shall be regional members.

(2) The six local members shall be chosen as follows:

(a) If the proposed facility will be located within the zoning jurisdiction of a municipality, the chief executive officer of the municipality shall appoint six members who reside within such zoning jurisdiction;

(b) If the proposed facility will be located in an unincorporated area which is within five miles of the zoning jurisdiction of one or more municipalities, the chief executive officer of each such municipality shall appoint a member who resides within the zoning jurisdiction of the respective municipality and the chairperson of the county board of the county in which the facility would be located shall appoint additional members who reside within five miles of the proposed facility for a total of six members; and

(c) If the proposed facility will be located in an unincorporated area which is more than five miles from the zoning jurisdiction of any municipality, the chairperson of the county board of the county in which the facility would be located shall appoint six members who reside within five miles of the proposed facility.

(3) The six regional members shall be appointed by the director to represent various interests affected by a proposed facility and shall include at least one environmental representative, one academic expert, one industry representative, one community planner, one representative of public interest groups, and one representative of the medical community. The regional members shall be appointed for two-year terms and shall serve whenever a committee is needed during that time. Alternates shall be appointed to serve in case a regional member is unable to do so or is already serving on a committee.

Source: Laws 1987, LB 114, § 4.

81-1521.11. Hazardous waste; site review committee; meetings; officers; professional facilitator.

The director shall organize a meeting of the committee within twenty-one days of the filing of a notice of intent by an applicant. The director shall serve as temporary chairperson of the committee and shall select as a professional facilitator a person trained in group dynamics and objectivity to handle committee meetings with the public and the applicant. At its first meeting, the committee shall select a chairperson and any other officers it deems necessary and shall adopt procedures for gathering information and preparing a report. The committee shall hold factfinding meetings near the proposed site for the facility. The applicant shall make a technical advisor and other resource people available to the committee.

Source: Laws 1987, LB 114, § 5.

81-1521.12. Hazardous waste; department; provide staff; applicant; pay expenses.

The department shall provide a secretary and other staff persons to assist the committee. The applicant shall pay the expenses for such clerical and other help and the salary of the professional facilitator, shall pay the costs of printing the committee's report, and shall reimburse the committee members for their mileage expenses at the rate provided in section 81-1176 for state employees. The department shall keep a record of all such costs and expenses and assess the applicant for any amount over the estimated amount on which the fee paid by the applicant was based.

Source: Laws 1987, LB 114, § 6.

81-1521.13. Hazardous waste; site review committee; consider factors; enumerated.

Factors to be considered by the committee shall include, but not be limited to:

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(1) Economic considerations such as whether the facility is needed, profit expectations for the facility, how the facility will be operated, effects on the community, the potential for compensation to the local governing body, and aspects related to closure of the facility;

(2) The function of the facility, including the management processes involved, the wastes to be handled, the relationship to any integrated system or master plan for hazardous waste management, and plans for future expansion;

(3) Considerations related to the technology to be used such as why that process was chosen, plans for quality control, reliability of the technology, and the sequence of steps involved from generation of the wastes to postclosure of the facility;

(4) Characteristics of the site for the facility, the methods for determining the characteristics, and why the site was chosen;

(5) Surface drainage, ground water protection, air emissions, and other factors related to environmental quality;

(6) Transportation considerations such as methods to be used, waste containment during transport, party responsible for transport, timing of arrivals, routing, and response plans in case of spills;

(7) Plans for responses to emergencies and for site security, qualifications and training of personnel, and actions to be taken when there are operating problems; and

(8) Enforcement provisions, including applicable regulations, monitoring plans, who is responsible for enforcement, sequence and timing of possible enforcement, and the ability of governmental agencies to ensure compliance.

Source: Laws 1987, LB 114, § 7.

81-1521.14. Hazardous waste; site review committee; issue report; contents.

The committee shall issue a report no later than one hundred eighty days from the date the notice of intent is filed, except that the deadline may be extended by mutual agreement between the applicant and the committee. The report shall document the discussion of community concerns raised during review by the committee of the proposed commercial hazardous waste management facility, including identification and discussion of the issues which were resolved, the issues which were not resolved, and the questions which were not answered, including the reasons they were not answered.

The report may also include recommendations on the compensation which the applicant should pay or provide to the local governing body. Any recommendations shall be subject to further negotiations between the applicant and the local governing body.

Copies of the report shall be made available to committee members, the department, the applicant, and the public.

After issuance of its report, the committee shall have no further duties, except that the department may ask the committee to review any changes related to the proposed commercial hazardous waste management facility which are proposed by the applicant and to amend its report if appropriate.

Source: Laws 1987, LB 114, § 8.

81-1521.15. Commercial hazardous waste management facility; application for permit.

At the conclusion of the process involving the committee, the person desiring a permit for a commercial hazardous waste management facility shall make application therefor to the director on a form provided by the director. The application shall contain the name and residence of the applicant, the location of the proposed facility, and such other information as may be necessary and shall be accompanied by a copy of the committee's report and any written response by the applicant to such report.

Source: Laws 1980, LB 853, § 8; R.S.1943, (1981), § 81-1521.01; Laws 1987, LB 114, § 9.

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81-1521.16. Commercial hazardous waste management facility; application; hearing by local governing body.

If the application for a commercial hazardous waste management facility contains all of the information required by the department, the director shall send a copy of the application, of the committee's report, and of any response by the applicant to the report to the county board of the county if the proposed facility will be located outside the zoning jurisdiction of a city or village or to the city council or board of trustees if it will be located within the zoning jurisdiction of a city or village. A hearing shall be held by the county board, city council, or board of trustees within forty-five days of receipt of the copy of the application.

Source: Laws 1987, LB 114, § 10.

81-1521.17. Commercial hazardous waste management facility; notice of hearing; decision by local governing body.

Before the county board, city council, or board of trustees approves or disapproves a proposed commercial hazardous waste management facility, notice shall be given once at least thirty days but not more than forty days before the hearing and a second time at least ten days before the hearing. Such notice shall be given by publication of a notice in a newspaper either published in or having general circulation in the county, city, or village where the proposed facility is to be located and shall state the time and place of hearing, the name of the applicant for a permit, and the exact location of the proposed facility. In deciding whether to approve or disapprove such facility, the county board, city council, or board of trustees shall determine if such facility will be in compliance with its zoning laws or violate any local ordinances or resolutions. The local governing body shall make its decision within one hundred eighty days of receipt of a copy of the application from the director and shall notify the department and the applicant of its action. If the local governing body disapproves the application, it shall specify its reasons for disapproval. If the local governing body disapproves the application, the department may not take further action on the application unless the disapproval is reversed by court order. For purposes of appeal, the decision of the local governing body to disapprove the application shall be deemed a final order.

Source: Laws 1980, LB 853, § 9; R.S.1943, (1981), § 81-1521.02; Laws 1987, LB 114, § 11; Laws 1987, LB 152, § 8.

81-1521.18. Commercial hazardous waste management facility; appeal of decision.

The disapproval decision made by the local governing body may be appealed to district court. The court may affirm the decision or it may reverse or modify the decision if the substantial rights of the petitioner may have been prejudiced because the decision is:

(1) In violation of constitutional provisions;

(2) In excess of the statutory authority or jurisdiction of the local governing body;

(3) Made upon unlawful procedure;

(4) Unsupported by competent, material, and substantial evidence in view of the entire record as made on review; or

(5) Arbitrary or capricious.

Source: Laws 1987, LB 114, § 12.

81-1521.19. Commercial hazardous waste management facility; approval; director; duties.

Following approval action by the local governing body, the director shall determine if the proposed facility complies with the provisions of the Environmental Protection Act and all rules, regulations, and standards promulgated pursuant to such act. The review shall include, but not be limited to,

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consideration of factors related to air quality, water quality, waste management, and hydrogeology and of the environmental risks and benefits to the vicinity in which the facility would be located. Each person in the department who reviews the application shall prepare and sign a written statement for evaluation by the director who shall decide whether to approve or disapprove the application.

Source: Laws 1987, LB 114, § 13.

81-1521.20. Commercial hazardous waste management facility; publication of notice; additional hearing; permit; issuance; conditions.

The department shall publish notice of an application for a permit for a commercial hazardous waste management facility, together with the action taken by the local governing body, the director's decision, and whether the permit will be granted or denied, in a legal newspaper either published in or having general circulation in the vicinity affected. A copy of such notice shall also be provided to the applicant. The public may comment or request a public hearing within thirty days after the date such information is made available, and the director may, within his or her discretion, hold a hearing on the granting or denial of the permit if he or she determines that the circumstances justify it.

Prior to issuing the permit, the director shall find that the applicant is a responsible and suitable person to conduct the business and that the proposed facility complies with the provisions specified in section 81-1521.19 and has the requisite approval of the local governing body. Permit conditions established by the department shall supersede any ordinances, resolutions, regulations, or requirements of the local governing body, then or thereafter in effect, which are inconsistent with such conditions.

Source: Laws 1980, LB 853, § 10; R.S.1943, (1981), § 81-1521.03; Laws 1987, LB 114, § 14.

81-1521.21. Commercial hazardous waste management facility; permittee; financial responsibility and insurance.

As a condition of granting a permit for any commercial hazardous waste management facility, the permittee shall provide proof of financial responsibility pursuant to subdivision (21)(a) of section 81-1505 and liability insurance, including coverage against nonsudden and accidental occurrences, in an amount determined by the director.

Source: Laws 1980, LB 853, § 11; Laws 1984, LB 1078, § 6; R.S.Supp.,1986, § 81-1521.04; Laws 1987, LB 114, § 15.

81-1521.22. Commercial hazardous waste management facility permit; expiration; renewal.

Permits shall expire five years following the date of issuance but may be renewed if the permittee has complied with the provisions of the Environmental Protection Act and the rules and regulations adopted and promulgated thereunder.

Source: Laws 1980, LB 853, § 12; R.S.1943, (1981), § 81-1521.05; Laws 1987, LB 114, § 16; Laws 1987, LB 152, § 9.

81-1521.23. Commercial hazardous waste management facility permit; revocation; when.

The director may revoke the permit for a commercial hazardous waste management facility, pursuant to subsection (3) of section 81-1507, if he or she finds that the facility is not being operated in accordance with the Environmental Protection Act and rules and regulations adopted and promulgated thereunder.

Source: Laws 1980, LB 853, § 13; R.S.1943, (1981), § 81-1521.06; Laws 1987, LB 114, § 17; Laws 1987, LB 152, § 10.

81-1522. Repealed. Laws 1992, LB 1257, § 105.

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81-1523. Accumulation of junk; unlawful.

It shall be unlawful for any property owner or person in lawful possession of property to allow the accumulation of junk on property that is not purely agricultural in character to the extent that such accumulation is a potential hazard to health.

Source: Laws 1971, LB 939, § 23.

81-1524. Accumulation of junk; investigation; removal; notice.

The department of health of a city, or the director, as the case may be, shall have the power to investigate all complaints of violations of section 81-1523 and, if either the department or director finds that the property owner or person in lawful possession of the property has allowed an unlawful accumulation of junk, shall give notice to the owner or person in lawful possession of the property by certified or registered mail to remove the accumulation within thirty days.

Source: Laws 1971, LB 939, § 24.

81-1525. Accumulation of junk; failure to remove; violation; penalty.

Any property owner or person in lawful possession of property who fails or refuses to remove an accumulation of junk as directed by the director pursuant to section 81-1524 shall be guilty of a Class IV misdemeanor.

Source: Laws 1971, LB 939, § 25; Laws 1972, LB 1435, § 13; Laws 1977, LB 39, § 305; Laws 2007, LB8, § 1.

81-1526. Rules and regulations; provisions applicable; exceptions.

(1) All rules and regulations adopted by the council and all hearings and other proceedings of the director, and judicial review thereof, shall be subject to the provisions of the Administrative Procedure Act.

(2) Nothing in this section shall be construed to require a hearing prior to the issuance of an emergency order pursuant to section 81-1507.

(3) Nothing in the Administrative Procedure Act shall be construed to render inapplicable or unenforceable the procedure set forth in section 81-1507. In any case of inconsistency or conflict, the provisions of section 81-1507 shall prevail.

Source:
Laws 1971, LB 939, § 26; Laws 1974, LB 1029, § 8.

Cross References

- Administrative Procedure Act, see section 84-920.

81-1527. Records and information; confidential use.

(1) Any records or other information furnished to or obtained by the department concerning one or more air, water, or land contaminant sources, which records or information, as certified by the owner or operator and determined by the director to relate to methods or processes entitled to protection as trade secrets of such owner or operator, shall be only for the confidential use of the department in the administration of the Environmental Protection Act and the Integrated Solid Waste Management Act unless such owner or operator expressly agrees to their publication or availability to the general public, except that emission data obtained under the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., or effluent data, permit applications, draft permits, or permits as issued, all under the National Pollutant Discharge Elimination System, pursuant to the Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500, as amended, shall be available to the public during business hours. Any information to be accorded confidential status in a national pollutant discharge elimination system form

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shall be forwarded to the Regional Administrator of the Environmental Protection Agency for concurrence with the director's determination of such status. Nothing in this section shall be construed to prevent the use of such records or information by the department in compiling or publishing analyses or summaries relating to the general condition of water or the land or the outdoor atmosphere as long as such analyses or summaries do not identify any owner or operator or reveal any information otherwise confidential under this section.

(2) The director shall permit the Administrator or Regional Administrator of the Environmental Protection Agency or his or her delegates to inspect the confidential records of the department concerning a given source.

Source: Laws 1971, LB 939, § 27; Laws 1972, LB 1435, § 14; Laws 1974, LB 1029, § 9; Laws 1984, LB 1078, § 7; Laws 1992, LB 1257, § 90.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.

81-1528. Act; political subdivision exempt; when; council; rules and regulations.

(1) The Environmental Protection Act shall not apply in any political subdivision which provides for the control of air, water, or land pollution by resolution, ordinance, or regulation not inconsistent with the substantive provisions of the Environmental Protection Act or any rule or regulation adopted pursuant to such act, except that no such resolution, ordinance, or regulation shall become effective until a certificate of exemption has been issued by the director. Such certificate of exemption shall be available for inspection in the office of the county, city, or village clerk as the case may be.

(2) If the director determines at any time after the issuance of such a certificate that a resolution, ordinance, or regulation is being enforced in a manner inconsistent with the Environmental Protection Act or any rule or regulation adopted pursuant to such act in any political subdivision holding a certificate of exemption, the director may suspend the certificate of exemption and the Environmental Protection Act shall apply in such political subdivision until such standards are met and a new certificate is issued.

(3) Any political subdivision desiring a certificate of exemption shall make application for such certificate by filing a petition for certificate of exemption with the director. The director or his or her designated representative shall promptly investigate such petition. If the recommendation of the director or his or her designated representative is against the granting of a certificate of exemption and he or she, in his or her discretion, concludes that a hearing would be advisable, a hearing shall be held as provided in section 81-1507 on the questions of whether the resolution, ordinance, or regulation is consistent with the substantive provisions of the Environmental Protection Act or any rule or regulation adopted pursuant to such act and whether adequate provisions have been made for enforcement. The burden of proof shall be upon the political subdivision. A like hearing shall be held upon any proposed suspension of a certificate of exemption.

(4) If the director finds that the location, character, or extent of particular concentrations of population, air, water, or land contaminant sources, the geographic, topographic, or meteorological considerations, or any combination thereof are such as to make impracticable the maintenance of appropriate levels of air, water, or land quality without an areawide air, water, or land pollution control program, the director may determine the boundaries within which such program is necessary and require it as the only acceptable alternative to direct state administration.

(5) Nothing in the Environmental Protection Act shall be construed to supersede or oust the jurisdiction of any local air, water, or land pollution control program in operation on May 26, 1971. Such program shall meet all requirements of the Environmental Protection Act for a local air, water, or land pollution control program. Any approval required from the department shall be deemed granted unless the department takes specific action to the contrary.

(6) Until October 1, 1993, cities of the second class and villages shall be exempt from the provisions of the Environmental Protection Act and the Integrated Solid Waste Management Act pertaining to

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permits for and control of nonhazardous solid waste disposal systems if such cities and villages provide solid waste disposal systems which do not result in the pollution of waters of the state. The department shall act in an advisory capacity to such cities and villages and shall have the right to inspect solid waste disposal sites and evaluate them according to the site evaluation criteria promulgated pursuant to the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq. The department shall notify the community of the results of its evaluation.

(7) The council shall, by July 1, 1992, adopt and promulgate rules and regulations which provide standards for the closure and postclosure care of all landfills, including landfills previously exempted under this section.

Source: Laws 1971, LB 939, § 28; Laws 1972, LB 1435, § 15; Laws 1980, LB 853, § 7; Laws 1984, LB 1078, § 8; Laws 1991, LB 67, § 2; Laws 1992, LB 1257, § 91.

Cross References

- **Integrated Solid Waste Management Act,** see section 13-2001.

81-1528.01. Repealed. Laws 1986, LB 491, § 40.

81-1529. Act, how construed.

Nothing in the Environmental Protection Act shall be construed to:

(1) Grant to the department any jurisdiction or authority with respect to air contamination existing solely within commercial and industrial plants, works, or shops or private property appurtenant thereto;

(2) Affect the relations between employers and employees with respect to or arising out of any condition of air contamination or air pollution; or

(3) Supersede or limit the applicability of any law or ordinance relating to sanitation, industrial health, or safety.

Source: Laws 1971, LB 939, § 29; Laws 1987, LB 152, § 11.

81-1530. Repealed. Laws 1987, LB 152, § 12.

81-1531. Repealed. Laws 1974, LB 1029, § 10.

81-1531.01. Act, how construed.

Nothing in the Environmental Protection Act shall be construed to apply to any wells or holes covered by sections 57-901 to 57-922.

Source: Laws 1983, LB 356, § 10.

81-1531.02. Uranium mining; department; regulatory duties; prohibited methods; enforcement.

(1) The department shall recommend an appropriate regulatory policy for controlling uranium mining to be presented to the council and the Legislature by January 1, 1986. The department shall evaluate all reasonable regulatory options for addressing the impacts on air, land, and water quality of uranium mining by methods other than mineral production and injection wells which are presently regulated. The department shall examine and consider regulatory programs created by other states and the federal government, their applicability to Nebraska, and their success in the states or areas where they are used and shall consider, but not be limited to, the following policy options:

(a) The development of uranium surface and shaft mining regulations;

(b) The development of regulations addressing appropriate development, mitigation, or reclamation standards for uranium mining or uranium mining-related activities;

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(c) The appropriateness of developing regulations addressing ground or surface water use standards for uranium mining or uranium mining-related activities as a means of limiting the impact of uranium mining on land and water resources; and

(d) The use of any other existing state regulatory programs to control or regulate the impacts of uranium mining on land and water resources.

(2) The department shall perform the evaluation in cooperation with other state agencies which have or could have a role in regulating the impacts of uranium mining on Nebraska's people and resources or in controlling other uranium mining activities. The department shall also create a citizen advisory panel, of interested or affected parties, which shall be consulted for its input and opinion on the results of the evaluation of regulatory options.

(3) Uranium mining by any method other than mineral production and injection wells shall be prohibited until legislation is passed authorizing the department to regulate such mining activities. It is the intent of the Legislature that uranium mining shall be regulated by the department. Upon receipt of evidence that uranium mining by any method other than by mineral production and injection wells or related activities are presenting or are likely to present an imminent and substantial threat to the environment, the director shall petition the district court for an injunction to immediately restrain any person from contributing to the alleged acts or to require any person to stop such acts or to take such other action as may be necessary. It shall be the duty of each county attorney or the Attorney General to whom the director reports a violation to cause appropriate proceedings to be instituted without delay to assure compliance with this section.

Source: Laws 1983, LB 356, § 11; Laws 1984, LB 742, § 2; Laws 1986, LB 1008, § 3.

81-1532. Act, how cited.

Sections 81-1501 to 81-1532 shall be known and may be cited as the Environmental Protection Act.

Source: Laws 1971, LB 939, § 32; Laws 1983, LB 356, § 12; Laws 1987, LB 114, § 18; Laws 1991, LB 528, § 2; Laws 1992, LB 1257, § 92; Laws 1994, LB 570, § 12; Laws 1998, LB 1209, § 30; Laws 2000, LB 1234, § 13; Laws 2001, LB 461, § 8; Laws 2004, LB 449, § 3.

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February 24, 2014

Mr. Karl Brooks
Regional Administrator
U.S. EPA, Region VII
11201 Renner Blvd.
Lenexa, KS 66219

Dear Mr. Brooks:

On December 9, 2013, the enclosed chapters were amended in Title 129 of the Nebraska Administrative Code. The Nebraska Department of Environmental Quality (NDEQ) is submitting these revised chapters to update Nebraska's regulatory State Implementation Plan (SIP).

The revised chapters were placed on public notice on May 15, 2013, and a public hearing was held by the NDEQ on June 20, 2013. The revised chapters were approved and adopted by the Environmental Quality Council (EQC) on June 20, 2013 following the public hearing. The revised chapters were approved and signed by the Governor on December 4, 2013. They then became effective on December 9, 2013 when they were placed on the Secretary of State's website.

Statutory authority for the Nebraska Environmental Quality Council and the Governor of Nebraska to adopt these rules is contained in the Nebraska Environmental Protection Act, sections 81-1501 to 81-1532 of the Revised Statutes of Nebraska. The NDEQ is requesting review and approval by for the following amended chapters of Title 129:

Chapter 4: Ambient Air Quality Standards
Chapter 19: Prevention of Significant Deterioration of Air Quality
Chapter 22: Incinerators: Emission Standards

The NDEQ requests that the U.S. Environmental Protection Agency (EPA) amend Nebraska's SIP to replace current rules in the SIP with the amended rules as submitted, to the extent that they are deemed approvable. NDEQ additionally requests that the EPA amend the Nebraska Title V Plan to include these changes, as applicable.

Enclosed are paper copies of all documents required for determination of plan completeness per 40 CFR Part 51, Appendix V. Also enclosed is a CD containing electronic files which are exact duplicates of the paper documents being submitted.

Thank you for your attention to this matter. If you have questions regarding this submittal, please contact Shelley Schneider, Air Quality Division Administrator at (402) 471-4299 or Brian Kozisek, Grants, Planning, and Outreach Unit Supervisor at (402) 471-6624.

Sincerely,

Patrick W. Rice
Acting Director

Attachments:

1. State Implementation Plan Completeness Checklist
2. Actual Copy of Regulatory Changes
3. Date Adopted
4. Date Effective
5. Signatory Requirements
6. Copy of the Proposed/Draft Regulations
7. Legal Authority (see SIP Completeness Checklist)
8. Copy of Public Notice
9. Certification that Public Hearing Was Held
10. Compilation of Public Comments and State Responses (N/A)

State Implementation Plan Completeness Checklist

40 CFR Part 51 Appendix V: Section 2.0 Criteria Check YES or NO to determine if a formal SIP revision submittal is complete. If the SIP submission is being parallel processed, only check YES or NO behind the numbers with an *.	**Attached?**
2.1 Administrative Materials	
1. Submittal letter (Governor or designee)	☒ Yes ☐ No
2. Evidence of adoption which contains: a. Actual copy of regulatory changes	☒ Yes ☐ No
b. Date adopted	☒ Yes ☐ No
c. Date effective	☒ Yes ☐ No
d. Signatory requirements	☒ Yes ☐ No
e. *If parallel processing, schedule for final adoption or issuance	☐ Yes ☐ No ☒ Not Applicable
f. *Copy of the proposed/draft regulations	☒ Yes ☐ No
3. *Legal authority (evidence that state has necessary legal authority to adopt and implement revision) – **Nebraska's legal authority is established in section 81-1505 (1), (12), and (17-18) of the Nebraska Environmental Protection Act.**	☒ Yes ☐ No
4. Copy of public notice	☒ Yes ☐ No
5. Certification that public hearing was held	☒ Yes ☐ No
6. Compilation of public comments and state responses	☒ Yes ☐ No
2.2. Technical Support ☒ **Section Not Applicable?**	
1. Pollutants affected by the change	☐ Yes ☐ No
2. Sources affected	☐ Yes ☐ No
3. Quantification of the changes in emissions (actual/allowable)	☐ Yes ☐ No
4. Demonstration of protection: NAAQS	☐ Yes ☐ No
PSD increments	☐ Yes

	☐ No
RFP	☐ Yes ☐ No
Visibility	☐ Yes ☐ No
5. Full modeling information	☐ Yes ☐ No
6. Evidence, where necessary, that emission limitations are based on continuous emission.	☐ Yes ☐ No
7. Evidence that a revision contains emission limitations, work practice standards, and recordkeeping/reporting requirements.	☐ Yes ☐ No
8. Compliance/enforcement strategies including how compliance will be determined in practice, and at what frequency.	☐ Yes ☐ No
9. As appropriate, special economic and technological justifications per applicable EPA policies.	☐ Yes ☐ No

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 4 - AMBIENT AIR QUALITY STANDARDS

The following ambient air quality standards are applicable in the State of Nebraska:

001 Particulate Matter

001.01 PM_{10} – Primary and secondary standards

Level: 150 micrograms per cubic meter
Averaging time: 24-hours
Form: Not to be exceeded more than once per year on average over 3 years

(Attainment of these standards is determined in accordance with Appendix K of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)

001.02 $PM_{2.5}$ – Primary and secondary standards

Level: 15.0 micrograms per cubic meter
Averaging time: Annual
Form: Annual mean averaged over 3 years

Level: 35 micrograms per cubic meter
Averaging time: 24-hour
Form: 98th percentile averaged over 3 years

(Attainment of these standards is determined in accordance with Appendix N of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)

002 Sulfur dioxide

002.01 Primary standard

Level: 75 parts per billion Averaging time: 1-hour
Form: 99th percentile of 1-hour daily maximum concentrations averaged over 3 years

002.02 Secondary standard

Level: 0.5 parts per million
Averaging time: 3-hours
Form: Not to be exceeded more than once a year

(Attainment of this standard is determined in accordance with Appendix T of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)

003 Nitrogen dioxide

003.01 Primary standard

Level: 100 parts per billion
Averaging time: 1-hour
Form: 98th percentile averaged over 3 years

003.02 Primary and secondary standards

Level: 53 parts per billion
Averaging time: Annual
Form: Annual mean

(Attainment of this standard is determined in accordance with Appendix S of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)

004 Carbon monoxide – Primary standards

Level: 9 parts per million
Averaging time: 8-hours
Form: Not to be exceeded more than once per year

Level: 35 parts per million
Averaging time: 1-hour
Form: Not to be exceeded more than once per year

(Attainment of this standard is determined in accordance with 40 CFR 50.8. (version July 1, 2012); which is adopted and incorporated herein)

005 Ozone – Primary and secondary standards

Level (1997 standard): 0.08 parts per million (0.08 ppm)
Averaging time: 8-hour
Form: Annual fourth-highest daily maximum 8-hour concentration averaged over 3 years

(Attainment of this standard is determined in accordance with Appendix I of 40 CFR Part 50 (Version July 1, 2012); which is adopted and incorporated herein)

Level (2008 standard): 0.075 parts per million (0.075 ppm)
Averaging time: 8-hour
Form: Annual fourth-highest daily maximum 8-hour concentration averaged over 3 years

(Attainment of this standard is determined in accordance with Appendix P of 40 CFR Part 50 (Version July 1, 2012); which is adopted and incorporated herein)

006 Lead – Primary and secondary standard

Level: 0.15 micrograms per cubic meter
Averaging time: Rolling three-month average
Form: Not to be exceeded

(Attainment of this standard is determined in accordance with Appendix R of 40 CFR Part 50 (Version July 1, 2012); which is adopted and incorporated herein)

007 Total reduced sulfur

Level: 10.0 parts per million (10.0 ppm)
Averaging time: 1 minute
Form: Maximum average concentration

Level: 0.10 parts per million (0.10 ppm)
Averaging time: 30-minutes
Form: Maximum rolling average

007.01 Except as provided in 007.01A and 007.01B these standards apply only where human exposure occurs.

007.01A Ambient concentrations of total reduced sulfur (TRS) emissions occurring as a result of natural activities that have no associated economic benefits, such as seasonal stratification or turnover of lakes and lagoons, and the release of water uncontaminated by process or industrial activity from

lakes, reservoirs, lagoons and water impoundment systems shall not constitute violation of the standards contained in section 007.

007.01B The Department shall provide reasonable opportunity for any owner or operator of any source causing or contributing to a violation of the standards in 007 to develop and implement a program to eliminate such violations prior to taking enforcement action.

007.02 Unless otherwise approved by the Director, the levels of TRS in the ambient air shall be measured using a TRS thermal converter in conjunction with an SO2 monitor. The SO2 monitor shall be designated as an EPA reference method or equivalent method in accordance with 40 CFR Part 53. In combination, the monitor must meet or exceed the following minimum specifications:

007.02A Lower detection limit of 0.4 ppb (parts per billion);

007.02B Zero Drift less than 0.5 ppb in 24 hours and less than 1 ppb in 7 days at constant conditions;

007.02C Span Drift of less than 0.5 percent of the reading in 24 hours and less than 1 percent of the reading in 7 days at constant conditions;

007.02D Precision of 0.5 percent of the reading; and

007.02E Linearity of 1 percent of full scale.

007.03 A rolling average shall be considered valid if there is data for at least 75 percent of the period in question. In the event that less than 100 percent of the data are available, the rolling average shall be computed on the basis of the data available using the number of data available as the divisor.

007.04 The standards are attained when all of the following conditions are met:

007.04A The one-minute concentration is less than or equal to 10.0 ppm, rounded to one decimal place (fractional parts equal to or greater than 0.05 ppm must be rounded up);

007.04B The 30-minute rolling arithmetic mean concentration is less than or equal to 0.10 ppm, rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm must be rounded up);

Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2), 81-1505(1)(12)

Legal Citation: Title 129, Ch. 4, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 – Nebraska Air Quality Regulations

Chapter 19 – Prevention of Significant Deterioration of Air Quality (PSD)

001 The following subsections of 40 CFR 52.21 published on July 1, 2009 are incorporated by reference into Chapter 19 of Title 129: (b) (34), (35), (36), (37), and (38) definitions related to clean coal technology demonstration projects; (e) Restrictions on area classifications; and (g) Redesignation. 40 CFR 52.21 (p), "Sources impacting Federal Class I area", as published at 75 Federal Register 64906 is incorporated by reference into Chapter 19 of Title 129.

002 The requirements of this chapter apply to the construction of any new major stationary source or the major modification of any existing major stationary source, as defined in Chapter 2, section 008. The provisions of this chapter apply only to sources located in areas designated as attainment or unclassifiable. Sources not subject to PSD review may still require a construction permit pursuant to provisions in Chapter 17.

003 Prior to beginning actual construction of a new major stationary source or a major modification of an existing major stationary source, the owner or operator must obtain a permit, issued by the Department, stating that the source will comply with the requirements of this chapter.

004 For any construction project at an existing major stationary source, the owner or operator must determine if the project is a major modification for a regulated NSR pollutant by assessing the following criteria:

004.01 The status of each relevant emissions unit, either new or existing, as defined in Chapter 1, section 051.

004.02 The baseline actual emissions (BAE) for each unit, as defined in section 005.

004.03 The projected actual emissions (PAE) or potential to emit (PTE) for each unit, as defined in sections 006 and 007.

004.04 Whether the emissions increase (PAE (or PTE) minus BAE) is significant, as defined in section 008.

004.05 If the emissions increase is significant, whether the net emissions increase, as defined in section 009, is significant as defined in section 010.

005 Baseline actual emissions (BAE) for a new unit is defined in section 005.12. BAE for an existing emissions unit means the average rate, in tons per year, at which an emissions unit actually emitted the regulated NSR pollutant during any consecutive 24-month period selected by the owner or operator that is representative of normal source operation and that meets the following criteria:

005.01 For units at an electric utility steam generating unit, within the five year period immediately preceding when the owner or operator begins actual construction of the project, unless the Department determines that a different time period within the preceding ten years is more representative of normal source operations.

005.02 For all other units, within the ten-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Department for a permit required under this section, whichever is earlier.

005.03 In no case may the consecutive 24-month period begin before January 1, 1996.

005.04 The average rate per unit shall include emissions associated with startups, shutdowns, and malfunctions.

005.05 Fugitive emissions:

005.05A The average rate per unit shall include fugitive emissions, to the extent quantifiable, for sources belonging to one of the categories listed in Chapter 2, sections 002.01 through 002.27. Fugitive emissions shall be considered quantifiable if emission factors are available or if emissions can be calculated using mass balance equations or other means deemed acceptable to the Department.

005.05B The average rate per unit shall not include fugitive emissions for sources not belonging to one of the categories specified in section 005.05A.

005.06 The average rate per unit shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

005.07 The average rate per unit shall be adjusted downward to reflect any regulatory changes becoming effective since the beginning of the consecutive 24-month period that would have required reduced emissions for any of the emissions units being changed if the regulatory changes had been in effect during the consecutive 24-month period.

005.08 When a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the BAE for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

005.09 The average rate per unit shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions or for measuring non-compliant emissions, in tons per year.

005.10 BAE shall be calculated using the following methodologies in this order of preference where possible:

005.10A Continuous Emissions Monitors (CEMS) complying with requirements in Chapter 34.

005.10B Predictive Emissions Monitors (PEMS) complying with requirements in Chapter 34.

005.10C Source-specific stack test data, if such stack test occurred during the baseline period.

005.10D Emission factors as defined in Chapter 6, sections 003.03 and 003.04.

005.10E Mass Balance

005.11 Other methodologies or a different order of preference of methodologies than those listed in 005.10 may be used to calculate the BAE with prior concurrence of the Department.

005.12 For a new emissions unit, the BAE for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's PTE.

005.13 For a PAL for a stationary source, the BAE shall be calculated in accordance with the procedures contained in section 005.01 through 005.12.

006 Projected actual emissions (PAE) is the maximum annual rate, in tons per year (consecutive 12 month period), at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years following the date the unit resumes regular operation after the project. If the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant, and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source, the PAE is the maximum annual rate in any one

of the ten years following the date the unit resumes regular operation after the project. To determine PAE, the owner or operator:

006.01 Shall consider all relevant information, including but not limited to the source's historical operational data, its own representations, expected business activity and highest projections of business activity, compliance plans, and filings with state or federal regulatory authorities; and

006.02 Shall include emissions associated with startup, shutdown, and malfunctions.

006.03 Shall consider fugitive emissions as follows:

006.03A The average rate per unit shall include fugitive emissions, to the extent quantifiable, for sources belonging to one of the categories listed in Chapter 2, sections 002.01 through 002.27. Fugitive emissions shall be considered quantifiable if emission factors are available or if emissions can be calculated using mass balance equations or other means deemed acceptable to the Department.

006.03B The average rate per unit shall not include fugitive emissions for sources not belonging to one of the categories specified in section 006.03A.

006.04 Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the BAE and that are also unrelated to the particular project, including any increased utilization due to product demand growth. The Department shall provide guidance for use by the owner or operator to determine the amount of emissions that may be attributed to demand growth.

006.05 May, in lieu of using the method set out in sections 006.01, 006.02, 006.03, and 006.04, elect to use the emissions unit's potential to emit (PTE), in tons per year, as defined in section 007.

007 Potential to emit (PTE) is the maximum capacity of a major stationary source to emit a regulated NSR pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit such a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

008 Calculating significant emissions increase of a regulated NSR pollutant.

008.01 Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between PAE and BAE, for each existing emissions unit, equals or exceeds the significant amount for that pollutant, as described in section 010.

008.02 As an alternative to section 008.01, the actual-to-potential test may be used for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the PTE from each existing emissions unit following completion of the project and the BAE of these units before the project equals or exceeds the significant amount for that pollutant, as described in section 010.

008.03 Actual-to-potential test for projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the PTE from each new emissions unit following completion of the project and the BAE of these units before the project equals or exceeds the significant amount for that pollutant, as described in section 010.

008.04 Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for all emissions units involved in the project (using the methods specified in sections 008.01, 008.02, and 008.03) equals or exceeds the significant amount for that pollutant, as described in section 010.

008.05 For any major stationary source with a Plant-wide Applicability Limit (PAL) for a regulated NSR pollutant, the major stationary source shall comply with the requirements in section 011.

009 If a project results in a significant emissions increase as calculated in section 008, then a determination must be made as to whether the project also results in a significant net emissions increase. The net emissions increase is the amount over zero of the sum of the emissions increase and any other increases and decreases in actual emissions at the major stationary source that are contemporaneous (as defined in section 009.01) with the project and are otherwise creditable. BAE for calculating such increases and decreases shall be as defined in section 005.

009.01 An increase or decrease in actual emissions is contemporaneous with the increase from the project for which an emissions increase has been calculated in section 008 only if it occurs between the date five years before the source begins actual construction (as defined in Chapter 1, section 023) of the project and the date that the increase from the project occurs.

009.02 An increase or decrease is creditable only if the Department has not relied on it in issuing a PSD permit for the source which was in effect when the increase from the project occurred.

010 Significant means, in reference to an emission increase or a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

010.01 Carbon monoxide: 100 tons per year;

010.02 Nitrogen oxides: 40 tons per year;

010.03 Sulfur dioxide: 40 tons per year;

010.04 Particulate matter (PM): 25 tons per year;

010.05 PM_{10}: 15 tons per year;

010.06 $PM_{2.5}$: 10 tons per year of direct $PM_{2.5}$ emissions; 40 tons per year of sulfur dioxide emissions; 40 tons per year of nitrogen oxide emissions;

010.07 Ozone: 40 tons per year of volatile organic compounds or nitrogen oxides;

010.08 Lead: 0.6 tons per year;

010.09 Fluoride: 3 tons per year;

010.10 Sulfuric acid mist: 7 tons per year;

010.11 Hydrogen sulfide (H_2S): 10 tons per year;

010.12 Total reduced sulfur compounds (including H_2S): 10 tons per year;

010.13 Reduced sulfur compounds (including H_2S): 10 tons per year;

010.14 Municipal waste combustor organics (measured as total tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year (3.5×10^{-6} tons per year);

010.15 Municipal waste combuster metals (measured as particulate matter): 14 megagrams per year (15 tons per year);

010.16 Municipal waste combuster acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year);

010.17 Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year);

010.18 For any regulated NSR pollutant not listed in sections 010.01 through 010.17: any increase is significant.

011 Actuals PALs. The term “Plantwide Applicability Limitations” (PAL) refers to an “actuals PAL” in the following sections. The Department may approve a PAL in accordance with the following requirements:

011.01 A PAL may only be approved for an existing major stationary source.

011.02 The PAL shall impose an annual emission limitation in tons per year that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

011.03 Any physical change or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets all requirements in section 013 and complies with the provisions of the construction permit establishing the PAL:

011.03A Is not considered a major modification for the PAL pollutant; and

011.03B Is not subject to the provisions in Chapter 19, sections 024.02.

011.04 Except as provided under section 011.03B, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations and work practice requirements that were established prior to the effective date of the PAL.

011.05 Permit application to establish a PAL. An owner or operator of a major stationary source wishing to establish a PAL must submit to the Department the following information:

011.05A A list of all emissions units at the source and each unit’s designation as small, significant or major based on its PTE.

011.05B An indication of which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit and,

if any do so, whether such requirements, emission limitations, or work practices were taken to comply with BACT.

011.05C Calculations of the BAE with supporting documentation.

011.05D The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by 011.12.

011.06 The PAL shall be established in a construction permit in accordance with Chapter 17. The construction permit establishing the PAL shall include the following information and conditions:

011.06A The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

011.06B Each PAL shall regulate emissions of only one pollutant.

011.06C Each PAL shall have an effective period of 10 years.

011.06D The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in sections 011.12, 011.13, and 011.14 for each emissions unit under the PAL throughout the PAL effective period.

011.06E The PAL pollutant and the applicable source-wide emissions limitation in tons per year.

011.06F The PAL effective date and expiration date.

011.06G Specification that if the owner or operator of the source with a PAL applies to renew a PAL in accordance with section 011.15 before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised permit renewing the PAL is issued or denied by the Department.

011.06H A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.

011.06I A requirement that, once a PAL expires, the major stationary source is subject to the requirements under section 011.18.

011.06J The calculation procedures that the owner or operator of the source shall use to convert the monitoring system data to monthly emissions

and annual emissions based on a 12-month rolling total for each month as required by section 011.12.

011.06K A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provision under section 011.12.

011.06L A requirement to retain the records required under section 011.13 onsite. Such records may be retained in an electronic format.

011.06M A requirement to submit the reports required under section 011.14 by the required deadlines.

011.06N At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under Chapter 17, section 013.03, unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL

011.06O Any other requirements that the Department deems necessary to implement and enforce the PAL.

011.07 Setting the PAL emissions level. The PAL level for a major stationary source shall be established as the sum of the BAE of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under section 010 or under the Act, whichever is lower. Emissions associated with units that were permanently shut down after the 24-month period used for the BAE must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the PTE of the units. The Department shall specify a reduced PAL level in tons per year in the construction permit establishing the PAL to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the Department is aware of prior to issuance of the construction permit establishing the PAL.

011.08 During the PAL effective period, the Department is required to reopen the construction permit to:

011.08A Correct typographical or calculation errors made in setting the PAL or to reflect a more accurate determination of emissions used to establish the PAL.

011.08B Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under Chapter 17, section 013.03.

011.08C Revise the PAL to reflect an increase in the PAL as provided in section 011.11.

011.09 During the PAL effective period the Department may, at its discretion, reopen the construction permit to:

011.09A Reduce the PAL to reflect newly applicable Federal requirements with compliance dates after the PAL effective date.

011.09B Reduce the PAL consistent with any other requirement, such as statute, rule, or court decision that is enforceable as a practical matter.

011.09C Reduce the PAL if the Department determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an Air Quality Related Values (AQRV) that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

011.10 Except for the permit reopening to correct typographical errors or calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with public participation procedures in Chapter 14.

011.11 Increasing a PAL emission limitation during the PAL effective period.

011.11A A PAL emission limitation may be increased during the PAL effective period only if the owner or operator of the major stationary source complies with the following:

011.11A1 The owner or operator shall submit a complete construction permit application to request an increase in the PAL limit for a PAL major modification. The application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

011.11A2 As part of this application, the owner or operator shall demonstrate that the sum of the BAE of the small emissions units, plus the sum of the BAE of the significant and major emissions units (assuming application of BACT equivalent controls), plus the sum of the allowable emissions of the new or modified emissions unit(s), exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit

shall be equal to the level of BACT with which that emissions unit must currently comply.

011.11A3 The owner or operator must obtain a major PSD permit for all emissions unit(s) identified in section 011.11A1, without regard to whether the increase in emissions for the unit will be significant. These emissions unit(s) shall comply with any emissions requirements resulting from the major PSD process, even though they have also become subject to the PAL or continue to be subject to the PAL.

011.11A4 The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

011.11B The Department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the BAE of the significant and major emissions units (assuming application of BACT equivalent controls), plus the sum of the BAE of the small emissions units.

011.11C The construction permit reflecting the increased PAL level shall be issued pursuant to compliance with requirements for public participation in Chapter 14.

011.12 Monitoring requirements for PALS. Each operating permit that includes a PAL must contain enforceable requirements for the monitoring system that accurately determines plant-wide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for a PAL must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the permit that includes the PAL. Failure to use a monitoring system that meets the requirements of section 011.12 renders the PAL invalid. The PAL monitoring system must employ one of the monitoring approaches listed in sections 011.12A through 011.12D or an alternative approach approved by the Department:

011.12A CEMS which meet the following requirements:

011.12A1 CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

011.12A2 CEMS must sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

011.12B PEMS which meet the following requirements:

011.12B1 Any PEMS must be approved for use by the Department in accordance with Chapter 34, section 009.

011.12B2 Any PEMS approved for use in accordance with Chapter 34, section 009 must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Department, while the emissions unit is operating.

011.12C Emissions factors which meet the following requirements:

011.12C1 All emissions factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

011.12C2 The emissions unit shall operate within the designated range of use for the emissions factor if applicable; and

011.12C3 If technically practicable, the owner or operator of a significant emissions unit that relies on an emissions factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emissions factor in accordance with Chapter 34, section 007, unless the Department determines that such testing is not required.

011.12D Mass balance calculations for activities using coatings or solvents which meet the following requirements:

011.12D1 Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

011.12D2 Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

011.12D3 Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

011.12E An owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the permit.

011.12F Notwithstanding the requirements in sections 011.12A through 011.12D, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Department shall, at the time of permit issuance:

011.12F1 Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

011.12F2 Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

011.12G Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Department. Such testing must occur at least once every five years after issuance of the PAL.

011.13 Recordkeeping requirements. The construction permit which contains the PAL shall require the owner or operator to retain a copy of all records necessary to determine compliance with any requirement of section 011 and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record. Such permit shall also require the owner or operator to retain a copy of the following records, for the duration of the PAL effective period plus five years:

011.13A A copy of the permit application requesting a PAL and applications for revisions to the PAL; and

011.13B Each annual certification of compliance pursuant to Chapter 8, section 012.05 and the data relied on in certifying the compliance.

011.14 Reporting and notification requirements. The owner or operator shall submit the following reports to the Department in accordance with Chapter 8, sections 004.03 and 004.04:

011.14A Semiannual report. The semiannual report shall be submitted to the Department within 30 days of the end of each reporting period. This report shall contain the following information:

011.14A1 The identification of the owner or operator and the permit number.

011.14A2 Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to section 011.13.

011.14A3 All data relied upon, including but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.

011.14A4 A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

011.14A5 The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

011.14A6 A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by section 011.12E.

011.14A7 A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

011.14B Deviation report. The owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to Chapter 8, section 004.03B including time limits, shall satisfy this reporting requirement. The reports shall contain the following information:

011.14B1 The identification of the owner or operator and the permit number;

011.14B2 The PAL requirement that experienced the deviation or that was exceeded;

011.14B3 Emissions resulting from the deviation or the exceedance; and

011.14B4 A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

011.14C Re-validation results. The owner or operator shall submit to the Department the results of any re-validation test or method within 45 days after completion of such test or method.

011.15 PAL Renewal. The owner or operator of a source with a PAL may apply for PAL renewal no sooner than 18 months and no later than six months prior to the end of the PAL effective period. If the owner or operator submits a complete application for renewal within this time period, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued or denied. A complete application shall consist of the following:

011.15A All of the information required for an initial application as listed in section 011.05.

011.15B A proposed PAL level.

011.15C The sum of the PTE of all emissions units under the PAL, with supporting documentation.

011.15D Any other information the owner or operator wants the Department to consider in determining the appropriate level for renewing the PAL.

011.16 The Department shall follow the procedures specified in Chapter 14 in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Department.

011.17 Adjusting the PAL at the time of renewal

011.17A If the emissions level calculated in accordance with section 011.07 at the time of renewal is equal to or greater than 80 percent of the currently permitted PAL level, the Department may renew the PAL at the currently permitted level without considering the factors set forth in section 011.17B.

011.17B At the Department's discretion, it may set the PAL at a level that it determines to be more representative of the source's BAE, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward

or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Department in its written rationale.

011.17C Notwithstanding the discretion allowed in sections 011.17A and 011.17B,

011.17C1 If the PTE of the source is less than the PAL, the Department shall adjust the PAL to a level no greater than the PTE of the source.

011.17C2 The Department shall not approve a renewed PAL level higher than the current PAL, unless the source has complied with the provisions of section 011.11.

011.17D If the compliance date for a State or Federal requirement that applied to the PAL source occurs during the PAL effective period, and if the Department has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL renewal or operating permit renewal whichever occurs first.

011.18 Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in section 011.15 shall expire at the end of the PAL effective period and the requirements in section 011.18 shall apply. If an application for PAL renewal is denied, the PAL shall expire on the date the application is denied and the requirements in section 011.18 shall apply:

011.18A Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emissions limitation under a new construction permit established as a major modification, as specified below:

011.18A1 Within the time frame specified for PAL renewals in section 011.15, the source shall submit a proposed allowable emissions limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Department) by distributing the PAL allowable emissions for the source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under section 011.17D, such distribution shall be made as if the PAL had been adjusted.

011.18A2 The Department shall decide whether and how the PAL allowable emissions will be distributed and issue a construction permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Department determines is appropriate.

011.18B Each emissions unit(s) shall comply with the allowable emissions limitation on a 12-month rolling basis. The Department may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS or PEMS to demonstrate compliance with the allowable emissions limitation.

011.18C Until the Department issues the new construction permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under section 011.18A, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emissions limitation.

011.18D Any physical change or change in the method of operation at the major stationary source will be subject to major PSD requirements if such change meets the definition of major modification in Chapter 1, section 076.

011.18E The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period except for those emissions limitations that had been established pursuant to section 024.02, but were eliminated by the PAL in accordance with section 011.11.

012 Ambient air increments. For any period other than an annual period listed below, the applicable maximum allowable increase may be exceeded during one such period per year at any one location. In any area of the state, increases in pollutant concentration over the baseline concentration shall be limited to the following:

012.01 $PM_{2.5}$ annual arithmetic mean: 4 micrograms per cubic meter

012.02 $PM_{2.5}$ 24 hour maximum: 9 micrograms per cubic meter

012.03 PM_{10}, annual arithmetic mean: 17 micrograms per cubic meter

012.04 PM_{10}, 24 hour maximum: 30 micrograms per cubic meter

012.05 Sulfur dioxide, annual arithmetic mean: 20 micrograms per cubic meter

012.06 Sulfur dioxide, 24 hour maximum: 91 micrograms per cubic meter

012.07 Sulfur dioxide, 3 hour maximum: 512 micrograms per cubic meter

012.08 Nitrogen dioxide, annual arithmetic mean: 25 micrograms per cubic meter

013 Ambient air ceilings. No concentration of a pollutant shall exceed:

013.01 The concentration permitted under the national secondary ambient air quality standard, or

013.02 The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

014 Exclusions from increment consumption. The concentrations listed in sections 014.01 through 014.04 shall be excluded in determining compliance with a maximum allowable increase. No exclusions of concentrations referred to in sections 014.01 and 014.02 shall apply more than five years after the effective date of the applicable order or plan.

014.01 Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order.

014.02 Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

014.03 Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and

014.04 The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

015 Stack heights. Requirements for control of pollutants under this chapter shall be in accordance with Chapter 16.

016 Exemptions for particular major stationary source or major modification. The requirements of sections 017 through 024 shall not apply to a particular major stationary source or major modification if:

016.01 The source or major modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution and the Governor of the State of Nebraska requests that it be exempt from those requirements;

016.02 The source or major modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the PTE of the stationary source or modification and the source does not belong to any of the categories listed in Chapter 2, sections 002.01 through 002.27.

016.03 The source or major modification is a portable stationary source which has previously received a permit under requirements equivalent to those in sections 017 through 024, if

016.03A The owner or operator proposes to temporarily relocate the source so that emissions at the new location would be temporary; and

016.03B The emissions for the source would not exceed its allowable emissions; and

016.03C The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

016.03D Notice of relocation is given to the Department in accordance with Chapter 10.

016.04 Requirements equivalent to those in sections 017 through 024 do not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or major modification is located in an area designated as nonattainment under section 107 of the Act.

016.05 Requirements equivalent to those contained in sections 018, 020, and 022 do not apply to a proposed major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a major modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

016.06 Requirements equivalent to those contained in sections 018, 020, and 022 as they relate to any maximum allowable increase for a Class II area do not apply to a modification of a major stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT would be less than 50 tons per year.

016.07 The Department may exempt a proposed major stationary source or major modification from the requirements of section 020, with respect to monitoring for a particular pollutant, if:

016.07A The emissions increase of the pollutant from a new stationary source or the net emissions increase of the pollutant from a major modification would cause, in any area, air quality impacts less than the following amounts:

016.07A1 Carbon monoxide – 575 micrograms per cubic meter, 8-hour average;

016.07A2 Nitrogen dioxide – 14 micrograms per cubic meter, annual average;

016.07A3 PM2.5 – 4 micrograms per cubic meter, 24-hour average;

016.07A4 PM_{10} – 10 micrograms per cubic meter, 24-hour average;

016.07A5 Sulfur dioxide – 13 micrograms per cubic meter, 24-hour average;

016.07A6 Ozone – no de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of VOCs or NO_x subject to PSD would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

016.07A7 Lead – 0.1 micrograms per cubic meter, 3-month average;

016.07A8 Fluorides – 0.25 micrograms per cubic meter, 24-hour average;

016.07A9 Total reduced sulfur – 10 micrograms per cubic meter, 1-hour average;

016.07A10 Hydrogen sulfide – 0.2 micrograms per cubic meter, 1-hour average;

016.07A11 Reduced sulfur compounds – 10 micrograms per cubic meter, 1-hour average; or

016.07B The concentrations of the pollutant in the area that the source or major modification would affect are less than the concentrations listed in section 016.07A; or

016.07C The pollutant is not listed in section 016.07A.

016.08 Permitting requirements equivalent to those contained in section 018.01B do not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or

modification submitted an application for a permit under the applicable permit program approved or promulgated under the Act before the provisions embodying the maximum allowable increase took effect as part of the plan and the Department subsequently determined that the application as submitted before that date was complete.

016.09 Permitting requirements equivalent to those contained in section 018.01B shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM_{10} if the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved under the Act before the provisions embodying the maximum allowable increases for PM_{10} took effect as part of the plan, and the Department subsequently determined that the application as submitted before that date was complete. Instead, the applicable requirements equivalent to section 018.01B shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

017 Control technology review:

017.01 A major stationary source or major modification shall meet each applicable emissions limitation under the SIP and each applicable emission standard and standard of performance under Chapters 18 and 23.

017.02 A new major stationary source shall apply best available control technology (BACT) for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

017.03 A major modification shall apply BACT for each regulated NSR pollutant for which it would be a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

017.04 For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the earliest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.

018 Source impact analysis.

018.01 Required Demonstration. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions

increases or reductions, (including secondary emissions) would not cause or contribute to air pollution in violation of

018.01A Any national ambient air quality standard in any air quality control region; or

018.01B Any applicable maximum allowable increase over the baseline concentration in any area.

018.02 Significant impact levels. For purposes of $PM_{2.5,}$ the demonstration required in section 018.01 of this chapter is deemed to have been made if the emissions increases of the new stationary source alone or from the modification alone would cause, in all areas, air quality impacts less than the following amounts:

018.02A $PM_{2.5}$ – 0.3 micrograms per cubic meter, annual average;

018.02B $PM_{2.5}$ - 1.2 micrograms per cubic meter, 24-hour average

019 Air quality models.

019.01 All applications of air quality modeling referred to in Chapter 19 shall be based on the applicable models, data bases, and other requirements specified in 40 CFR 51, appendix W (Guideline on Air Quality Models).

019.02 Where an air quality model specified in 40 CFR 51, appendix W (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis adopted by the Department. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures set forth in Chapter 14.

020 Air quality analysis:

020.01 Pre-application analysis:

020.01A Any application for a major PSD permit shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

020.01A1 For the source, each pollutant that it would have the potential to emit in a significant amount;

020.01A2 For the major modification, each pollutant for which it would result in a significant net emissions increase.

020.01B With respect to any pollutant for which no NAAQS exists, the analysis shall contain such air quality monitoring data as the Department determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

020.01C With respect to any pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

020.01D The continuous air monitoring data that is required shall have been gathered over a period of one year and shall represent the year preceding receipt of the application, except that, if the Department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not less than four months), the data that is required shall have been gathered over at least that shorter period.

020.01E The owner or operator of a proposed major stationary source or major modification of volatile organic compounds (VOCs) who satisfies all conditions of Chapter 17, section 013, may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under section 020.01.

020.02 Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or major modification, conduct such ambient monitoring as the Department determines is necessary to determine the effect emissions from the stationary source or major modification may have, or are having, on air quality in any area.

020.03 Operation of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of 40 CFR 58, Appendix B during the operation of monitoring stations for purposes of satisfying the requirements of section 020.

021 Source information:

021.01 The owner or operator of a proposed source or major modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with Chapter 19. Such information shall include

021.01A A description of the nature, location, design capacity, and typical operating schedule of the source or major modification, including specifications and drawings showing its design and plant layout;

021.01B A detailed schedule for construction of the source or major modification;

021.01C A detailed description as to what system of continuous emission reduction is planned by the source or major modification, emissions estimates, and any other information as necessary to determine that BACT as applicable would be applied.

021.02 Upon request by the Department, the owner or operator shall also provide information on:

021.02A The air quality impact of the source or major modification, including meteorological and topographical data necessary to estimate such impact; and

021.02B The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or major modification would affect.

022 Additional impact analyses:

022.01 The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or major modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

022.02 The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or major modification.

023 Notification to permit applicants and public:

023.01 The Department shall determine if a permit application is complete within 60 days after receipt of the application and so notify the applicant. If the Department determines that the application is incomplete and additional information is necessary to evaluate or take final action on the application, the Department may request such information in writing and set a reasonable deadline for a response. The Department may determine that an application is complete, but later determine that additional information is needed to evaluate or take final action on the application.

023.02 If the Department does not determine that the application is incomplete, the application is automatically deemed to be complete 60 days after it was

received by the Department. Nothing in this section shall prohibit the Department from requesting additional information that is necessary to evaluate or take final action on the application or release the applicant from providing such information.

023.03 Within one year after receipt of a complete application, the Department shall make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

023.04 The Department shall provide opportunity to the public to submit comments or request a public hearing on every PSD permit application approved or approved with conditions, in accordance with section 010 of Chapter 14.

024 Source obligation:

024.01 Approval to construct and issuance of a major PSD construction permit shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state or Federal law.

024.02 At any time that a source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of sections 016 through 024 shall apply to the source or modification as though construction had not yet commenced on the source or modification.

024.03 The following provisions apply to projects at existing emissions units at a major stationary source where the project is not a part of a major modification and where the owner or operator elects to use the method specified in sections 006.01 through 006.04 for calculating projected actual emissions.

024.03A Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

024.03A1 A description of the project;

024.03A2 Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

024.03A3 The applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the BAE, the PAE, and any netting calculations if applicable. The owner or operator must also include the amount of emissions excluded due to demand growth, as defined in section 006.04, and an explanation for why such amount was excluded.

024.03B Before beginning actual construction, the owner or operator shall meet face-to-face with a Department representative to discuss the PAE determination, and shall provide a copy of the information set out in section 024.03A to the Department. The owner or operator of such a unit is not required to obtain any determination from the Department before beginning actual construction.

024.03C The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in section 024.03A2 and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit.

024.03D If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Department within 60 days after the end of each calendar year during which records must be generated under section 024.03C, setting out the unit's annual emissions during the calendar year that preceded submission of the report.

024.03E If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Department if the annual emissions, in tons per year, from the project identified in section 024.03A exceed the BAE (as documented and maintained pursuant to section 024.03A3) by 80 percent of the significant amount for that regulated NSR pollutant, as listed in section 010. Such report shall be submitted to the Department within 60 days after the end of such calendar year. The report shall contain the following:

024.03E1 The name, address and telephone number of the major stationary source;

024.03E2 The annual emissions as calculated pursuant to section 024.03E.

024.03E3 An explanation as to whether the emissions differ from the preconstruction projections, and, if so, why.

024.03F A PSD construction permit is required for each unit with annual net emissions of a regulated NSR pollutant exceeding the significant level listed in section 010 notwithstanding PAE below the significant level.

024.04 The owner or operator shall make the information required to be documented and maintained pursuant to section 024.03 available for review upon request for inspection by the Department or the general public pursuant to the requirements contained in Chapter 14.

025 If any provisions of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

Enabling Legislation: Neb.Rev.Stat. §§81-1504(1)(2); 81-1505(12)

Legal Citation: Title 129, Ch.19, Nebraska Department of Environmental Quality

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NEBRASKA ADMINISTRATIVE CODE

Title 129 – Department Of Environmental Quality

Chapter 22 - INCINERATORS; EMISSION STANDARDS

001 The provisions of this chapter shall apply to all new and existing incinerators except for those listed in sections 001.01 through 001.05 of this chapter. Incinerators not included in the exceptions listed in sections 001.01 through 001.05 must comply with construction permit requirements listed in Chapter 17, section 001.03.

001.01 Incinerators located on residential premises containing five or less dwelling units and used exclusively for the disposal of waste originating on said premises.

001.02 Incinerators used solely for space heating.

001.03 Incinerators used to burn hazardous waste and subject to regulations under Nebraska Administrative Code Title 128, Chapter 7, section 008.

001.04 Furnaces used for law enforcement purposes specified in definition of “incinerator” in Chapter 1.

001.05 Air curtain incinerators subject to Chapter 18 sections 001.68 or 001.69 or which operate in compliance with Chapter 30, section 002.07G and combust only 100 percent wood waste; 100 percent clean lumber; 100 percent yard waste; or a 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

001.05A Air curtain incinerators must meet additional requirements in section 007 of this chapter.

002 No person shall cause or permit particulate matter emissions from any incinerator to be discharged into the outdoor atmosphere to exceed 0.10 grains per dry standard cubic foot (gr/dscf) of exhaust gas, corrected to 7% oxygen.

003 The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Director in accordance with good engineering practice.

004 Waste burned during performance testing required by Chapter 34 shall be representative of the waste normally generated by the affected facility and shall be charged at a rate equal to the burning capacity of the incinerator. Copies of any additional operational data recorded during the test shall be submitted to the Department together with the completed test report forms.

005 Instructions for proper operation of each incinerator shall be posted on site and written certification that each operator has read these instructions, understands them and intends to comply, shall be kept on record by the owner.

006 Except as provided in sections 006.01 and 006.02 below, each incinerator shall consist of (a) refractory lined combustion furnace(s) employing adequate design parameters necessary for maximum combustion of the materials to be burned, and shall be designed to vent the products of combustion through an adequate stack, duct, or chimney.

006.01 An alternate design for a new unit may be permitted provided it can be shown that the alternative design is at least as effective in controlling pollutant emissions as the design criteria of this section.

006.02 An operating permit can be issued to an existing unit not meeting the design criteria set forth in section 006 above, provided compliance with both section 002 of this chapter and the visible emission standard in section 005 of Chapter 20 can be demonstrated.

007 Air curtain incinerators which combust only clean lumber, wood waste, and/or yard waste shall meet the following requirements:

007.01 Within 60 days after the air curtain incinerator reaches the charge rate at which it will operate, but no later than 180 days after its initial startup, the limitations in sections 007.01A and 007.01B must be met:

007.01A The opacity limitation is 10 percent (6-minute average), except as described in section 007.01B.

007.01B The opacity limitation is 35 percent (6-minute average) during the startup period that is within the first 30 minutes of operation.

007.02 Except during malfunctions, the requirements of section 007.01 apply at all times, and each malfunction must not exceed 3 hours.

007.03 Opacity monitoring of the air curtain incinerator shall include:

007.03A Use of Method 9 of appendix A of New Source Performance Standards (40 CFR 60) to determine compliance with the opacity limitation.

007.03B Conducting an initial test for opacity as specified in 40 CFR 60.8.

007.03C After the initial test for opacity, conducting annual opacity tests no more than 12 calendar months following the date of the previous test.

007.04 Prior to commencing construction on the air curtain incinerator, submit all items described in sections 007.04A through 007.04C:

007.04A Notification of intent to construct the air curtain incinerator.

007.04B Planned initial startup date.

007.04C Types of materials to be burned in the air curtain incinerator.

007.05 Recordkeeping requirements for air curtain incinerators:

007.05A Keep records of results of all initial and annual opacity tests onsite (or readily available) in either paper copy or electronic format, unless the Director approves another format, for at least five years.

007.05B Make all records available for submittal to the Director or for an inspector's onsite review.

007.05C The results (each 6-minute average) of the initial opacity tests must be submitted no later than 60 days following the initial test. Submit annual opacity test results within 12 months following the previous report.

007.05D Submit initial and annual opacity test reports in electronic or paper copy on or before the applicable submittal date.

007.05E Keep a copy of the initial and annual reports onsite (or readily available) for a period of five years.

Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2); 81-1505(1)(2)

Legal Citation: Title 129, Ch. 22, Nebraska Department of Environmental Quality.

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STATE OF NEBRASKA

Dave Heineman
Governor

OFFICE OF THE GOVERNOR
P.O. Box 94848 • Lincoln, Nebraska 68509-4848
Phone: (402) 471-2244 • dave.heineman@nebraska.gov

November 6, 2013

Mr. Karl Brooks
Regional Administrator
U.S. EPA, Region VII
11201 Renner Boulevard
Lenexa, KS 66219

Dear Mr. Brooks:

In accordance with section 107(d)(1) of the Clean Air Act, and additional guidance from EPA, I am submitting my designation recommendation for the revised Primary Annual Fine Particle National Ambient Air Quality Standard ($PM_{2.5}$ NAAQS) which was signed by the Administrator on December 14, 2012, published in the Federal Register on January 15, 2013 (78 FR 3086), and became effective on March 18, 2013.

Nebraska currently monitors $PM_{2.5}$ at seven sites across the state. Based upon the three most recent years of monitoring data available, the years 2010, 2011, and 2012, the design value at all monitoring sites in Nebraska is below the revised annual $PM_{2.5}$ standard of 12.0 $\mu g/m^3$. Therefore I am recommending that the entire state of Nebraska be designated **"unclassifiable/attainment"**.

The enclosed documentation includes data for all fine particle monitors in Nebraska, the annual averages for the years 2010, 2011, and 2012, and the 3-year design value at each location. This data will substantiate my recommendation.

Sincerely,

Dave Heineman

Dave Heineman
Governor

cc: Becky Weber, Air, RCRA, and Toxics Divisions, U.S. EPA, Region VII
Mike Linder, Director, Nebraska Department of Environmental Quality
Shelley Schneider, Administrator, Air Quality Division, NDEQ

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Site	2010 (µg/m^3)	2011 (µg/m^3)	2012 (µg/m^3)	Design Value (µg/m^3)	% NAAQS
Omaha MSA & Near-By Sites					
Omaha NCore	8.7	9.2	8.4	8.8	73%
9225 Berry St.; Omaha	10.4	10.6	11.7	10.9	91%
2912 Coffey Ave., Bellevue	12.4	11.7	10.4	11.5	96%
2242 Wright St., Blair	9.7	9.1	9.2	9.3	78%
Lincoln MSA Site					
3140 N Street, Lincoln	9.0	8.5	8.7	8.8	73%
Other Nebraska Sites					
Grand Island Senior High	7.3	7.0	7.6	7.3	61%
Scottsbluff	5.3	4.8	5.6	5.2	44%

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
11201 RENNER BOULEVARD
LENEXA, KS 66219

AUG 19 2014

OFFICE OF
THE REGIONAL ADMINISTRATOR

The Honorable Dave Heineman
Governor of Nebraska
P.O. Box 94848
Lincoln, Nebraska 68509-4848

Dear Governor Heineman:

Thank you for your recommendation dated November 6, 2013, of air quality designations for the 2012 revised primary annual fine particle National Ambient Air Quality Standard throughout Nebraska. I appreciate the information Nebraska shared with the U.S. Environmental Protection Agency as we move forward to improve $PM_{2.5}$ air quality. This letter is to notify you of the EPA's preliminary response to Nebraska's recommendation and to inform you of our approach for completing the initial area designations for the 2012 revised primary annual $PM_{2.5}$ standard.

On December 14, 2012, the EPA promulgated a revised primary annual $PM_{2.5}$ NAAQS (78 FR 3086, January 15, 2013). In that action, the EPA revised the primary annual $PM_{2.5}$ standard, strengthening it from 15.0 micrograms per cubic meter ($\mu g/m^3$) to 12.0 $\mu g/m^3$; retained the existing 24-hour $PM_{2.5}$ standard at 35 $\mu g/m^3$; retained the existing 24-hour PM_{10} (coarse particle) standard at 150 $\mu g/m^3$; and retained the current suite of secondary PM standards. The EPA revised the primary annual $PM_{2.5}$ standard based on an integrated assessment of an extensive body of new scientific evidence, which substantially strengthens our body of knowledge regarding $PM_{2.5}$-related health effects. The revised primary annual $PM_{2.5}$ standard will provide increased protection for children, older adults, persons with pre-existing heart and lung disease, and other at-risk populations against an array of $PM_{2.5}$-related adverse health effects, including premature mortality, increased hospital admissions and emergency department visits, and development and exacerbation of chronic respiratory disease.

History shows us that better health and cleaner air go hand-in-hand with economic growth. Working closely with the states and tribes, the EPA is implementing the standards using a commonsense approach that improves air quality and minimizes the burden on state, local, and tribal governments. As part of this routine process, the EPA is working with the states and tribes to identify areas in the country that meet the standards and those that need to take steps to reduce $PM_{2.5}$ air pollution. Within one year of promulgating a new or revised air quality standard, the Clean Air Act requires the Governor of each state to submit to the EPA a list of all areas in the state, with a designation recommendation for each area. As a first step in implementing the 2012 annual $PM_{2.5}$ standard, Governors were to submit their designation recommendations, including appropriate area boundaries, by December 13, 2013.

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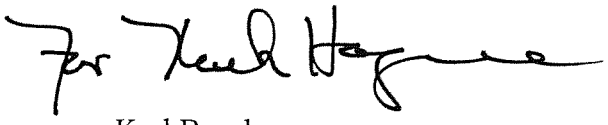
As required by the Clean Air Act, the EPA then promulgates designations for all areas across the country. The EPA designates an area as "nonattainment" if it is violating the 2012 annual $PM_{2.5}$ NAAQS or if it is contributing to a violation of the NAAQS in a nearby area. Consistent with designations for previous $PM_{2.5}$ standards, the EPA intends to use a designation category of "unclassifiable/attainment" for areas that are monitoring attainment or do not have monitors, but for which the EPA has reason to believe are likely attainment and are not contributing to nearby violations. Additionally, the EPA intends to designate as "unclassifiable" those areas where the EPA cannot determine based on available information whether the area is meeting the NAAQS or where EPA has not determined that the area contributes to a nearby violation. At this time, the EPA is proceeding with intended initial area designations using quality-assured, certified air quality monitoring data from 2011 to 2013.

We have considered the annual $PM_{2.5}$ designation recommendations submitted by Nebraska on November 6, 2013, and have reviewed the relevant technical information, including 2011–2013 air quality data. These data do not indicate any violation of the 2012 annual $PM_{2.5}$ NAAQS in Nebraska or contribution to any nearby area. Accordingly, the EPA intends to designate the entire state of Nebraska as unclassifiable/attainment.

The EPA will make its preliminary designation decisions and supporting documentation available to the general public for review and comment. We will be announcing a 30-day public comment period shortly in the *Federal Register*. After considering the additional information we receive, the EPA plans to promulgate final annual $PM_{2.5}$ designations in December of 2014.

The EPA is committed to working with the states and tribes to share the responsibility of reducing $PM_{2.5}$ air pollution. Current and upcoming federal standards and safeguards – including pollution reduction rules for power plants, vehicles, and fuels – will ensure steady progress to reduce $PM_{2.5}$-forming pollution and will protect public health in communities across the country. We look forward to a continued dialogue with you and your staff as we work together to implement the 2012 annual $PM_{2.5}$ standard. Should you have any questions, please do not hesitate to contact me, or have your staff contact Becky Weber of my staff at 913-551-7487 or weber.rebecca@epa.gov.

Sincerely,



Karl Brooks

cc: Brian Dunnigan, Director, Department of Natural Resources
Clifford Wolfe Jr, Chairman, Omaha Tribe of Nebraska
John Blackhawk, Chairman, Winnebago Tribe of Nebraska
Joseph Painter, Director, Winnebago Tribe Environmental Protection Department
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Alisha Bartling, Deputy Director, Santee Sioux Nation Environmental Department
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Nebraska Department of Environmental Quality
2014 Ambient Air Monitoring Network Plan

Public Inspection Draft 072414
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PI Draft Nebraska 2014 Ambient Air Monitoring Network Plan

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Acronyms and Abbreviations

Agencies/Organizations

ATSDR - Agency for Toxic Substances and Disease Registry (an agency within the US Department of Health)

CASAC - Clean Air Scientific Advisory Committee [(a)]

DCHD - Douglas County Health Department

EPA - United States Environmental Protection Agency

EPA R7 - United States Environmental Protection Agency Region VII

LLCHD - Lincoln/Lancaster County Health Department

NDEQ - Nebraska Department of Environmental Quality

OAQC - City of Omaha Air Quality Control

(a) CASAC was established by the Clean Air Act (CAA) Amendments of 1977, and provides independent advice to the EPA Administrator on the technical bases for EPA's national ambient air quality standards.

Regulations

CFR - Code of Federal Regulations

NAAQS - National Ambient Air Quality Standards

Title 129 - Nebraska Air Quality Regulations

Site Types

IMPROVE - Interagency Monitoring of Protected Visual Environments (monitoring performed to evaluate regional haze)

MDN - Mercury Deposition Network (a type of NADP site)

NADP - National Atmospheric Deposition Program (analysis of deposition components in precipitation. May include NTN and MDN sites)

NCore - National Core multi-pollutant monitoring stations. Monitors at these sites are required to measure particles ($PM_{2.5}$, speciated $PM_{2.5}$, $PM_{10-2.5}$), O_3, SO_2, CO, nitrogen oxides (NO/NO_y), Pb, and basic meteorology.

NTN - National Trends Network (a type of NADP site that analyzes for acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., CA, Mg, K and Na))

SLAMS - State and Local Air Monitoring Stations

Monitor Terminology

AQS - Air Quality System, the name for EPA's air monitoring data base

FRM - Federal Reference Method used for determining compliance with the NAAQS

FEM - Federal Equivalent Method used for determining compliance with the NAAQS

PWEI - Population Weighted Emissions Index (a term defined in 40 CFR Part 58 Appendix D that relates to SO_2 monitoring requirements)

2010 Network Assessment – Nebraska's *2010 Ambient Air Monitoring Network Plan and 5-Year Assessment.*

2011 Network Plan – Nebraska's *2011 Ambient Air Monitoring Network Plan*

2012 Network Plan – Nebraska's *2012 Ambient Air Monitoring Network Plan*

2013 Network Plan – Nebraska's *2013 Ambient Air Monitoring Network Plan*

2014 Network Plan – Nebraska's *2014 Ambient Air Monitoring Network Plan* (i.e., this document)

Acronyms and Abbreviations (Continued)

Pollutants

CO - Carbon Monoxide

H_2S - Hydrogen sulfide (typically a major component of TRS)

O_3 - Ozone

Pb - Lead

$PM_{2.5}$ - Particulate matter with a diameter equal to or less than 2.5 micrometers or microns (reported as $\mu g/m^3$ with air volumes measures at local conditions)

PM_{10} - Particulate matter with a diameter equal to or less than 10 micrometers or microns (reported as $\mu g/m^3$ with air volumes measures at standard conditions (25º C, 1 atm))

$PM_{10-2.5}$ - The difference between PM_{10} and $PM_{2.5}$ (Both being calculated at local conditions)

SO_2 - Sulfur Dioxide

TRS - Total Reduced Sulfur (H_2S + other reduced sulfur-containing compounds)

TSP - Total Suspended Particulates

TSP-Pb - Lead sampled using a TSP sampler

Concentration Units

ppb - Parts per billion (a volume/volume concentration unit)

ppm - Parts per million (a volume/volume concentration unit)

mg/m^3 - Milligrams per cubic meter (a mass/volume concentration unit)

$\mu g/m^3$ - Micrograms per cubic meter (a mass/volume concentration unit)

Census Terminology

MSA - Metropolitan Statistical Area

MiSA - Micropolitan Statistical Area

Definitions

in situ - A Latin phrase meaning *in the place*. As used in this report it refers to the formation of pollutants in the atmosphere. For example, ozone is formed *in situ* from the photochemical reaction of pollutant precursors. Ozone is not emitted directly from sources. $PM_{2.5}$ and haze are also formed *in situ*, although they are also emitted by sources. PM_{10} and CO, on the other hand, are largely emitted from sources; *in situ* formation being of minimal importance. NOx and SOx are emitted and then undergo transformations to NO_2 and SO_2; they also can play a role in the *in situ* formation of ozone and $PM_{2.5}$.

Criteria Pollutants – The six pollutants for which National Ambient Air Quality Standards (NAAQS) have been established: carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, particulates and lead.

PI Draft Nebraska 2014 Ambient Air Monitoring Network Plan

I. Introduction and Purpose

This 2014 Ambient Air Monitoring Network Plan (hereafter referred to as the "2014 Network Plan") was prepared to meet the requirements of federal regulations set forth in 40 CFR Part 58.10. It serves several purposes as listed below.

- Describes the current ambient air monitoring network in Nebraska including:
  - The purpose of each monitoring site, and
  - Changes made since January 1, 2013.
- Discusses ambient air quality issues as they relate to the monitoring network.
- Reviews the ambient air monitoring network to determine that the requirements of 40 CFR Part 58 Appendixes A, C, D and E are met.
- Describes planned and possible changes to the ambient air monitoring network through 2015, as best they can be determined at the time this review was conducted.

II. Public Participation

Federal regulations require annual network plans to be made available for public inspection. The NDEQ meets this requirement by posting it on the NDEQ web site (www.ndeq.state.ne.us) for 30 days. During the 30 day public inspection period, written comments regarding this Network Plan may be submitted to the Nebraska Department of Environmental Quality (NDEQ). Contact information is provided below.

Mail:

Nebraska Department of Environmental Quality
Attn: Jim Yeggy - Air Quality Compliance Section
PO Box 98922
1200 N Street, The Atrium Suite 400
Lincoln, NE 68509

Email:

NDEQ.airquality@nebraska.gov

Informal inquiries may also be directed to Jim Yeggy at 402/471-2142. Non-written comments are not necessarily included or addressed as review comments.

The deadline for written comment submittal can be found on the NDEQ web site.

III. Overview of Current Ambient Air Monitoring Network

Nebraska's current air monitoring network is summarized in Table III-1 below. The network description tables in Attachment A provide more detailed information on the network, including site locations and monitoring objectives.

The network includes monitoring sites for ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, total reduced sulfur, lead, PM_{10}, $PM_{2.5}$, $PM_{10-2.5}$ and regional haze (i.e., IMPROVE monitors). The network is operated by the Nebraska Department of Environmental Quality and two local agencies: the Douglas County Health Department and the Lincoln Lancaster County Health Department.

Table III-1: Number of Monitoring Sites in the Nebraska Air Monitoring Network (1)

Pollutant	Omaha MSA (2)	Lincoln MSA (5)	Sioux City MSA (6)	Other Areas of NE (6)	Total Sites
Ozone	3 (3)	1	0	0	4
Carbon Monoxide	2 (3)	0	0	0	2
Nitrogen Oxides	1 (3)	0	0	0	1
Sulfur Dioxide	2 (3)	0	0	0	2
Total Reduced Sulfur	0	0	1	0	1
PM_{10}	6 (3)(4)	0	0	2	8
$PM_{2.5}$	4 (3)	1	0	2	7
$PM_{10-2.5}$	1 (3)	0	0	0	1
$PM_{2.5}$ Speciation	1 (3)	0	0	0	1
Lead	1 (3)	0	0	2	3
NCore (7)	1	0	0	0	1
IMPROVE (8)	0	0	0	2	2
Totals	12 (2)(4)(7)	2 (5)	1	8	23 (9)

Footnotes:

(1) This table summarizes the number of operating sites in the NE SLAMS network as of 5/31/14.

(2) There are 2 multi-pollutant monitoring sites in the Omaha MSA:

- The 24th & O Sts (South Omaha) site, at which ozone and a PM_{10} are monitored;
- The NCore site, at which CO, NO/NOy, O_3, SO_2, PM, lead and meteorological parameters are monitored.

Thus there are 12 monitoring sites within the Omaha MSA, but if the pollutants are counted separately the total would be 19.

(3) This footnote means that one (1) monitor in this category is located at the NCore site.

(4) PM_{10} sites in the Omaha MSA include 4 sites operated by DCHD that are located in Douglas County; and 2 sites operated by NDEQ. The NDEQ operated sites are located in the Weeping Water area of Cass County.

(5) LLCHD operates the 2 monitoring sites in the Lincoln MSA: the Davey ozone site and the N Street $PM_{2.5}$ site..

(6) The NDEQ operates 11 sites: 2 at Weeping Water in the Omaha MSA, 1 in the Sioux City MSA, and 8 in "Other Areas of NE".

(7) The 12 Omaha MSA sites includes 10 sites operated by DCHD: 30th & Fort (O_3), 24th & O St (O_3 & PM_{10}), 78th & Dodge (CO), 16th & Whitmore (SO_2), 19th & Burt (PM_{10}), 46th & Farnum (PM_{10}), 92nd & Berry ($PM_{2.5}$), Bellevue ($PM_{2.5}$), Blair ($PM_{2.5}$) & 42nd & Woolworth (Ncore); and 2 sites operated by NDEQ: Weeping Water WWTF (PM_{10}) & Weeping Water Farm (PM_{10}).

(8) IMPROVE – Interagency Monitoring of Protected Visual Environments. These are fine particulate and particulate speciation monitors intended to provide information for studying regional haze that may impact Class I National Park and Wilderness Areas.

(9) The sum total number of individual pollutant sites in the *Total Sites* column exceeds the bottom total sites value because the multi-pollutant NCore site and the ozone/PM_{10} site at 24th & O Sts. were counted as one site each.

IV. Nebraska Ambient Air Monitoring Network: January 1, 2013 thru May 31, 2014

This section describes Nebraska's Ambient Air Monitoring Network in place from January 1, 2013 thru May 31, 2014, and changes made during that time period. There were no new sites established, nor permanent closure of existing sites during this time span.

Detailed information on individual monitoring sites, including purpose, scale, monitor details and start dates, is contained in Attachment A.

For the most part, this section is organized around the MSAs and MiSAs in which monitoring is conducted. For population and statistical information about the MSAs and MiSAs see Attachment C.

A. Omaha MSA Sites Operated by the DCHD

DCHD operates an ambient air network of 10 sites in Douglas, Sarpy and Washington Counties. Multi-pollutant monitoring is conducted at two of the sites. The NCore site monitors for 9 pollutant parameters (CO, NOy/NOx, O_3, SO_2, $PM_{2.5}$, PM_{10}, $PM_{10\text{-}2.5}$, $PM_{2.5}$ speciation & TSP lead), meteorological parameters, and atmospheric radiation (RADNET*). The South Omaha site has both an ozone and a PM_{10} monitor. Thus the Omaha area monitoring network is more extensive than the 10 site total might indicate; if the pollutants are counted separately, there are 19 pollutant monitoring sites.

Table III-1 above provides summary information on the DCHD operated network, while Attachment A provides detailed information.

> * Note: RadNet is a nationwide system that monitors the nation's air, drinking water, precipitation, and pasteurized milk to determine levels of radiation in the environment. RadNet sample analyses and monitoring results provide baseline data on background levels of radiation in the environment and can detect increased radiation from radiological incidents. The RadNet monitor is not subject to the network planning process set forth in 40 CFR Part 58.10. It is recognized above for informational purposes only.

B. Omaha MSA Sites Operated by the NDEQ

The NDEQ operates 2 PM_{10} monitoring sites in the Weeping Water area. One at the city waste water treatment plant (abbr. WW City site) and one approximately 1/3 mile northwest of the Weeping Water spur (State Spur 13K) and Highway 50 intersection (abbr. WW Farm site).

The WW City site was temporarily closed from May 17, 2013 thru July 30, 2013 because a new roof was put on the WWTP building. Both the primary and collocated samplers were re-located to a newly constructed platform located ~ 40 ft NW of their previous location. The re-location was required because the City's roofing company would not warranty the new roof if our monitors were on it.

C. Lincoln MSA Sites Operated by the LLCHD

LLCHD operates two monitoring sites:

- A $PM_{2.5}$ site at 3140 N Street in Lincoln, and
- An ozone site in Davey, NE.

The $PM_{2.5}$, N Street site has three monitors: a primary filter-based FRM sampler, a collocated filter-based FRM sampler, and a continuous MetOne BAM monitor. Data from the continuous monitor is reported to AirNow, but not AQS.

LLCHD deployed new ozone monitoring equipment (i.e., analyzer, transfer standards and local primary standard) at the start of the 2014 ozone monitoring season.

D. Sioux City Metropolitan Statistical Area in Dakota and Dixon Counties

The NDEQ operates one TRS monitoring at 501 Pine Street in Dakota City. There were no changes to the Nebraska air monitoring network in the Sioux City MSA from January 1, 2013 thru March 31, 2014.

E. Grand Island Metropolitan Statistical Area

The NDEQ operates a $PM_{2.5}$ filter-based FRM sampler at Grand Island Senior High.

A new ThermoScientific 2025i was put into service in November 2013 (replaced an older R&P 2025 sampler), and then taken out of service in December 2013 because of re-current filter exchange failures. The R&P 2025 sampler was put back in service at the site.

Grand Island was officially recognized as a MSA in February 2013. The potential impact on monitoring requirements associated with the MSA designation are discussed in Section V.E.2 below.

F. Scottsbluff Micropolitan Statistical Area

The NDEQ operates a $PM_{2.5}$ filter-based FRM sampler at the Scottsbluff high School.

A new ThermoScientific 2025i was put in service in September 2012 (replaced an older R&P 2025 sampler). The 2025i has had some cold-weather related filter exchange failure, but not as frequently as the unit installed at Grand Island. Thus the 2025i remains in service at Scottsbluff.

G. Fremont Micropolitan Statistical Area

The NDEQ operates a TSP-lead monitoring site at 1255 Front Street in Fremont. This site has two TSP samplers for collecting ambient air lead samples: a primary sampler that operates once every 6 days and a collocated QA sampler that operates once every 12 days. There were no changes in the Fremont lead monitoring network from January 1, 2013 thru March 31, 2014.

Motor malfunctions impacted data completeness in 2013. In March 2013, the motor in one of the Fremont samplers prematurally failed. The motor was sent in for warranty repair/replacement. The Fremont site operated with only the primary sampler from March 11th thru May 28th of 2013. The replacement motor failed again in March 2014. A spare replacement motor was used to bring the sampler back on line with minimal data loss. The TSP-Pb sampler at Auburn experienced similar problems (see below).

H. Lexington Micropolitan Statistical Area

The NDEQ operates PM_{10} sites in Cozad and Gothenburg. These are source-oriented sites with respect to alfalfa processing and grain handling facilities in these communities. Data from these sites is demonstrating attainment with the PM_{10} NAAQS (see Attachment B Table B-5.a).

I. City of Auburn

The NDEQ operates a TSP-lead monitoring site in Auburn that is located approximately 0.15 miles northeast of the city ball park facilities. The site has a single TSP sampler that operates on a once per 6 day schedule. There were no changes to the Auburn lead monitoring network from January 1, 2013 thru March 31, 2014.

The sampler motor prematurely failed in October 2013 (Same problem as occurred in Fremont), and 2 samples were lost to this malfunction.

J. IMPROVE Sites

IMPROVE is the acronym for Interagency Monitoring of Protected Visual Environments. These sites contain fine particulate and particulate speciation monitors intended to provide information for studying regional haze that may impact Class I National Park and Wilderness Areas. There are no Class I National Park and Wilderness Areas in Nebraska; the nearest sites are in Colorado and South Dakota. Data collected at the Nebraska sites facilitate regional haze and pollution transport studies.

The NDEQ provides administrative oversight of the operation of two IMPROVE sites: one at Halsey National Forest in Thomas County and one at Crescent Lake National Wildlife Refuge in Garden County. These sites began operation in 2002. No changes were made at these sites from January 1, 2013 thru March 31, 2014.

K. National Atmospheric Deposition Program (NADP): National Trends Network (NTN) & Mercury Deposition Network (MDN)

There are two NADP/NTN sites in Nebraska: one near Mead that has operated since 1978 and one near North Platte that has operated since 1985. These sites are operated by the University of Nebraska, with analytical and data development support from the NADP. There were no changes to the NADP/NTN network from January 1, 2013 thru March 31, 2014.

National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition parameters examined include acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., calcium, magnesium, potassium and sodium).

Mercury Deposition Network (MDN) monitoring was initiated at the Mead site on June 26, 2007, and is continuing. At the North Platte site, MDN monitoring was conducted from October 2008 thru October 2010.

The operation of NADP sites is not subject to the provisions of 40 CFR Part 58.10. Their inclusion in this Network Plan is for informational purposes only. More information on the NADP/NTN and the NADP/MDN can be found in Attachment A and at the following web addresses: http://nadp.sws.uiuc.edu/ or http://nadp.sws.uiuc.edu/mdn/

V. Considerations for Network Planning

A. Compliance with 40 CFR Part 58 Requirements

The Nebraska Ambient Air Quality Network must comply with the requirements set forth in 40 CFR Part 58, including Appendices A, C, D and E. Attachment D of this Network Plan contains a review of the Nebraska ambient air monitoring network with respect to these requirements. The review indicates the Nebraska ambient air monitoring program is meeting applicable requirements with one possible exception related to collocation in the DCHD $PM_{2.5}$ network (see *DCHD $PM_{2.5}$ Collocation Upgrade* below).

DCHD $PM_{2.5}$ Collocation Upgrade:

As noted in previous Network Plans, DCHD currently operates one collocated $PM_{2.5}$ FRM monitor at its Ncore site. The FRM is collocated with a MetOne BAM FEM. This meets the collocation requirements for the 2 $PM_{2.5}$ sites operated by DCHD that use MetOne BAM samplers.

It does not appear to meet the collocation requirements for the 2 DCHD sites with $PM_{2.5}$ FRM samplers. The current collocation set-up was originally approved by EPA, which created uncertainty as to whether an upgrade was needed.

The NDEQ has agreed to finance the purchase of a new FRM sampler from existing §103 funds. It is anticipated that DCHD will install the new sampler at the Berry St monitoring site in 2014, thus satisfying the collocation requirement.

Additional information is provided below concerning 2 potential monitoring site requirements that pertain to 40 CFR Part 58 Appendix D requirements.

1) Near-Road NOx Monitoring in the Omaha MSA

On March 14, 2013, EPA promulgated changes to the near-road NOx monitoring requirements (see 40 CFR Part 58 Appendix D Sec. 4.3.2) that were consistent with the previously-recommended, phased-implementation strategy. The revised regulations will require a near-road monitoring site in the Omaha MSA by January 1, 2017, with the site to be identified in the 2016 Network Plan.

There is a provision in the revised regulation, where-by a near-road monitoring site would be required in the Omaha MSA if there are road-segments with traffic counts that equal or exceed 250,000 Annual Average Daily Traffic (AADT). This provision does not apply to Omaha, because traffic counts are below this threshold. See *Omaha Traffic Count Data Summary* below.

Omaha Traffic Count Data Summary: Both the NDOR and Omaha Metropolitan Area Planning Association (MAPA) publish traffic count data. Both agencies identified I-80 near the 42nd St. intersection as the highest traffic count segment as summarized below:

- NDOR: 2012 traffic count data identified I-80 at 42nd St. to be the heaviest traveled segment with ~170,000 AADT.
- MAPA: The *2010 Traffic Flow Map* identified the heaviest traveled road segment as I-80 between I-480 and 42nd St interchanges with an estimated 183,500 annual average weekday traffic (AAWT) count. The AAWT should be slightly higher than the AADT.

The Douglas County Health Department has indicated that the current CO monitoring site at 78th St. and W. Dodge Rd. would be a good candidate for consideration as the near-road NOx monitoring site. City of Omaha traffic count data estimates are 89,000 AADT for the 72nd and Dodge Street intersection, and 67,000 AADT for the 84th and West Dodge Road intersection. Although the traffic counts are lower than on I-80 near 42nd St., the 78th and Dodge Street location is subject to traffic congestion (slower speed limit and multiple traffic light stops in the vicinity), and is in a valley location adjacent to Little Papillion Creek. Factors such as these are important in the determining where to place the near-road NOx site.

EPA published the *Near-Road NO_2 Monitoring Technical Assistance Document* (EPA-454/B-12-002) in June 2012, which explains EPA recommendations for the site selection process. Traffic volumes, fleet mix, roadway design, traffic congestion patterns, meteorology, and local terrain & topography are all considerations in identifying the near-road NOx monitoring site.

2) Source-Oriented Lead Monitoring

On December 14, 2010 EPA promulgated modifications to 40 CFR Part 58 Appendix D Sec 4.5, which lowered the emission threshold for requiring source-oriented lead monitoring to 0.5 tons per year (previously it had been 1 ton of lead emitted per year). This change required lead monitoring near the Nucor Steel-Norfolk facility, unless it could be demonstrated that lead levels would not exceed 50% of the NAAQS. Nucor Steel initially provided modeling in 2011 that demonstrated the 50% criteria would be met, and the NDEQ submitted a waiver request in June 2011.

EPA was reviewing this request, when Nucor Steel submitted a construction permit application for an expansion of the Norfolk facility. Nucor Steel revised the model to include the expansion, and the revised model indicated that ambient lead levels would not exceed 50% of the NAAQS.

The EPA Region VII Administrator Karl Brooks approved the waiver in a letter dated April 16, 2014. The waiver will need to be renewed in 5 years (i.e., by April 2019).

B. Attainment with the National Ambient Air Quality Standards (NAAQS)

There are no declared non-attainment areas in Nebraska at this time (May 2014), but there are attainment related issues that are discussed in this section. Attainment with NAAQS is evaluated using data from the latest 3 years. Attachment B contains a summary of ambient monitoring data for all sites from 2011 thru 2013, and a comparison of the monitoring data to the NAAQS.

The NAAQS attainment issues are discussed in this section are:

- Lead: Fremont & Auburn sites
- PM_{10}: Weeping Water Farm and Omaha 46th & Farnam sites
- $PM_{2.5}$: Statewide with respect to 2012 NAAQS revision
- 1-Hour SO_2 NAAQS
- 1-hour NO_2 NAAQS
- Ozone: Current NAAQS and revision review

None of these issues is anticipated to require modifications to the Nebraska ambient air monitoring network before the end of 2015.

1) Lead

The NAAQS for lead was revised in 2008 and additional monitoring requirements were established. To meet the new monitoring requirements source-oriented monitoring sites were established in Fremont and Aubutn

1a) Lead: Fremont Site

The Fremont lead monitoring site is a source-oriented site with respect to Magnus Farley Metals (MFM). MFM recycles and manufactures brass castings with lead babbitt linings for locomotive and rail car wheel bearings. The ambient air monitoring site is located ~ 80 meters north of the MFM facility fence-line.

Fremont remains in compliance with the NAAQS, although the Fremont monitoring site has recorded 3-month average lead concentrations near or above the lead NAAQS in 2011, 2012 and 2013 as summarized below.

- September thru November 2011: A 3-month average value of 0.16 *u*g/m^3 (NAAQS = 0.15 *u*g/m^3) was found. However, sampler flow bias issues resulted in data being invalidated. Thus the exceedence could not be supported. The samplers were refitted with different flow controllers in 2012, and sampler performance has been within specifications since the refits were completed.
- April thru June 2012 & May thru July 2012: The averages for these two 3-month time periods were 0.13 and 0.14 *u*g/m^3, respectively. These ambient lead levels are at 87% and 93% of the NAAQS.
- October thru December 2013: The 3-month average for this period was 0.11 *u*g/m^3 or 73 % of the NAAQS. There was a double-run filter during this time-frame that could not be counted, but appeared high, which might have raised the 3-month average if it had been valid.
- Data collected in 2014 (thru May) indicates attainment with the NAAQS, but 7 samples (between 2/16/14 thru 3/30/14) were lost due to a shipping problem and a sampler malfunction.

The NDEQ has taken several steps to encourage voluntary efforts at MFM to reduce lead emissions:

- In 2012, NDEQ met with MFM to review potential lead emissions sources and encourage voluntary reduction efforts
- There was also follow-up with respect to the higher lead levels found in the 4th quarter of 2013.
- Typically results become available 3 to 7 weeks after sampling. When the results do become available they are disseminated to MFM as soon as possible via email.

Changes to the ambient monitoring conducted in Fremont are not anticipated at this time.

1b) Lead: Auburn Site

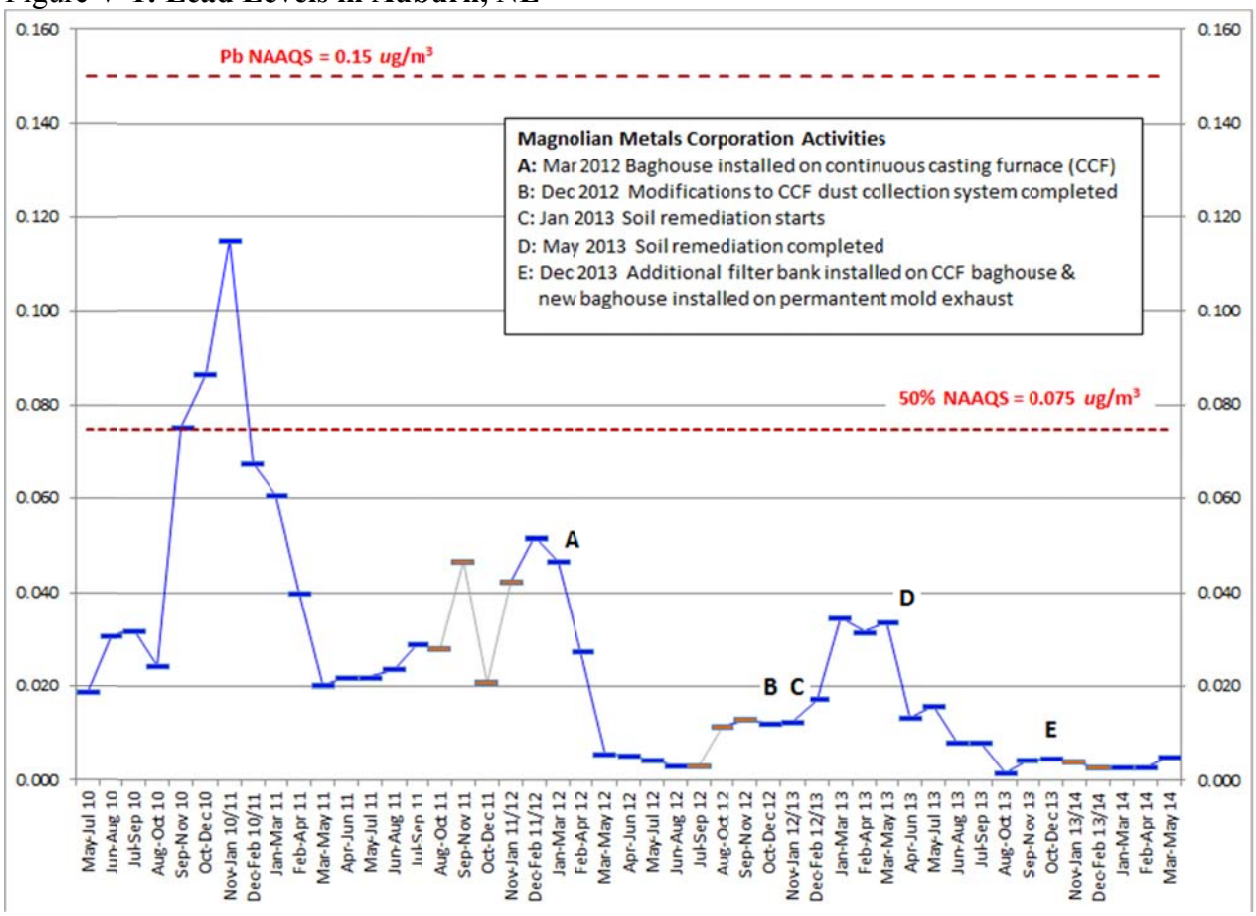
The Auburn lead monitoring site is a source-oriented site with respect to Magnolia Metals Corporation (MMC). MMC manufactures bronze castings. The ambient air monitoring site is located ~ 540 meters southeast of the MMC process areas. The monitoring site is located between the MMC facility and residential/recreational areas in the city of Auburn.

The Auburn monitor has consistently demonstrated that lead levels are below the NAAQS

since it became operational in May 2010, as shown in Figure **V-1** below. MMC installed additional air pollution control technology in 2012 & 2013, and completed a soil remediation project in 2013. Lead levels have been less than 50% of the NAAQS since the start of 2011, and are now ranging from 2% to 3% of the NAAQS, after the completion of the soil remediation project.

After reviewing this data, some of which became available late in this network review process, it may be appropriate to apply for a waiver from the source-oriented lead monitoring requirements in Auburn. Such waiver requests are authorized in 40 CFR Part 58 Appendix D Section 4.5.a.ii. The waiver requests would be made separate from the 2014 Network Plan. If the waiver request is submitted (by NDEQ) and approved (by EPA), the NDEQ will close the Auburn lead monitoring site as outlined in Section VI below.

Figure **V-1: Lead Levels in Auburn, NE** (1)



Footnotes:

(1) The Auburn lead monitoring site is source-oriented with respect to the Magnolia Metals Corporation bronze casting facility which is located ~ 550 yds NW of the monitoring site.

2) PM_{10} NAAQS

The PM_{10} NAAQS is set at 150 *u*g/m^3 as a 24-hour average value. This 24-hour NAAQS is attained when the expected number of exceedences per year at each monitoring site is less than or equal to one. Typically attainment is evaluated over a 3-year period, with up to three 24-hour values exceeding 150 *u*g/m^3 allowed as attainment (i.e., 4 or more values above 150 *u*g/m^3 being indicative of non-attainment).

2a) PM_{10}: Weeping Water

Source-oriented PM_{10} monitoring is conducted in the Weeping Water area with respect to limestone mining and processing facilities located there. There are two PM_{10} monitoring sites in the Weeping Water area:

- The Weeping Water City (WW City) site at the wastewater treatment plant in the east central part of the city; and
- The Weeping Water Farm site (WW Farm) located ~ 1.9 miles west of the city in an agricultural field.

Historically, there have been times when 24-hour PM_{10} value exceeds the 150 *u*g/m^3. When this occurs sources in the area are notified, compliance reviews are conducted, and voluntary control efforts and due diligence are encouraged. This has proven to be an effective strategy in lowering ambient PM_{10} levels.

The most recent time frame with elevated PM_{10} values occurred in the 2010 thru 2012 time frame. The WW Farm site recorded 4 days from October thru November 2010 and one day in January 2012 when the 24- hour average PM_{10} level exceeded 150 μg/m^3.

In the latest 3-year time frame (2011 – 2013), 24-hour PM_{10} values exceeded 150 *u*g/m3 only once at 179 *u*g/m3 on 1/5/12. The next highest value was 129 on 10/18/12. The highest value in 2011 was 108 *u*g/m3 on 10/21/11, and in 2013 it was 108 on 2/13/13. See Table V-1 above for additional maximum value data.

There are limestone mining and processing facilities located ~ 0.3 miles to the west of the WW Farm monitoring site, which in turn is located approximately 1.9 miles west of the City of Weeping Water. During the 4 year 2010 thru 2013 time frame, the highest value reported at the WW City monitoring site was 75 *u*g/m3 on 12/14/12 (Table V-1 above has additional maximum value data). Thus it appears that area impacted by the elevated PM_{10} values did not extend into the city of Weeping Water.

Table V-1: Maximum 24-Hour PM_{10} Values from the Weeping Water Area: 2010-2013

Year	Rank	1	2	3	4	5	6	7	8	9	10
Weeping Water – City Site											
2010	Date	10/20	12/7	10/14	4/20	10/8	12/10	4/5	10/17	4/14	4/11
	ug/m^3	73	61	55	53	49	40	38	38	34	33
2011	Date	10/21	10/6	5/9	6/8	10/3	7/20	3/4	4/12	5/30	8/31
	ug/m^3	52	47	43	43	42	37	35	35	35	34
2012	Date	12/14	9/30	9/27	9/24	10/2	8/22	9/6	10/18	11/20	5/18
	ug/m^3	75	55	51	46	45	44	44	44	43	42
2013	Date	12/3	8/29	9/7	5/16	11/15	11/30	12/18	8/23	4/4	8/14
	ug/m^3	45	42	40	37	36	35	35	34	33	31
Weeping Water – Farm Site											
2010	Date	10/27	10/26	11/26	10/20	10/19	3/31	10/21	4/19	3/23	9/7
	ug/m^3	**306**	**249**	**209**	**176**	122	109	106	93	88	85
2011	Date	10/21	12/30	12/29	10/6	2/11	11/21	11/7	11/28	5/31	5/10
	ug/m^3	108	95	94	89	86	86	82	77	76	75
2012	Date	1/5	10/18	10/31	5/14	9/27	2/1	12/13	9/26	5/16	10/1
	ug/m^3	**179**	129	116	109	108	104	99	98	94	93
2013	Date	2/13	4/19	1/14	7/2	4/4	12/2	1/25	6/22	11/8	5/15
	ug/m^3	108	91	85	85	77	73	71	67	66	64

Notes:

- Values greater than the 150 $\mu g/m^3$ NAAQS are shown in **bold, red font**.
- The 24-hour values are calculated to the nearest µg, and rounded to the nearest 10 µg for comparison to the NAAQS. Values of 151 to 154 are rounded to 150 (i.e., do not exceed the NAAQS), while values of 155 to 159 are rounded to 160 (i.e., exceed the NAAQS).
- The NAAQS is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. Assuming daily monitoring, then there cannot be more than 3 exceedences of 150 $\mu g/m^3$ in 3 consecutive calendar years.

2b) PM_{10}: 46th & Farnam Sts., Omaha

The 46th & Farnam site is source-oriented, with the monitor being located within 150 to 200 ft of the production areas at Omaha Steel Castings Company. From September 2011 thru June 2012, the 46th & Farnam site recorded four (4) 24-hour average PM_{10} values greater than the 150 $\mu g/m^3$ standard (see Table V-2, next page below).

Omaha Air Quality and Omaha Steel representatives met to discuss potential PM_{10} sources and controls. Process-handling and housekeeping changes were recommended to reduce PM_{10} emissions. This appears to have been effective; the last time ambient PM_{10} exceeded 150 *u*g/m3 was in June 2012.

PM_{10} values were significantly lower in 2013 (see Table V-2, next page below) as Omaha Steel began the process of relocating their plant to Wahoo, NE. The air quality construction permit for the new plant was issued on March 11, 2013. The move is being performed in a phased manner. Relocation to the Wahoo site was recently completed in the summer of 2014, with all production activities at the 46th & Farnam site to be discontinued.

DCHD wants to continue operating the monitor through 2014, and possibly into 2015, depending upon the ambient PM10 levels detected after Omaha Steel Castings ceases operations.

Table V-2: Maximum 24-Hour PM_{10} Values from the 46th & Farnam Site: 2010-2013

Year	Rank	1	2	3	4	5	6	7	8	9	10
2010	Date	4/20	10/8	7/10	7/9	10/1	4/19	6/1	12/8	10/15	5/14
	*u*g/m^3	145	145	133	132	117	116	113	113	111	109
2011	Date	9/28	10/29	10/24	10/5	10/31	10/6	10/11	10/21	3/16	6/7
	*u*g/m^3	**172**	152	151	141	138	135	122	122	120	120
2012	Date	5/14	6/5	1/5	10/3	3/16	6/6	5/18	5/10	6/1	1/10
	*u*g/m^3	**199**	**181**	**159**	150	143	143	140	133	132	129
2013	Date	7/8	5/7	9/10	8/30	9/9	6/25	2/21	1/9	5/14	6/21
	*u*g/m^3	94	89	87	85	84	81	80	78	78	78

Notes:

- Values greater than the 150 µg/m^3 NAAQS are shown in **bold, red font**.
- The 24-hour values are calculated to the nearest µg, and rounded to the nearest 10 µg for comparison to the NAAQS. Values of 151 to 154 are rounded to 150 (i.e., do not exceed the NAAQS), while values of 155 to 159 are rounded to 160 (i.e., exceed the NAAQS).
- The NAAQS is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. Assuming daily monitoring, then there can not be more than 3 exceedences of 150 µg/m^3 in 3 consecutive calendar years.

3) $PM_{2.5}$: December 2012 NAAQS Revision

In December 2012, EPA finalized changes to the NAAQS regulations that lowered the annual average $PM_{2.5}$ NAAQS from 15.0 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The subsections that follow discuss the attainment status of various areas of Nebraska with this new NAAQS.

3a) Omaha MSA: $PM_{2.5}$

There are 5 $PM_{2.5}$ monitoring sites in the Omaha MSA: 4 in Nebraska and 1 in Council Bluffs, IA. Figure V-2 shows the 2011 thru 2013 annual average data and the 3-year Design Values (DVs) from these 5 sites. The DVs at all 5 sites within the Omaha MSA are less than 12.0 $\mu g/m^3$. Thus attainment with the NAAQS is indicated.

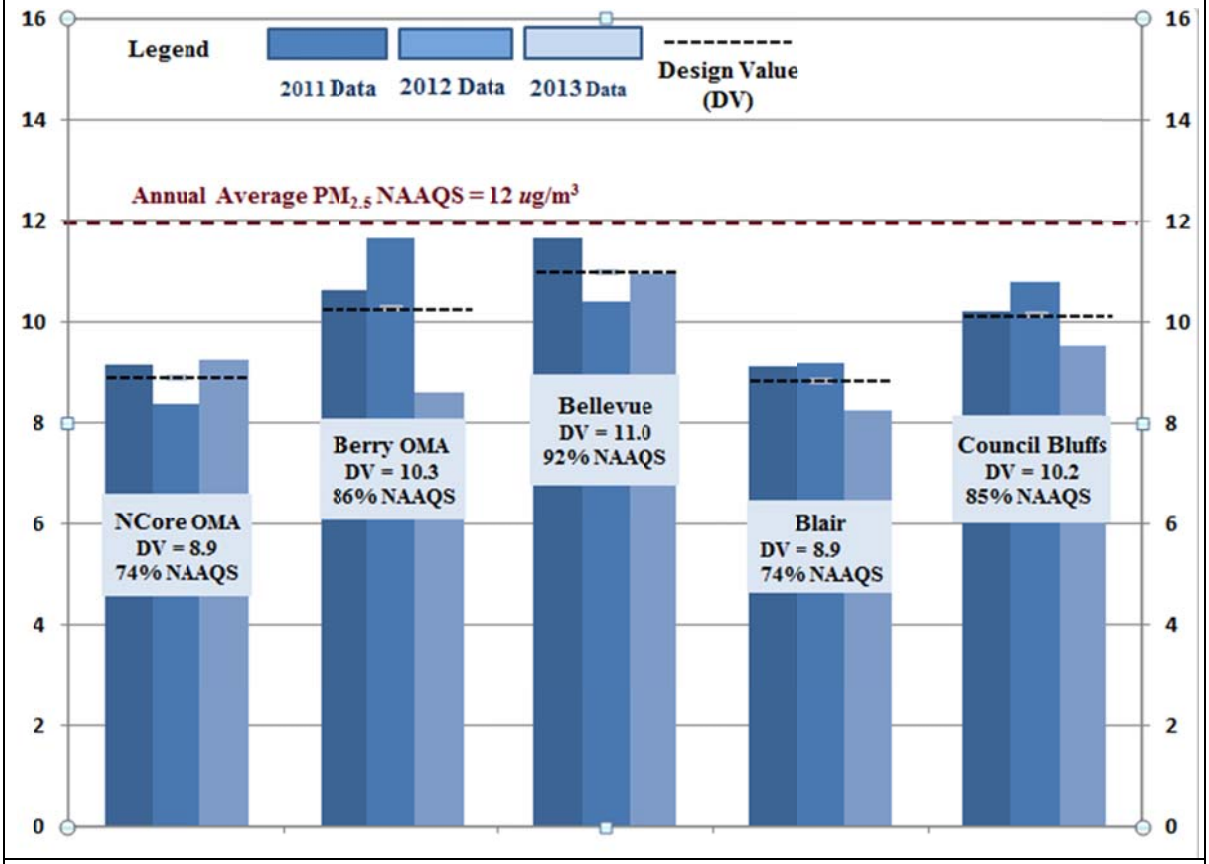
Note: the Design Value (DV) for the Council Bluffs site was calculated by the NDEQ using data from the EPA AQS data base. The IA DNR will calculate the official DV for the Council Bluffs site. Thus the Council Bluffs DV used in this document is preliminary and is used for preliminary evaluation purposes.

Figure V-3 shows the annual average data for these 5 sites from 2004 thru 2014 (10 years), with both the 10-year (2004 thru 2013) and the 5-year (2009 thru 2013) trend lines and slopes. The following is noted from the data summarized in Figure V-3:

- For all 5 sites, the 2010-12 and 2011-13 Design Values (DVs) indicate attainment with the 2012 NAAQS of 12.0 ug/m^3;
- Previous DVs from 2004-06 thru 2009-11 would also have been in attainment with the 2012 NAAQS;
- There were 3 instances where the annual average value exceeded 12.0 ug/m^3 (i.e., annual averages have exceeded 12.0 ug/m3, but not the 3-year DV):
  - In 2005 at the Council Bluffs, IA site the annual average was 12.5 $ug.m^3$,
  - In 2010 at the Council Bluffs, IA site the annual average was 12.5 $ug/^{m3}$, and
  - In 2010 at the Bellevue, NE site the annual average was 12.4 ug/m^3.
- The Bellevue site had the highest 2011-13 Design Value (DV) at 11.0 ug/m^3 or 92% of the NAAQS, while the 2010-12 DV was 11.5 ug/m^3 , the 2009-11 DV was 11.0 ug/m^3 and the 2008-10 DV was 10.2 ug/m^3;
- The Bellevue site had the most pronounced upward trend over the 5 year and 10 year periods examined, although over the most recent 4 years (2010 thru 2013) there was a downward trend.

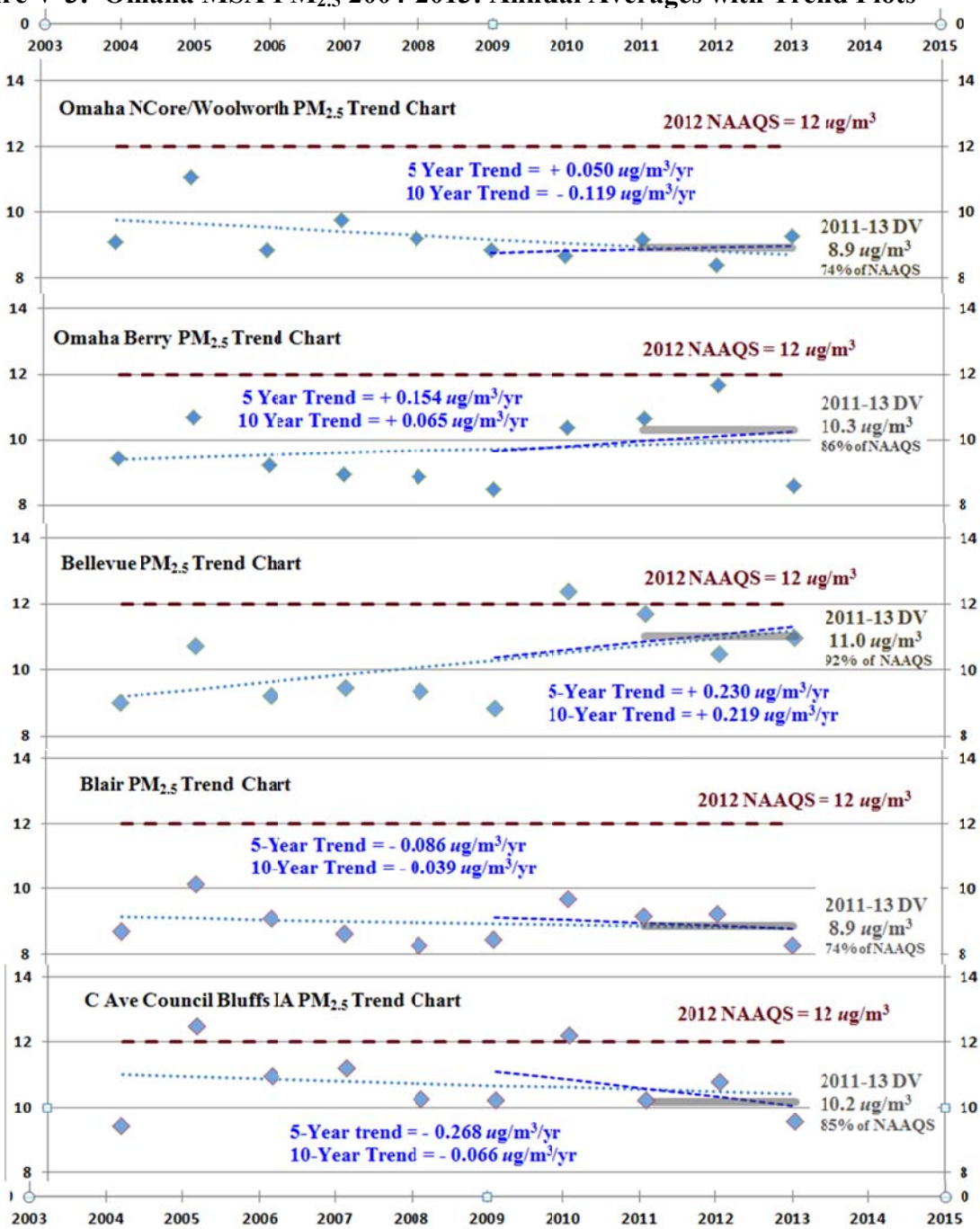
It is noted that historical trends are not necessarily indicative of future trends. This is amply demonstrated at the Bellevue site in Figure V-3 by comparing the 2009 thru 2013 5-year upward trend of +0.23 ug/m^3/yr and the 2010-2013 4-year downward trend of –0.56 ug/m^3/yr.

Figure V-2: Annual Average $PM_{2.5}$ Levels and 2011-13 Design Values (DVs) in the Omaha MSA



Note: the DV for the Council Bluffs site was calculated by the NDEQ using data from the EPA AQS data base. The IA DNR will calculate the official DV for the Council Bluffs site. Thus the Council Bluffs DV used in this document is preliminary and is used for preliminary evaluation purposes.

Figure V-3: Omaha MSA $PM_{2.5}$ 2004-2013: Annual Averages with Trend Plots



Notes:.....

* This figure summarizes data from the 5 $PM_{2.5}$ monitoring sites in the Omaha MSA
* There were 3 instances when annual average exceeded 12 $\mu g/m^3$:
  * In 2005 and 2010 at the Council Bluffs, IA site
  * In 2010 at the Bellevue, NE site
* The 2010-12 and 2011-13 Design Values were in attainment with the NAAQS
* Previous Design Values since 2004-06 would have been in attainment with the 2012 NAAQS
* The Bellevue site had the highest DV and the most pronounced upward trend, although the most recent 4 year trend (2010-2013) is downward.

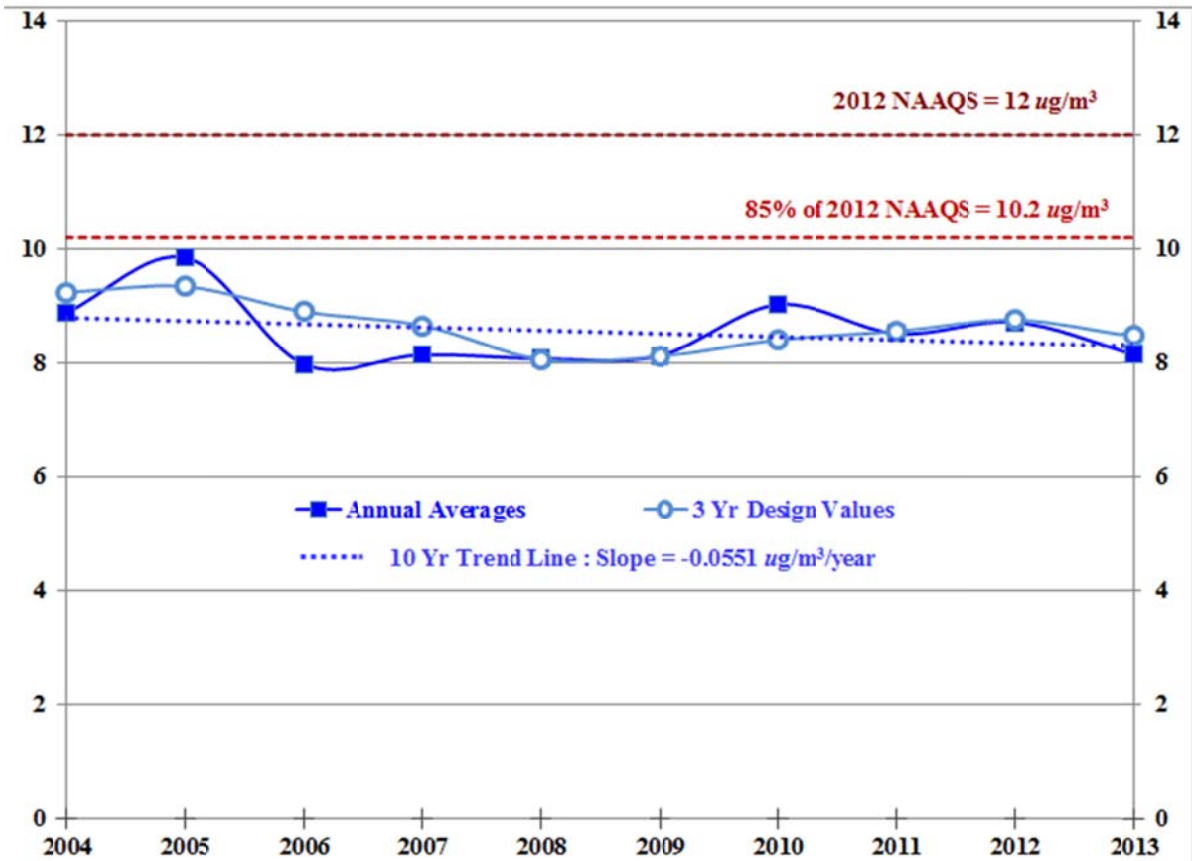
3b) Lincoln MSA: $PM_{2.5}$:

There is one $PM_{2.5}$ monitoring site in the Lincoln MSA. The 2011-13 Design Value (DV) is 8.5 $\mu g/m^3$ or 71% of the revised NAAQS finalized in 2012.

The minimum number of $PM_{2.5}$ monitoring sites required for an MSA with a population between 50,000 to 500,000 and a DV less than 85% of the NAAQS is zero (40 CFR Part 58 Appendix D Section 4.7.1, Table D-5). The Lincoln MSA has a population of ~310,000. As shown in Figure V-4 below, the historical DVs from this site going back to 2000-03 have always been less than 10.2 $\mu g/m^3$ (85% of new NAAQS).

No additional $PM_{2.5}$ monitoring sites are required or anticipated.

Figure V-4: Lincoln MSA $PM_{2.5}$ 2004-2013 : Annual Averages and Design Values (DVs)



3c) Sioux City MSA: $PM_{2.5}$

There are 3 monitoring sites in the Sioux City MSA: one in Sioux City, IA and two in Union County, SD. As shown in Figure V-5 below the 2011-13 Design Values (DVs) were less than 85% of the 12.0 $\mu g/m^3$ NAAQS.

The Sioux City MSA has a population of ~ 169,000. The minimum number of $PM_{2.5}$ monitoring sites required for an MSA with a population between 50,000 to 500,000 is dependent upon the DV (see 40 CFR Part 58 Appendix D Section 4.7.1, Table D-5):

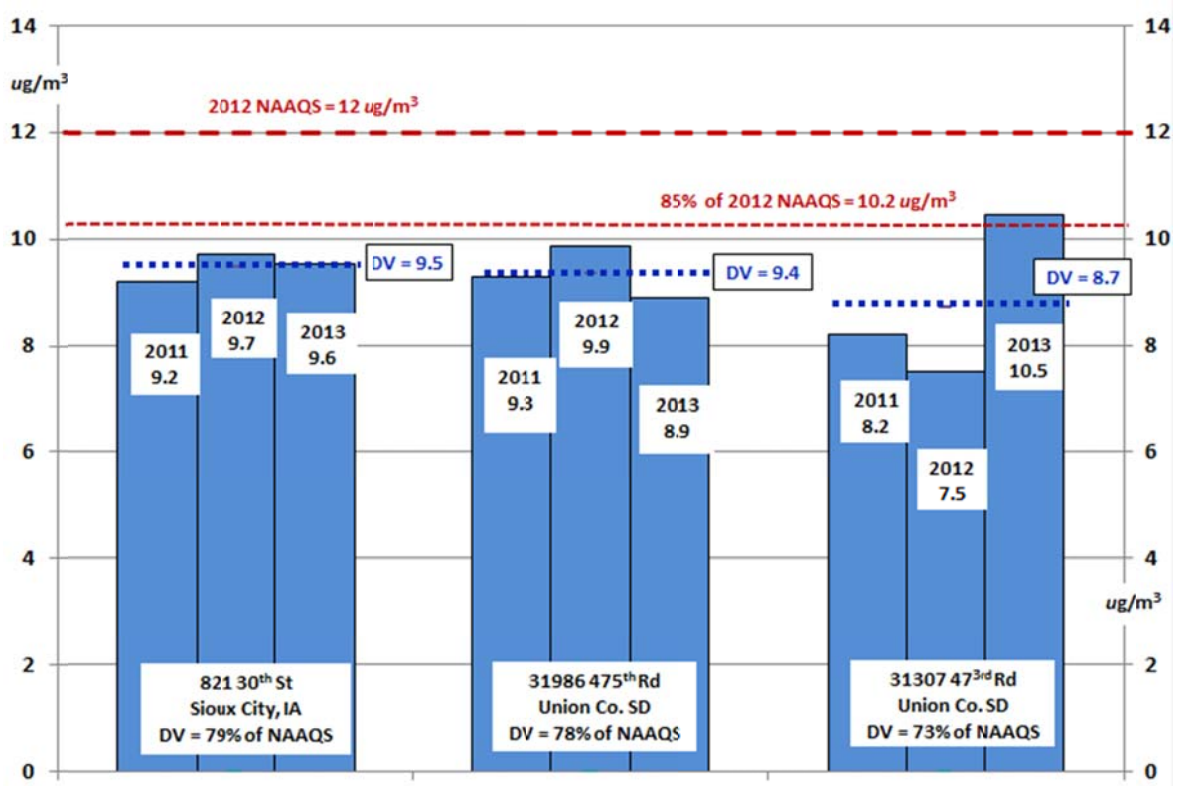
- If the DV less than 85% of the NAAQS no sites are required; or
- If DV is equal to or greater than 85% of the NAAQS one site is required.

Thus no additional $PM_{2.5}$ monitoring sites are required or no additional sites within Nebraska are anticipated.

Table V-3 below provides a historical summary of $PM_{2.5}$ levels at monitoring sites within the Sioux City MSA. Annual average $PM_{2.5}$ levels have never exceeded 12.0 $\mu g/m^3$.

There have been 4 instances since 2000 when the DV within Sioux City was equal to or greater than 85% of the NAAQS. The highest DV recorded was 10.5 ug/m^3 or 87.5 % of the 2012 NAAQS for 2005 thru 2007. The most recent instance was the 2006-08 DV, which was 10.3 ug/m^3 or 86% of the 2012 NAAQS.

Figure V-5: Sioux City MSA: Annual Average $PM_{2.5}$ Levels and Design Values (DVs): 2011-2013



Note: The DVs in this figure were calculated by the NDEQ using data from the EPA AQS data base. The official DVs for these sites will be calculated by Iowa and South Dakota.

Table V-3: Historical Summary of Annual Average $PM_{2.5}$ Levels and Design Values in the Sioux City MSA: 2000 thru 2013

Sites	Year Monitoring Started	Highest Annual Average		Highest DV	
		$\mu g/m^3$	Year	$\mu g/m^3$	Years
821 30th St, Sioux City IA	2010	10.73	2003	10.5*	2005-07
31986 475th Rd, Union Co SD	2009	9.88	2012	9.6	2010-12
31307 473rd Rd, Union Co. SD	2013	10.46	2010	8.7	2009-11 2011-13

* Other instances when the Sioux City monitoring site has met or exceeded 10.2 ug/m^3 or 85% of the 2012 NAAQS: 2001-03 DV = 10.3; 2003-05 DV = 10.3 & 2006-08 DV = 10.3.

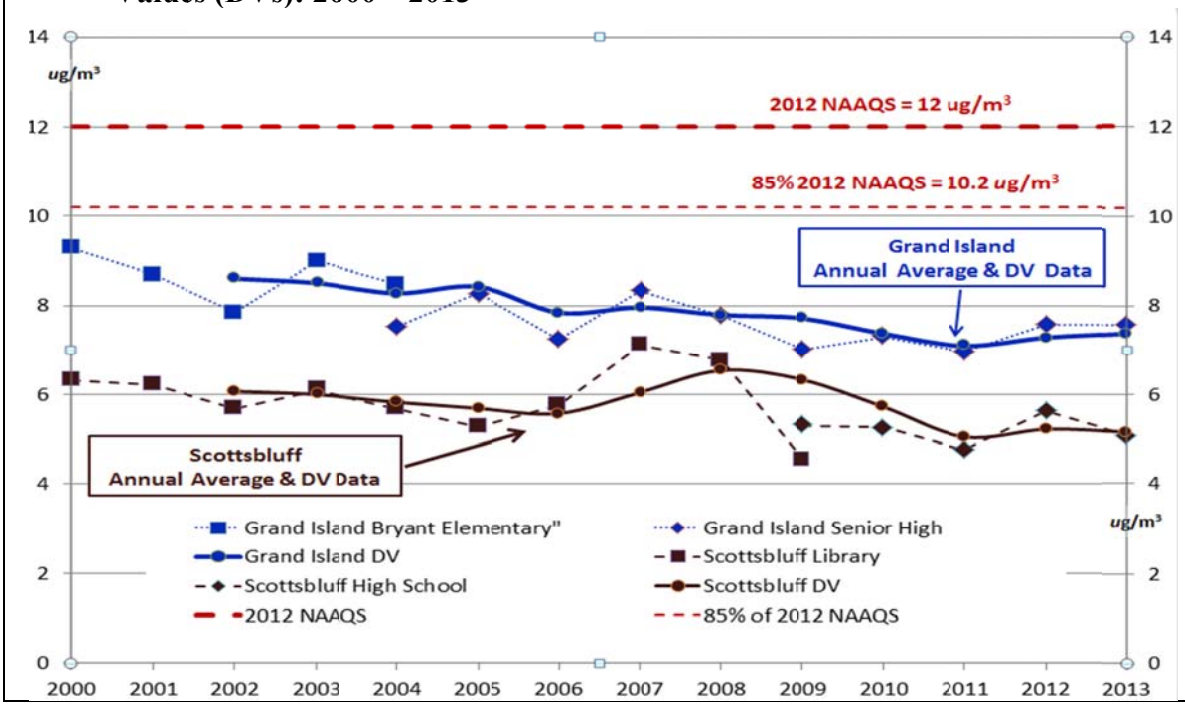
3d) Grand Island and Scottsbluff: $PM_{2.5}$

The NDEQ operates monitoring sites in Grand Island and Scottsbluff. The Grand Island site was established as Nebraska's transport site. The Scottsbluff site was established as Nebraska's background site. Each state is required to have one background site and one transport site per 40 CFR Part 58 Appendix D Section 4.7.3. Both the Grand Island and Scottsbluff sites are also population oriented, being located at the high schools in these two communities.

The 2011-13 Design Values, as well as historical design values going back to 2000-02, have been less than 85% of the 12.0 $\mu g/m^3$ NAAQS. See Figure V-6 below.

Also see Section V.E.2 below for the $PM_{2.5}$ monitoring requirements for the newly designated Grand Island MSA.

Figure V-6: Grand Island and Scottsbluff Annual Average $PM_{2.5}$ Levels and Design Values (DVs): 2000 – 2013



4) Sulfur Dioxide – Primary 1-Hour NAAQS

EPA promulgated a new 1-hour SO_2 NAAQS of 0.075 ppm in 2010. Attainment with the NAAQS is evaluated using the 3-year average of the annual 99th percentile 1-hour values (1-Hour SO_2 Design Value). Nebraska's initial designation recommendation was submitted as "unclassifiable" in accordance with the EPA regulations and guidance. EPA issued a letter in February 2013 confirming that Nebraska did not have any monitored nonattainment areas but deferred designating Nebraska.

There is one source-oriented SO_2 monitoring site in the Nebraska network. It is located at 1616 Whitmore Ave in Omaha and operated by DCHD. The site is at a highest concentration location relative to the OPPD North Omaha Station (a coal-fired electricity generating facility). This site is currently finding SO_2 levels to be in attainment with the NAAQS. Historically (before the current NAAQS was promulgated) the 2005-07, 2006-08 and 2007-09 design values did exceed 75 ppb. See Figure V-7 below.

Table V-4 contains data on the BTU input and SO_2 emissions from coal-fired power plants in and near Nebraska. The two largest plants without source-oriented SO2 monitoring are NPPD's Gerald Gentleman Station in Lincoln County and OPPD's Nebraska City Station in Otoe County.

Until EPA finalizes the procedures for completing area designations, it is not possible to determine whether additional source-oriented SO_2 monitoring sites will need to be established. Therefore, any additional monitoring site needs will be addressed in future network plans.

Figure V-7: 1-Hour SO_2 Levels at the Whitmore Site in Omaha

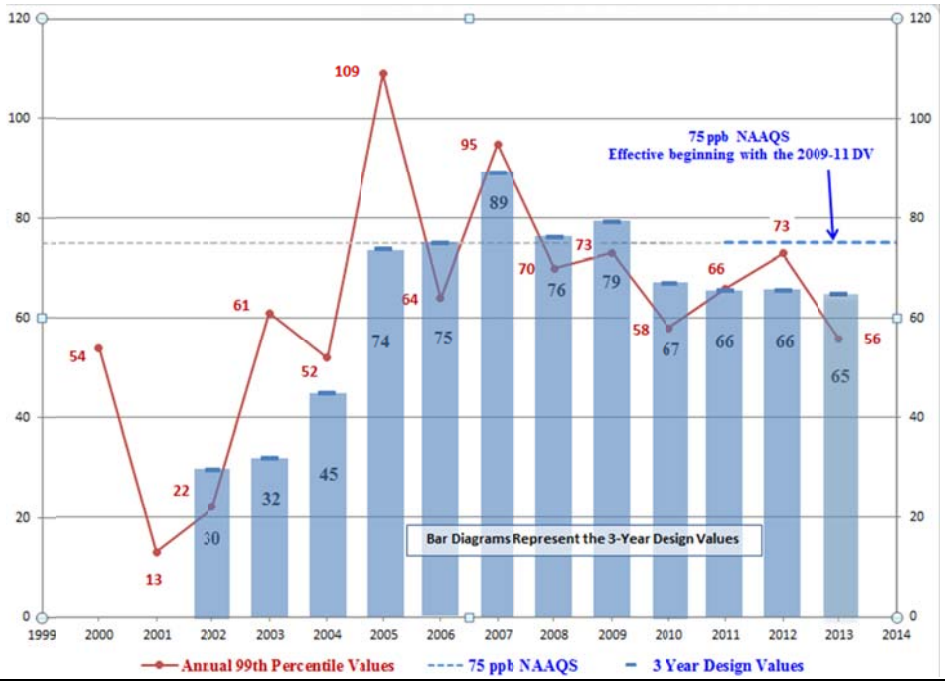


Table V-4: SO_2 Related Information on Power Plants in or near Nebraska: 2011-13 Data (1)(2)

Plant name	Location	BTU Input (BTU x10^{12})	SO_2 (tons)	1-Hr Ambient Monitoring Data (ppm) (3)	
				2013 99th Percentile	Design Value (3)
Mid Am Scott Energy Ctr	Pottawattamie Co IA Omaha MSA	112	14,073	nd	nd
OPPD North Omaha Stn	Douglas Co NE Omaha MSA	35	11,377	56	65(4)
Mid Am G. Neal North Stn	Woodbury Co IA Sioux City MSA	44	9789	16	6 qtr avg 24(5)
Mid Am G Neal South Stn	Woodbury Co IA Sioux City MSA	45	14273		
NPPD Gerald Gentleman Stn	Lincoln Co NE 18 mi W North Platte	89	26438	nd	nd
OPPD Nebraska City Stn	Otoe Co NE 4 mi SE Neb City	95	16766	nd	nd
Gerald Whelan Energy Ctr	Adams Co NE 2 mi E Hastings	15	2133	nd	nd
NPPD Sheldon Stn	Lancaster Co NE Lincoln MSA	12	2760	nd	nd
Platte Generating Stn	Hall Co NE 2 mi S Grand Island	6	1813	nd	nd
Lon D Wright Power Plant	Dodge Co NE SE edge Fremont	4	1095	nd	nd

Abbr:
nd – Source-oriented ambient air monitoring site data not available (no data)
na – Data not available

Footnotes:
(1) BTU input and SO_2 emission data from the EPA Acid Rain data base (http://www.epa.gov/airmarkets/quarterlytracking.html).
(2) Ambient air monitoring data from the EPA AQS data base.
(3) The 1-hour SO_2 NAAQS is equal to 75 ppm. Attainment is evaluated using the 3-year average of the annual 99th percentile value, which is referred to as the Design Value or DV.
(4) The source-oriented monitoring site for the OPPD North Omaha Station was shut down from 6/22/11 thru 10/1/11 due to Missouri River flooding.
(5) The source-oriented monitoring site for the Mid America George Neal North & South Stations began operations on 7/1/12. There is insufficient data for a 3-year average DV; the value shown is a 6 quarter average.

Source-Oriented Ambient Air Monitoring Stations:
Mid America George Neal North & South Stations: Site located at 1221 260th Street, Sergeant Bluff , IA; Operated by the IA DNR /University Hygienic Laboratory; Began operation on 7/1/12.
OPPD North Omaha Station: Site located at 1616 Whitmore Street, Omaha, NE; Operating by DCHD; Began operation in 1999, but was shut-down from 6/22/11 thru 10/1/11 due to Missouri River flooding.

5) Nitrogen Oxides - Primary 1-Hour NAAQS

EPA promulgated a new 1-hour NOx NAAQS of 100 ppb in February 2010. Attainment with the NAAQS is evaluated using the 3-year average of the annual 98th percentile 1-hour NO_2 values.

The initial attainment evaluation was to be performed using 2008 thru 2010 data. The NDEQ submitted a classification recommendation of *unclassifiable/attainment* in August 2011, and EPA approved this classification in January, 2012. This classification was used because Nebraska did not have NOx monitoring data available for 2008 thru 2010, but no evidence was available that Nebraska had not attained the standard.

In 2011, DCHD began operating a NO/NOy monitor at the NCore site at 4102 Woolworth St. in Omaha (see Attachment B Table B-4.b for data). The NO/NOy monitor will not provide an exact NO_2 value, but the NOy-NO should approximate NO_2 levels with the possibility of a positive bias (i.e., NOy-NO $\geq$ NO_2).

Table V-5 below contains NO/NOy data from the Omaha NCore site, as well as NO_2 data from selected monitoring sites in adjacent or near-by states for 2011 thru 2013. The data demonstrates that NOy-NO levels are well below the NOx NAAQS at the Omaha NCore site, and that NO_2 levels in adjacent states are also in attainment with the NAAQS.

The 2010 thru 2012 data presented in the 2012 Network Plan demonstrated very similar results, with the highest 3-year DV (2010-2012) being 72% of the NAAQS at Denver, CO (Site 08-031-0002)*; very similar to the 71% of NAAQS value for 2011 thru 2013.

The data in Table V-5 supports the *unclassifiable/attainment* classification (i.e., although data from Nebraska is limited, the data available from Nebraska and near-by states indicates attainment).

There is a possibility that the highest NO_2 levels may exists at near-road sites. The near-road monitoring program is discussed in Section V.A.1 above. It is noted that two of the sites listed in Table V-5 below are near-road-sites that began operation on 1/1/2013: Minneapolis, MN (27-053-0962) @ 58 ppb and St. Louis, MO (29-510-0094) @ 65 ppb.

* Note: the Denver site (08-031-0002) is located north of downtown Denver (~0.9 mi north of the Colorado State Capitol building), on a building roof at the intersection of Broadway, Champa & 21st Sts. Pollutant source is listed as "Area" and scale as "neighborhood".

Table V-5: One-Hour NOx Levels at Monitoring Sites in Nebraska and at Selected Sites in Near-By States for Comparison to the Primary NAAQS (1)(2)(3)

Site	Site #	98th Percentiles (ppb)			DV (ppb)	% NAAQS	Pollutant
		2011	2012	2013			
Omaha NE NCore	31-055-0019	45.0	45.0	35.3	41.8	42%	NOy-NO
Des Moines IA	19-153-0030	39.3	39.6	36.8	38.6	39%	NO_2
Davenport IA	19-163-0015	37.5	34.1	38.8	36.8	37%	NO_2
Blaine MN Minneapolis MSA	27-003-1002	46.0	41.0	43.0	43.3	43%	NO_2
Rosemount MN Minneapolis MSA	27-037-0020	37.0	36.0	38.0	37.0	37%	NO_2
Minneapolis MN Near-road site	27-053-0962	nd	nd	58.0	na	na	NO_2
Sioux Falls SD	46-099-0008	38.6	36.6	33.8	36.3	36%	NO_2
Union Co. SD Sioux City MSA	46-127-0002	14.3	57.0	40.3	37.2	37%	NO_2
Rapid City SD	46-103-0020	47.0	42.2	38.6	42.6	43%	NO_2
Campbell Co WY	56-005-0011	nd	46.0(4)	52.0	na	na	NO_2
Brookhurst WY Casper MSA	56-025-2601	42.2	27.3	35.9	35.1	35%	NO_2
Cheyenne WY	56-021-0100	32.3	35.8	37.1	35.1	35%	NO_2
Wamsutter WY	56-037-0200	37.9	36.3	37.7	37.3	37%	NO_2
Denver CO	08-031-0002	72.0	72.0	67.6	70.5	71%	NO_2
Wichita KS	20-173-0010	68.8	85.1	39.6	64.5	65%	NO_2
Kansas City KS	20-209-0021	53.1	51.5	47.4	50.7	51%	NO_2
Kansas City MO	29-095-0034	53.9	52.8	48.1	51.6	52%	NO_2
St. Louis MO	29-510-0086	55.5	52.4	50.5	52.8	53%	NO_2
St. Louis MO Near-road site	29-510-0094	nd	nd	65.1	na	na	NO_2

Footnotes:

(1) The Omaha NCore site is the only NOx monitoring site in Nebraska. This site monitors for NO and NOy. The NOy-NO parameter includes NO_2 as well as other reactive forms of NOx. The NOy-NO parameter can be used demonstrate attainment with the NOx NAAQS, but not non-attainment.

(2) Sites from the near-by states of IA, MN, SD, WY, CO, KS and MO were selected in part on their proximity to NE. Urban sites and highest concentration sites also received priority. In areas where there was more than one NOx monitoring site, data from the site that had the highest NOx values is shown. The levels shown in this table include the highest found in each state.

(3) The NOx 1-hour primary NAAQS is 100 ppb. Attainment with the NAAQS is evaluated using the 3 year average of the annual 98th percentile values for NO_2. The NOy-NO value is equal to or greater than the NO2 value.

(4) There was only 3 quarters of 2012 data from the Campbell Co WY site.

6) Ozone: Current NAAQS and Revision Review

The current ozone NAAQS is set at 75 ppb with attainment being evaluated by averaging the 4th highest 8-hour values from the previous 3 years. The calculations involve truncation of the 8-hour values and the 3-year average values (e.g., 69.9 ppb truncates to 69 ppb). These 3-year truncated average values are referred to as Design Values.

EPA is in the process of re-evaluating the ozone NAAQS. In 2010, EPA proposed lowering the 8-hour ozone NAAQS to be within the range of 60 to 70 ppb as recommended by the Clean Air Science Advisory Committee (CASAC). There were also proposed changes that would have eliminated the current practice of truncating annual 4th-high values and 3 year average values. Using the revised calculation method, DVs could be raised as much as 2 ppb because truncation is currently used in calculating both the 8-hr values and the 3-yr DVs.

EPA subsequently withdrew the proposed regulation and is in the process of re-evaluating the ozone NAAQS. EPA is under a court schedule to publish the draft revised ozone NAAQS by December 2014and promulgate by October 2015. CASAC has once again recommended the NAAQS to be within 60 to 70 ppb over an 8-hour period.

The subsections below discuss how ozone levels comply with the current NAAQS and how they compare to the revision range EPA is currently considering.

6a) Omaha MSA: Ozone

Figure V-8 below shows summary ozone monitoring data from the five monitoring sites in the Omaha MSA. Figure V-8 shows the 2011 thru 2013 4th high values for 8-hour ozone levels and the 3-year averages of these values. The 3-year averages approximate the 3-year Design Values.

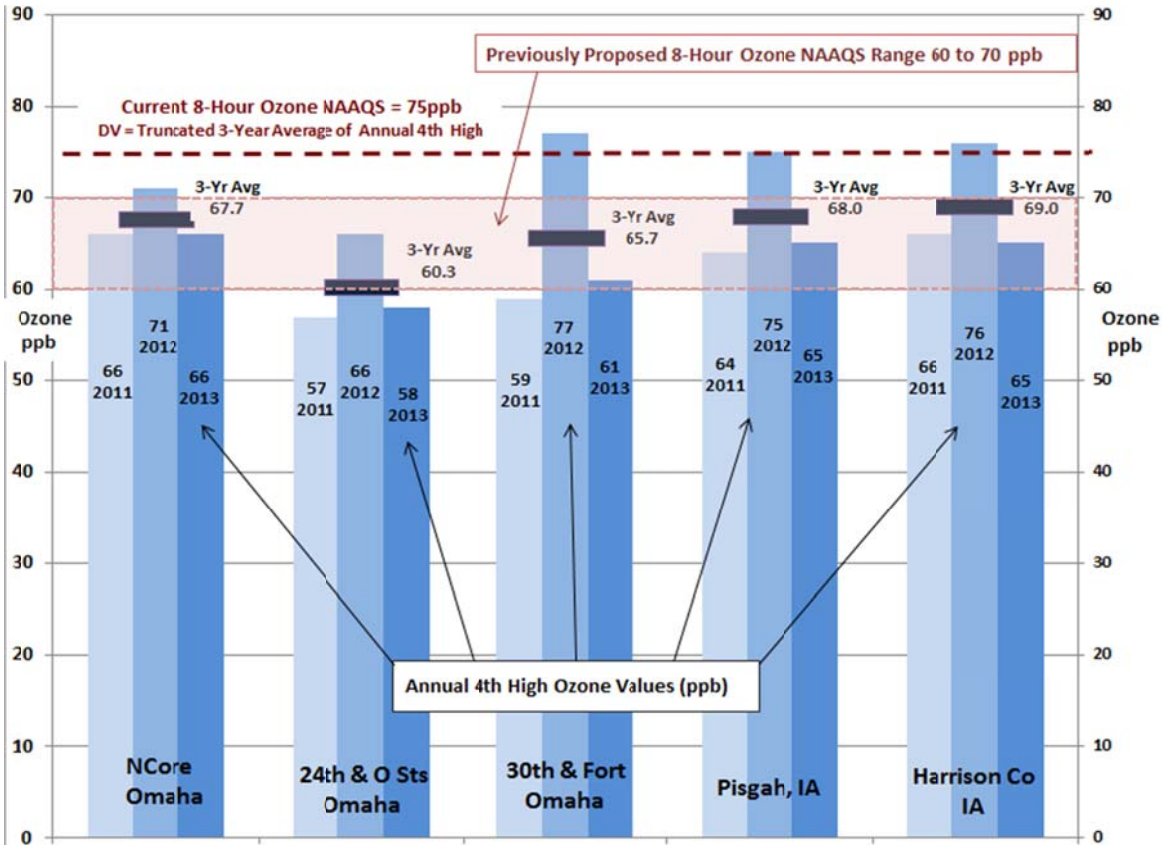
Figure V-8 shows that the Omaha MSA remains in attainment with the current 75 ppb 8-hour ozone NAAQS. Figure V-8 also demonstrates how the attainment status of the Omaha MSA might be impacted if the ozone NAAQS is lowered into the 60 to 70 ppb range.

Historically, the Harrison County site has recorded the highest ozone Design Values in the Omaha MSA. Figure V-9 below shows the DVs and annual 4th-high 8-hour values from the Harrison County site for data collected from 2000 thru 2013.

As can be seen from Figure V-9, the annual 4th-high ozone levels dropped below 70 ppb after 2007 and stayed there until 2012 when the 4th-high value was 76 ppb. The Design Values have ranged from 63 to 70 ppb since 2007. This demonstrates how the attainment status of Omaha might be impacted if the ozone NAAQS is lowered into the 60 to 70 ppb range (see Section V.C.2 below for a discussion of the NAAQS review status).

Extrapolating the historical data from Figure V-9 indicates that ozone levels in the Omaha MSA will remain in attainment with the current 75 ppb NAAQS through 2014, unless unprecedentedly high ozone levels are reached in 2014 (i.e., a 4th high value of 85 ppb or higher would be required to raise the DV above 75 ppb).

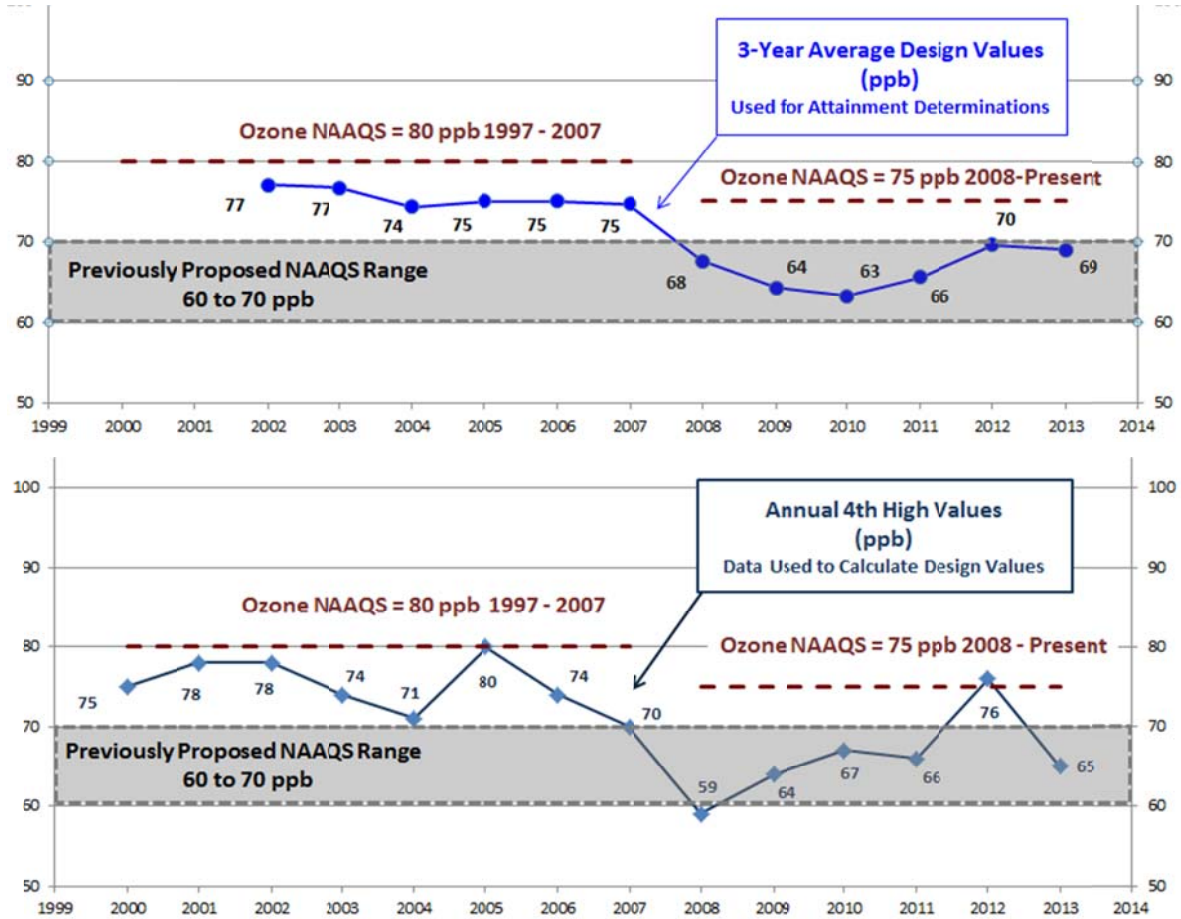
Figure V-8: Annual 4th-High 8-Hour Ozone Levels and 3-Year Averages in the Omaha MSA: 2011-13



Footnotes:

1) The annual 4th high values are truncated values from the EPA AQS data base.
2) The 3-year average values were calculated using the annual 4th hgih values. The 3-year design value (DV) is equal to the truncated 3-year average value.
3) The IA DNR calculates the DVs for the IA sites. It is possible that the final DVs calculated by Iowa could differ from the truncated 3-year average values in this figure.

Figure V-9: Ozone Design Values (DVs)* and Annual 4th-High Levels at the Harrison County IA Site: 2000 - 2013



* The "DVs" shown in this figure were calculated using the Design Value calculation procedures set forth in 40 CFR Part 58. However, the IA DNR is responsible for calculating the DVs for the Harrison County site. It is possible that the final DVs calculated by Iowa could differ from the DVs shown above.

6b). Nebraska Outside of the Omaha MSA: Ozone

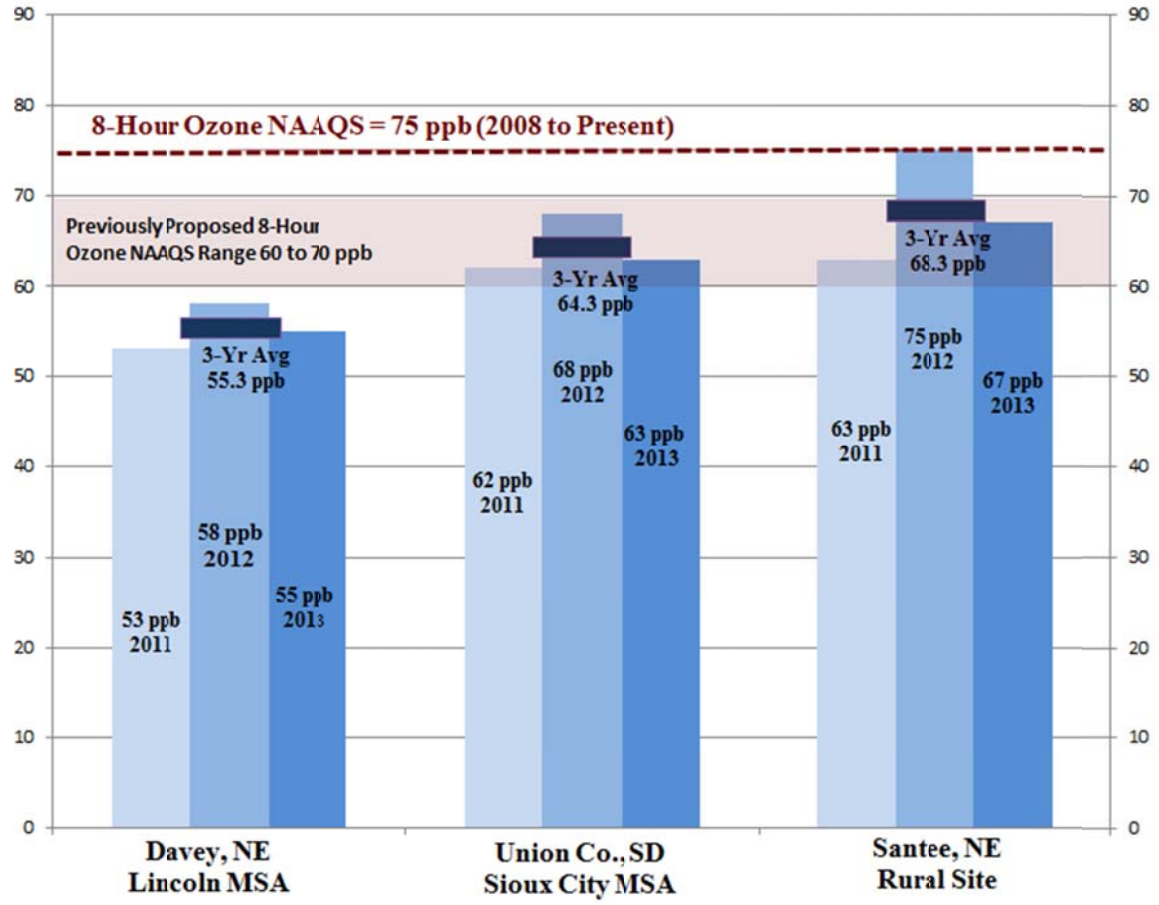
There are two ozone monitoring sites in Nebraska located outside of the Omaha MSA:

- Davey: a SLAMS site operated by LLCHD in the Village of Davey ~ 6 miles north of Lincoln, which began operation in 1985; and
- Santee: a CASTNET site operated by EPA located ~ ¼ mile south of the Village of Santee, which began operation on January 1st, 2011.

There is also an ozone monitoring site in Union County SD ~ 15 miles north of Elk Point, SD near I-29. This site is within the Sioux City MSA and has operated since January 1, 2009. It is operated by the SD Department of Environmental Protection.

Figure V-10 below shows the 2011-13 annual 4th high values and 3-year average values for the Davey, Santee and Union Co., SD sites. Figure V-10 demonstrates that ozone at these 3 sites was in attainment with the ozone NAAQS for the 2011-13 time period. Figure V-10 also shows that the 3-year average values at the Union County, SD (Sioux City MSA) and Santee, NE sites are in the 60 to 70 ppb range previously proposed for the revised NAAQS (see Section V.C.2 below for a discussion of the NAAQS review status).

Figure V-10: Ozone Data from Sites Outside of the Omaha MSA: 2011 - 2013 (1) (2)



Footnotes:

(1) The 3-year average shown in this figure were calculated from the annual 4th-high values in the EPA AQS database on or about 3/18/14. The Design Value or DV that is compared to the current NAAQS is calculated by truncating the 3-year average to a whole ppb value (e.g., 55.9 ppb is truncated to 55 ppb). The previously proposed ozone NAAQS revision used standard rounding conventions to calculate the DV (e.g., 55.9 ppb rounds to 56 ppb).

(2) The 3 year average values shown above should be used with caution for comparison to the NAAQS, because these are not final DV calculations.

There was no ozone monitoring conducted in 2013 in the Nebraska's panhandle. The National Park Service had operated temporary ozone monitoring sites there previously:

- The Scotts Bluff National Monument from 2010 thru 2012: Annual 8-hour 4th high ozone values of 59 to 67 ppb were detected with a 3-year average value of 63 ppb.
- The Agate Fossil Beds in Sioux County (~40 miles north of Scottsbluff) from 2007 thru 2009: Annual 8-hour 4th high ozone values of 62 to 67 ppb were detected with a 3-year average value of 65 ppb.

This data indicates that the Nebraska panhandle area is in attainment with the current 75 ppb NAAQS. It also shows that the attainment status could change if the NAAQS were lowered into the 60 to 70 ppb range previously proposed (see Section V.C.2 below for a discussion of the NAAQS review status).

Figure V-11 shows the 2013 4th-high ozone levels for sites in and around Nebraska, while Figure V-12 shows the DVs for these sites. Figures V-11 and V-12 demonstrate that annual 4th high ozone levels in the 60 to 75 ppb range are common at rural and municipal monitoring sites in and around Nebraska.

Figure V-11: 4th-High Ozone Levels for Sites In and Around Nebraska in 2013 (1) (2) (3)

1) Data was retrieved from the EPA AQS database on 3/19/14. The 2013 data was not yet certified.
2) In instances where there was more than one site in an area, values from the site with the highest ozone levels are shown.
3) Brick red font indicates less than a full year of data was available from a site.

Figure V-12: Ozone Design Values for Monitoring Sites In and Around Nebraska: 2011-2013 (1) (2) (3)

(1) The DVs shown in this figure were calculated by truncating the 3year averages of the annual 4th-high values. They are "unofficial" because the "official" DVs are calculated by the state or local authority in which the sites reside. Also the 2013 data had not yet been certified when the data was retrieved from the EPA AQS database.
(2) In instances where there is more than one site in an area, the DV from the site with the highest DV is shown.
(3) Brick red font indicates that 3 years of data was not available. The value shown was calculated using only 2 years of data, or was calculated using data from 2 near-by sites.

As shown in Figures V-11 & V-12 (also see Attachment B, Table B.1), the Lincoln MSA ozone monitoring site at Davey has been reporting lower ozone levels than other sites in Nebraska. LLCHD and NDEQ have discussed possibly seeking a higher concentration ozone monitoring site within the Lincoln MSA. For 2014, LLCHD will continue to operate the ozone monitoring site at Davey. It is possible that temporary SPAMS or special study sites could be used to investigate higher ozone concentration areas.

Ozone NAAQS Attainment Summary: All monitoring sites in Nebraska and the Omaha MSA are demonstrating attainment with the current 75 ppb NAAQS. If the NAAQS were lowered as previously proposed, non-attainment is a possibility.

C. EPA Regulation Changes that are Proposed or Under Consideration

1. Ozone NAAQS Revision

At this time EPA is reviewing the ozone NAAQS. See Section V.C.6 discusses the status of the review and how it might impact Nebraska. The current ozone monitoring network in Nebraska consists of 3 sites in the Omaha MSA and one site in the Lincoln MSA. At this time, no changes to the ozone network are anticipated until the ozone NAAQS is finalized.

2. Rural Ozone Monitoring

EPA proposed additional ozone monitoring requirements on July 8, 2009. The proposed regulation called for an additional 3 non-urban monitors in Nebraska. EPA indicated their intent to finalize the additional ozone monitoring requirements at the same time they finalized the revised ozone NAAQS, which were proposed in January 2010 (see next section).

In September 2011, EPA withdrew the proposed regulations and stated their intent to defer changes until the next 5-year ozone NAAQS review. That review is currently underway, but a schedule for a proposed determination relative to the ozone NAAQS has not been established.

It now appears that any changes to the ozone monitoring requirements will likely not be finalized until 2015 or later. At this time, the NDEQ is not proposing initiating a rural ozone monitoring network.

D. Other Air Quality Issues:

1) PM_{10} at Cozad and Gothenburg

PM_{10} monitoring was initiated in Cozad in 1994 and Gothenburg in 1991. Concern over particulate levels in these communities prompted the establishment of these monitoring sites. Both cities have alfalfa dehydration/pelleting plants and other agriculturally-related processing facilities that are particulate sources.

The highest 24-hour PM_{10} values found in this 20 to 22 year monitoring period were 146 ug/m^3 at Cozad in 2002 and 143 ug/m^3 at Gothenburg in 2004. The 24-Hour NAAQS is 150 ug/m^3, which is not to be exceeded more than 3 times in 3 consecutive years.

Figures V-13 and V-14 below summarize the monitoring data from Cozad and Gothenburg, respectively. As can be seen in Figures V-13 and V-14, PM_{10} levels have been lower in the past 6 to 7 years, and attainment/compliance with the NAAQS is being demonstrated with the highest 3rd high values in the last five years being 94 ug/m^3 at Cozad and 73 ug/m^3 at Gothenburg (63% and 49% of the NAAQS, respectively).

Closure of the Cozad and Gothenburg PM_{10} sites was considered as part of this network review. Three factors prompting the closure review are listed below. Those marked with a "-" favor closure. Those marked with a "+" favor continued operation. Those marked with a "n" are neutral.

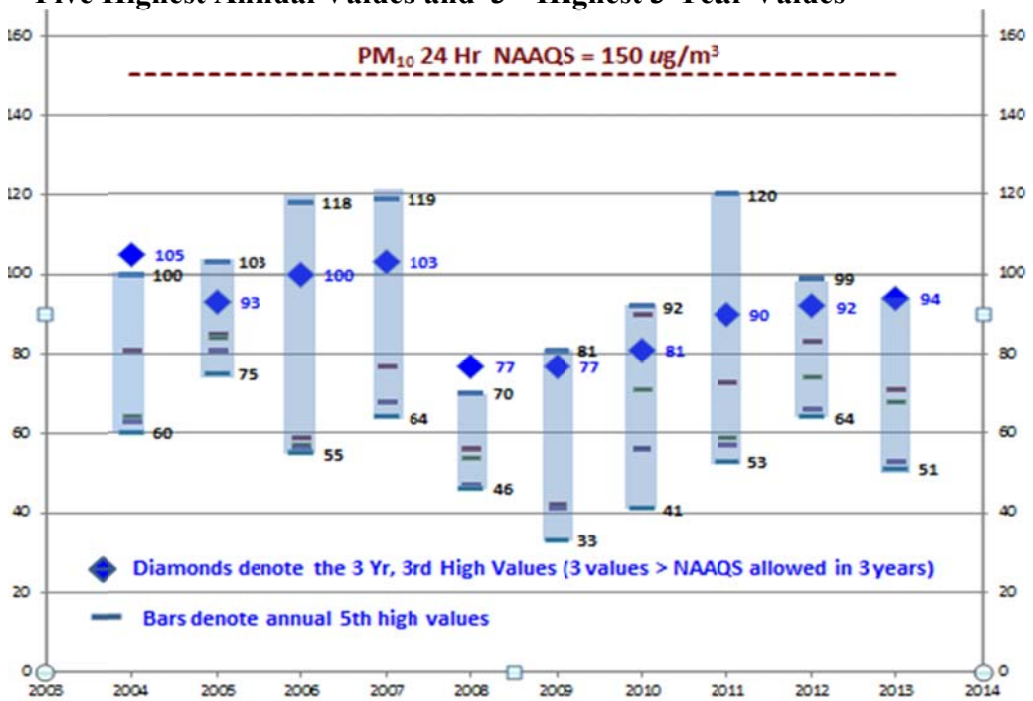
- Historical monitoring results indicate attainment with a significant margin of safety.
- The samplers at these sites are more than 10 years old and will need to be replaced soon, which will involve significant expenditures for replacements.

n Ozone monitoring may be required in Grand Island and other areas of Nebraska in the future (see Sections C.1 & E.2), and a re-deployment of resources from PM_{10} to ozone might be prudent (i.e., purchase new ozone monitoring equipment needed in a year or two, rather than new PM_{10} samplers that may only be used for a year or two).

+ The presence of the samplers may provide incentive for sources in the area to diligently implement dust controls.

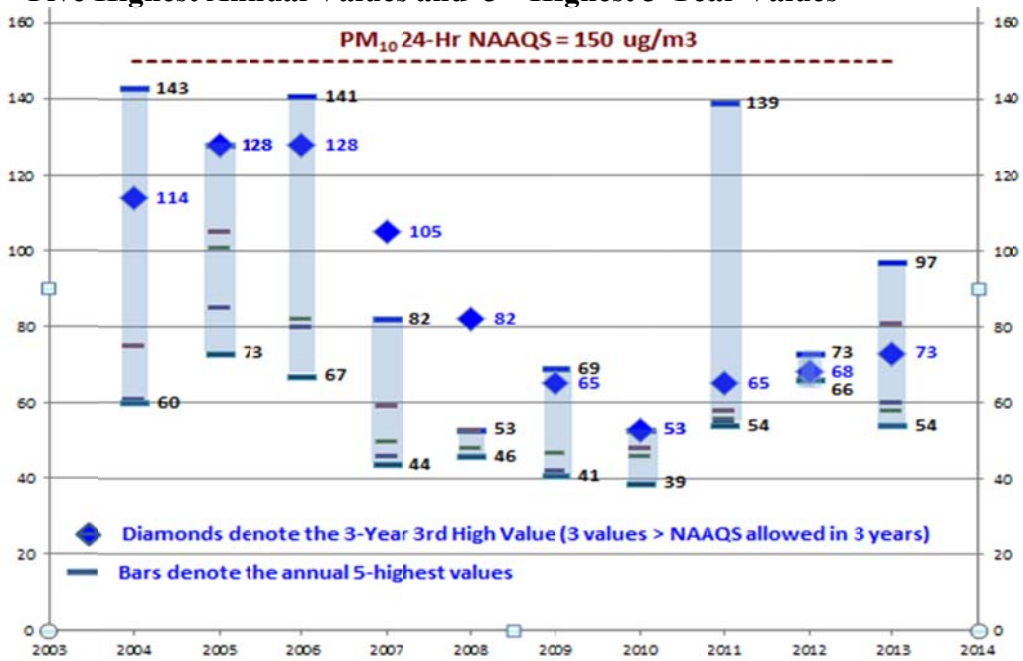
It was determined that it was best to continue operating the Cozad and Gothenburg sites with the existing samplers for the time being. If the samplers encounter O&M problems such that replacement is required, then temporary closure may occur (i.e., temporary until a final determination is rendered as part of the 2015 network review).

Figure V-13: 24-Hour PM_{10} Values at Cozad NE: 2004 – 2013
Five Highest Annual Values and 3rd Highest 3-Year Values



Maximum 3-Year, 3rd High Value 2004 - 2013 = 105 *u*g/m3 or 70% of NAAQS
Maximum 3-Year, 3rd High Value in Last 5-Years (2009-2013) = 94 *u*g/m3 or 63% of NAAQS
Maximum Annual High Value 2004-2013 = 120 *u*g/m3 or 80% of NAAQS

Figure V-14: 24-Hour PM_{10} Values at Gothenburg NE: 2004 – 2013
Five Highest Annual Values and 3rd Highest 3-Year Values



Maximum 3-Year, 3rd High Value 2004 - 2013 = 143 *u*g/m^3 or 70% of NAAQS
Maximum 3-Year, 3rd High Value in Last 5 Years (2009-2013) = 73 *u*g/m^3 or 49% of NAAQS
Maximum Annual High Value 2004-2013 = 143 *u*g/m^3 or 95% of NAAQS
Maximum Annual High Value in last 5 Years (2009-2013) = 139 *u*g/m^3 or 93% of NAAQS

2) Total Reduced Sulfur (TRS) Monitoring

Monitoring is conducted to verify compliance with the Nebraska air quality standard for TRS set forth in Chapter 4 of Title 129 – Nebraska Air Quality Regulations. In most instances hydrogen sulfide is the primary component of ambient TRS. However, TRS includes additonal reduced sulfur compounds including methyl mercaptan, dimethyl sulfide and dimethyl disulfide

TRS monitoring was initiated in 1997 in and around Lexington and Dakota City. These sites were source-oriented with respect to the packing plants located there. The packing plants installed covers over their anaerobic lagoons in 2000, which resulted in dramatic decreases in ambient TRS levels. From 2001 forward all sites, except the Dakota City site demonstrated continuous attainment with the standard. The Dakota City site continued to report short-term isolated exceedences of the 30-minute standard through 2010.

TRS monitoring was also conducted in Broken Bow starting in 2000 and ending in 2002. Cattle feedlots in the area were suspected sources of hydrogen sulfide odors present in the area. The monitoring found ambient TRS levels to be in attainment with the state standard.

The last site in Lexington was closed in 2011. The Dakota City site is the sole remaining TRS site currently operated. The last exceedence of the TRS standard at the Dakota City site was in 2010.

Table V-6 contains a 10-year summary of the exceedence history for the Dakota City site. As can be seen the Dakota City site is finding TRS to be in attainment with the standard from July 2010 thru May 2014.

Table V-6: Maximum 30-Minute Average TRS Levels detected in Dakota City: January 2004 thru May 2014

Year	Maximum	Time > Std	Details
2004	0.11 ppm	10 min	1 event: 4/15/2004
2005	0.10 ppm	None	Maximum event in June
2006	0.16 ppm	27 min	1 event: 4/24/06
2007	0.11 ppm	14 min	1 event: 5/8/07
2008	0.16 ppm	115 min	4 events: 5/25/08, 0.13 ppm, 26 min; 5/31/08, 0.11 ppm, 10 min; 6/2/08, 0.13 ppm, 51 min & 6/2/08, 0.16 ppm, 51 minutes
2009	0.04 ppm	None	Maximum event in May
2010	0.14 ppm	40 min	1 event : 5/27/10
2011	0.05 ppm	None	Maximum event in May
2012	0.09 ppm	None	Maximum event in March
2013	0.04 ppm	None	Maximum event in August
2014*	0.09 ppm	None	Maximum event in May*

* 2014 data only available through May

The closing of this site was considered. Factors considered are listed below. Factors marked with a "-" tend to favor closure. Those marked with a "+" tend favor continued operation of the site. Those marked with an "n" are neutral.

- Site has demonstrated consistent attainment for nearly 4 years: July 2010 thru May 2014.
- Comparing data from the last 5 years shows a downward trend in maximum TRS values from the previous 5 years.

n The monitoring equipment in use at the site is over 10 years old. The Department has at least 1 spare operating unit for all site components (i.e., analyzer, zero air system and calibrator). Thus keeping the site operational for another year without additional equipment expenses should be feasible.

+ This is the last TRS site open. If all TRS sites are closed, it can be anticipated that technical expertise and parts inventory within the NDEQ for operating and maintaining a TRS site will decline. This could make it harder to initiate a new site if a future need arises.

+ The presence of the site provides sources with incentive to diligently implement TRS/odor control efforts.

n Ozone monitoring may be required in Grand Island and other areas of Nebraska in the future (see Sections C.1 & E.2), and a re-deployment of resources from TRS to ozone may be prudent. However, these additional ozone monitoring requirements are at least a year away, and it is anticipated that the TRS site can be operated over the next year or two without major capital expenditures for new/replacement components.

After considering these factors, it was decided to continue operating the Dakota City TRS site for the time being.

3) Range and Grassland Management Burning

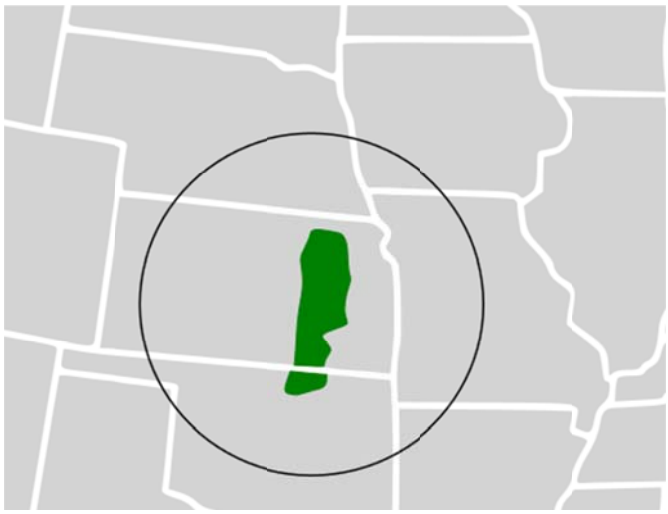
Prescribed burning is a common range and grassland management practice conducted in the spring to promote native prairie species, to suppress tree growth in pastures and prairies, and to release nutrients back into the soil. It is a conservation/grassland management tool recognized by state and federal agencies, as described at the following web addresses:

- http://www.npwrc.usgs.gov/resource/habitat/burning/
- http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ia/newsroom/features/?cid=stelprdb1077081
- http://outdoornebraska.ne.gov/wildlife/programs/wildnebraska/options.asp

The appeal of burning is in part because it recreates natural prairie fires that were important to maintaining native grasslands in their indigenous, pre-settlement state. Thus from an ecological viewpoint, it is the "natural" way to maintain prairie environments. These burns destroy invading trees and shrubs, release nutrients, and maintain inter-species populations of prairie plants and grasses in a natural state. The down-side is that smoke from wildfires can travel great distances and can cause elevated air pollution hundreds of miles from the site of the fires.

The Flint Hills of eastern Kansas and northeast Oklahoma (see Figure V-15) contain the densest coverage of intact tallgrass prairie in North America. It is roughly 200 miles N-to-S and 80 miles E-to-W. The northern end of the Flint Hills extends into the southern areas of Washington County and Marshall County KS; approximately 20 miles south of the Nebraska/Kansas boundary. The cattle ranchers within the Flint Hills conduct spring burning to maintain the prairie.

Figure V-15: The Flint Hills Area of Kansas and Oklahoma



It was anticipated that Flint Hills prairie burning would be extensive in the spring of 2014 because drought conditions in 2012 and wet conditions in 2013 reduced the feasibility of burning in those years. Air quality data indicates that prescribed burns in the Flint Hills did impact Nebraska's air quality on numerous occasions during March & April of 2014. Table V-7 below contains $PM_{2.5}$ and ozone air quality data from the Lincoln, Omaha and Sioux City MSAs for 4 dates (3/30/14, 4/6/14, 4/12/14 and 4/18/14) when the impacts were greatest. Figures V-16 thru V-20 demonstrates the relationship between increased pollutant levels on these four dates and the occurrence of wildfires.

Table V-7: Elevated $PM_{2.5}$ and Ozone Levels on Four Specific Days that Appear Associated with Grassland Burning in the Flint Hills Area [(1) (2)]

Date	Location	24-Hour $PM_{2.5}$ (ug/m^3)	8-Hour Ozone (ppb)	Additonal Information
3/30/14	Omaha MSA	34.5	58	See Figure V-16
	Lincoln MSA	38.7	nd	
	Sioux City MSA	34.3	50	
4/6/14	Omaha MSA	22.5	55	See Figure V-17
	Lincoln MSA	38.6	52	
	Sioux City MSA	23.1	54	
4/12/14	Omaha MSA	36.0	62	See Figure V-18
	Lincoln MSA	31.1	53	
	Sioux City MSA	34.7	67	
4/18/14	Omaha MSA	22.4	61	See Figures V-19 & V-20
	Lincoln MSA	60.5	65	
	Sioux City MSA	28.8	63	

Air Quality Index (AQI) Public Health Impact Categories noted in this figure. [(4)]

Green indicates a GOOD AQI - Air quality is considered satisfactory, and air pollution poses little or no risk

Yellow indicates a MODERATE AQI - Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.

Orange indicates an UNHEALTHY TO SENSITIVE GROUPS AQI - Members of sensitive groups may experience health effects. The general public is not likely to be affected.

Red indicates an UNHEALTHY AQI - Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.

National Ambient Air Quality Standards (NAAQS) [(5)]

24-Hour $PM_{2.5}$ = 35 ug/m^3, which is compared to the 3 year average of the annual 98th percentile values (98th percetile = annual 8th high if 351 or more days of data is available)

Annual Average $PM_{2.5}$ = 12 ug/m^3, which is compared to the 3 year average of the annual averages [(5)]

8-Hour Ozone = 75 ppb, which is compared to the 3 year average of the annual 4th high values

Footnotes:

(1) $PM_{2.5}$ and Ozone Data Source: EPA AirNow Web Site

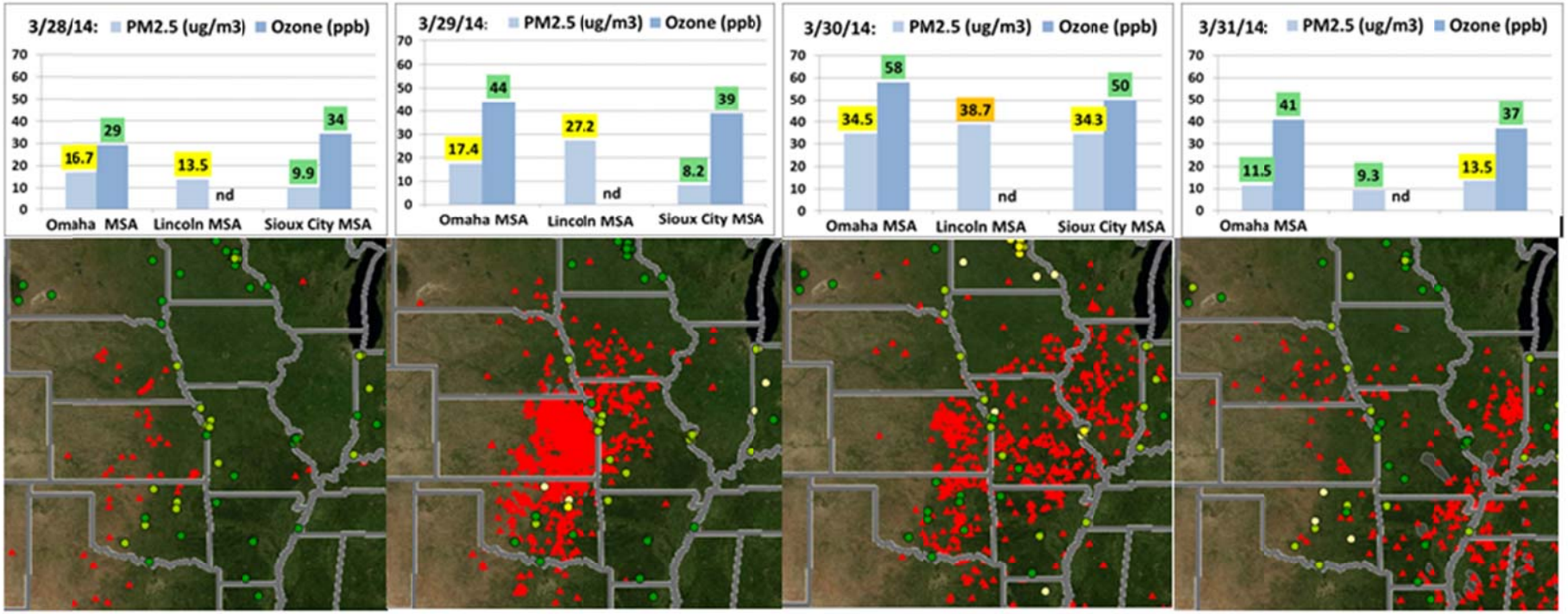
(2) Pollution impacts were not isolated to the four days shown, but four days had the highest $PM_{2.5}$ levels that appeared associated with Flint Hills burning.

(3) Lincoln $PM_{2.5}$ analyzer was not operating from 1/1/14 thru 1/30/14. Thus the average value is for data collected between 1/3/14 and 4/30/14.

(4) The AQI Category descriptions are from the AirNow website: airnow.gov/index.cfm?action=aqibasics.aqi

(5) All areas of Nebraska are in attainment with the $PM_{2.5}$ annd ozone NAAQS. See Attachment B. If historical trends from recent years) hold through the remainder of 2014, the 2012-14 design values for $PM_{2.5}$ and ozone are antipcated to remain in attainment with the current NAAQS. If EPA lowers the ozone NAAQS that could change (see Sections V.C.10 & V.C.11.

Figure V-16: Wildfires and Ambient Pollutant Levels ($PM_{2.5}$ & Ozone): March 28, 2014 thru March 31, 2014



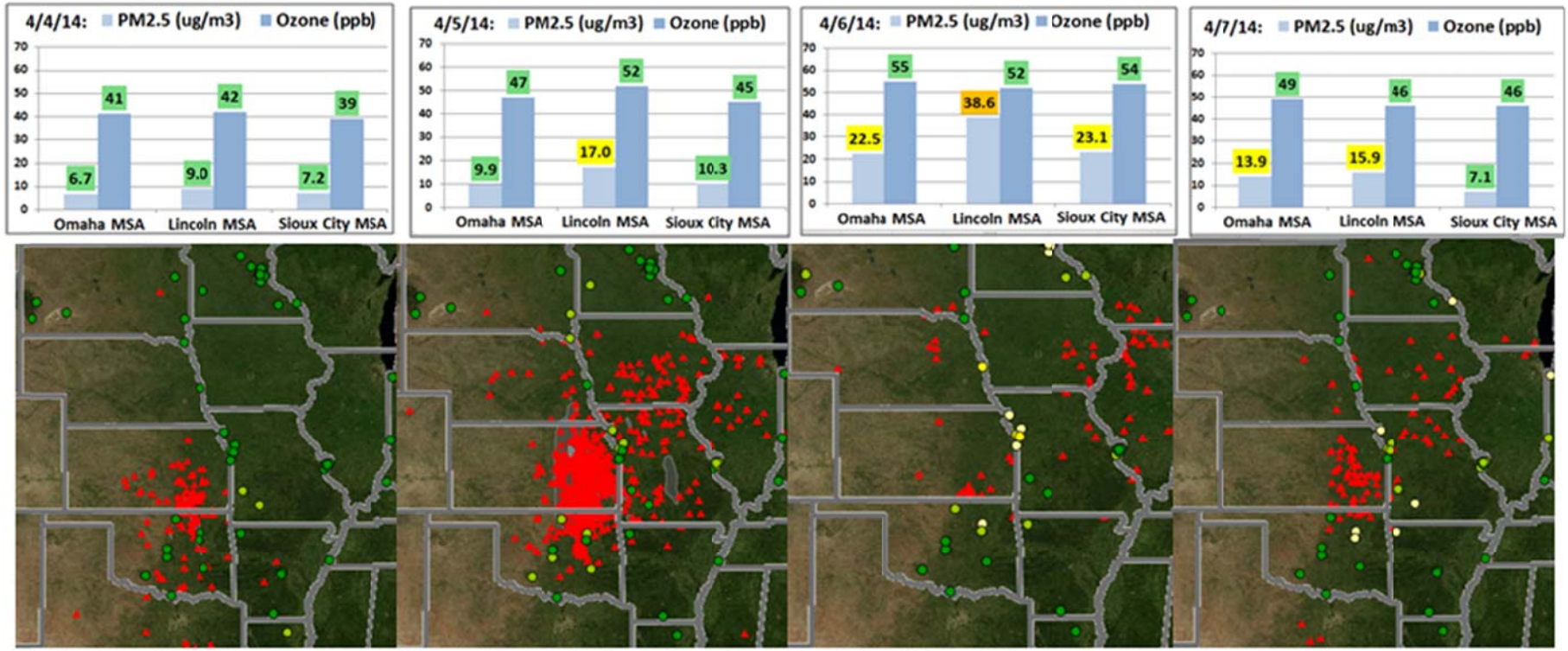
Red triangles are fires Gray areas are smoke plumes Data & maps from EPA AirNow website.

Daily Observations:

3/28/14: Some wildfires in NE, KS & OK. **$PM_{2.5}$ AQI** MODERATE in Omaha & Lincoln MSAs and good in Sioux City MSA. **Ozone AQI** GOOD in Omaha & Sioux City MSAs. Lincoln not reporting ozone.	**3/29/14:** Numerous wildfires, especially in the Flint Hills area. **$PM_{2.5}$ AQI** MODERATE range in Omaha & Lincoln MSAs and GOOD in Sioux City MSA. Ozone AQI in GOOD d rangein Omaha & Sioux City MSAs. Lincoln not reporting ozone.	**3/30/14:** Wildfires less than previous day. $PM_{2.5}$ elevated from previous day at all 3 cities. **$PM_{2.5}$ AQI** MODERATE in Omaha & Sioux City MSAs and UNHEALTHY TO SENSITIVE GROUPS in Lincoln MSA. **Ozone AQI** GOOD in Omaha & Sioux City MSAs. Lincoln not reporting ozone.	**3/31/14:** Wildfires less than previous 2 days. **$PM_{2.5}$ AQI** GOOD range in Omaha & Lincoln MSAs and MODERATE in Sioux City MSA. **Ozone AQI** in GOOD in Omaha & Sioux City MSAs. Lincoln not reporting ozone.

General Observations: There were numerous wildfires in the Flint Hills on 3/29/14, and pollutant levels (both $PM_{2.5}$ and ozone) peaked in the Omaha, Lincoln and Sioux City MSAs one day later, on 3/30/14. At their peaks, the $PM_{2.5}$ AQI reached UNHEALTHY TO SENSITIVE GROUPS in the Lincoln MSA, and MODERATE in the Omaha and Sioux City MSA's. The ozone AQI remained GOOD in all three MSAs.

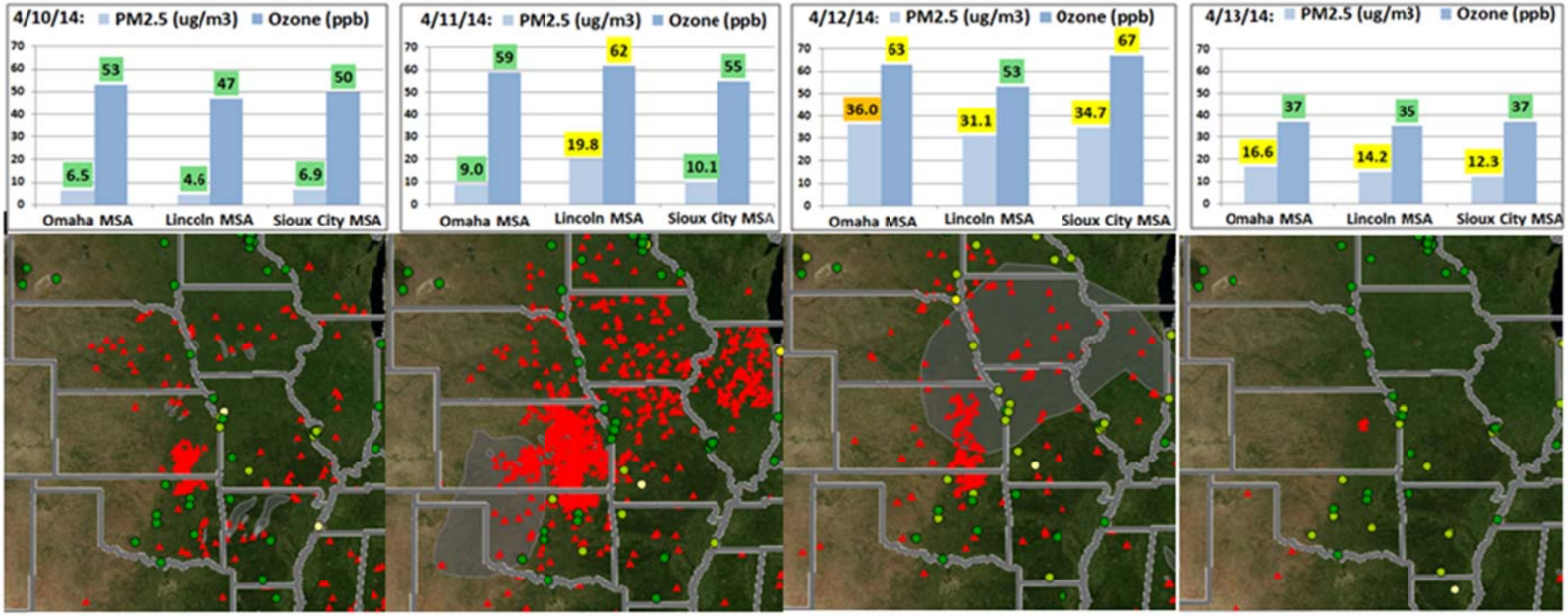
Figure V-17: Wildfires and Ambient Pollutant Levels ($PM_{2.5}$ & Ozone): April 4, 2014 thru April 7, 2014



Red triangles are fires Gray areas are smoke plumes Data & maps from EPA AirNow website.

Daily Observations:			
4/4/14: Some wildfires in Flint Hills & surrounding areas. **$PM_{2.5}$ and ozone AQIs** in Omaha, Lincoln & Sioux City MSAs are GOOD.	**4/5/14:** High concentration of wildfires in Flint Hills area. **$PM_{2.5}$ AQI** in Lincoln MSA is MODERATE, and GOOD in Omaha & Sioux City MSAs. **Ozone AQI** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/6/14**: Wildfires much reduced from previous day. $PM_{2.5}$ AQI in Lincoln MSA is UNHEALTHY TO SENSITIVE GROUPS, and MODERATE in Omaha & Sioux City MSAs. **Ozone AQI** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/7/14:** Some wildfires in Flint Hills, & also in IA, MO & NE. **$PM_{2.5}$ AQI** in Omaha & Lincoln MSAs is MODERATE, and GOOD in Sioux City MSA. **Ozone AQI** GOOD in Omaha, Lincoln & Sioux City MSAs.
General Observations: The heaviest concentration of wildfires occurred on 4/5/14. $PM_{2.5}$ levels peaked in the Omaha, Lincoln and Sioux City MSAs one day later, on 4/6/14. At their peaks, the $PM_{2.5}$ AQI reached UNHEALTHY TO SENSITIVE GROUPS in the Lincoln MSA, and MODERATE in the Omaha and Sioux City MSA's. The ozone AQI remained GOOD in all three MSAs, and peaked slightly on 4/6/14.			

Figure V-18: Wildfires and Ambient Pollutant Levels ($PM_{2.5}$ & Ozone): April 10, 2014 thru April 13, 2014

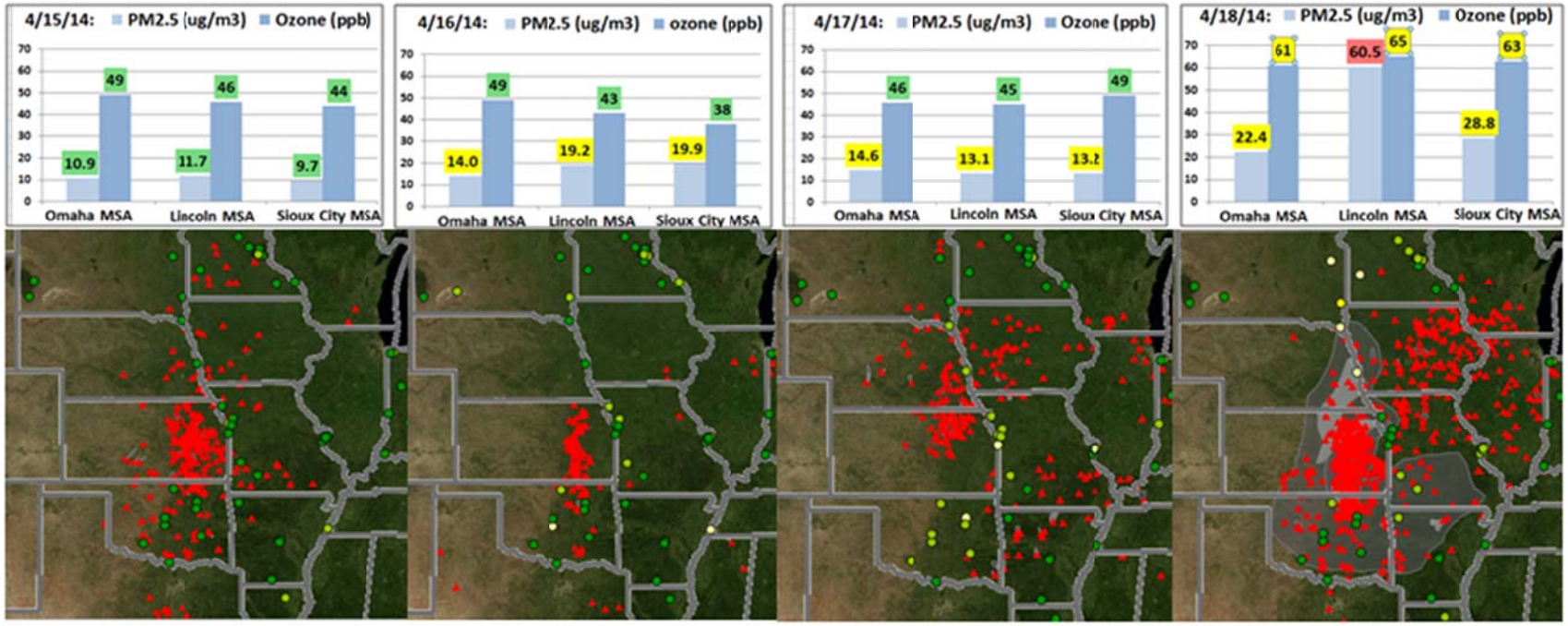


Red triangles are fires Gray areas are smoke plumes Data & maps from EPA AirNow website.

Daily Observations			
4/10/14: Some wildfires in Flint Hills & surrounding areas. **$PM_{2.5}$ and ozone AQIs** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/11/14:** Numerous wildfires with high concentration in Flint Hills. **Smoke plume** SW of Flint Hills in KS, OK & TX. **$PM_{2.5}$ & Ozone AQIs** MODERATE in Lincoln MSA **$PM_{2.5}$ & Ozone AQIs** GOOD in Omaha and Sioux City MSAs.	**4/12/14:** Wildfires reduced from previous day. **Smoke plume** extends over 8 states: KS, NE, MO, IA, MN, WI, IL & IN. $PM_{2.5}$ AQI UNHEALTHY TO SENSITIVE GROUPS in Omaha, and MODERATE in Lincoln & Sioux City. **Ozone AQI** is MODERATE in Omaha & Sioux City MSAs, and GOOD in Lincoln.	**4/13/14:** A few wildfires in Flint Hills. **$PM_{2.5}$ AQI** MODERATE in Omaha, Lincoln & Sioux City. **Ozone AQI** GOOD in Omaha, Lincoln & Sioux City MSAs.

General Observations: The heaviest concentration of wildfires occurred on 4/11/14 with a smoke plume that drifted SW. On 4/12/13 the smoke plume drifted NE and covered portions of 8 states. On 4/12/14, $PM_{2.5}$ levels peaked in the Omaha, Lincoln and Sioux City MSAs, and ozone also peaked on this day at Omaha and Sioux City. Ozone in the Lincoln MSA peaked on 4/11/14. The afternoon and evening of 4/13/14 there was precipitation across eastern NE, which should have facilitated reductions in $PM_{2.5}$ and ozone.

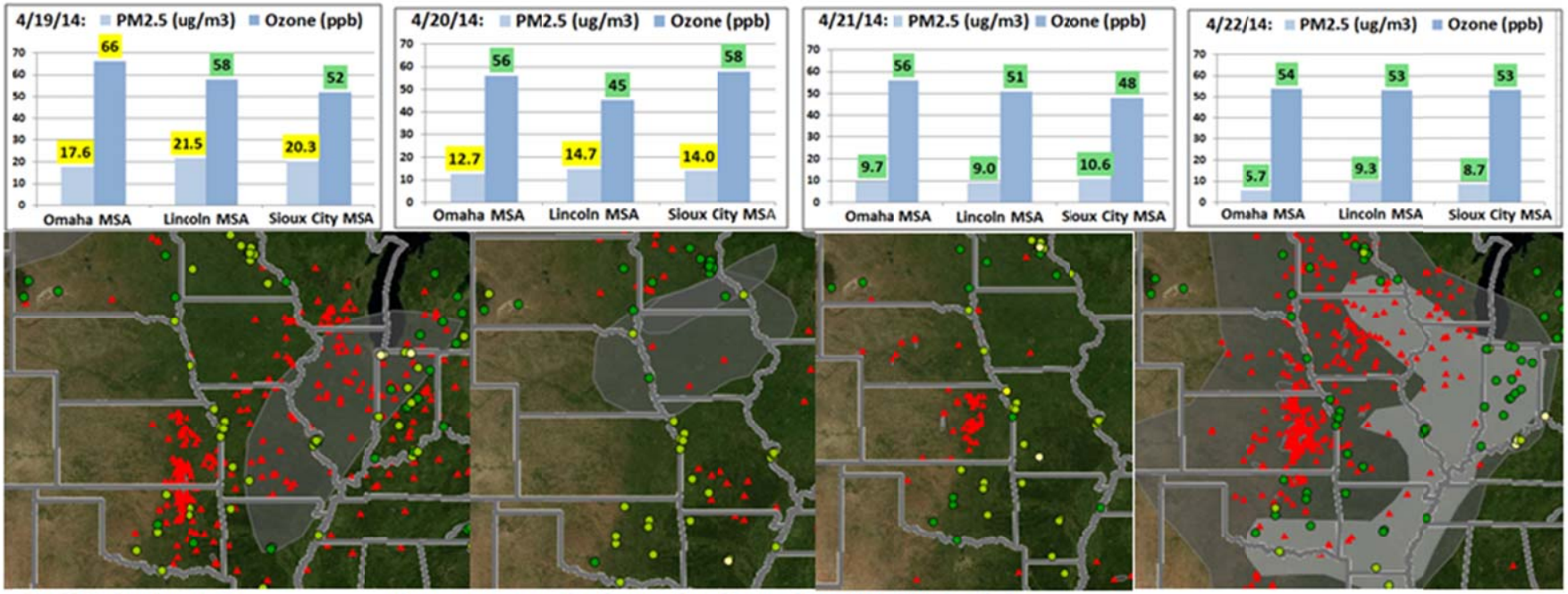
Figure V-19: Wildfires and Ambient Pollutant Levels ($PM_{2.5}$ & Ozone): April 15, 2014 thru April 18, 2014



Red triangles are fires Gray areas are smoke plumes Data & maps from EPA AirNow website.

Daily Observations:			
4/15/14: Numerous wildfires with concentrated fires in Flint Hills. **$PM_{2.5}$ and ozone AQIs** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/16/14:** Wildfires concentrated in Flint Hills. **$PM_{2.5}$ AQI** MODERATE in Omaha, Lincoln & Sioux City MSAs. **Ozone AQIs** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/17/14:** Numerous wildfires with concentrated fires in northeast KS & southeast NE. **$PM_{2.5}$ AQI** MODERATE in Omaha, Lincoln & Sioux City MSAs. **Ozone AQI** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/18/14:** Many wildfires with concentrated fires in Flint Hills. Smoke plume extends across 6 states: OK, KS, NE, AR, MO & IA. **$PM_{2.5}$ AQI** MODERATE in Omaha & Sioux City, & UNHEALTHY in Lincoln. **Ozone AQIs** MODERATE in Omaha, Lincoln & Sioux City.
General Observations: There were signficant number of wildfires on all 4 days. $PM_{2.5}$ in the Omaha , Lincoln & Sioux City MSAs became elevated on 4/16/14 and 4/17/14 (i.e., the 2nd & 3rd days) in the MODERATE AQI range. On 4/18/14 (the 4th day), a smoke plume developed over 6 states, and was most concentrated over northest KS and southest NE. Both $PM_{2.5}$ and ozone levels were elevated to MODERATE , except Lincoln $PM_{2.5}$ was UNHEALTHY TO SENSITIVE GROUPS.			

Figure V-20: Wildfires and Ambient Pollutant Levels ($PM_{2.5}$ & Ozone): April 19, 2014 thru April 22, 2014



Red triangles are fires Gray areas are smoke plumes Data & maps from EPA AirNow website.

Daily Observations:			
4/19/14: Wildfires in Flint Hills and other states. Smoke plume extends over 7 states: AK, MO, IA, IL, WI, MI & IN. **$PM_{2.5}$ AQI** MODERATE in Omaha, Lincoln & Sioux City MSAs. **Ozone AQI** MODERATE in Omaha MSA & GOOD in Lincoln & Sioux City MSAs.	**4/20/14:** Few wildfires. Smoke plume remains over parts of 6 states. NE, SD, MO, IA, MN & WI. **$PM_{2.5}$ AQI** MODERATE in Omaha, Lincoln & Sioux City MSAs. **Ozone AQI** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/21/14:** Some wildfires in Flint Hills and a few in NE and other states. **$PM_{2.5}$ & Ozone AQIs** GOOD in Omaha, Lincoln & Sioux City MSAs.	**4/22/14:** Wildfires in Flint Hills and other states. Smoke plume extends from Canada to Mexico and 20 states (see Figure XX below). across 6 states: OK, KS, NE, AR, MO & IA. **$PM_{2.5}$ & Ozone AQIs** GOOD in Omaha, Lincoln & Sioux City MSAs.
General Observations: $PM_{2.5}$ and ozone pollutant levels declined during this period from previous peak on 4/18/14. Smoke plumes were present on 4/19/14, 4/20/14 and 4/22/14. The smoke plume on 4/22/14 was very wide-spread. Visual observations at mid-day in Lincoln on 4/22/14 indicated good visibility and little haze (personal observation of Jim Yeggy).			

An examination of Figures V-15 thru V-19 above indicates that pollution impacts on the Lincoln, Omaha and Sioux City MSAs typically occurred the day after peak burning activities in the Flint Hills. An exception was April 18, 2014 when the 24-hour $PM_{2.5}$ level reached 60.5 *u*g/m^3 in Lincoln, which was a peak burning day.

Atmospheric conditions such as wind direction, wind direction changes, atmospheric dispersion/inversions and/or rainfall events can greatly affect the pollution impact of open burning. For example see figure V-17, on 4/11/14 the smoke plume from the Flint Hills drifted to the southwest and covered parts of 3 states, and then on 4/12/14 the plume shifted to the northeast and covered parts of 8 states. Rainfall on 4/13/14 cleared the smoke plume.

E. Population Growth and Metropolitan Areas

1. General Population Trends and Network Design

Population related data is reviewed as part of the network planning process because:

- Population growth may be associated with pollution source growth;
- High population density generally correlates with high air pollution potential; and
- Some 40 CFR Part 58 requirements are based on population and/or federally defined metropolitan statistical definitions.

Attachment C contains a review of population growth and growth trends in Nebraska. The data in Attachment C is based on 2010 census and 2012 survey estimate data.

Overall growth trends in Nebraska appear basically unchanged from those described in previous annual Network Plans. Most of the population growth is occurring in Nebraska's 3 most populous and densely populated counties: Douglas, Lancaster and Sarpy (i.e., the Omaha and Lincoln MSAs).

The basic design of the Nebraska ambient air monitoring network is consistent with these population trends: 61% of the monitoring sites and 73% of the pollutant monitors are located within the Omaha and Lincoln MSAs. The Omaha MSA network contains 52% of the monitoring sites in Nebraska and 67% of the monitors.

2. Grand Island MSA

The 2010 US Census found the urbanized core of Grand Island to have a population of 50,440, and Grand Island was formally recognized as a Metropolitan Statistical Area on February 28, 2013. The MSA designation triggered new minimum monitoring site requirements for $PM_{2.5}$ and ozone as summarized in Table V-8.

The existing $PM_{2.5}$ monitoring site in Grand Island meets/exceeds the minimum monitoring requirements for that pollutant. Thus, no changes in the $PM_{2.5}$ monitoring network at Grand Island are planned.

Currently there are no ozone monitoring sites in Grand Island, which creates uncertainties in the application of the minimum monitoring requirements in 40 CFR Part 58 Appendix D (see Table V-8). Further uncertainty is created because the ozone NAAQS is currently under review(see Section V.C.1 above). Also there is a possibility that rural ozone monitoring requirements may be associated with the revised NAAQS (see section V.C.1 above), which might influence the preferred location for a monitor within the Grand Island MSA

Thus at this time, the NDEQ is deferring a determination to initiate ozone monitoring in Grand Island until the ozone NAAQS review is completed, and any NAAQS changes and associated rural monitoring requirements are finalized.

While awaiting the finalization of the ozone NAAQS and any associated monitoring requirements, the NDEQ will proceed with preliminary planning for deployment of ozone monitoring outside the Omaha and Lincoln MSAs.

Table V-8: Minimum Monitoring Site Requirements for the Grand Island MSA [(a)]
$PM_{2.5}$: 40 CFR Part 58 Appendix D Section 4.7 Table D-5 that appy to MSAs with populations of 50,000 to 499,000 (Grand Island MSA population ~ 84,000) • DV ≥ 85% of NAAQS => At least 1 monitoring site required • DV < 85% of NAAQS => No monitoring site required
2011-13 $PM_{2.5}$ Design Values (DVs): • Annual Average = 7.3 $\mu g/m^3$ or 61% of NAAQS (12 $\mu g/m^3$) • 98th Percentile = 18.8 $\mu g/m^3$ or 54% of the NAAQS (35 $\mu g/m^3$)
Grand Island is not required to have a $PM_{2.5}$ monitoring site. Grand Island has one $PM_{2.5}$ monitoring site, which meets/exceeds the minumum monitoring requirement. Changes in the $PM_{2.5}$ monitoring network in Grand Island are not needed nor anticipated.
Ozone: 40 CFR Part 58 Appendix D Section 4.1 Table D-2, which apply to MSAs with populations of 50,000 to 349,999 (Grand Island MSA population ~ 84,000) • DV ≥ 85% of NAAQS => At least 1 monitoring site required • DV < 85% of NAAQS => No monitoring site required
2011-13 Design Value (DV) for 4th High Values is not available because ozone monitoring site has not been conducted in Grand Island.
Ozone monitoring needs under review.
Footnotes: (a) 40 CFR Part 58 Appendix D sets forth the minimum number of monitoring sites required. The actual number of monitoring sites needed may exceed the minimum number required.

F. Funding

Air monitoring is supported by a combination of federal, cash, state and local funding sources. Table V-4 below provides a summary of the primary funding sources used for air monitoring.

Current funding levels are adequate to continue the operation of the existing Nebraska air monitoring network, at least through the end of the current federal fiscal year (sept. 2014). Current funding levels have been sufficient to allow upgrades including:

- New ozone monitoring equipment and reporting software for LLCHD, and
- A new $PM_{2.5}$ FRM monitor being sought to fulfill collocation requirements for DCHD (see Section V.A).

Federal CAA §103 grant funding for April 2014 thru March 2015 was maintained at previous levels. Initial indications are that Federal CCA §105 funding for October 2014 thru September 2015 will also be maintained at current levels. These future funding levels appear adequate to allow continued operation of the current monitoring network. Expansion of the monitoring

network is not currently planned thru the 2015 FFY. If a need for expanding the monitoring network develops, funding would need to be obtained.

Table V-9: Primary Funding Sources used to Support Air Monitoring in Nebraska	
Nebraska Department of Environmental Quality (NDEQ)	
Funding Source	**Comments**
State General Funds	At a minimum must be sufficient to meet minimum federal match requirements
State Title V Funds	Fees paid by major sources based on the quantity of air pollutants they emit. NDEQ collects Title V fees for sources through-out Nebraska, except those regulated by LLCHD and Omaha Air Quality Control. Title V funds cannot be used for state/local match.
CAA §105 Funds	Federal grant funds used for air monitoring activities set forth in a bi-annually negotiated EPQA-NDEQ work plan. Requires a 40% state/local match. A portion of this grant funding is passed on to DCHD and LLCHD.
CAA §103 Funds	Federal grant funds used for air monitoring activities set forth in a bi-annually negotiated EPQA-NDEQ work plan. This money is currently limited to funding $PM_{2.5}$ and IMPROVE monitoring, and sometimes for specified equipment purchases and/or special monitoring studies. Requires no state/local match. A portion of this grant funding is passed on to DCHD and LLCHD.
Douglas County Health Department (DCHD)	
Local County Funds	At a minimum must be sufficient to meet minimum federal match requirements
City of Omaha Title V funds	See *State Title V Funds* comments above. The Omaha Air Quality Control regulates air emission sources in the City of Omaha, including the collection of Title V fees from major sources. A portion of the Omaha Title V funds are directed to DCHD to support air monitoring. Title V funds can not be used for state/local match.
CAA §105 Funds	NDEQ passes-through a portion of the Federal §105 funds to DCHD for activities described in an NDEQ/DCHD work plan. DCHD is required to meet the 40% state/local match requirement.
CAA §103	NDEQ passes-through a portion of the federal §103 funds to DCHD for activities described in an NDEQ/DCHD work plan, primarily $PM_{2.5}$ related monitoring activities. There is no state/local match requirement.
Metropolitan Area Planning Assoc. (MAPA) Funds	Typically federal grant funds obtained by MAPA are for specific purposes such as transportation or homeland security related activities. Historically they have been used for equipment purchases and site set-up, not network operating costs.
Lincoln Lancaster County Health Department (LLCHD)	
Local County Funds	At a minimum must be sufficient to meet minimum federal match requirements
Lancaster County Title V funds	See *State Title V Funds* comments above. LLCHD regulates air emission sources in Lancaster County, including the collection of Title V fees from major sources. A portion of the Title V funds are used to support air monitoring activities performed by LLCHD. Title V funds cannot be used for state/local match.
CAA §105 Funds	NDEQ passes-through a portion of the Federal §105 funds to LLCHD for activities described in an NDEQ/LLCHD work plan. LLCHD is required to meet the 40% state/local match requirement.
CAA §103	NDEQ passes-through a portion of the federal §103 funds to LLCHD for activities described in an NDEQ/LLCHD work plan, primarily $PM_{2.5}$ related monitoring activities. There is no state/local match requirement.

VI. Anticipated Nebraska Air Monitoring Network Modifications

There are no definitive plans to add or close sites within the Nebraska air monitoring network before the end of 2015. However, there are possible closures and network upgrades that could occur in this time frame. These are summarized below with references to sections with detailed discussion.

- The NDEQ is considering submitting a waiver pursuant to 40 CFR Part 58 Apepndix D Section 4.5.a.ii that would allow for closure of the lead monitoring site in Auburn. If a waiver was approved, the NDEQ would close the site, possibly in 2014 (if the waiver was approved). Currently the Auburn site is detecting lead levels that are 2% to 3% of the NAAQS as discussed in Section V.B.2.

- DCHD Sequential $PM_{2.5}$ Samplers Collocation (Section V.A): Funds have been allocated for the purchase of a new sequential $PM_{2.5}$ sampler so that a collocated sampler can be oplaced at the Berry St. site in Omaha. This upgrade is being made to meet collocation requirements in 40 CFR Part 58 Appendix A.

- PM_{10} Monitoring at 46th and Farnam Streets (Section V.B.3): It is anticipated that this site will be operated after Omaha Steel discontinues operations to allow a post-shutdown air quality analysis. A determination on closure of the site will hinge on the PM10 levels detected, with consideration of re-development activities and the emission potential of any new sources. Thus a site closure decision is anticipated in 2015, but cannot be forecast at this time.

- Ozone Monitoring in Grand Island (Section V.E.2): This was considered and a decision to proceed was deffered pending finalization of the ozone NAAQS review and possible rural ozone monitoring requirements.

- Cozad and Gothenburg Up-Grade or Closure (Section D.1): These sites are demonstrating, and always have demonstrated compliance with the current 24-hour NAAQS. The sequential samplers at these sites are more than 10 years old. Upgrading to new samplers will involve a significant expenditure of funds. Re-deployment of resources from these sites toward establishing ozone monitoring sites in Grand Island and rural Nebraska is an option. A determination to close or up-grade these sites was deferred for 2014. The NDEQ will continue to evaluate options for either closure or up-grade as the ozone NAAQS review proceeds. In the interim, if the samplers at either of these sites were to fail and could not be repaired (not considered a likely possibility, but possible), temporarily closure might be necessitated (until replacement equipment is purchased or a permanent closure determination is finalized).

- Weeping Water PM_{10} Up-Grade (not discussed elsewhere): The possibility of replacing the filter-based sequential PM_{10} samplers at the Weeping Water City site with continuous monitors) has been discussed. The current samplers are more than 10 years old and due for replacement. Continuous samplers have several advantages:
  - Lower operating costs because filter analysis are not required,
  - They provide daily versus the current one in six day sampling, and
  - The operation of a collocated monitor is not required.

  The filter-based, sequential samplers are federal reference methods (FRMs), while the continuous monitors are federal equivalent methods (FEMs).

  The replacement of FRM with FEM samplers (or an FEM to FRM switch) does not need to be included in the Network Plan, but is related to the Cozad and Gothenburg determination discussed above, because the Weeping Water City site is currently the collocated site for PM_{10} network operated by NDEQ (i.e, Weeping Water City, Cozad and Gothenburg sites). Thus an upgrade to a continuous sampler at the Weeping Water City site must be made in conjunction with the determination to up-grade or close the Cozad and Gothenburg sites.

- Ozone Monitoring in the Lincoln MSA (Sections IV.C & V.B.6b) :
  - New monitoring equipment (i.e., analyzer, transfer standards and primary local standard was deployed at the start of the 2014 monitoring season.
  - The establishment of a temporary investigative site in 2014 or 2015 to explore the possibility of identifying a higher concentration site has been discussed. Any relocation of the existing Davey site would occur after 2014.

- Total Reduced Sulfur Monitoring in Dakota City (Section V.D.2): This is the sole remaining TRS monitoring site in Nebraska's air monitoring network. It is a source-oriented site that is demonstrating attainment with the Nebraska air quality standard for TRS. Closure of this site was discussed. The determination was made to continue operating this site for the time being.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Omaha NCore Site Operated by DCHD

Site Name: Omaha NCore [1]	AIRS ID: 31-055-0019 [1]
Location: 4102 Woolworth St., Omaha	Latitude: 41.246792º Longitude: -95.973964º
Operating Agency: Douglas County Health Department	
Purpose: NCore	Scale: Neighborhood
Monitor/Pollutant: Carbon Monoxide (CO) - Trace Level	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 48i-TLE	EPA Method: RFCA-0981-054 (AQS 554)
Start-Up Date: 1/20/11	Closure Date: Currently operating
Monitor/Pollutant: Ozone (O_3)	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 49i	EPA Method: EQOA-0880-047
Start-Up Date: 4/1/11	Closure Date: Currently operating
Monitor/Pollutant: Nitrogen Oxides (NO/NO_y)	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 42i NO/NO2/NOx	EPA Method: RFNA-1289-074
Start-Up Date: 1/20/11	Closure Date: Currently operating
Monitor/Pollutant: Sulfur Dioxide (SO_2) – Trace Level	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 43i-TLE	EPA Method: EQSA-0486-060 (AQS 560)
Start-Up Date: 1/20/11	Closure Date: Currently operating
Monitor/Pollutant: $PM_{2.5}$	
Type/POC: Primary Continuous / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020 [3] [4]	EPA Method: EQPM-0308-170
Start-Up Date: 2/1/04 [3]	Closure Date: Currently operating
Monitor/Pollutant: $PM_{2.5}$	
Type/POC: Collocated [2] / POC 002	Monitoring Frequency: Once every 6 days [2]
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-0498-118
Start-Up Date: 1/1/99	Closure Date: Currently operating
Monitor/Pollutant: $PM_{2.5}$ Speciation	
Type/POC: Speciation / POC 005 [6]	Monitoring Frequency: Once every 3 days
Analyzer/Sampler: $PM_{2.5}$ Speciation	Sampler Type: SASS and a 3000 URG
Start-Up Date: 5/25/01	Closure Date: Currently operating
Monitor/Pollutant: PM_{10} – STP & Local Conditions	
Type/POC: Continuous [3] / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020 [4]	EPA Method: EQPM-0798-122
Start-Up Date: 1/1/11 [4]	Closure Date: Currently operating
Monitor/Pollutant: $PM_{10-2.5}$ – Local Conditions	
Type/POC: Continuous [3] / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020 [4]	EPA Method: EQPM-0709-185
Start-Up Date: 1/1/11 [4]	Closure Date: Currently operating
Continued on next page	

Attachment A: Ambient Air Monitoring Sites in Nebraska

Omaha NCore Site Operated by DCHD

Site Name: Omaha NCore	AIRS ID: 31-055-0019 (See Comment 1)
Location: 4102 Woolworth St., Omaha	Latitude: 41.246792º Longitude: -95.973964º
Operating Agency: Douglas County Health Department	(continued from previous page)

Monitor Information – Lead (Pb)

Type/POC: Primary / POC 1	Monitoring Frequency: Once every 6 days
Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS)	EPA Method: EQL-0310-189
Start-Up Date: 12/1/12	Closure Date: Currently operating

Meteorological Parameters – Manufacturer & Model – Start Date

Wind Direction & Velocity – MetOne 50.5 Sonic - 5/13/11

Temperature - MetOne Model 083D – 4/12/11

Barometric Pressure – MetOne Model 090D – 4/12/11

Relative Humidity – MetOne 083D – 4/12/11

Solar Radiation – MetOne Model 096-1 – 4/12/11

Closure Date: Currently operating

Atmospheric Radiation – RadNet Air Monitor

RadNet is a nationwide system that monitors the nation's air, drinking water, precipitation, and pasteurized milk to determine levels of radiation in the environment. RadNet sample analyses and monitoring results provide baseline data on background levels of radiation in the environment and can detect increased radiation from radiological incidents. The RadNet monitor is not subject to the network planning process set forth in 40 CFR Part 58.10. It is recognized in this Network Plan for informational purposes only. The RadNet monitor began operating at the Woolworth site in June 2006.

Comments:

1. Site History: Site 31-055-0019 was referred to as the "Woolworth site" through 12/31/10. The Woolworth site was a PM monitoring site with $PM_{2.5}$ filter-based, continuous and speciation monitors located on the roof of Douglas County Hospital. To accommodate NCore monitoring more space was required and the site was moved approximately 550 ft north to the roof of an adjacent/attached building. The move was initiated in December 2010 with the moving of the $PM_{2.5}$ monitors.
2. The POC 1 filter-based sequential monitor was used as the primary site monitor for NAAQS attainment evaluation through September 2009. At that point, it was converted to the collocated sampler with the POC 3 continuous monitor becoming the primary monitor. The POC 2 collocated sampler was shut down after taking the 9/22/09 sample.
3. The POC 3 continuous $PM_{2.5}$ monitor operated from 2/1/04 thru 1/5/09 using a R&P TEOM continuous $PM_{2.5}$ monitor. The TEOM monitor is not an FRM/FEM. On 1/6/09 a Met One BAM monitor was brought on line. The Met One BAM monitor is an FEM. Through September 2009 the BAM unit was run as an auxiliary monitor for AirNow and AQI reporting purposes. A review found good correlation between the POC 1 and POC 3 data. On October 1, 2009 the POC 3 monitor was designated the primary monitor for evaluating NAAQS attainment status. On January 1, 2011 the continuous monitor was re-designated as POC 1, to facilitate AQS data analysis issues.
4. Between 10/28/10 and 1/3/11, the $PM_{2.5}$ Met One BAM-1020 was temporarily removed from service so that it could be reconfigured to operate as the $PM_{2.5}$ portion of a dichotomous $PM_{10-2.5}$ monitoring system. The other part of the dichotomous $PM_{10-2.5}$ monitoring system is a PM_{10} Met One BAM-1020, which is configured to report PM_{10} data in local and STP conditions. The dichotomously-configured $PM_{2.5}$ and PM_{10} BAM units, which comprise the $PM_{10-2.5}$ monitoring system, were put on-line on 1/1/11.
5. The POC 5 speciation monitor is comprised two speciation samplers: a SASS and a 3000 URG. The speciation data derived from both samplers are reported as POC 005 results.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Carbon Monoxide Sites in the Omaha MSA that are Operated by DCHD

Site Name: 78th & Dodge – Omaha **Location: 78th St and W Dodge Rd, Omaha**	AIRS ID: 31-055-0056 Latitude: 41.259175º	Longitude: -96.028628º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Thermo 48i Purpose: Highest Concentration Start-Up Date: 10/01/07	**Pollutant: Carbon Monoxide (CO)** Monitoring Frequency: Continuous EPA Method: RFCA-0981-054 Scale: Microscale Closure Date: Currently operating	
Comments: None		

Sulfur Dioxide Sites in the Omaha MSA that are Operated by DCHD

Site Name: Whitmore – Omaha **Location: 1616 Whitmore St, Omaha**	AIRS ID: 31-055-0053 Latitude: 41.297778º	Longitude: -95.937500º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Thermo 43i Purpose: High Conc. & Population Oriented Start-Up Date: 7/1/99	**Pollutant: Sulfur Dioxide (SO_2)** Monitoring Frequency: Continuous EPA Method: EQSA-0486-060 Scale: Neighborhood Closure Date: Currently operating*	
Comments: This site was temporarily closed from 6/22/11 thru 10/1/11 due to Missouri River flooding.		

Ozone Sites in the Omaha MSA that are Operated by DCHD

Site Name: South Omaha – Ozone **Location: 2411 O Street, Omaha**	AIRS ID: 31-055-0028 Latitude: 41.207500º	Longitude: -95.947500º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Thermo 49C Purpose: Population Oriented Start-Up Date: 7/1/78	**Pollutant: Ozone (O_3)** Monitoring Frequency: Continuous EPA Method: EQOA-0880-047 Scale: Neighborhood Closure Date: Currently operating	
Comments: There is also a PM_{10} monitor located at this site.		

Site Name: 30th & Fort - Omaha **Location: 30th & Fort Sts., Omaha**	AIRS ID: 31-055-0035 Latitude: 41.306111º	Longitude: -95.960278º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Thermo 49C Purpose: Population Oriented Start-Up Date: 5/1/81	**Pollutant: Ozone (O_3)** Monitoring Frequency: Continuous EPA Method: EQOA-0880-047 Scale: Neighborhood Closure Date: Currently operating	
Comments: None		

$PM_{2.5}$ Sites in the Omaha MSA that are Operated by DCHD (Continued)

Site Name: Berry Street Omaha **Location: 9225 Berry Street, Omaha**	AIRS ID: 31-055-0052 Latitude: 41.333056º	Longitude: -96.099722º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 1/1/99	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Once every 3 days EPA Method: RFPS-0498-118 Scale: Neighborhood Closure Date: Currently operating	
Comments: None		

Site Name: Bellevue **Location: 2912 Coffey Ave., Bellevue**	AIRS ID: 31-153-0007 Latitude: 41.166944º	Longitude: -95.923889º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary Continuous / POC 001 Analyzer/Sampler: Met One BAM-1020 (1) Purpose: Population & Source Oriented Start-Up Date: 3/1/99	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Once every 3 days EPA Method: EQPM-0308-170 Scale: Neighborhood Closure Date: Currently operating	
Comments: (1) This site was operated with a 2025 sequential sampler from 3/1/99 thru 6/30/10 (RFPS-0498-118). On 7/1/10 a Met One BAM monitor began operating.		

Site Name: Blair **Location: 2242 Wright St., Blair**	AIRS ID: 31-177-0002 Latitude: 41.551136º	Longitude: -96.146753
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 4/6/09	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Once every 3 days EPA Method: RFPS-0498-118 Scale: Neighborhood Closure Date: Currently operating	
Comments: None		

PM_{10} Sites in the Omaha MSA that are Operated by DCHD

Site Name: 19th & Burt, Omaha **Location: 19th & Burt Sts., Omaha**	AIRS ID: 31-055-0054 Latitude: 41.267770º	Longitude: -95.940830º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Hi-Vol Filter Purpose: Population & Source Oriented Start-Up Date: 6/1/01	**Pollutant: PM_{10}** Monitoring Frequency: Once every 6 days EPA Method: RFPS 1287-063 Scale: Middle Closure Date: Currently operating	
Monitor Information Type/POC: Collocated / POC 002 Analyzer/Sampler: Hi-Vol Filter Purpose: Population & Source Oriented Start-Up Date: 6/1/01	**Pollutant: PM_{10}** Monitoring Frequency: Once every 6 days (1) EPA Method: RFPS 1287-063 Scale: Middle Closure Date: Currently operating	
Comments: None		

Site Name: 46th & Farnam, Omaha **Location: 46th & Farnam Sts, Omaha**	AIRS ID: 31-055-0045 Latitude: 41.257500º	Longitude: -95.976111º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary Continuous / POC 001 Analyzer/Sampler: Thermo FH 62 C14 Purpose: Source Oriented Start-Up Date: 1/1/93 (See Comments)	**Pollutant: PM_{10}** Monitoring Frequency: Continuous EPA Method: EQPM-1102-150 Scale: Middle Closure Date: Currently operating	
Comments: This site utilized a Hi-Vol sampler on a once every 6 day sampling schedule until 1/1/08, when a continuous sampler was installed.		

Site Name: South Omaha - PM_{10} **Location: 2411 O Street, Omaha**	AIRS ID: 31-055-0028 Latitude: 41.207500º	Longitude: -95.947500º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Hi-Vol Filter Purpose: Population & Source Oriented Start-Up Date: 6/1/06 (See Comments)	**Pollutant: PM_{10}** Monitoring Frequency: Once every 6 days EPA Method: RFPS 1287-063 Scale: Neighborhood Closure Date: Currently operating	
Comments: • This site was originally established for ozone monitoring on 2/1/78. • The PM_{10} sampler was initially set-up at 25th & L Sts and then moved to 2411 O St on 8/22/07.		

Attachment A: Ambient Air Monitoring Sites in Nebraska

PM_{10} Sites in the Weeping Water Area* that are Operated by NDEQ

Site Name: Weeping Water City (at WWTP) **Location: 102 P Street, Weeping Water**	AIRS ID: 31-025-0002 Latitude: 40.866228	Longitude: -96.137678
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 1/1/85	**Pollutant: PM_{10}** Monitoring Frequency: Once per 3 days EPA Method: RFPS-1298-127 Scale: Neighborhood Closure Date: Currently operating	
Monitor Information Type/POC: Collocated / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 1/1/85	**Pollutant: PM_{10}** Monitoring Frequency: Once per 6 days EPA Method: RFPS-1298-127 Scale: Neighborhood Closure Date: Currently operating	
Comments: Located at the city waste water treatment facility.		

Site Name: Weeping Water Farm **Location: 5102 Hwy 50, Cass Co.**	AIRS ID: 31-025-0009 Latitude: 40.873309º	Longitude: -96.183359º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information Type/POC: Primary Continuous / POC 001 Analyzer/Sampler: R&P TEOM Purpose: Source Oriented Start-Up Date: 4/8/05	**Pollutant: PM_{10}** Monitoring Frequency: Continuous EPA Method: RFPS 1090-079 Scale: Neighborhood Closure Date: Currently operating	
Comments: None		

* The Weeping Water Area is in Cass County, which is part of the Omaha MSA. This is a relatively non-urbanized area of the county with limestone mining and processing activities. The PM_{10} monitoring conducted here is for evaluation of air quality in the vicinity of Weeping Water, and not the Omaha MSA as a whole.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Sites in the Lincoln MSA that are Operated by LLCHD

Site Name: Davey **Location: 1st & Maple Sts., Davey**	AIRS ID: 31-109-0016 Latitude: 40.984722º Longitude: -96.677222º
Operating Agency: Lincoln Lancaster County Health Department	
Monitor Information	**Pollutant: Ozone**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Dasibi Model 1003 AH	EPA Method: EQOA 0577-019
Purpose: Population Oriented	Scale: Urban
Start-Up Date: 1/1/85	Closure Date: Currently operating
Comments: It is anticipated that the analyzer equipment at this site will be updated in 2013 or 2014. It is also possible that this site may be relocated in 2014.	

Site Name: LLCHD Building **Location: 3140 N St., Lincoln**	AIRS ID: 31-109-0022 Latitude: 40.812590º Longitude: -96.683020º
Operating Agency: Lincoln Lancaster County Health Department	
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Primary / POC 001	Monitoring Frequency: Once every 3 days
Analyzer/Sampler: R&P 2025 Seq. Filter	EPA Method: RFPS 0498-118
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 1/1/99	Closure Date: Currently operating
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Collocated / POC 002	Monitoring Frequency: Once every 6 days
Analyzer/Sampler: R&P 2025 Seq. Filter	EPA Method: RFPS 0498-118
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 1/1/99	Closure Date: Currently operating
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Continuous / POC 003(1)	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020	EPA Method: EQPM-0308-170
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 7/1/06	Closure Date: Currently operating
Comment: (1) The MetOne BAM monitor reports to AirNow, but not AQS.	

Attachment A: Ambient Air Monitoring Sites in Nebraska

$PM_{2.5}$ Sites Operated by NDEQ

Site Name: Grand Island Senior High	AIRS ID: 31-079-0004
Location: 2124 N Lafayette Ave, Grand Island	Latitude: 40.942099º Longitude: -98.364967º
Operating Agency: Nebraska Department of Environmental Quality	
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 3 days
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-0498-118
Purpose: Transport & Population Oriented	Scale: Regional & Neighborhood
Start-Up Date: 5/7/04	Closure Date: Currently operating
Comments: None	

Site Name: Scottsbluff Senior High School	AIRS ID: 31-157-0004
Location: Hwy 26 & 5th Ave, Scottsbluff	Latitude: 41.876853º Longitude: -103.656561º
Operating Agency: Nebraska Department of Environmental Quality	
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 3 days
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-0498-118
Purpose: Background & Population Oriented	Scale: Regional & Neighborhood
Start-Up Date: 5/13/09	Closure Date: Currently operating
Comments: Electric power is supplied to this site by wind and solar generating units.	

PM_{10} Sites Operated by NDEQ (Outside of the Omaha MSA/Weeping Water Area)

Site Name: Cozad	AIRS ID: 31-047-0001
Location: 215 W 8th Street, Cozad	Latitude: 40.859444º Longitude: -99.987778º
Operating Agency: Nebraska Department of Environmental Quality	
Monitor Information	**Pollutant: PM_{10}**
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 6 days
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-1298-127
Purpose: Source and Population Oriented	Scale: Neighborhood
Start-Up Date: 10/1/94	Closure Date: Currently operating
Comments: None	

Site Name: Gothenburg	AIRS ID: 31-047-0003
Location: 409 9th Street, Gothenburg	Latitude: 40.927500º Longitude: -100.162778º
Operating Agency: Nebraska Department of Environmental Quality	
Monitor Information	**Pollutant: PM_{10}**
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 6 days
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-1298-127
Purpose: Source and Population Oriented	Scale: Neighborhood
Start-Up Date: 9/1/91	Closure Date: Currently operating
Comments: None	

Lead (Pb) Sites Operated by NDEQ

Site Name: Fremont	AIRS ID: 31-053-0005	
Location: 1255 Front St., Fremont, NE	Latitude: 41.90583º	Longitude: -97.31583º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information	**Pollutant: Lead (Pb)**	
Type/POC: Primary / POC 1	Monitoring Frequency: Once every 6 days	
Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS)	EPA Method: EQL-0310-189	
Purpose: Source Oriented	Scale: Micro-scale	
Start-Up Date: 3/9/10	Closure Date: Currently operating	
Monitor Information	**Pollutant: Lead (Pb)**	
Type/POC: Collocated / POC 2	Monitoring Frequency: Once every 6 days	
Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS)	EPA Method: EQL-0310-189	
Purpose: Source Oriented	Scale: Micro-scale	
Start-Up Date: 3/9/10	Closure Date: Currently operating	
Comments: Highest concentration site		

Site Name: Auburn	AIRS ID: 31-127-0002	
Location: RR2, Auburn, NE	Latitude: 40.40254º	Longitude: -95.84164º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information	**Pollutant: Lead (Pb)**	
Type/POC: Primary / POC 1	Monitoring Frequency: Once every 6 days	
Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS)	EPA Method: EQL-0310-189	
Purpose: Source Oriented	Scale: Micro-scale	
Start-Up Date: 5/8/10	Closure Date: Currently operating	
Comments: Highest concentration site		

Attachment A: Ambient Air Monitoring Sites in Nebraska

Total Reduced Sulfur (TRS) Sites operated by NDEQ

Site Name: Pine Street – Dakota City **Location: 501 Pine St, Dakota City**	AIRS ID: State SPM, AIRS ID not assigned Latitude: 42.421867º Longitude: -96.403031º
Operating Agency: Nebraska Department of Environmental Quality	
Monitor Information	**Pollutant: Total Reduced Sulfur (TRS)**
Type/POC: State TRS monitor	Monitoring Frequency: Continuous
Analyzer/Sampler: API 102A w TOX	Method: NDEQ T129 Chap 4.007
Purpose: Source Oriented	Scale: Neighborhood
Start-Up Date: 9/15/97	Closure Date: Currently operating
Comments: None	

Interagency Monitoring of Protected Visual Environments (IMPROVE) Sites *

Site Name: Crescent Lake IMPROVE **Location: Crescent Lake WRA, Gosper Co.**	AIRS ID: Not applicable, See Comments Latitude: 41.7627º Longitude: -102.4336º
Operating Agency: Nebraska Department of Environmental Quality / US Fish & Wildlife Service	
Monitor Information	**Pollutant: IMPROVE** (See Comments)
Type/POC: IMPROVE	Monitoring Frequency: Continuous
Method Description: : IMPROVE	EPA Method: Not applicable
Purpose: Background & Transport	Scale: Regional
Start-Up Date: 2002	Closure Date: Currently operating
Comments: None	

Site Name: NE National Forest IMPROVE **Location: Nebraska National Forest, Thomas Co.**	AIRS ID: Not applicable, See Comments Latitude: 41.8888º Longitude: -100.3387º
Operating Agency: Nebraska Department of Environmental Quality / US Forest Service	
Monitor Information	**Pollutant: IMPROVE** (See Comments)
Type/POC: IMPROVE	Monitoring Frequency: Continuous
Method Description: : IMPROVE	EPA Method: Not applicable
Purpose: Background & Transport	Scale: Regional
Start-Up Date: 2002	Closure Date: Currently operating
Comments: None	

* Interagency Monitoring of Protected Visual Environments (IMPROVE) monitors are operated to evaluate regional haze that may impact Federal Class I areas in National Parks and Wilderness Areas. Fine particulate and particulate speciation monitoring is conducted at these sites. They do not have an AIRS ID.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Monitoring Sites not subject to the Network Plan Review Process**

** These sites are included in the Network Plan for informational purposes only.

Site Name: Mead NADP **Location: U of Ne Field Lab, Saunders Co.** Operating Agency: University of Nebraska	AIRS ID: Not applicable, See Comments Latitude: 41.1528º Longitude: -96.4912
Monitor Information Type/POC: NTN/MDN Method Description: NTN/MDN Purpose: Background & Transport Start-Up Date: 7/25/78	**Pollutant: TNT/MDN** Monitoring Frequency: Continuous EPA Method: Not applicable Scale: Regional Closure Date: Currently operating

Comments: The Mead and North Platte National Atmospheric Deposition Program (NADP) sites are operated by the University of Nebraska with analytical and data processing support from the NADP. NADP sites are not subject to review under the provisions of 40 CFR Part 58.10, and thus are not subject to review under this Network Plan. They are included herein for informational purposes only.

- Monitoring methods are specific to this program and are not Federal Reference or Equivalent Methods (FRM/FEM).
- The National Trends Network (NTN) sites collect deposition data on acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., calcium, magnesium, potassium and sodium).
- Mercury Deposition Network (MDN) sites collect mercury deposition data.
- The NADP oversees both NTN and MDN sites, and provides analytical and data processing support.
- The Mead site initiated operation as an NTN site in 1978 and began MDN operations in June 2007.

Site Name: North Platte NADP **Location: U of Ne Ag Station, Lincoln, Co.** Operating Agency: University of Nebraska	AIRS ID: Not applicable, See Comments Latitude: 41.0592º Longitude: -100.7464º
Monitor Information Type/POC: NTN Method Description: NTN Purpose: Background & Transport Start-Up Date: 9/24/85	**Pollutant:** NTN Monitoring Frequency: Continuous EPA Method: Not applicable Scale: Regional Closure Date: Currently operating

Comments: The Mead and North Platte National Atmospheric Deposition Program (NADP) sites are operated by the University of Nebraska with analytical and data processing support from the NADP. NADP sites are not subject to review under the provisions of 40 CFR Part 58.10, and thus are not subject to review under this Network Plan. . They are included herein for informational purposes only.

- Monitoring methods are specific to this program and are not Federal Reference or Equivalent Methods (FRM/FEM).
- The National Trends Network (NTN) sites collect deposition data on acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., calcium, magnesium, potassium and sodium).
- Mercury Deposition Network (MDN) data was collected at this site from October 2009 thru October 2011 using Nebraska Environmental Trust funding.
- The NADP oversees both NTN and MDN sites, and provides analytical and data processing support.

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Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

This attachment compares ambient air quality data from 2011 thru 2013 to the NAAQS, or in the case of Total Reduced Sulfur to Nebraska's state standard. The annual data presented below was retrieved from the EPA AQS data base. The 2013 data was not yet certified and could be subject to change. The values compared to the NAAQS were calculated as set forth in 40 CFR Part 58.

The NDEQ operates an ambient air monitoring program in Nebraska, and provides oversight for the DCHD and LLCHD monitoring programs. Data from sites outside Nebraska and from sites within Nebraska not operated by the NDEQ, DCHD and LLCHD (collectively abbreviated "non-NDEQ sites") are included below. The NAAQS comparisons for these non-NDEQ sites are not official, and are included for comparison purposes only.

Table B-1: Ozone Data

Comparison of 3-Year Design Values for 8-hour Ozone to NAAQS (1)					
Site	**2011**	**2012**	**2013**	**DV (1)**	**% NAAQS**
Omaha MSA and Near-By Montgomery Co., IA (4)					
Omaha NCore (2)	0.066	0.071	0.066	0.067	89%
2411 O St., Omaha	0.057	0.066	0.058	0.060	80%
30th & Fort, Omaha	0.059	0.077	0.061	0.065	87%
Harrison Co, IA (orig. Pisgah site) (3)	0.066	0.076	0.065	0.069	92%
Pisgah, IA (new in 2009) (3)	0.064	0.075	0.065	0.068	91%
Montgomery County, IA (3) (4)	0.065	0.071	0.060	0.065	87%
Lincoln MSA					
First & Maple, Davey	0.053	0.058	0.055	0.055	73%
Sioux City MSA and Surrounding Area (6)					
31102 471st Ave, Union Co, SD (5)	0.062	0.068	nd	0.064 Combined	85%
31986 475th Ave Union Co, SD (5)	nd	nd	0.063		
Emmetsburg, IA (6)	0.067	0.070	0.064	0.067	89%
Sioux Falls, SD (6)	0.065	0.072	0.072	0.069	92%
Santee Indian Reservation (6) (7)	0.063	0.075	0.067	0.068	91%
Nebraska Panhandle					
Scotts Bluff National Monument (7)	0.063	0.067	nd	0.065	87%

Notes and Explanations: (EPA AQS data retrieval 3/25/14)

(1) Concentrations are in units of ppm.. The Design Value (DV) is the truncated 3-year average of the 4th highest max for each year. The NAAQS = 0.075 ppm (promulgated 3/27/2008).

(2) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(3) The following sites are operated by the IA DNR: Harrison Co. IA, Pisgah, IA, Montgomery Co, IA and Emmetsburg, IA.

(4) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(5) The Union Co., SD site is in the Sioux City MSA & operated by the SD Dept. of Environment & Natural Resources

(6) Three of the four sites listed are located outside the Sioux City MSA:

- Emmetsburg, IA site is 97 mi NE of Sioux City & is operated by the IA DNR.
- Sioux Falls, SD site is 75 NNW of Sioux City & is operated by the SD Dept of Environment & Natural Resources
- Santee Indian Reservation site is 76 mi WNW of Sioux City & is operated by EPA as part of CASTNET.

(7) The Scotts Bluff NM site was operated by the National Park Service; using a method that is not an EPA reference or equivalent method (FRM/FEM). It was not operated in 2011 & 2012, but not in 2013

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-2: Carbon Monoxide Data

Comparison of 3-Year Maximum Value for 1-Hour Carbon Monoxide to NAAQS (1) (2)					
Site	**2011**	**2012**	**2013**	**Design Value (2)**	**% NAAQS**
Omaha MSA					
78th & Dodge Sts, Omaha	2.4	2.6	2.4	2.6	7%
Omaha NCore (4)	1.3	1.3	0.9	1.3	4%
Lincoln MSA					
2620 O St, Lincoln	2.9	1.3 (6)	nd	2.9	8%
Sioux City MSA					
31986 475th Ave, Union Co, SD (5)	0.4	0.6	0.5	0.6	2%
Comparison of 3-Year Maximum Value for 8-Hour Carbon Monoxide to NAAQS (1) (3)					
Site	**2011**	**2012**	**2013**	**Design Value (3)**	**% NAAQS**
Omaha MSA					
78th & Dodge Sts., Omaha	1.6	2.3	1.9	2.3	26%
Omaha NCore (4)	0.5	0.8	0.6	0.8	9%
Lincoln MSA					
2620 O St, Lincoln	1.5	0.9 (6)	nd	1.5	17%
Sioux City MSA					
31986 475th Ave, Union Co, SD (5)	0.3	0.3	0.3	0.3	3%

Notes and Explanations:

(1) The CO NAAQS were last revised in 1984. The latest review was concluded in August 2011 when EPA determined no changes in the CO NAAQS were warranted.

(2) The 1-hour NAAQS = 35 ppm. The Design Value is the highest annual 2nd highest maximum value over the last 3 years. The annual values shown are the annual 2nd highest maximum values. Concentrations are in units of ppm.

(3) The 8-hour NAAQS = 9 ppm. The Design Value is the highest annual 2nd highest maximum value over the last 3 years. The annual values shown are the 2nd highest 8-hour maximum values. Concentrations are in units of ppm.

(4) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(5) The Union Co., SD site is operated by the South Dakota Department of Environment & Natural Resources

(6) The 2620 O St. Lincoln site closed 2/3/12.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-3: Sulfur Dioxide Data

Comparison of 1-Hour Sulfur Dioxide Levels to the Primary NAAQS (1)

Site	2011	2012	2013	Design Value (1)	% NAAQS
Omaha MSA					
1616 Whitmore St., Omaha	0.066 (4)	0.073	0.056	0.065	86%
Omaha NCore (3)	0.037	0.038	0.027	0.034	45%
Sioux City MSA Sites					
1221 260th St. Sergeant Bluff, IA (5)	nd	0.039	0.021	0.030	40%
31986 475th Ave, Union Co, SD (6)	0.007	0.009	0.006	0.007	10%
31307 473rd Ave, Union Co, SD (6)	0.008	0.007	0.005	0.007	9%

Comparison of 3-Hour Sulfur Dioxide Levels to the Secondary NAAQS (2)

Site	2011	2012	2013	Design Value (2)	% NAAQS
Omaha MSA					
1616 Whitmore St., Omaha	0.054 (4)	0.076	0.052	0.076	15%
Omaha NCore (3)	0.026	0.026	0.027	0.027	5%
Sioux City MSA					
1221 260th St. Sergeant Bluff, IA (5)	nd	0.015	0.014	0.015	3%
31986 475th Ave, Union Co, SD (6)	0.005	0.007	0.005	0.007	1%
31307 473rd Ave, Union Co, SD (6)	0.006	0.005	0.003	0.006	1%

Notes and Explanations: (EPA AQS data retrieval 3/25/14)

(1) The 1-hour NAAQS is 75 ppb or 0.075 ppm. The Design Value is the three-year average of the annual 99th percentile values. This NAAQS was promulgated on June 22, 2010. The annual values shown are annual 99th percentile values in ppm units.

(2) The 3-hour NAAQS is 0.5 ppm not to be exceeded more than once per year. It is a secondary standard promulgated in 1971, and retained without change in 1996. The Design Value is the highest annual 2nd highest maximum 3-hour reading over the last three years. The annual values shown are 2nd highest maximum values. All concentrations expressed in units of ppm.

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Whitmore St Omaha site was closed from 6/22/11 thru 10/1/11 due to Missouri River flooding.

(5) The Sergeant Bluff IA site began operation 7/1/12 and is operated by the IA DNR.

(6) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources.

Table B-3: Sulfur Dioxide Data (continued)

Comparison of 24-Hour Sulfur Dioxide Levels to the Pre-2010 NAAQS (7) (8)

Site	2011	2012	2013	Design Value (1)	% NAAQS
Omaha MSA					
1616 Whitmore St., Omaha	0.020 (4)	0.025	0.019	0.025	18%
Omaha NCore (3)	0.006	0.006	0.006	0.006	4%
Sioux City MSA					
1221 260th St. Sergeant Bluff, IA (5)	nd	0.003	0.003	0.003	2%
31986 475th Ave, Union Co, SD (6)	0.002	0.002	0.002	0.002	2%
31307 473rd Ave, Union Co, SD (6)	0.003	0.002	0.002	0.003	2%

Comparison of Annual Average Sulfur Dioxide Levels to the Pre-2010 NAAQS (9) (10)

Site	2011	2012	2013	Design Value (1)	% NAAQS
Omaha MSA					
1616 Whitmore St., Omaha (4)	0.0024	0.0023	0.0021	0.0024	8%
Omaha NCore (3)	0.0009	0.0009	0.0007	0.0009	3%
Sioux City MSA					
1221 260th St. Sergeant Bluff, IA (5)	nd	0.0003	0.0003	0.0003	1%
31986 475th Ave, Union Co, SD (6)	0.0002	0.0004	0.0003	0.0004	1%
31307 473rd Ave, Union Co, SD (6)	0.0003	0.0003	0.0004	0.0004	1%

Notes and Explanations:

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Whitmore St Omaha site was closed from 6/22/11 thru 10/1/11 due to Missouri River flooding.

(5) The Sergeant Bluff IA site began operation 7/1/12 and is operated by the IA DNR.

(6) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

(7) The 24-hour NAAQS is a primary standard promulgated in 1971 and retained without change in 1996. It will no longer apply once the attainment status to the 1-hour NAAQS is determined per regulations changes in 2010.

(8) The 24-hour NAAQS is 0.14 ppm not to be exceeded more than once per year. The Design Value is the highest annual 2nd highest maximum 24-hour reading over the last three years. The annual values shown are 2nd highest maximum values. The 24-hour NAAQS is a primary standard. All concentrations expressed in units of ppm.

(9) The Annual Average NAAQS is a primary standard promulgated in 1971 and retained without change in 1996. It will no longer apply once the attainment status to the 1-hour NAAQS is determined per regulations changes in 2010.

(10) The Annual Average NAAQS is 0.03 ppm not to be exceeded in a calendar year. The Design Value is the highest annual average over the last 3-years. The Annual Average NAAQS is a primary standard. All concentrations expressed in units of ppm.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-4a: Nitrogen Dioxide Data

Comparison of 1-Hour Maximum Levels of Nitrogen Dioxide to NAAQS					
Site	**2011**	**2012**	**2013**	**Design Value (1)**	**% NAAQS**
Sioux City MSA					
31986 475th Ave, Union Co, SD (3)	0.015	0.016	0.018	0.016	16%
31307 473rd Ave, Union Co, SD (3)	0.014	0.057	0.040	0.037	37%
Comparison of 3-Year Maximum Annual Average Value for Nitrogen Dioxide to NAAQS					
Site	**2011**	**2012**	**2013**	**Design Value (2)**	**% NAAQS**
Sioux City MSA					
31986 475th Ave, Union Co, SD (3)	0.003	0.003	0.003	0.003	6%
31307 473rd Ave, Union Co, SD (3)	0.003	0.006	0.004	0.004	8%

Notes and Explanations:
(1) (3) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

Table B-4b: 2011-2013 Nitrogen Oxide Data from the Omaha NCore Site (1)(2)

Parameter	2011	2012	2013	Approx. DV (3)(4)(8)	% NAAQS
1-Hour Data: Annual Maximum					
NOy (6)	0.121	0.158	0.104	na	na
NO (7)	0.089	0.133	0.084	na	na
NOy-NO (8)	0.053	0.051	0.040	na	na
1-Hour Data: 98th Percentile (5)					
NOy (6)	0.090	0.113	0.078	na	na
NO (7)	0.060	0.103	0.051	na	na
NOy-NO (8)	0.045	0.045	0.035	0.042	42%
1-Hour Data: Annual Average					
NOy (6)	0.010	0.010	0.009	na	na
NO (7)	0.002	0.002	0.002	na	na
NOy-NO (8)	0.008	0.008	0.007	0.008	16%

Footnotes:
(1) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.
(2) All concentrations expressed in ppm units.
(3) The 1-hour NO_2 NAAQS is 0.100 ppm (promulgated Feb. 2010). NAAQS attainment is achieved if the 3-year average of the annual 98th percentile of the daily maximum 1-hour values does not exceed 0.100 ppm.
(4) The Annual Average NO^2 NAAQS is 0.053 ppm not to be exceeded in a calendar year. It was promulgated 1971, and retained in the 1996 and 2010 reviews. The Design Value is the highest annual average over the 3-year comparison period.
(5) Percentile determination: (Days $\geq$ 75% complete data): 2011 331 d => 7th high value, 2012 356 d => 8th high value & 2013 341 d => 7th high value.
(6) NOy – Reactive oxides of nitrogen; includes NO, NO_2 and other nitrogen oxides, including organic nitrogen oxide compounds.
(7) NO – Nitrogen oxide
(8) NOy-NO provides an approximation of nitrogen dioxide (NO_2), with some possibility of over-estimating the true NO_2 concentration. For this reason, the NOy-NO parameter can be used to demonstrate attainment, but not non-attainment.

Table B-5a: PM_{10} - Maximum 24-Hour Data (1) (2)

Site	2011	2012	2013	Design Value (1)	% NAAQS
Omaha MSA & Montgomery Co., IA (5)					
Omaha NCore (3)	86	74	62	70	47%
2411 O St, Omaha	58	71	67	58	39%
46th & Farnam Sts, Omaha	172	199	94	159	106%
19th & Burt Sts, Omaha	44	51	56	50	33%
3130 C Ave, Council Bluffs, IA (4)	50	64	65	60	40%
Montgomery Co., IA (outside Omaha MSA) (4) (5)	49	65	45	45	30%
Weeping Water WWTF (6)	52	75	45	51	34%
Weeping Water Lauritzen Farm (6)(7)	108	179	108	109	73%
Sioux City MSA Sites					
821 30th St, Sioux City, IA (4)	74	78	57	58	39%
31986 475th Ave, Union Co, SD (8)	69	101	103	82	55%
31307 473rd Ave, Union Co, SD (8)	67	82	49	67	45%
Other Nebraska Sites					
Cozad	120	99	94	83	55%
Gothenburg	139	73	97	73	49%

Notes and Explanations:

(1) NAAQS = 150 µg/m^3, not to be exceeded more than once per year on average over 3 years, where exceedence is defined as a value of 155 μg/m^3 or more. The Design Value is the 4th highest 24-hour value found in the 3-year design period. Concentrations are in units of µg/m^3 at standard temperature (25º C) and pressure (760 mm Hg) conditions.

(2) NAAQS History: The primary 24-hour NAAQS was initially set at 150 μg/m^3 in 1987, and was retained at this level in the 1997, 2006 and 2012 PM NAAQS reviews.

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(5) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(6) Weeping Water is a limestone mining and processing area in Cass County, which is located 15 to 20 miles south of the main urbanized area within the Omaha MSA.

(7) The Weeping Water Lauritzen Farm site recorded four 24-hour PM_{10} values above 150 μg/m^3 in 2010: 176 on 10/20/10, 249 on 10/26/10, 306 on 10/27/10 and 209 on 11/26/10. Attainment status is under review.

(8) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

Table B-5b: PM_{10} - Annual Average Data [1]

Site	2011	2012	2013	3-Year Average	% Old Std
Omaha MSA and Montgomery Co., IA [4]					
Omaha NCore [2]	21.8	24.6	20.8	22.4	45%
2411 O St, Omaha	25.9	30.1	24.0	26.7	53%
46th & Farnam Sts, Omaha	44.3	52.4	32.0	42.9	86%
19th & Burt Sts, Omaha	21.0	25.0	21.4	22.5	45%
3130 C Ave, Council Bluffs, IA [3]	23.4	28.4	23.8	25.2	50%
Montgomery Co., IA (outside Omaha MSA) [3] [4]	18.7	21.7	16.8	19.1	38%
Weeping Water WWTF [5]	20.4	25.1	19.0	21.5	43%
Weeping Water Lauritzen Farm [5]	28.1	34.7	27.7	30.2	60%
Sioux City MSA					
821 30th St, Sioux City, IA [3]	19.7	22.8	18.3	20.3	41%
31986 475th Ave, Union Co, SD [6]	17.1	22.4	18.5	19.3	39%
31307 473rd Ave, Union Co, SD [6]	15.6	19.2	14.1	16.3	33%
Other Nebraska Sites					
Cozad	24.9	29.4	25.4	26.6	53%
Gothenburg	28.1	29.5	27.2	28.3	57%

Notes and Explanations:

(1) There is currently no NAAQS for the annual average PM_{10} concentration. An annual average NAAQS of 50 $\mu g/m^3$ was established in 1987, and then rescinded on December 18, 2006. Comparison to the rescinded NAAQS is provided for informational purposes only. Concentrations are in units of $\mu g/m^3$.

(2) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(3) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(4) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(5) Weeping Water is a limestone mining and processing area in Cass County, which is located 15 to 20 miles south of the main urbanized area within the Omaha MSA.

(6) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-6a: $PM_{2.5}$ - 98th Percentile, 24-Hour Data (1) (2)

Site	2011	2012	2013	Design Value (1)	% NAAQS
Omaha MSA & Montgomery Co., IA (5)					
Omaha NCore (3)	22.5	21.3	22.2	22.0	63%
9225 Berry St.; Omaha	20.4	24.8	21.0	22.1	63%
2912 Coffey Ave., Bellevue	28.1	23.5	24.0	25.2	72%
2242 Wright St., Blair	21.8	24.1	20.6	22.2	63%
3130 C Ave., Council Bluffs, IA (4)	20.8	28.5	22.4	23.9	68%
Montgomery Co., IA (outside Omaha MSA) (4) (5)	21.5	20.5	21.0	21.0	60%
Lincoln MSA					
3140 N Street, Lincoln	21.1	20.0	19.5	20.2	58%
Sioux City MSA & Emmetsburg, IA (7)					
821 30th St, Sioux City, IA (4)	23.4	24.9	21.5	23.3	66%
31986 475th Ave, Union Co, SD (6)	23.1	19.7	22.8	21.9	62%
31307 473rd Ave, Union Co, SD (6)	22.1	20.8	23.5	21.8	62%
Emmetsburg, IA (outside Sioux City MSA) (4)(7)	22.0	22.4	20.9	21.8	62%
Other Nebraska Sites					
Grand Island Senior High	17.7	17.5	21.3	18.8	54%
Scottsbluff	12.6	17.9	12.2	14.2	41%

Notes and Explanations:

(1) The Design Values are the 3-year average of the annual 98th percentile values. To determine attainment status, the Design Values are compared to the 35 µg/m^3 NAAQS. Concentrations are in units of µg/m^3.

(2) NAAQS History: The 24-hour $PM_{2.5}$ NAAQS was initially established at 65μg/m^3 in 1997. It was lowered to 35 *m*g/m^3 in 2006 and retained at the 35 μg/m^3 level in 2012.

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(5) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(6) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

(7) Emmetsburg is located outside the Sioux City located approximately 97 miles northeast of Sioux City. Data from this site is included here for comparison purposes only.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-6b: $PM_{2.5}$ - Annual Average Data (1) (2)

Site	2011	2012	2013	Design Value (1)	% NAAQS
Omaha MSA & Montgomery Co., IA (4)					
Omaha NCore (3)	9.2	8.4	9.2	8.9	74%
9225 Berry St.; Omaha	10.6	11.7	8.6	10.3	86%
2912 Coffey Ave., Bellevue	11.7	10.4	11.0	11.0	92%
2242 Wright St., Blair	9.1	9.2	8.3	8.9	74%
3130 C Ave., Council Bluffs, IA (4)	10.2	10.8	9.6	10.2	85%
Montgomery Co., IA (outside Omaha MSA) (4) (5)	9.0	8.8	8.3	8.7	72%
Lincoln MSA Site					
3140 N Street, Lincoln	8.5	8.7	8.2	8.5	71%
Sioux City MSA & Emmetsburg, IA (6)					
821 30th St, Sioux City, IA (4)	9.2	9.7	9.3	9.4	78%
31986 475th Ave, Union Co, SD (6)	9.3	9.9	8.9	9.4	78%
31307 473rd Ave, Union Co, SD (6)	8.1	7.5	10.5	8.7	72%
Emmetsburg, IA (outside Sioux City MSA) (4)(7)	9.2	8.7	8.1	8.6	72%
Other Nebraska Sites					
Grand Island Senior High	7.0	7.6	7.6	7.4	61%
Scottsbluff (8)	4.8	5.6	5.1	5.2	43%

Notes and Explanations:

(1) The Design Values are the 3 year average of the annual average values. To determine attainment status, the Design Values compared to the 12 $\mu g/m^3$ NAAQS. Concentrations are in units of $\mu g/m^3$.

(2) NAAQS History: The annual average $PM_{2.5}$ NAAQS was initially established in 1997 at 15 $\mu g/m^3$. It was retained at this level in the 2006 review and then lowered to 12 $\mu g/m^3$ in December 2012.

(2) The Omaha NCore site is located at 4102 Woolworth Street. It is a multi-pollutant monitoring site.

(3) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(4) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(5) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

(6) Emmetsburg is located well outside the Sioux City located approximately 97 miles northeast of Sioux City. Data from this site is included here for comparison purposes only.

(7) The Scottsbluff site was relocated from 1809 3rd St. (shut-down on 5/11/09) to the Scottsbluff High School at Hwy 26 and 5th St (start-up 5/13/09). Combined data for both sites is presented above.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-7: Lead in Total Suspended Particulate (TSP-Pb)

Comparison of 3-Year Maximum Values of 3-Month Average Values (1) (2)					
Site	**2011**	**2012**	**2013**	**DV (1)**	**% NAAQS**
Sioux City MSA					
Auburn (3)	0.12	0.05	0.03	0.12	80%
Fremont (4)	0.03	0.14	0.11	0.14	93%
Omaha NCore (5) (6)	nd	0.006	0.006	0.006	7%

Notes and Explanations:

(1) Concentrations are in units of $\mu g/m^3$. The 3-month average NAAQS = 0.15 $\mu g/m^3$. The DV or Design Value is the highest 3 month average in the last 3 years.

(2) NAAQS History: The initial NAAQS was promulgated in 1978 and was set at 1.5 $\mu g/m^3$ calendart quarter average. In 2008, it was modified to 0.15 $\mu g/m^3$ 3-month running average.

(3) Auburn Data Completeness: (3-month average completeness needs to meet or exceed 75%)
2011- Invalid data from 10/6 thru 12/5 due to flow control issues. Nine valid 3-mo averages; Aug-Oct, Sep-Nov & Oct-Dec were lost.
2012- Data lost to sampler repair 8/25 thru 9/30. Nine 3 mo averages were obtained; Jul-Sep, Aug-Oct & Sep-Nov were lost
2013 – Data completeness for 3-month averages ranged from 76% to 100%. All 3-month averages were valid.

(4) Fremont Data Completeness: (3-month average completeness needs to meet or exceed 75%)
2011- Invalid data from 2/26 thru 5/21 and 8/1thru 11/29 due to flow control issues. Two valid 3-mo averages obtained (Nov-Jan & Dec-Feb)
2012- Invalid data in Nov 2011, resulted in the loss of the Nov-Jan 3-mo average; Eleven 3-mo averages obtained.
2013 – Data completeness for 3-month averages ranged from 80% to 100%. All 3-month averages were valid.

(5) The Omaha NCore site is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(6) Omaha NCore Data Completeness: (3-month average completeness needs to meet or exceed 75%)
2012 - Operations were initiated on 1/4/12. Ten 3-month averages obtained starting with Jan-Mar 2012. Completeness ranged from 87% to 100%.
2013 –April thru June 2014 completeness fell to 73%. Completeness for the other 11 3-month averages ranged from 80% to 100%.

Abbreviation: nd – no data, site not operating

Table B-8: Total Reduced Sulfur (TRS) Data

Comparison of 3-Year Maximum Value for 1-Minute TRS to the State Standard (1) (2)					
Site	**2011**	**2012**	**2013**	**Maximum Value**	**% NE Std**
Sioux City MSA					
501 Pine St. Dakota City	0.075	0.180	0.058	0.180	1.8%

Comparison of 3-Year Maximum Value for 30-Minute TRS to the State Standard (1) (3)					
Site	**2011**	**2012**	**2013**	**Maximum Value**	**% NE Std**
Sioux City MSA					
501 Pine St. Dakota City	0.049	0.086	0.042	0.86	86% (4)

Notes and Explanations:

(1) Concentrations are in units of ppm.

(2) The 1-minute Nebraska Air Quality Standard is 10 ppm.

(3) The 30-minute Nebraska Air Quality Standard is 0.10 ppm.

Attachment C – Population Dynamics

Note: Attachment C is unchanged from the Nebraska 2013 Ambient Air Monitoring Network Plan. It was last updated in the spring of 2013 using US Census data from on 2010 Census and 2012 survey estimate data.

Population related data is reviewed as part of the network planning process because:

- Population growth may be associated with pollution source growth;
- High population density generally correlates with high air pollution potential; and
- Some 40 CFR Part 58 requirements are based on population and/or Federally defined metropolitan statistical definitions.

Population data from the US Census Bureau from 2000, 2010 and 2012 was used in this attachment. The US Census Bureau conducts a comprehensive population census every 10 years referred to as a decennial census. The last decennial census was completed in 2010. In addition, the US Census Bureau conducts annual surveys to provide annual population estimates for each interim year. Population data from the decennial census is more reliable than that from the annual survey estimates.

Population Growth Summary:

Five counties (Douglas, Lancaster, Sarpy, Hall and Buffalo Counties) have consistently ranked as the fastest growing counties in terms of actual population growth over the 2000 – 2012 time frame. See Table C-1 below. These are also the counties with the highest populations as shown in Table C-2, with 59% of Nebraska's population residing in these 5 counties.

Also as shown in Table C-1, the counties of Douglas, Lancaster and Sarpy Counties accounted for most of the population growth within Nebraska (i.e., 106%). The total population growth in these 3 counties was able to exceed 100% of the Nebraska's total population growth because many other counties lost population (see Table C-7 at the end of this attachment for population data for all of Nebraska's counties). Douglas, Lancaster and Sarpy Counties are also the highest population counties (see Table C-2) and the most densely populated counties (see Table C-3).

Percent growth rates of counties (in contrast to actual population growth) provide a somewhat different picture of population growth as seen in Table C-4. However, a high growth rate in a low population county does not have that much impact on pollution potential because of the relatively small number of additional people involved. For example, the 10-year growth rate in Johnson County was 1.5%, which equates to a population gain of 73 people; vs. Lancaster County with a growth rate of 1.3% and a population gain of 3,461 people (i.e., a 47 fold higher population gain in the lower percent growth county).

From a potential air pollution source perspective, the population growth trends remain basically unchanged from previous years. Most of the population growth is occurring in the Omaha and Lincoln MSAs, and specifically in Douglas, Lancaster and Sarpy Counties. These counties have the highest populations and population densities. There are other counties growing at similar or even slightly higher rates, but their smaller populations equate to smaller population increases.

Note: this attachment focuses on population dynamics because it is a factor that can impact air pollution potential. It is recognized that there are many other factors and those are examined elsewhere in the 2013 Network Plan.

Attachment C – Population Dynamics

Table C-1: Population Growth Rate Data for the 15 Nebraska Counties Demonstrating the Highest Population Gains from 2010 thru 2012

County Rank (1)	Geographic Area	2-Year Annualized Growth (2)	10-Year Annualized Growth (3)	Percent of NE Population Gain (4)	Cumulative Percent (5)
na	Nebraska	12,692	11 ,686	na	na
1	Douglas County	6,300	5,384	47%	47%
2	Lancaster County	3,623	3,461	29%	76%
3	Sarpy County	3,075	3,646	30%	106%
4	Hall County	787	521	5%	111%
5	Buffalo County	655	382	4%	114%
6	Platte County	206	72	1%	115%
7	Saline County	169	34	0%	117%
8	Seward County	70	30	0%	118%
9	Colfax County	59	10	0%	118%
10	Madison County	55	-31	0%	118%
11	Adams County	54	17	0%	118%
12	York County	51	-92	-1%	117%
13	Chase County	51	-8	0%	117%
14	Cheyenne County	50	16	0%	117%
15	Howard County	38	-27	0%	117%

Footnotes:

(1) **County Rank** based on the 2-year annualized population growth.
(2) The **2-Year Annualized Growth** is calculated by dividing the 2010-12 population gain by 2.
(3) The **10-Year Annualized Growth** is calculated by dividing the 2000-2010 population gain by 10.
(4) The **% of NE Population Gain** is calculated by dividing the population gain of each county from 2000 to 2012 and dividing by the population gain of Nebraska over this same time frame.
(5) The **Cumulative Percent** is calculated by adding the **% of NE Population Gain** from each successive county.

Explanatory Notes:

- The 2-year and 10-year population gains are calculated on exclusive time frames. The 2-year uses 2010-12 data, while the 10 year uses 2000-10 data.
- The 2-year population gains (2010-12) rely on estimated data for 7/1/10 and 7/1/12. While the 10-year population gains (2010-12) rely on 7/1/00 and 7/1/10 estimated data. The 10-year estimates are more closely tied to the decennial census, and thus more reliable.
- The **% of Ne Population Gain** is based on the entire 12 year time frame over which the 2-year and the 10-year population gains were examined: 2000-12.
- The Cumulative Percent exceeds 100% because many NE counties are losing population. See Table C-7 below.
- Sarpy County was the only county listed in this table that grew at a slower rate in 2010 -12 than in 2000-10.
- Table C-7 at the end of this attachment contains population and population density data for all of Nebraska's counties.

Attachment C – Population Dynamics

Table C-2: Population Data for Nebraska's 15 Most Highly Populated Counties

Co. Rank	Geographic Area	MSA/MiSA	Population 7/1/2012	Percent Nebraska (1)	Cumulative Percent (2)
	Nebraska	na	1,855,525	100%	na
1	Douglas County	Omaha MSA	531,265	29%	29%
2	Lancaster County	Lincoln MSA	293,407	16%	44%
3	Sarpy County	Omaha MSA	165,853	9%	53%
6	Hall County	Grand Island MSA	60,345	3.3%	57%
7	Buffalo County	Kearney MiSA	47,463	2.6%	59%
8	Scotts Bluff County	Scottsbluff MiSA	36,964	2.0%	61%
9	Dodge County	Fremont MiSA	36,427	2.0%	63%
10	Lincoln County	North Platte MiSA	36,099	1.9%	65%
11	Madison County	Norfolk MiSA	35,031	1.9%	67%
12	Platte County	Columbus MiSA	32,681	1.8%	69%
13	Adams County	Hastings MiSA	31,459	1.7%	70%
14	Cass County	Omaha MSA	25,133	1.4%	72%
6	Dawson County	Lexington MiSA	24,220	1.3%	73%
14	Gage County	Beatrice MiSA	21,806	1.2%	74%
15	Dakota County	Sioux City MSA	20,918	1.1%	75%

Footnotes:

(1) **Percent Nebraska**: The percent of Nebraska's population that resides in that county

(2) **Cumulative Percent:** The cumulative total of the percentages in the preceding column. For example: 44% of Nebraska's residents reside in Douglas and Lancaster Counties, and 75% reside in the 15 counties listed.

Notes:

- All 15 of the most populated counties are located within MSA's or MiSA's.
- Table C-7 at the end of this attachment contains population data for all of Nebraska's counties.

Attachment C – Population Dynamics

Table C-3: The 15 Most Densely Populated Nebraska Counties

Rank	Geographic Area	MSA/MiSA	Population Density	Population 7/1/12	Area (sq. mi.)
	Nebraska	na	24	1,855,525	76,872
1	Douglas County	Omaha MSA	1605	531,265	331
2	Sarpy County	Omaha MSA	690	165,853	241
3	Lancaster County	Lincoln MSA	350	293,407	839
4	Hall County	Grand Island MSA	110	60,345	546
5	Dakota County	Sioux City MSA	79	20,918	264
6	Dodge County	Fremont MiSA	68	36,427	534
7	Madison County	Norfolk MiSA	61	35,031	573
8	Adams County	Hastings MiSA	56	31,459	563
9	Washington County	Omaha MSA	52	20,252	390
10	Scotts Bluff County	Scottsbluff MiSA	50	36,964	739
11	Buffalo County	Kearney MiSA	49	47,463	968
12	Platte County	Columbus MiSA	48	32,681	678
13	Cass County	Omaha MSA	45	25,133	559
14	Seward County	Lincoln MSA	30	16,935	575
15	Saunders County	Omaha MSA	28	20,823	754

Notes:

- All 15 of the most densely populated counties are located within MSA's or MiSA's.
- Table C-7 at the end of this attachment contains population and population density data for all of Nebraska's counties.

Table C-4: Percent Growth Rates: 15 Counties with the Highest 10-Year and 2-Year Rates

10-Year 2000-2010				2-Year: 2010-2012			
Rank	Geographic Area	Percent Growth (1)	Annual Population Gain (2)	Rank	Geographic Area	Percent Growth (3)	Annual Population Gain (4)
	Nebraska	0.7%	11,686		Nebraska	0.7%	12,692
1	Sarpy Co.	2.6%	3,646	1	Banner Co.	4.3%	32
2	Johnson Co.	1.5%	73	2	Blaine Co.	4.2%	21
3	Lancaster Co.	1.3%	3,461	3	Arthur Co.	2.2%	11
4	Douglas Co.	1.1%	5,384	4	Thomas Co.	2.0%	14
5	Hall Co.	0.9%	521	5	Sarpy Co.	1.9%	3,075
6	Buffalo Co.	0.9%	382	6	Buffalo Co.	1.4%	655
7	Garfield Co.	0.8%	15	7	Grant Co.	1.4%	9
8	Washington Co.	0.8%	148	8	Hall Co.	1.3%	787
9	Arthur Co.	0.5%	2	9	Chase Co.	1.3%	50
10	Saunders Co.	0.5%	103	10	Lancaster Co.	1.3%	3,623
11	Lincoln Co.	0.5%	162	11	Douglas Co.	1.2%	6,300
12	Cass Co.	0.4%	88	12	Saline Co.	1.2%	169
13	Dakota Co.	0.4%	73	13	Deuel Co.	0.8%	16
14	Saline Co.	0.2%	34	14	Platte Co.	0.6%	206
15	Platte Co.	0.2%	72	15	Howard Co.	0.6%	38

Footnotes:

(1) 10-Year Percent Growth = (100%)(pop. 2010 – pop. 2000)(2) / (pop. 2000 + pop. 2010)

(2) 10-Year Annual Population Gain = (pop. 2010 – pop. 2000) / 10

(3) 2-Year Percent Growth = (100%)(pop. 2012 – pop. 2010)(2) / (pop. 2010 + pop. 2012)

(4) 2-Year Annual Population Gain = (pop. 2012 – pop. 2010) / 10

Note: Table C-7 at the end of this attachment contains growth rate information for all of Nebraska's counties.

Attachment C – Population Dynamics

Metropolitan Statistical Areas and Micropolitan Statistical Areas

The U.S. Office of Management and Budget (OMB) defines Metropolitan Statistical Areas (MSAs), Micropolitan Statistical Areas (MiSAs) and Combined Statistical Areas (CSAs) based upon urban population data and *urbanized area*/*urban cluster* definitions provided by the US Census Bureau.

Metropolitan Statistical Areas (MSAs) contain an *urbanized area,* where an *urbanized area* is a densely settled territory delineated by the US Census Bureau that contains 50,000 or more people.

Micropolitan Statistical Area (MiSAs) contain an *urban cluster* with a population of 10,000 to 49,999, where an *urban cluster* is a densely settled territory delineated by the US Census Bureau that contains at least 2,500 people, but fewer than 50,000 people.

Combined Statistical Areas (CSAs) are adjacent MSAs and MiSAs with social and economic ties.

Of these 3 designations, the MSA is of the most importance from an ambient monitoring perspective because:

- It is sometimes used in defining minimum monitoring requirements, and
- It is often the default boundary when defining non-attainment areas.

The OMB released a revised listing of CSAs, MSAs and MiSAs on February 28, 2013, which were based on 2010 decennial census data. The Nebraska MSAs and MiSAs are shown in Figure C-1. Table C-5 lists the Nebraska CSAs, MSAs & MiSAs and the counties that comprise them.

Figure C-1: Nebraska Metropolitan Statistical Areas (MSAs) and Micropolitan Statistical Areas (MiSAs)

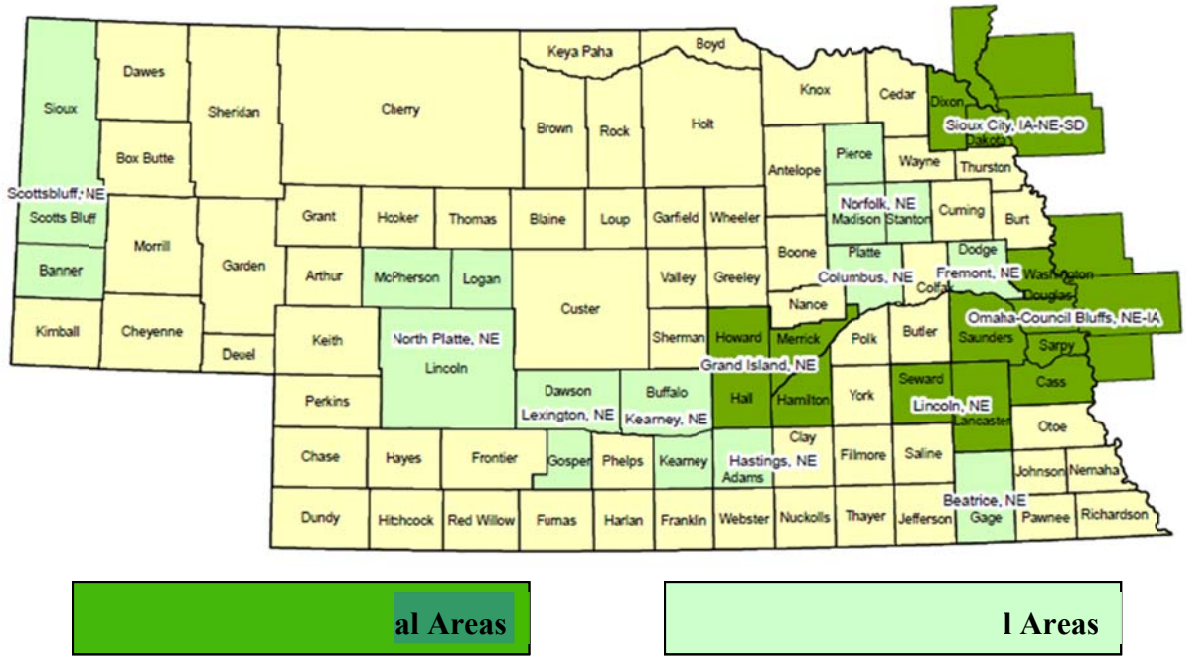


Table C-5: Nebraska CSAs, MSAs and MiSAs: Summary Information	
Urbanized Area	**Subparts & Basic Information**
Omaha-Council Bluffs-Fremont NE-IA CSA	Omaha-Council Bluffs, NE-IA MSA & Fremont NE MiSA CSA Population: 922,051
Omaha-Council Bluffs NE-IA MSA	NE Counties: Cass, Douglas, Saunders, Sarpy & Washington IA Counties: Harrison, Mills & Pottawattamie Principal Cities: Omaha, NE & Council Bluffs, IA MSA Population: 885,624
Fremont NE MiSA	NE Counties: Dodge Principal City: Fremont MiSA Population: 36,427
Lincoln-Beatrice NE CSA	Lincoln NE MSA & Beatrice NE MiSA CSA Population: 332,148
Lincoln NE MSA	Lancaster and Seward Counties Prinipal City: Lincoln MSA Population: 310,342
Beatrice NE MiSa	Gage County Prinicipal City: Beatrice MiSA Population: 21,806
Sioux City-Vermillion IA-SD-NE CSA	Sioux City, IA-SD-NE MSA & Vermillion, SD MiSA CSA Population: 183,052
Sioux City IA-SD-NE MSA	NE Counties: Dakota & Dixon IA Counties: Plymouth & Woodbury SD Counties: Union Prinicipal City: Sioux City, IA MSA Population: 168,921
Vermillion SD MiSA	Clay County SD Principal City: Vermillion, SD MiSA Population: 14,141
Table continued on next page	

Table C-5: Nebraska CSAs, MSAs and MiSAs: Summary Information (continued)	
Urbanized Area	**Subparts & Basic Information**
Grand Island NE MSA	NE Counties: Hall, Hamilton, Howard & Merrick Principal City: Grand Island MSA Population: 83,472
Kearney NE MiSA	NE Counties: Buffalo & Kearney Principal City: Kearney MiSA Population: 53,948
Norfolk NE MiSA	NE Counties: Madison, Pierce & Stanton Principal City: Norfolk MiSA Population: 48,286
Scottsbluff NE MiSA	NE Counties: Banner, Scotts Bluff & Sioux Principal City: Scottsbluff MiSA Population: 39,039
North Platte NE MiSA	Ne Counties: Lincoln, Logan & McPherson Principal City: North Platte MiSA Population: 37,373
Hastings NE MiSA	Ne Counties: Adams Principal City: Hastings MiSA Population: 31,459
Columbus NE MSA	Ne Counties: Platte Principal City: Columbus MiSA Population: 32,681
Lexington NE MiSA	Ne Counties: Dawson & Gosper Principal City: Lexington MiSA Population: 26,249
Data Sources: CSA, MSA & MiSA definitions, including counties and principal cities, from OMB Bulletin No. 13-01 (February 28, 2013). Population data from US Census survey estimates for July 1, 2012.	

Attachment C – Population Dynamics

Table C-6 below provides population, population density and population growth information on Nebraska MSAs and MiSAs, and the counties within them. Table C-6 shows that the Omaha and Lincoln MSAs have the highest growth rates, and that most of this growth is occurring in Douglas, Lancaster and Sarpy Counties. The Grand Island MSA and the Kearney MiSA have the next highest growth rates. This is the same basic growth pattern recognized in the county analysis at the beginning of this attachment.

Also see Figures C-2 and C-3 below. Most (86%) of the population in the Omaha-Council Bluffs MSA resides in Nebraska. While in the Sioux City MSA, most (75%) of the population resides in Iowa.

Table C-6: Nebraska MSAs and MiSAs: Population Data

Geographic Area	2012 Population	Population Density	10-Year Annualized Population Growth	2-Year Annualized Population Growth	12-Year Annualized Percent Growth
Omaha-Council Bluffs MSA	**885,624**	**202**	**9882**	**8754**	**1.2%**
NE Counties	**763,326**	**336**	**9369**	**9296**	**1.3%**
Cass Co NE	25,133	56	88	-63	0.3%
Douglas Co NE	531,265	1605	5384	6300	1.1%
Sarpy Co NE	165,853	690	3646	3075	2.5%
Saunders Co NE	20,823	28	103	-9	0.4%
Washington Co NE	20,252	52	148	-8	0.7%
IA Counties	**122,298**	**58**	**514**	**-542**	**0.3%**
Harrison Co IA	14,548	21	-76	-190	-0.6%
Mills Co IA	14,837	34	49	-107	0.2%
Pottawattamie Co IA	92,913	97	541	-246	0.5%
Lincoln MSA	**310,342**	**220**	**3492**	**3693**	**1.2%**
Lancaster Co	293,407	350	3461	3623	1.3%
Seward Co	16,935	29	30	70	0.2%
Sioux City MSA	**168,921**	**57**	**98**	**48**	**0.1%**
NE Counties	**26,836**	**68**	**44**	**-84**	**0.1%**
Dakota Co NE	20,918	79	73	-60	0.2%
Dixon Co NE	5,918	12	-28	-24	-0.5%
IA Counties	**127,230**	**10**	**-137**	**-54**	**-0.1%**
Woodbury Co IA	102,323	117	-149	-23	-0.1%
Plymouth Co IA	24,907	29	12	-31	0.02%
SD – Union Co	**14,855**	**32**	**191**	**186**	**1.4%**
Grand Island MSA	**83,472**	**39**	**440**	**736**	**0.6%**
Hall Co	60,345	110	521	787	1.0%
Hamilton Co	9,011	17	-26	-56	-0.3%
Howard Co	6,336	11	-27	38	-0.3%
Merrick Co	7,780	16	-28	-33	-0.4%

Table continued on next page.

Attachment C – Population Dynamics

Table C-6: Nebraska MSAs and MiSAs: Population Data

Geographic Area	2012 Population	Population Density	10-Year Annualized Population Growth	2-Year Annualized Population Growth	12-Year Annualized Percent Growth
Kearney MiSA	**53,948**	**36**	**337**	**652**	**0.8%**
Buffalo Co	47,463	49	382	655	1.0%
Kearney Co	6,485	13	-45	-3	-0.6%
Norfolk MSA	**48,286**	**31**	**-117**	**-6**	**-0.2%**
Madison Co	35,031	61	-31	55	-0.05%
Pierce Co	7,166	12	-56	-45	-0.7%
Stanton Co	6,089	14	-30	-16	-0.4%
Scottsbluff MSA	**39,039**	**11**	**-23**	**-19**	**-0.1%**
Banner Co	819	1.0	-12	32	-0.6%
Scotts Bluff Co	36,964	50	5	-52	-0.01%
Sioux Co	1,315	0.6	-16	2	-0.1%
North Platte MiSA	**37,373**	**9**	**162**	**-102**	**0.3%**
Lincoln Co	36,099	14	162	-85	0.3%
Logan Co	765	1.3	0	-3	-0.1%
McPherson Co	509	0.6	1	-15	-0.4%
Fremont MiSA	**36,427**	**68**	**49**	**-140**	**0.05%**
Dodge Co	36,427	68	49	-140	0.05%
Columbus MiSA	**32,681**	**48**	**72**	**206**	**0.3%**
Adams Co	32,681	48	72	206	0.3%
Hastings MiSA	**31,459**	**56**	**17**	**54**	**0.1%**
Adams Co	31,459	56	17	54	0.1%
Lexington MiSA	**26,249**	**18**	**-18**	**-77**	**-0.1%**
Dawson Co	24,220	24	-8	-68	-0.1%
Gosper Co	2,029	4	-9	-9	-0.4%
Beatrice MiSA	**21,806**	**25**	**-64**	**-248**	**-0.4%**
Gage Co	21,806	25	-64	-248	-0.4%

Term Definitions:

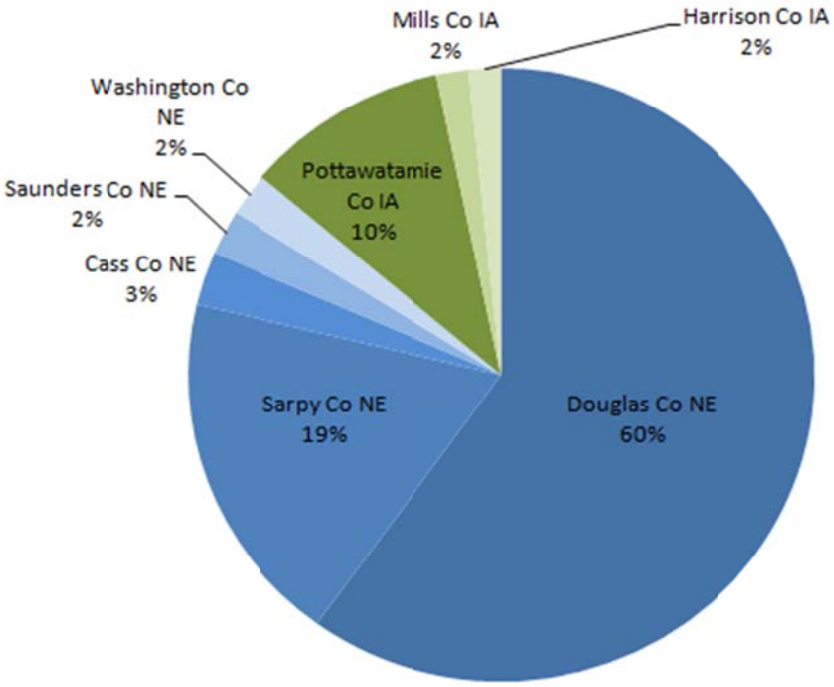
2012 Population – The US Census survey estimate for 7/1/12

10-Year Annualized Population Growth – The change in population between 7/1/00 and 7/1/10 based on US Census Bureau survey estimate data.

2-Year Annualized Population Growth – The change in population between 7/1/10 and 7/1/12 based on US Census Bureau survey estimate data.

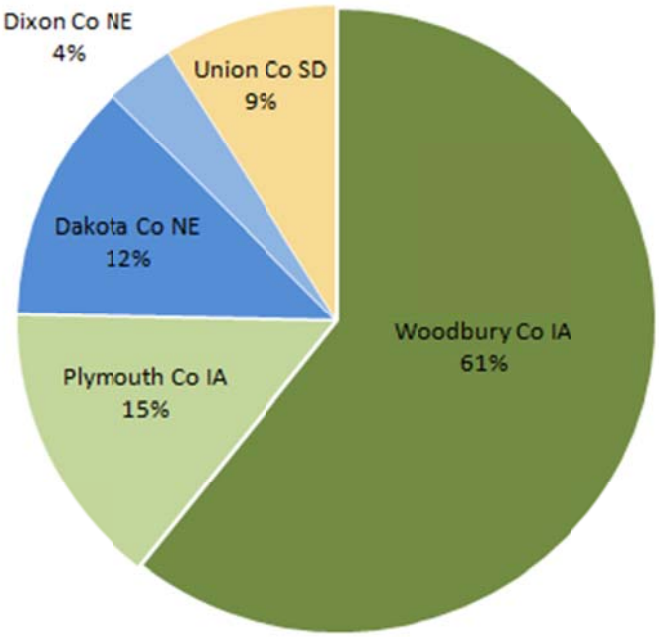
12-Year Annualized Population Growth – The change in population from 7/1/00 to 7/1/12 divided by the average of the 7/1/00 and 7/1/12 populations and divided by 12 years, express as a percent. US Census Bureau survey estimate data was used for the calculations.

Figure C-2: Population Distribution within the Omaha MSA



Nebraska Counties: 86% of the Omaha MSA population & a growth rate of 1.3 % per year from 2000 thru 2012.
Iowa Counties: 14% of the Omaha MSA population & a growth rate of 0.3 % per year from 2000 to 2012.

Figure C-3: Population Distribution within the Sioux City MSA



Nebraska Counties: 16% of the Sioux City MSA population with a growth rate of 0.1% per year from 2000 thru 2012.
Iowa Counties: 75% of the Sioux City MSA population with a growth rate of -0.1 % per year from 2000 to 2012
South Dakota Counties: 9% of the Sioux City MSA population with a growth rate of 1.4 % per year from 2000-12.

Attachment C – Population Dynamics

Table C-7: Nebraska Population Data: All Counties

Geographic Area	Area (sq mi)	Population 7/1/2012	Population Density	10-Year Annualized Growth	10-Year Annualized Percent Growth	2-Year Annualized Growth	2-Year Annualized Percent Growth
Nebraska	76,872	1,855,525	24.1	11,686	0.7%	12,692	0.7%
Adams Co	563	31,459	55.8	17	0.1%	54	0.2%
Antelope Co	857	6,545	7.6	-77	-1.1%	-55	-0.8%
Arthur Co	715	486	0.7	2	0.5%	11	2.2%
Banner Co	746	760	1.0	-12	-1.6%	32	4.3%
Blaine Co	711	514	0.7	-11	-2.1%	21	4.2%
Boone Co	687	5,417	7.9	-71	-1.2%	-40	-0.7%
Box Butte Co	1,075	11,317	10.5	-95	-0.8%	21	0.2%
Boyd Co	540	2,054	3.8	-33	-1.5%	-23	-1.1%
Brown Co	1,221	3,023	2.5	-39	-1.2%	-61	-2.0%
Buffalo Co	968	47,463	49.0	382	0.9%	655	1.4%
Burt Co	493	6,659	13.5	-94	-1.3%	-92	-1.4%
Butler Co	584	8,295	14.2	-44	-0.5%	-41	-0.5%
Cass Co	559	25,133	44.9	88	0.4%	-63	-0.2%
Cedar Co	740	8,746	11.8	-76	-0.8%	-38	-0.4%
Chase Co	895	4,064	4.5	-8	-0.2%	51	1.3%
Cherry Co	5,961	5,727	1.0	-42	-0.7%	8	0.1%
Cheyenne Co	1,196	10,068	8.4	16	0.2%	50	0.5%
Clay Co	573	6,411	11.2	-47	-0.7%	-66	-1.0%
Colfax Co	413	10,653	25.8	10	0.1%	59	0.6%
Cuming Co	572	9,072	15.9	-102	-1.1%	-34	-0.4%
Custer Co	2,576	10,740	4.2	-84	-0.7%	-86	-0.8%
Dakota Co	264	20,918	79.3	73	0.4%	-60	-0.3%
Dawes Co	1,396	9,152	6.6	13	0.1%	-8	-0.1%
Dawson Co	1,013	24,220	23.9	-8	0.0%	-68	-0.3%
Deuel Co	440	1,972	4.5	-14	-0.7%	16	0.8%
Dixon Co	476	5,918	12.4	-28	-0.5%	-24	-0.4%
Dodge Co	534	36,427	68.2	45	0.1%	-118	-0.3%
Douglas Co	331	531,265	1605.1	5,384	1.1%	6,300	1.2%
Dundy Co	920	2,021	2.2	-26	-1.2%	7	0.3%
Fillmore Co	576	5,771	10.0	-73	-1.2%	-55	-0.9%
Franklin Co	576	3,188	5.5	-28	-0.8%	-25	-0.8%
Frontier Co	975	2,741	2.8	-31	-1.1%	-6	-0.2%
Furnas Co	718	4,907	6.8	-33	-0.6%	-23	-0.5%
Gage Co	855	21,806	25.5	-64	-0.3%	-248	-1.1%

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Table C-7: Nebraska Population Data: All Counties

Geographic Area	Area (sq mi)	Population 7/1/2012	Population Density	10-Year Annualized Growth	10-Year Annualized Percent Growth	2-Year Annualized Growth	2-Year Annualized Percent Growth
Garden Co	1,704	1,953	1.1	-20	-0.9%	-63	-3.1%
Garfield Co	570	2,007	3.5	15	0.8%	-17	-0.8%
Gosper Co	458	2,029	4.4	-9	-0.4%	-9	-0.4%
Grant Co	776	629	0.8	-12	-1.8%	9	1.4%
Greeley Co	570	2,458	4.3	-16	-0.6%	-42	-1.7%
Hall Co	546	60,345	110.4	521	0.9%	787	1.3%
Hamilton Co	544	9,011	16.6	-26	-0.3%	-56	-0.6%
Harlan Co	553	3,410	6.2	-33	-0.9%	-3	-0.1%
Hayes Co	713	953	1.3	-11	-1.1%	-4	-0.4%
Hitchcock Co	710	2,887	4.1	-20	-0.7%	-5	-0.2%
Holt Co	2,413	10,396	4.3	-100	-0.9%	-23	-0.2%
Hooker Co	721	727	1.0	-4	-0.5%	-4	-0.5%
Howard Co	569	6,336	11.1	-27	-0.4%	38	0.6%
Jefferson Co	573	7,521	13.1	-79	-1.0%	4	0.1%
Johnson Co	376	5,140	13.7	73	1.5%	-37	-0.7%
Kearney Co	516	6,485	12.6	-45	-0.7%	-3	0.0%
Keith Co	1,061	8,220	7.7	-46	-0.5%	-73	-0.9%
Keya Paha Co	773	804	1.0	-16	-1.8%	-9	-1.1%
Kimball Co	952	3,783	4.0	-23	-0.6%	-20	-0.5%
Knox Co	1,108	8,573	7.7	-63	-0.7%	-51	-0.6%
Lancaster Co	839	293,407	349.8	3,461	1.3%	3,623	1.3%
Lincoln Co	2,564	36,099	14.1	162	0.5%	-85	-0.2%
Logan Co	571	765	1.3	0	0.0%	-3	-0.3%
Loup Co	570	589	1.0	-8	-1.2%	-19	-3.1%
McPherson Co	859	509	0.6	1	0.1%	-15	-2.8%
Madison Co	573	35,031	61.2	-31	-0.1%	55	0.2%
Merrick Co	485	7,780	16.0	-28	-0.4%	-33	-0.4%
Morrill Co	1,424	4,889	3.4	-37	-0.7%	-75	-1.5%
Nance Co	441	3,715	8.4	-32	-0.8%	-4	-0.1%
Nemaha Co	409	7,154	17.5	-29	-0.4%	-48	-0.7%
Nuckolls Co	575	4,438	7.7	-53	-1.1%	-32	-0.7%
Otoe County	616	15,747	25.6	29	0.2%	-13	-0.1%
Pawnee Co	432	2,765	6.4	-32	-1.1%	0	0.0%
Perkins Co	883	2,931	3.3	-20	-0.6%	-25	-0.8%
Phelps Co	540	9,215	17.1	-54	-0.6%	15	0.2%

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Attachment C – Population Dynamics

Table C-7: Nebraska Population Data: All Counties

Geographic Area	Area (sq mi)	Population 7/1/2012	Population Density	10-Year Annualized Growth	10-Year Annualized Percent Growth	2-Year Annualized Growth	2-Year Annualized Percent Growth
Pierce Co	574	7,166	12.5	-56	-0.7%	-45	-0.6%
Platte Co	678	32,681	48.2	72	0.2%	206	0.6%
Polk Co	439	5,320	12.1	-22	-0.4%	-30	-0.6%
Red Willow Co	717	10,975	15.3	-43	-0.4%	-36	-0.3%
Richardson Co	553	8,290	15.0	-114	-1.3%	-29	-0.3%
Rock Co	1,008	1,376	1.4	-24	-1.4%	-66	-4.5%
Saline Co	575	14,557	25.3	34	0.2%	169	1.2%
Sarpy Co	241	165,853	689.6	3,646	2.6%	3,075	1.9%
Saunders Co	754	20,823	27.6	103	0.5%	-9	0.0%
Scotts Bluff Co	739	36,964	50.0	5	0.0%	-52	-0.1%
Seward Co	575	16,935	29.5	30	0.2%	70	0.4%
Sheridan Co	2,441	5,319	2.2	-69	-1.2%	-70	-1.3%
Sherman Co	566	3,108	5.5	-15	-0.5%	-19	-0.6%
Sioux Co	2,067	1,315	0.6	-16	-1.1%	2	0.1%
Stanton Co	430	6,089	14.2	-30	-0.5%	-16	-0.3%
Thayer Co	575	5,134	8.9	-81	-1.4%	-40	-0.8%
Thomas Co	713	676	0.9	-8	-1.2%	14	2.0%
Thurston Co	394	7,020	17.8	-15	-0.2%	24	0.3%
Valley Co	568	4,229	7.4	-37	-0.8%	-17	-0.4%
Washington Co	390	20,252	51.9	148	0.8%	-8	0.0%
Wayne Co	443	9,554	21.5	-24	-0.2%	-27	-0.3%
Webster Co	575	3,725	6.5	-21	-0.5%	-47	-1.2%
Wheeler Co	575	805	1.4	-6	-0.7%	-9	-1.0%
York Co	576	13,746	23.9	-92	-0.7%	51	0.4%

Attachment D: Verification of Compliance with 40 CFR Part 58

This attachment reviews compliance with 40 CFR Part 58 Appendixes A, C, D and F as set forth on February 28, 2013. The review found the Nebraska Ambient Monitoring Network to be in compliance with these requirements.

I. Appendix A Review

40 CFR Part 58 Appendix A sets forth quality assurance requirements for the collection, calculation and reporting of air monitoring data. To ensure compliance with these requirements, the NDEQ has a *Quality Assurance Project Plan (QAPP) for the Nebraska Ambient Air Monitoring Program for PM_{10}, $PM_{2.5}$, CO, O_3, SO_2 and TRS.* EPA Region 7 reviewed and approved this QAPP in June 2006. Actual procedures for operating monitors, as well as for collecting, reviewing and submitting data are set forth in Standard Operating Procedures (SOPs) that were developed to comply with the requirements of the QAPP.

Appendix A also sets forth requirements specifying the number of collocated monitors required for $PM_{2.5}$, PM_{10}, $PM_{10\text{-}2.5}$ and Lead (Pb) monitors. Table D-1 summarizes the collocated sites in Nebraska. It appears that Nebraska is meeting these collocation requirements. It is noted, as it was previously in the 2011 and 2012 Network Plans, that DCHD is meeting the collocation requirement for its $PM_{2.5}$ network of 3 sites (1 MetOne BAM and 2 2025 sequential samplers) with a 2025 sequential sampler collocated at the MetOne BAM site.

II. Appendix C Review

Appendix C contains requirements for approved ambient air monitoring methodologies. Any monitor that is used to evaluate NAAQS compliance must be a Federal Reference Method (FRM) or a Federal Equivalent Method (FEM) or an alternatively approved method as defined in Appendix C. The network description tables in Attachment A of the network plan identify the monitoring method used by each monitor in the Nebraska ambient air monitoring network. All monitors used to evaluate compliance with the NAAQS are FRM or FEM certified. The only monitors that are not FRM/FEM certified are the TRS monitors used to evaluate compliance with Nebraska's TRS standard.

Attachment D: Verification of Compliance with 40 CFR Part 58

Table D-1: Compliance Summary: Collocation Requirements of Appendix A

Parameter	Method	NDEQ/LLCHD (1)			DCHD (1)		
		# of Sites	# Collocated	% Collocated	# of Sites	# Collocated	% Collocated
PM_{10}	Hi-Vol Sampler	0	0	na	2	1	50%
PM_{10}	Sequential 2025 Sampler	3	1	33%	0	0	na
PM_{10}	Continuous Monitor	1	0	See Footnote (2)	1	0	See Footnote (2)
$PM_{2.5}$	Sequential 2025 Sampler	3	1	33%	2	See Footnote (3)	33% (3)
$PM_{2.5}$	Met One BAM Method (5)	0	0	na	2	1	
$PM_{10-2.5}$	Met One BAM Method	0	0	na	1	0	See Footnote (4)
TSP-Lead	Hi-Vol Sampler	2	1	50%	0	0	See Footnote (4)

Collocation Requirement: Appendix A requires 15% of the sites in each parameter/method category to have collocated monitors with certain exceptions and additional requirements explained in the footnotes below.

Footnotes:

(1) The 15% collocation requirements applies to each Primary Quality Assurance Organization (PQAO) separately. There are two PQAO's in Nebraska: DCHD and NDEQ/LLCHD.

(2) Collocated monitors are not required for continuous PM10 monitors.

(3) The sequential 2025 sampler collocated with the MetOne BAM sampler at the NCore site is currently being used to meet the collocation requirement for the DCHD $PM_{2.5}$ monitoring network of 3 sites: one Met One BAM and two 2025 sequential samplers.

(4) Only EPA designated NCore sites are required to have collocated monitors for $PM_{10-2.5}$ and TSP-Lead sites, The $_{PM10-2.5}$ and TSP-Lead monitors operated by DCHD are located at the Omaha NCore site, and EPA has not required collocation for these monitors at this site.

Network Descriptions

NDEQ Sequential 2025 PM_{10}: Weeping Water (collocated), Cozad & Gothenburg
NDEQ Continuous PM_{10}: Weeping Water Farm (collocation not required)
NDEQ Sequential 2025 $PM_{2.5}$: LLCHD (collocated), Grand island & Scottsbluff
NDEQ TSP-Lead: Fremont (collocated) & Auburn

DCHD Hi-Vol PM_{10}: 19& Burt (collocated) and South Omaha
DCHD Continuous PM_{10}: 46th & Farnam (collocation not required)
DCHD Sequential 2025 $PM_{2.5}$: Berry St & Blair (collocation at NCore)
DCHD MetOne BAM $PM_{2.5}$: NCore (collocated) & Bellevue
DCHD Met MetOne BAM $PM_{10-2.5}$: NCore (collocation not required)
DCHD TSP-Lead: NCore (collocation not required)

III. Appendix D Review

Appendix D sets forth monitoring objectives and minimum monitoring site requirements that must be met. The review that follows demonstrates that the Nebraska ambient air monitoring network meets the Appendix D requirements in effect on February 28, 2013.

EPA periodically re-evaluates the NAAQS and monitoring requirements. Regulatory modifications may impact the minimum monitoring requirements in one of two ways:

- Appendix D minimum monitoring requirements may be changed (i.e., more or less monitoring could be required); or
- Monitoring needs may change as a result of a NAAQS modification (e.g., when the annual average $PM_{2.5}$ NAAQS was lowered from 15 $\mu g/m^3$ to 12 $\mu g/m^3$, the 85% of NAAQS threshold set forth in 40 CFR Part 58 Appendix D Sec. 4.7 Table D.5 was crossed, and the minimum number of $PM_{2.5}$ monitoring sites for the Omaha MSA increased from 1 to 2).

III.A: Appendix D - Objectives Review

Appendix D Section 1.1 sets forth 3 objectives that ambient air monitoring networks must be designed to meet:

- Provide air pollution data to the general public in a timely manner.
- Support compliance with ambient air quality standards and emissions strategy development.
- Support for air pollution research studies.

Each of these objectives is discussed below.

1. Timely Dissemination of Data - Met

Air monitoring data is made available to the public and other parties in several ways.

a. Ambient air monitoring data is reviewed quarterly and entered into the national EPA-operated AQS database. The AQS data base is available to federal, state and local monitoring agency personnel, as well as some other public agencies and researchers. AQS data cannot be directly accessed by the general public, but the NDEQ does respond to data requests.

b. Air Quality Index reporting is performed by DCHD and LLCHD for their respective jurisdictions. The AQI information is made available on their respective city websites.

c. Monitoring data from continuous particulate, ozone and CO monitors in the Omaha and Lincoln MSA report directly to the EPA AirNow system. The general public can access air quality index information on-line at: www.airnow.gov

d. Daily maximum TRS monitoring data is available to the public on the NDEQ web site. This data is typically entered on a monthly basis. The NDEQ also responds to telephone or email requests for more timely or detailed information.

e. The NDEQ publishes an annual Air Quality Report. This report is available on-line and upon request. Similarly the annual Network Plan reports are also available to the public on-line or upon request.

2. Support compliance with ambient air quality standards and emissions strategy development – Met

The annual Network Plans and Five Year Assessments are an important element in meeting this objective. They examine historical pollutant trends, NAAQS attainment, source impacts and population growth. All of this information is important not only to network planning, but air quality planning in general.

In addition, the NDEQ, DCHD and LLCHD review monitoring data on a quarterly or more frequent basis to evaluate attainment with the standards. The purpose of these reviews is to identify any non-attainment or near non-attainment circumstances. If such conditions are identified, efforts are made to ascertain the cause and to the extent possible bring about corrective action through regulatory and/or voluntary mechanisms. Three examples are described below

- In the fall of 2011, the 3 month average lead concentration at the Fremont site exceeded the NAAQS. EPA and the one known source were notified. The data was discussed and presented to EPA for review. NDEQ and the source conducted an on-site review of the facility and potential emission sources (see Section V.B.2 in this network plan for additional information).

  In 2012, NDEQ continued to calculate daily and 3-month average lead monitoring data as the data became available; and to disseminate this information to the primary known source. High daily lead levels in May thru early July brought the 3-month average within 93% of the NAAQS, and these lead levels were discussed with the primary known source. Lower lead levels were seen beginning in July and continuing thereafter. The impact of this information exchange with the source is difficult to evaluate, but it may have played an important role in facilitating the source in remaining diligent with their control efforts.

- From September 2011 thru June 2012, the 46th & Farnam site recorded four (4) 24-hour average PM_{10} values grater than the 150 ug/m^3 standard. The 46th & Farnam site is source-oriented with respect to Omaha Steel Castings Company. Douglas County Health Department made Omaha Air Quality and Omaha Steel aware of the high values in a timely manner. Omaha Air Quality met with Omaha Steel to discuss potential PM_{10} sources and controls. Omaha Steel proceeded with process-handling and housekeeping changes intended to reduce PM_{10} emissions. Omaha Steel is anticipated to move from this site by April 2014 as part of a planned facility relocation.

- In the summer of 2012, Nebraska monitoring sites began reporting ozone levels above those seen in recent years. The NDEQ began using Air Now data to track the current 4th highest values for sites in and around Nebraska as the ozone season progressed. Although the 4th high values at 2 sites in the Omaha MSA exceeded 0.075 ppm 8-hour ozone NAAQS, the 3 year average design values did not exceed the NAAQS (i.e., the maximum unofficial 2010-2012 DVs = 0.069 ppm).

  This information was disseminated within the NDEQ Air Quality Division and to DCHD, OAQC and LLCHD. The periodic updating of the 4th high values to DCHD and OAQC facilitated the timely transfer of attainment status information to stakeholders in the Omaha/Council Bluffs Ozone-Reduction Community Based Planning Process was facilitated, which encouraged Omaha/Council Bluffs-area residents to take voluntary measures to help reduce ground-level ozone.

3. Support for air pollution research studies – Met

The NDEQ, DCHD and LLCHD operate the Nebraska SLAMS network in accordance with the monitor specifications, site placement and QA requirements set forth in 40 CFR Part 50 and 58. EPA R7 provides oversight to ensure that regulatory requirements are met with respect to methodology and QA.

Data is reviewed quarterly before being submitted to EPA's AQS data base. Once in AQS, the data is available for pollution research studies.

Near real-time data is also reported to the EPA AirNow data from the continuous PM, CO and ozone monitors operating in the Omaha and Lincoln MSA. This data is also available for research purposes.

III.B: Appendix D – Minimum Monitoring Site Requirements

Nebraska has the minimum number of monitoring sites required by Appendix D. The minimum monitoring site requirements for each of the four MSAs are examined separately and documented in Tables D-2.a thru D-2.d below.

The review for non-MSA areas of the state was performed on a pollutant specific basis. This review is documented in narrative form in Section III.C below.

It should be noted that the number of monitoring sites required in a network generally needs to be greater than the minimum number required by Appendix D. This is stated in Appendix D Section 1.1.2: "… total number of monitoring sites that will serve the variety of data needs will be substantially higher than these minimum requirements provide…"

III.C: Appendix D Minimum Monitoring Requirements for non-MSAs

NCore – (40 CFR Part 58 App. D Sec. 3). None required or operated.

At this time there is no requirement or plan to develop an NCore site in Nebraska, other than the current site in Omaha.

Ozone (O_3) – (40 CFR Part 58 App. D Sec. 4.1) No sites required or operated.

At this time there is no requirement to deploy ozone monitoring sites outside of the MSAs.

Previously, EPA had proposed requiring rural ozone monitoring sites. These proposed regulations would have required 1 to 3 rural monitoring sites in Nebraska. These regulations were not issued, but ozone NAAQS is currently under review. Proposed regulations, which may include rural ozone monitoring requirements, are anticipated in 2013.

Carbon Monoxide (CO) – (40 CFR Part 58 App. D Sec. 4.2). No sites required or operated.

At this time there is no requirement or plan to conduct CO monitoring outside the MSAs.

Nitrogen Dioxide (NO_2) – (40 CFR Part 58 App. D Sec. 4.3). No sites required or operated.

At this time there is no requirement or plan to conduct NO_2 monitoring outside the MSAs.

Attachment D: Verification of Compliance with 40 CFR Part 58

Sulfur Dioxide (SO_2) – (40 CFR Part 58 App. D Sec. 4.4) No sites required or operated.

At this time there is no requirement or plan to conduct SO_2 monitoring outside the Omaha MSA.

Lead (Pb) – (40 CFR Part 58 App. D Sec. 4.5) Two required and 2 sites operated.

Two source-oriented sites with lead emissions ≥ 1 tpy were required to be established in 2010. One site is in Fremont near Magnus Farley (established in March 2010). The other site is in Auburn near Magnolia Metals (established in May 2010).

The emission threshold for source-oriented sites was lowered to ≥ 0.5 tpy with additional sites needing to be established in 2012. Emission estimates for Nucor Steel in Norfolk exceeded the 0.5 tpy threshold. There was an allowance for not conducting monitoring if it could be shown that ambient lead concentrations would not exceed 50% of the NAAQS. Nucor Steel submitted a modeling study to the NDEQ that ambient lead concentrations would not exceed 50% of the NAAQS. The NDEQ reviewed the modeling study; and based on the findings of the study submitted it to the EPA Region 7 Administrator with a request for waiver pursuant to 40 CFR Part 58 Appendix D Section 4.5(a)(ii). The EPA R7 administrator approved the waiver in April 2014. The waiver must be renewed every 5 years. Thus a lead monitoring site in Norfolk is not required at this time.

PM_{10} Particulate Matter (40 CFR Part 58 App. D Sec. 4.6). No sites required. Two sites operated.

There are no minimum PM_{10} monitoring requirements for areas outside of MSAs. Both of the Nebraska PM_{10} sites located outside of the Omaha MSA are source and population oriented. One is deployed in downtown Cozad; the other one is in downtown Gothenburg. These sites were established to monitor for possible impacts from agricultural processing facilities, primarily alfalfa processing facilities in these two communities.

Fine Particulate Matter: $PM_{2.5}$ (40 CFR Part 58 Appendix D Section 4.7 & 4.7.3) Two (2) sites required and 2 operated.

States are required to operate a background site and a transport site for $PM_{2.5}$. Nebraska's background site is in Scottsbluff, and the transport site is in Grand Island.

Coarse Particulate Matter: $PM_{10-2.5}$ (40 CFR Part 58 App D Sec 4.8). No sites required or operated.

Photochemical Assessment Monitoring Stations (PAMS) (40 CFR Part 58 Appendix D Section 5) No sites required or deployed.

PAMS are only required in areas classified as serious, severe, or extreme non-attainment for O_3. No such areas exist in Nebraska at this time.

IV: Appendix E Review

This appendix sets forth requirements for probe and monitoring path placement, including: horizontal and vertical placement, spacing from minor sources, spacing from obstructions, spacing from trees, spacing from roadways, cumulative interferences on a monitoring path, maximum monitoring path length, and probe material and sample residence time. Compliance with these criteria is verified when the site is set-up and periodically thereafter. Compliance is evaluated using review sheets developed for that purpose.

Tables D-2.a thru D-2.c: Minimum Monitoring Reviews for Each Nebraska MSA

Table D-2.a: 40 CFR Part 58 Appendix D Review: Omaha MSA (MSA Population ~ 886,000) *

Pollutant	App. D Citation	Review Criteria & *Comments*	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	Omaha's MSA population is between 350K to 4M and O_3 levels are ≥ 85% of NAAQS (*See Design Values in Attachment B).*	2	3 Includes NCore	Y
CO	Sec. 4.2	A near-road CO monitor will be required to be located at the near-road NOx monitor site (see near-road NOx below).	0	2 Includes NCore	Y
NO_2	Sec. 4.3.2	One near road NOx monitor for CBSA ≥ 500K to be operational by 1/1/2013. However, under EPA's proposed regulation of 10/5/12, a near-road NO_2 monitor will not be required in Omaha until 1/1/17.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring if CBSA ≥ 1M (Omaha CBSA population < 1 M)	0	1 @ NCore	Y
	Sec. 4.3.4	Regional Administrator required monitoring	0	0	Y
SO_2	Sec. 4.4	The need for SO_2 sites is based on the *Population Weighted Emissions Index* (PWEI) with any newly required sites to be operational by 1/1/2013. Omaha's PWEI = 42906, which falls within the 5000 to 100000 range requiring 1 site. *The current network of one highest concentration site and one NCore site exceeds the minimum requirements. No changes are proposed.*	1	2 Includes NCore	Y
		Regional Administrator required monitoring	0	0	Y
Lead	Sec. 4.5 (a)	Near sources emitting ≥ 0.5 tpy of lead	0	0	Y
	Sec. 4.5 (b)	One community-based site if CBSA population ≥ 500K by 1/1/2012 at the NCore site.	1	1	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	Omaha has a CBSA population between 500K – 1M. and a high PM_{10} concentration range with max values > 120% of NAAQS at the 46th & Farnam St Site (*See Design Values in Attachment B).*	4-8	6 Includes NCore & 2 sites @ Weeping Water	Y
$PM_{2.5}$	Sec 4.7 Table D-5	Omaha has a CBSA population between 500K – 1M. and $PM_{2.5}$ levels ≥ 85% of NAAQS range (*See Design Values in Attachment B).*	2	4 Includes NCore	Y
	Sec 4.7.2	Continuous monitor	1	1 @ NCore	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network	1	1 @ NCore	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3	0	0	NA
NCore	Sec. 3	Omaha has been designated to operate an NCore site with lead and NOx/NOy monitoring.	1	1	Y

* Unless noted otherwise, this analysis does not count monitors located in IA toward meeting the minimum monitoring requirements. It does consider pollutant levels measured at IA sites, when determining minimum monitoring needs for ozone and $PM_{2.5}$.

Table D-2.b: 40 CFR Part 58 Appendix D Review: Lincoln MSA (Population ~ 310,000)

Pollutant	App. D Citation	**Review Criteria & *Comments***	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	Lincoln's MSA population is between 50K to 350K and O_3 levels < 85% of NAAQS (*See Design Values in Attachment B)*	0	1	Y
CO	Sec. 4.2	No minimum requirement	0	0	Y
NO_2	Sec. 4.3.2	Near-road monitoring: No requirement for CBSA < 500K.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring: No requirements for CBSA < 1M	0	0	Y
	Sec. 4.3.4	Regional Administrator required monitoring	0	0	Y
SO_2	Sec. 4.4	Based on the *Population Weighted Emissions Index* (PWEI) with any newly required sites to be operational by 1/1/2013. Lincoln's PWEI = 3301, which falls below 5000 where sites are required.	0	0	Y
		Regional Administrator required monitoring	0	0	Y
Lead	Sec. 4.5 (a)	Near sources emitting $\geq$ 0.5 tpy of lead	0	0	Y
	Sec. 4.5 (b)	Community-based monitor required if CBSA population $\geq$ 500K by 1/1/2011	0	0	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	Lincoln's CBSA population between 250K – 500K and PM_{10} assumed < 80% of NAAQS. *The highest 24-hr value found from 1988-98 was 102 $\mu g/m^3$* or 68% of the NAAQS	0-1	0	Y
$PM_{2.5}$	Sec 4.7 Table D-5	Lincoln's CBSA population between 50K – 500K and $PM_{2.5}$ levels < 85% of NAAQS (*See Design Values in Attachment B).*	0	1	Y
	Sec 4.7.2	Continuous monitor	0	1	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network	0	0	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3	0	0	Y
NCore	Sec. 3	Lincoln has not been designated to operate an NCore site.	0	0	Y

Table D-2.c: 40 CFR Part 58 Appendix D Review: Sioux City MSA (Population ~ 169,000) **

Pollutant	App. D Citation	Review Criteria & *Comments*	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	Sioux City MSA population is between 50K -350K and O_3 levels assumed < 85% of NAAQS in accordance with footnote 4 in Table D-2. There is one ozone site in the SC MSA. It is located in Union County SD. The 2009-11 3 year DV is 81% of NAAQS (*See Design Values in Attachment B).*	0	0	Y
CO	Sec. 4.2	No minimum requirement.	0	0	Y
NO_2	Sec. 4.3.2	Near-road monitoring: No requirement for CBSA < 500K.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring: No requirements for CBSA ≥1M	0	0	Y
	Sec. 4.3.4	Regional Administrator required monitoring	0	0	Y
SO_2	Sec. 4.4	Based on the *Population Weighted Emissions Index* (PWEI) with any newly required sites to be operational by 1/1/2013. Sioux City MSA's PWEI = 6073, which falls within the 5000 to 100000 range requiring 1 site. *It appears that existing monitoring sites in South Dakota may meet the minimum SO_2 monitoring requirements for the Sioux City MSA.* Also, the IA DNR installed a source-oriented near in Sergeant Bluff in 2012.	(1 in 2013)	0	Y
		Regional Administrator required monitoring	0	0	Y
Lead	Sec. 4.5 (a)	Near sources emitting ≥ 0.5 tpy of lead	0	0	Y
	Sec. 4.5 (b)	Community-based if CBSA population ≥ 500K by 1/1/2011	0	0	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	Sioux City's CBSA population is between 100K – 250K and PM_{10} levels are < 80% of NAAQS (*See Design Values in Attachment B).*	0	0	Y
$PM_{2.5}$	Sec 4.7 Table D-5	Sioux City's CBSA population is between 50K – 500K and $PM_{2.5}$ levels are < 85% of NAAQS (*See Design Values in Attachment B).*	0	0	Y
	Sec 4.7.2	Continuous monitor	0	0	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network	0	0	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3	0	0	Y
NCore	Sec. 3	The Nebraska portion of the Sioux City MSA has not been designated to operate an NCore site.	0	0	Y

* Unless noted otherwise, this analysis does not count monitors located in IA and SD toward meeting the minimum monitoring requirements. It does use pollutant levels measured at IA and SD monitoring sites, when determining minimum monitoring needs for ozone and PM.

Table D-2.d: 40 CFR Part 58 Appendix D Review: Grand Island MSA (Population ~ 83,500) **

Pollutant	App. D Citation	**Review Criteria & *Comments***	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	Grand Island MSA population is between 50K -350K and O_3 levels assumed < 85% of NAAQS, although no monitoring has been conducted. See Section V.F.2 in this Network Plan for further discussion.	0	0	Y
CO	Sec. 4.2	No minimum requirement.	0	0	Y
NO_2	Sec. 4.3.2	Near-road monitoring: No requirement for CBSA < 500K.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring: No requirements for CBSA ≥1M	0	0	Y
	Sec. 4.3.4	Regional Administrator required monitoring	0	0	Y
SO_2	Sec. 4.4	*Population Weighted Emissions Index* (PWEI) = 271, which falls below 5000. No minimum number of sites required. See Table D-3 below for PWEI calculation data	0	0	Y
		Regional Administrator required monitoring	0	0	Y
Lead	Sec. 4.5 (a)	Near sources emitting ≥ 0.5 tpy of lead	0	0	Y
	Sec. 4.5 (b)	Community-based if CBSA population ≥ 500K by 1/1/2011	0	0	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	PM_{10} monitoring is not required if MSA population < 100,000	0	0	Y
$PM_{2.5}$	Sec 4.7 Table D-5	Grand Islands's CBSA population is between 50K – 500K and $PM_{2.5}$ levels are < 85% of NAAQS (*See Design Values in Attachment B)*	0	0	Y
	Sec 4.7.2	Continuous monitor	0	0	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network	0	0	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3	0	0	Y
NCore	Sec. 3	The Grand Island MSA has not been designated to operate a NCore site	0	0	Y

Table D-3: Population Weighted Emissions Index (PWEI) Data for Nebraska Core Based Statistical Areas (CBSAs)

CBSA (1)	County	Population (2)	SO_2 Emissions (3) (tons/yr)	PWEI (4)
Omaha - Council Bluffs - Fremont	Cass Co NE	25,133	1226.2	**37884**
	Dodge Co NE	36,427	1999.2	
	Douglas Co NE	531,265	15288.4	
	Sarpy Co NE	165,853	57.8	
	Saunders Co NE	20,823	179.1	
	Washington Co NE	20,252	25.4	
	Harrison Co IA	14,548	40.8	
	Mills Co IA	14,837	26.7	
	Pottawattamie Co IA	92,913	22242.6	
	Totals	**922,051**	**41086**	
Lincoln - Beatrice	Gage Co NE	21,806	49.5	**1700**
	Lancaster Co NE	293,407	5026.8	
	Seward Co NE	16,935	40.4	
	Total	**332,148**	**5,117**	
Sioux City- Vermillion	Dakota Co NE	20,918	16.9	**6555**
	Dixon Co NE	5,918	25.0	
	Woodbury Co IA	102,323	35698.2	
	Plymouth Co IA	24,907	34.6	
	Clay Co SD	14,131	15.8	
	Union Co SD	14,855	17.2	
	Total	**183,052**	**35,808**	
Grand Island	Hall Co NE	60,345	3145.8	**271**
	Hamilton Co NE	9,011	33.0	
	Howard Co NE	6,336	17.9	
	Merrick Co NE	7,780	44.3	
	Total	**83,472**	**3,241**	

Footnotes:
(1) CBSAs as defined in OMB Bulliten 13-01 (February 28, 2013)
(2) Population based on the US Census Bureau 2012 population estimates
(3) SO_2 emission estimates from the 2008 NEI. This was the most recent NEI data available at www.epa.gov/ttnchie1/net/2008inventory.html
(4) PWEI = (population) x (SO_2 tons/yr) / 1,000,000 (ref. 40 CFR Part 58 App. D Sec 4.4.2)

Minimum CBSA SO_2 Monitoring Site Requirements:
PWEI $\geq$ 1,000,000 => 3 sites
PWEI range 100,000 to < 1,000,000 => 2 sites
PWEI range 5,000 to < 100,000 => 1 site
PWEI < 5,000 => no minimum site requirement

Nebraska Department of Environmental Quality

2015 Ambient Air Monitoring Network Plan

and

5-Year Assessment

NDEQ Document #15-012

Public Inspection Draft-111015

This document is written to fulfill the requirements of 40 CFR Part 58.10 for an annual monitoring network plan and periodic network assessment as it pertains to the ambient monitoring conducted by the Nebraska Department of Environmental Quality (NDEQ), the Lincoln-Lancaster County Department (LLCHD) and the Douglas County Health Department (DCHD).

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Acronyms and Abbreviations

Agencies/Organizations

ATSDR - Agency for Toxic Substances and Disease Registry (an agency within the US Department of Health)

CASAC - Clean Air Scientific Advisory Committee [(a)]

DCHD - Douglas County Health Department

EPA - United States Environmental Protection Agency

EPA R7 - United States Environmental Protection Agency Region VII

LLCHD - Lincoln/Lancaster County Health Department

NDEQ - Nebraska Department of Environmental Quality

OAQC - City of Omaha Air Quality Control

(a) CASAC was established by the Clean Air Act (CAA) Amendments of 1977, and provides independent advice to the EPA Administrator on the technical bases for EPA's national ambient air quality standards.

Regulations

CFR - Code of Federal Regulations

NAAQS - National Ambient Air Quality Standards

Title 129 - Nebraska Air Quality Regulations

Site Types

IMPROVE - Interagency Monitoring of Protected Visual Environments (monitoring performed to evaluate regional haze)

MDN - Mercury Deposition Network (a type of NADP site)

NADP - National Atmospheric Deposition Program (analysis of deposition components in precipitation. May include NTN and MDN sites)

NCore - National Core multi-pollutant monitoring stations. Monitors at these sites are required to measure particles ($PM_{2.5}$, speciated $PM_{2.5}$, $PM_{10-2.5}$), O_3, SO_2, CO, nitrogen oxides (NO/NO_y), Pb, and basic meteorology.

NTN - National Trends Network (a type of NADP site that analyzes for acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., CA, Mg, K and Na))

SLAMS - State and Local Air Monitoring Stations

Monitor Terminology

AQS - Air Quality System, the name for EPA's air monitoring data base

FRM - Federal Reference Method used for determining compliance with the NAAQS

FEM - Federal Equivalent Method used for determining compliance with the NAAQS

PWEI - Population Weighted Emissions Index (a term defined in 40 CFR Part 58 Appendix D that relates to SO_2 monitoring requirements)

2014 Network Plan – Nebraska's *2014 Ambient Air Monitoring Network Plan* (i.e., this document)

2015 Network Plan & 5-Yr Assessment - Nebraska's *2015 Ambient Air Monitoring Network Plan & 5-Year Assessment*

Acronyms and Abbreviations (Continued)

Pollutants

CO - Carbon Monoxide

H_2S - Hydrogen sulfide (typically a major component of TRS)

O_3 - Ozone

Pb - Lead

TSP-Pb - Lead sampled using a TSP sampler

$PM_{2.5}$ - Particulate matter with a diameter equal to or less than 2.5 micrometers or microns (reported as $\mu g/m^3$ with air volumes measures at local conditions)

PM_{10} - Particulate matter with a diameter equal to or less than 10 micrometers or microns (reported as $\mu g/m^3$ with air volumes measures at standard conditions (25º C, 1 atm))

$PM_{10-2.5}$ - The difference between PM_{10} and $PM_{2.5}$ (Both being calculated at local conditions)

SO_2 - Sulfur Dioxide

TRS - Total Reduced Sulfur (H_2S + other reduced sulfur-containing compounds)

TSP - Total Suspended Particulates

Concentration Units

ppb - Parts per billion (a volume/volume concentration unit)

ppm - Parts per million (a volume/volume concentration unit)

mg/m^3 - Milligrams per cubic meter (a mass/volume concentration unit)

$\mu g/m^3$ - Micrograms per cubic meter (a mass/volume concentration unit)

Census Terminology

MSA - Metropolitan Statistical Area

MiSA - Micropolitan Statistical Area

Definitions

in situ - A Latin phrase meaning *in the place*. As used in this report it refers to the formation of pollutants in the atmosphere. For example, ozone is formed *in situ* from the photochemical reaction of pollutant precursors. Ozone is not emitted directly from sources. $PM_{2.5}$ and haze are also formed *in situ*, although they are also emitted by sources. PM_{10} and CO, on the other hand, are largely emitted from sources; *in situ* formation being of minimal importance. NOx and SOx are emitted and then undergo transformations to NO_2 and SO_2; they also can play a role in the *in situ* formation of ozone and $PM_{2.5}$.

Criteria Pollutants – The six pollutants for which National Ambient Air Quality Standards (NAAQS) have been established: carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, particulates and lead.

I. Introduction and Purpose

This 2015 Ambient Air Monitoring Network Plan and 5-Year Assessment (hereafter referred to as the "2015 Network Plan & Assessment") was prepared to meet the federal requirements set forth in 40 CFR Part 58.10. It serves several purposes.

- Describes the current ambient air monitoring network in Nebraska including:
  - The purpose of each monitoring site, and
  - Changes made since January 1, 2014.
- Discusses ambient air quality issues as they relate to the monitoring network.
- Reviews the ambient air monitoring network to determine that the requirements of 40 CFR Part 58 Appendixes A, C, D and E are met.
- Describes planned and possible changes to the ambient air monitoring network through 2016, as best they can be determined at the time this review was conducted.

II. Public Participation

Federal regulations require annual network plans to be made available for public inspection. The NDEQ meets this requirement by posting it on the NDEQ web site (http://deq. ne.gov/) for 30 days. During the 30 day public inspection period, written comments regarding this Network Plan may be submitted to the Nebraska Department of Environmental Quality (NDEQ). Contact information is provided below.

Mail:

Nebraska Department of Environmental Quality
Attn: Jim Yeggy - Air Quality Compliance Section
PO Box 98922
1200 N Street, The Atrium Suite 400
Lincoln, NE 68509

Email:

NDEQ.airquality@nebraska.gov

Informal inquiries may also be directed to Jim Yeggy at 402/471-2142. Non-written comments are not necessarily included or addressed as review comments.

The deadline for written comment submittal can be found on the NDEQ web site.

III. Overview of Current Ambient Air Monitoring Network

Nebraska's current air monitoring network is summarized in Table III-1 below. The network description tables in Attachment A provide more detailed information on the network, including site locations and monitoring objectives.

The network includes monitoring sites for ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, total reduced sulfur, lead, PM_{10}, $PM_{2.5}$, $PM_{10-2.5}$ and regional haze (i.e., IMPROVE monitors). The network is operated by the Nebraska Department of Environmental Quality and two local agencies: the Douglas County Health Department and the Lincoln Lancaster County Health Department.

Table III-1: Number of Monitoring Sites in the Nebraska Air Monitoring Network (1)

Pollutant	Omaha MSA (2)	Lincoln MSA (5)	Sioux City MSA (6)	Other Areas of NE (6)	Total Sites
Ozone	3 (3)	1(5)	0	0	4
Carbon Monoxide	2 (3)	0	0	0	2
Nitrogen Oxides	1 (3)	0	0	0	1
Sulfur Dioxide	2 (3)	0	0	0	2
Total Reduced Sulfur	0	0	1	0	1
PM_{10}	6 (3)(4)	0	0	2	8
$PM_{2.5}$	4 (3)	1	0	2	7
$PM_{10-2.5}$	1 (3)	0	0	0	1
$PM_{2.5}$ Speciation	1 (3)	0	0	0	1
Lead	1 (3)	0	0	2	3
NCore (7)	1	0	0	0	1
IMPROVE (8)	0	0	0	2	2
Totals	11 (2)(4)(7)	2 (5)	1	8	22 (9)

Footnotes:

(1) This table summarizes the number of operating sites in the NE SLAMS network as of 9/30/15.

(2) There are 3 multi-pollutant monitoring sites in the Omaha MSA in 2015:

- 1616 Whitmore – SO_2 & Ozone
- 24th & O Sts (South Omaha) : Ozone and a PM_{10}
- NCore (42nd & Woolworth) - CO, NO/NOy, O_3, SO_2, PM, lead and meteorological

Thus there are 11 monitoring sites within the Omaha MSA, but if the pollutants are counted separately there are 19 analytical sites.

(3) This footnote means that one (1) monitor in this category is located at the NCore site.

(4) PM_{10} sites in the Omaha MSA include 4 sites operated by DCHD that are located in Douglas County; and 2 sites operated by NDEQ. The NDEQ operated sites are located in the Weeping Water area of Cass County.

(5) LLCHD operates the 2 monitoring sites in the Lincoln MSA: the Davey ozone site and the N Street $PM_{2.5}$ site. In addition, a temporary investigative site for ozone was established at Waverly in May 2015. As a temporary, investigative site, it was not counted as part of the Nebraska SLAMS network.

(6) The NDEQ operates 11 sites: 2 at Weeping Water in the Omaha MSA, 1 in the Sioux City MSA, and 8 in "Other Areas of NE".

(7) The 12 Omaha MSA sites include 10 sites operated by DCHD: 30th & Fort (O_3), 24th & O St (O_3 & PM_{10}), 78th & Dodge (CO), 16th & Whitmore (SO_2), 19th & Burt (PM_{10}), 46th & Farnam (PM_{10}), 92nd & Berry ($PM_{2.5}$), Bellevue ($PM_{2.5}$), Blair ($PM_{2.5}$) & 42nd & Woolworth (NCore); and 2 sites operated by NDEQ: Weeping Water City (PM_{10}) & Weeping Water Farm (PM_{10}).

(8) IMPROVE – Interagency Monitoring of Protected Visual Environments. These are fine particulate and particulate speciation monitors intended to provide information for studying regional haze that may impact Class I National Park and Wilderness Areas.

(9) The sum total number of individual pollutant sites in the *Total Sites* column exceeds the bottom total sites value because the multi-pollutant NCore site and the ozone/PM_{10} site at 24th & O Sts. were counted as one site each.

IV. Nebraska Ambient Air Monitoring Network: January 1, 2014 thru September 30, 2015

This section describes Nebraska's Ambient Air Monitoring Network in place from January 1, 2014 thru September 30, 2015, and changes made during that time period. Detailed information on individual monitoring sites, including purpose, scale, monitor details and start dates, is contained in Attachment A.

For the most part, this section is organized around the MSAs and MiSAs in which monitoring is conducted. For population and statistical information about the MSAs and MiSAs see Attachment C.

A. Omaha MSA Sites Operated by the DCHD

DCHD operates an ambient air network of 9 sites in Douglas, Sarpy and Washington Counties. Multi-pollutant monitoring is currently conducted at three of the sites:

- The NCore site monitors for 9 pollutant parameters (CO, NOy/NOx, O_3, SO_2, $PM_{2.5}$, PM_{10}, $PM_{10\text{-}2.5}$, $PM_{2.5}$ speciation & TSP-Pb), meteorological parameters, and atmospheric radiation (RADNET*);
- The South Omaha site has both an ozone and a PM_{10} monitor; and
- The 1616 Whitmore site has both SO_2 and ozone monitors.

Thus the Omaha area monitoring network is more extensive than the 9 site total might indicate; if the pollutants are counted separately, there are 19 pollutant monitoring sites.

There were two changes in the Omaha-DCHD monitoring network since January 1, 2014.

1) Starting in October 2014, a collocated 2025 sequential sampler was located at the 9225 Berry Street site to fulfill the collocation requirements of 40 CFR Part 58, Appendix A.
2) The 30th & Fort ozone monitoring site in Omaha was closed due to construction at the site, and relocated to 1616 Whitmore (the existing SO_2 site) for the 2015 ozone monitoring season. At this time DCHD anticipates maintaining the 1616 Whitmore monitoring site and not re-establishing the 30th & Fort Street site through 2016. The availability of the former 30th & Fort location is questionable. Also, the Whitmore site recorded the highest ozone levels of all the sites in the Omaha MSA during 2015. See Attachment A for detailed information on sites operated by DCHD.

* Note: RadNet is a nationwide system that monitors the nation's air, drinking water, precipitation, and pasteurized milk to determine levels of radiation in the environment. RadNet sample analyses and monitoring results provide baseline data on background levels of radiation in the environment and can detect increased radiation from radiological incidents. The RadNet monitor is not subject to the network planning process set forth in 40 CFR Part 58.10. It is recognized above for informational purposes only.

B. Omaha MSA Sites Operated by the NDEQ

The NDEQ operates 2 PM_{10} monitoring sites in the Weeping Water area. One at the city waste water treatment plant (abbr. WW City site) and one approximately 1/3 mile northwest of the Weeping Water spur (State Spur 13K) and Highway 50 intersection (abbr. WW Farm site). There were no network changes in the Weeping Water area from January 1, 2014 to September 30, 2015.

C. Lincoln MSA Sites Operated by the LLCHD

LLCHD operates two SLAMS monitoring sites:

- A $PM_{2.5}$ site at 3140 N Street in Lincoln, and
- An ozone site in Davey, NE.

The $PM_{2.5}$, N Street site has three monitors: a primary filter-based FRM sampler, a collocated filter-based FRM sampler, and a continuous MetOne BAM monitor. Data from the continuous monitor is reported to AirNow, but not AQS.

LLCHD deployed new ozone monitoring equipment (i.e., analyzer, transfer standards and local primary standard) at the start of the 2014 ozone monitoring season.

In 2015, Lincoln established a temporary, investigative site for ozone in Waverly. At the end of the 2015 ozone monitoring season the data from both the Davey and Waverly site will be compared to determine if Waverly might be a higher concentration site, and thus if changes in the ozone network might be needed.

D. Sioux City Metropolitan Statistical Area in Dakota and Dixon Counties

The NDEQ operates one TRS monitoring at 501 Pine Street in Dakota City. There were no changes to the Nebraska air monitoring network in the Sioux City MSA from January 1, 2014 thru September 30, 2015.

E. Grand Island Metropolitan Statistical Area

The NDEQ operates a $PM_{2.5}$ filter-based FRM sampler at Grand Island Senior High. There were no changes to the monitoring network in Grand Island MSA from January 1, 2014 thru September 30, 2015.

F. Scottsbluff Micropolitan Statistical Area

The NDEQ operates a $PM_{2.5}$ filter-based FRM sampler at the Scottsbluff High School. There were no changes to the monitoring network in the Scottsbluff MiSA from January 1, 2014 thru September 30, 2015.

G. Fremont Micropolitan Statistical Area

The NDEQ operates a TSP-Pb (lead) monitoring site at 1255 Front Street in Fremont. This site is source-oriented with respect to Magnus-Farley, a brass/bronze foundry. There are two TSP samplers at this site: a primary sampler and a collocated sampler. There were no monitoring network changes in the Fremont MiSA from January 1, 2014 thru September 30, 2015.

H. Lexington Micropolitan Statistical Area

The NDEQ operates PM_{10} sites in Cozad and Gothenburg. These are source-oriented sites with respect to alfalfa processing and grain handling facilities in these communities. There were no changes to the monitoring network in the Lexington MiSA from January 1, 2014 thru September 30, 2015.

I. City of Auburn

The NDEQ operates a TSP-Pb (lead) monitoring site in Auburn that is source-oriented with respect to Magnolia Metals, a bronze-casting foundry. The site has a single TSP primary sampler. There were no changes to the monitoring network in Auburn and Nemaha County from January 1, 2014 thru September 30, 2015.

J. IMPROVE Sites

IMPROVE is the acronym for Interagency Monitoring of Protected Visual Environments. These sites contain fine particulate and particulate speciation monitors intended to provide information for studying regional haze that may impact Class I National Park and Wilderness Areas. There are no Class I National Park and Wilderness Areas in Nebraska; the nearest sites are in Colorado and South Dakota. Data collected at the Nebraska sites facilitate regional haze and pollution transport studies.

The NDEQ provides administrative oversight of the operation of two IMPROVE sites: one at Halsey National Forest in Thomas County and one at Crescent Lake National Wildlife Refuge in Garden County. These sites began operation in 2002. No changes were made at these sites from January 1, 2014 thru September 30, 2015.

K. National Atmospheric Deposition Program (NADP): National Trends Network (NTN) & Mercury Deposition Network (MDN)

There are two NADP/NTN sites in Nebraska: one near Mead that has operated since 1978 and one near North Platte that has operated since 1985. These sites are operated by the University of Nebraska, with analytical and data development support from the NADP. There were no changes to the NADP/NTN network from January 1, 2014 thru September 30, 2015.

National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition parameters examined include acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., calcium, magnesium, potassium and sodium).

Mercury Deposition Network (MDN) monitoring was initiated at the Mead site on June 26, 2007, and is continuing. At the North Platte site, MDN monitoring was conducted from October 2008 thru October 2010.

The operation of NADP sites is not subject to the provisions of 40 CFR Part 58.10. Their inclusion in this Network Plan is for informational purposes only. More information on the NADP/NTN and the NADP/MDN can be found in Attachment A and at the following web addresses: http://nadp.sws.uiuc.edu/ or http://nadp.sws.uiuc.edu/mdn/

V. Considerations for Network Planning

A. Compliance with 40 CFR Part 58 Requirements

The Nebraska Ambient Air Quality Network must comply with the requirements set forth in 40 CFR Part 58, including Appendices A, C, D and E. Attachment D of this Network Plan contains a review of the Nebraska ambient air monitoring network with respect to these requirements.

As the review in Attachment D verifies, the Nebraska ambient air monitoring network, operated by the NDEQ, DCHD and LLCHD, is meeting all applicable network requirements set forth in 40 CFR Part 58. Three issues related to Part 58 network monitoring site requirements are discussed below.

1) **$PM_{2.5}$ Collocation**: A collocated $PM_{2.5}$ 2025 sampler was installed at the 9225 Berry Street site at the start of October 2014. This fulfilled the collocation requirements set forth in 40 CFR Part 58 Appendix A as applied to 2025 samplers in the DCHD $PM_{2.5}$ network..

2) **Source-Oriented Lead Monitoring in Norfolk:** On December 14, 2010 EPA promulgated modifications to 40 CFR Part 58 Appendix D Sec 4.5, which lowered the emission threshold for requiring source-oriented lead monitoring to 0.5 tons per year (previously it had been 1 ton of lead emitted per year). This change required lead monitoring near the Nucor Steel-Norfolk facility (a 0.5 tpy source in the 2011 NEI), unless it could be demonstrated that lead levels would not exceed 50% of the NAAQS.

   Nucor Steel provided modeling in 2011 that demonstrated the 50% criteria would be met, and the NDEQ submitted a waiver request in June 2011. EPA approved the model demonstration in April 16, 2014. The waiver is effective for 5 years (i.e., expires April 2019).

3) **Near-Road NOx Monitoring in the Omaha MSA**

   On March 14, 2013, EPA promulgated changes to the near-road NOx monitoring requirements (see 40 CFR Part 58 Appendix D Sec. 4.3.2) that were consistent with the previously-recommended, phased-implementation strategy. The revised regulations require a near-road monitoring site in the Omaha MSA by January 1, 2017.

   Attachment G contains the siting review conducted by the DCHD, in which they propose putting the near-road NO_2 site at the current 78th & Dodge CO site. Attachment H contains NDEQ's review of, and concurrence with, the DCHD siting proposal.

   Initiation of near-road NO_2 monitoring at 78th & Dodge will be contingent upon EPA approval of the site and commitment of EPA funding to support development of the site (see Section VI.B below).

B. Attainment with the National Ambient Air Quality Standards (NAAQS)

The monitoring results from all Nebraska monitoring sites, and adjacent state monitoring sites in the Omaha and Sioux City MSAs, for 2012 thru 2014 are in attainment with the NAAQS. See the monitoring data tables in Attachment B for more information on 2012 thru 2014 monitoring results.

Nebraska has never had a declared non-attainment determination. See Attachment E for a historical perspective on pollutant levels in Nebraska.

NO_2 and SO_2: The NAAQS for these two pollutants were revised in 2010 to establish 1-hour standards. EPA has not rendered a final attainment determination with respect to these revised

NAAQS.

- The 1-hour NO_2 NAAQS was set at 100 ppb and an "unclassifiable/attainment" classification currently applies. The unclassifiable issue applies to near-road NO_2 levels in Omaha. See Sections V.A.3 and VI.B for discussion of near-road NO_2 monitoring plans.
- The 1-hour SO_2 NAAQS was set at 75 ppb and an "unclassifiable" classification currently applies. The unclassifiable issue relates to additional information requirements in 40 CFR Part 51 Subpart BB that apply to SO_2 sources of 2000 tpy or more. See Sections V.C and VI.D for information on how this is being addressed.

Ozone: On October 1, 2015, EPA strengthened (lowered) the ozone NAAQS from 0.075 ppm to 0.070 ppm. As shown in Attachment B Table B-1, the 2012-14 Design Values for monitoring sites in Nebraska and adjacent state areas in the Omaha and Sioux City MSAs are less than 70 ppb (i.e., indicate attainment). Ozone levels thru September 2015 are lower than the 2014 levels as shown Table V-1 below. Thus, it is anticipated that 2013-15 DVs will also find attainment with the revised 70 ppb NAAQS. It is noted that Table V-1 contains April thru September 2015 ozone data from the EPA AirNow database, which has not undergone data validation reviews like AQS data, and thus may be subject to changes.

Table V-1: 8-Hour Ozone: Annual 4th High Values and 3-Year Design Value (DV) Projections: 2013-2015 (1)

MSA	Site	2013	2014	2015(1)	Projected 2013-15 DV(2)	% NAAQS (3)
Omaha	NCore Omaha	0.066	0.063	0.062	0.063	84%
	2411 O St., Omaha	0.058	0.059	0.055	0.057	76%
	30th & Fort, Omaha	0.061	0.060	nd	na	na
	16th & Whitmore	nd	nd	0.064	na	na
	Harrison Co, IA	0.065	0.062	0.061	0.062	83%
	Pisgah, IA	0.065	0.063	0.061	0.063	84%
Lincoln	First & Maple, Davey	0.055	0.061	0.061	0.059	79%
Sioux City	Union Co SD	0.063	0.062	0.061	0.062	83%
na	Santee Indian Reservation	0.067	0.063	0.063	0.064	85%

Footnotes:
(1) The 2015 4th high values were obtained using April thru September 2015 data. October data was not yet available. The 2015 data was obtained from the EPA AirNow database. This is not validated data. The 2013 and 2014 validated data were obtained from the EPA AQS data.
(2) The DV is the truncated 3-year average of the annual 4th high values.
(3) The 8-hour ozone NAAQS is 0.070 ppm effective 10/1/15.

C. Other EPA Regulations: Existing and Proposed

Data Requirements for Demonstrating SO_2 Attainment: On August 21, 2015 EPA finalized changes to 40 CFR Part 51 Subpart BB, §51.1200 - §51.1205 that set forth additional data requirements with respect to demonstrating attainment with the 1-hour SO_2 NAAQ promulgated in 2010. These regulations defined the requirements for air quality agencies… *in whose jurisdiction is located one or more applicable sources of SO_2 emissions that have annual actual SO_2 emissions of 2,000 tons or more; or in whose jurisdiction is located one or more sources of SO_2 emissions that have been identified by the air agency or by the EPA Regional Administrator as requiring further air quality characterization.* The discussion below is not part of the submittal required to comply with these requirements, but rather a preliminary review of how this might impact Nebraska's monitoring network.

Table V-2 below contains 2014 Nebraska Emission Inventory data for SO_2 for the 7 largest coal-fired power plants in Nebraska, and where available air monitoring data. Table V-2 is not the list of facilities required to be submitted under §51-1203(a); it is included here to facilitate discussion.

Table V-2 indicates that Nebraska has 6 facilities with SO_2 emissions of 2000 tpy or more. Monitoring has been conducted in the vicinity of one of these: North Omaha Station. That monitoring found SO_2 levels to be in compliance with the NAAQS, but this may not satisfy the additional data requirements of Part 51 Subpart BB.

Table V-2: Largest SO_2 Emission Sources in Nebraska and 2012-14 1-Hour SO_2 DVs (1)

Source	Location	SO_2 Emissions (2) (tpy)	2012-14 DV(3)(4) (ppm)
NPPD Gerald Gentleman Station	Lincoln County	24,482	No data
OPPD Nebraska City Station	Otoe County	16,134	No data
OPPD North Omaha Station	Douglas County (Omaha)	11,250	0.061
NPPD Sheldon Station	Lancaster County	3,243	No data
Gerald Whelan Energy Center	Adams County (Hastings)	2,899	No data
Lon D Wright Power Plant	Dodge County (Fremont)	2,232	No data
Platte Generating Station	Hall County	1,452	No data

Footnotes:
(1) This table is **not** the list of facilities to be submitted pursuant to 40 CFR Part 51.1203(a).
(2) SO_2 emission data was obtained from the 2014 Nebraska Emission Inventory.
(3) The 1-hour SO_2 DV is the 3-year average of the annual 99th percentile values.
(4) The 1-hour SO_2 NAAQS = 0.075 ppm.

Agencies can meet data requirements for demonstrating attainment in 3 ways:
1) Establish ambient monitoring in the vicinity of applicable sources by January 1, 2017;
2) Submit air quality monitoring analyses by January 13, 2017; or
3) Establish enforceable emission limits to hold SO_2 emissions below 2000 tpy.

If the monitoring option is pursued and the January 1, 2017 deadline is missed, then a modeling analysis or enforceable limits are required. There are also interim submittal requirements not discussed herein.

The NDEQ is evaluating how to best proceed to comply with the Part 51, Subpart BB requirements. At this time, the agency is not ready to commit to additional SO_2 monitoring to meet these requirements, in part due to the uncertainty of what monitoring will be required. Rather, it is anticipated that modeling and/or the establishment of enforceable limits will be used to meet the requirements of Part 51 Subpart BB.

D. Other Air Quality Issues:

Wild Fires and Prescribed Burning: Nebraska's air quality is periodically impacted by smoke from wildfires and prescribed burning. In 2015, Nebraska's air quality was impacted by prescribed burns in the spring and western wildfires from the Pacific Northwest and Canada in the summer. See Figures V-2 thru V-7.

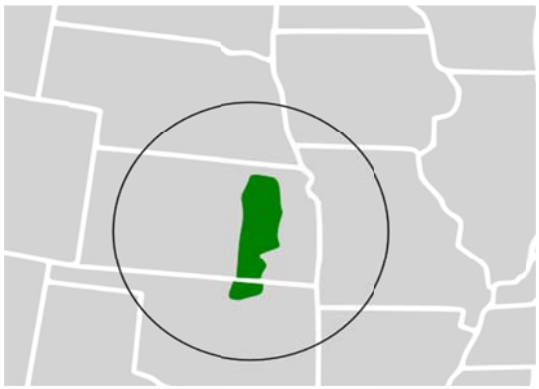
Prescribed burning is a common range and grassland management practice conducted to promote native prairie species, suppress tree growth, and release nutrients back into the soil. It is a conservation/grassland management tool recognized by state and federal agencies, as described at the following web addresses:

- http://www.npwrc.usgs.gov/resource/habitat/burning/
- http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ia/newsroom/features/?cid=stelprdb1077081
- http://outdoornebraska.ne.gov/wildlife/programs/wildnebraska/options.asp

A negative aspect of prescribed burning is that smoke from fires can travel great distances and contribute to air pollution hundreds of miles from the site of the fires.

The Flint Hills of eastern Kansas and northeast Oklahoma (see Figure V-1) contain the densest coverage of intact tall-grass prairie in North America. It is roughly 200 miles N-to-S and 80 miles E-to-W. The northern end of the Flint Hills extends into the southern areas of Washington County and Marshall County KS; approximately 20 miles south of the Nebraska/Kansas boundary. The cattle ranchers within the Flint Hills conduct spring burning to maintain the prairie. Smoke from these burning activities impacts Nebraska.

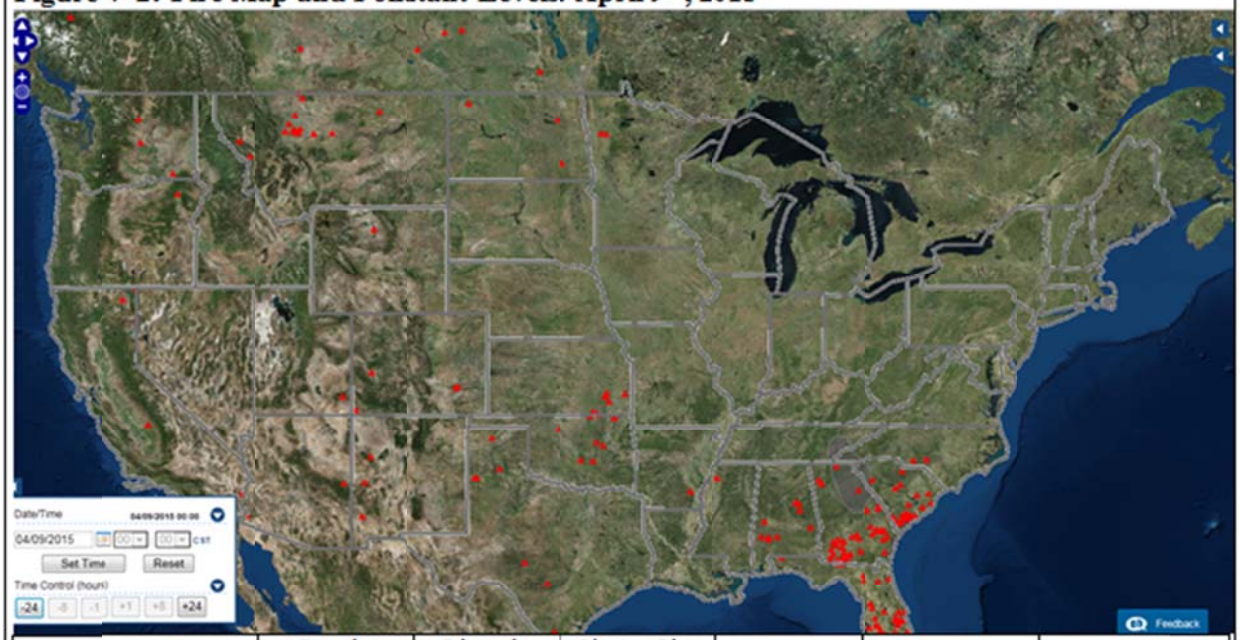
Figure V-1: Flint Hills Area of Kansas and Oklahoma



Impacts from Flint Hills burning were particularly significant in the spring of 2014. Drought conditions in 2012 and wet conditions in 2013 reduced the feasibility of burning in those years. There were also impacts in the spring of 2015, but they were not as severe as in 2014. Figures V-2 thru V-6 show the impact of Flint Hills burning on April 10th-11th 2015. Typically, ozone and $PM_{2.5}$ levels peak in Nebraska the day after there is burning in the Flint Hills area, and this was true in April 2015 as shown in Figures V-2 thru V-6.

Nebraska's air quality was also impacted in 2015 by wild fires in the Pacific Northwest, Canada and Alaska. Figure V-7 shows the impact on July 7th, 2015, but this is not the only day when western forest fires impacted air quality in Nebraska.

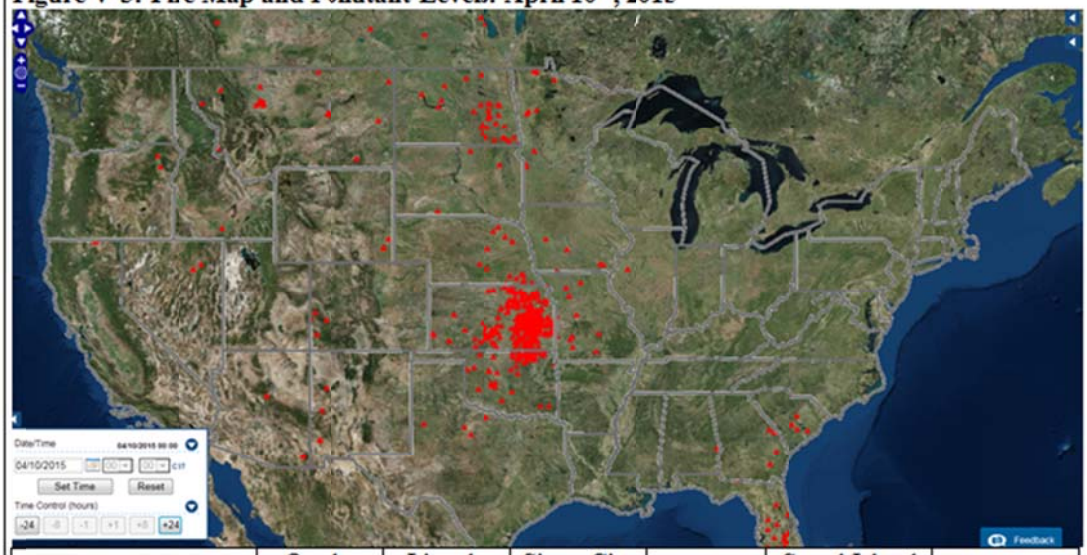
Figure V-2: Fire Map and Pollutant Levels: April 9th, 2015



April 9, 2015	Omaha MSA	Lincoln MSA	Sioux City MSA	Santee	Grand Island	Scottsbluff
Ozone - Max 8-hr (ppb)	28	27	31	40	No Data	No Data
$PM_{2.5}$ – Max 24-hr (ug/m^3)	6.7	8.1	6.0	No Data	No Data	1.7

Few fires, Nebraska pollutant levels low AQI *Good* at all sites.

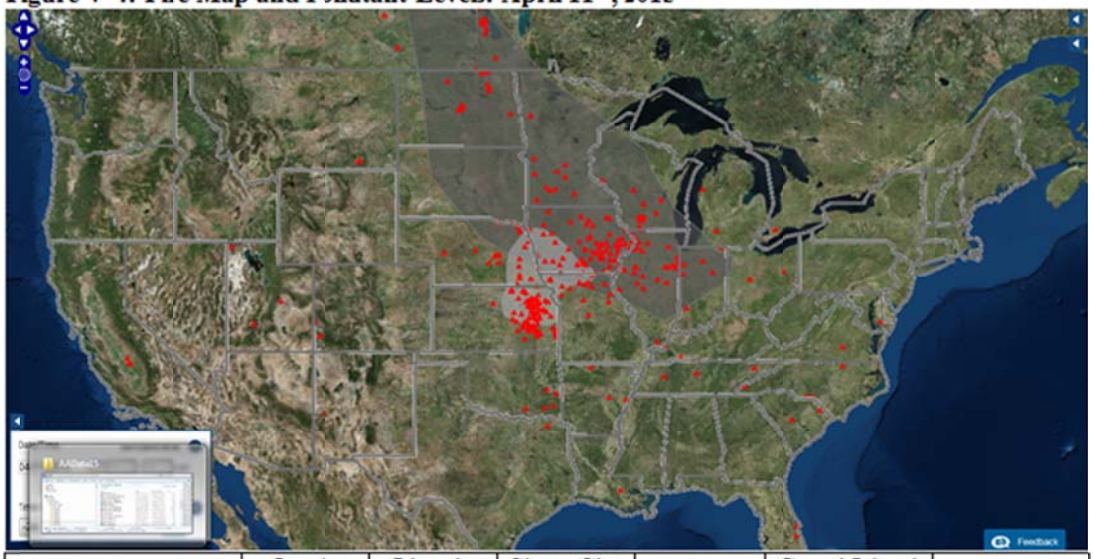
Figure V-3: Fire Map and Pollutant Levels: April 10th, 2015



April 10, 2015	Omaha MSA	Lincoln MSA	Sioux City MSA	Santee	Grand Island MSA	Scottsbluff
Ozone - Max 8-hr (ppb)	46	42	48	49	No Data	No Data
$PM_{2.5}$ – Max 24-hr (ug/m^3)	6.7	7.2	5.5	No Data	No Data	No Data

Numerous fires concentrated in Flint Hills. Nebraska pollutant levels low: AQI levels all good.

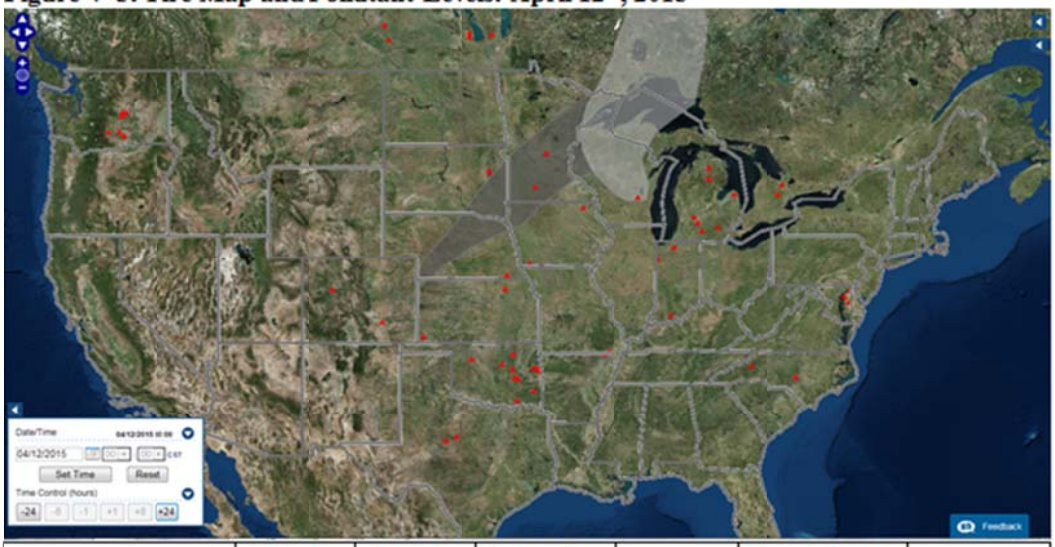
Figure V-4: Fire Map and Pollutant Levels: April 11th, 2015



April 11, 2015	Omaha MSA	Lincoln MSA	Sioux City MSA	Santee	Grand Island MSA	Scottsbluff
Ozone - Max 8-hr (ppb)	77	63	61	58	No Data	No Data
$PM_{2.5}$ – Max 24-hr (ug/m^3)	24.9	31.9	19.9	No Data	No Data	No Data

Numerous fires in Flint Hills and other states. Heavy smoke plume over parts of KS, MO, Ne & IA. Total smoke plume extending east to Ohio and north into Canada. Nebraska pollutant levels elevated:
AQI: Omaha *Unhealthy for Sensitive Individuals*, Lincoln & Sioux City MSAs *Moderate*
Ozone (Apr-Sep 2015): Omaha MSA max value, Lincoln & Sioux City MSAs 2nd high, and Santee 9th high
$PM_{2.5}$ (Jan-Sep 2015): Omaha MSA 6th high, Lincoln MSA 3rd high and Sioux City MSA 7th high

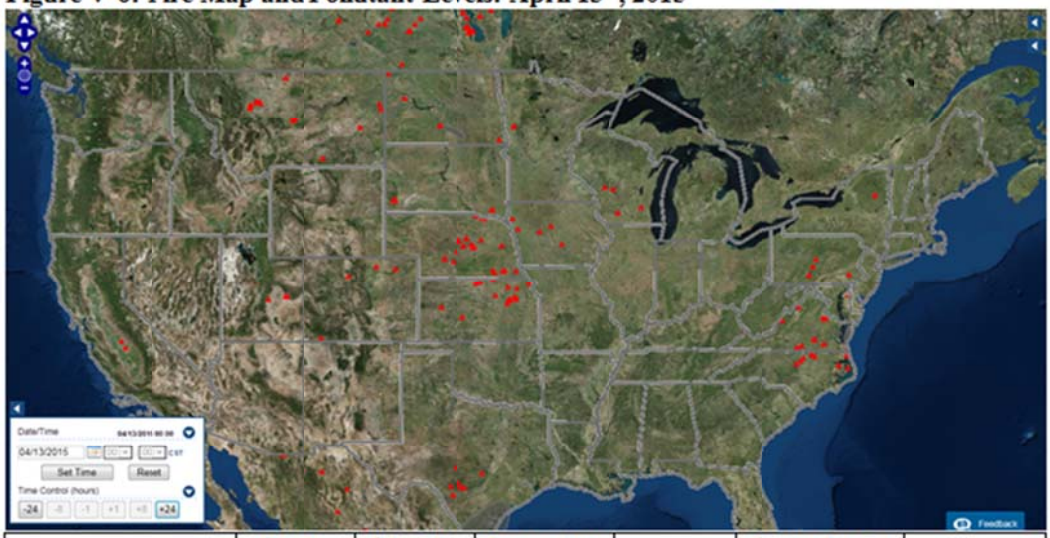
Figure V-5: Fire Map and Pollutant Levels: April 12th, 2015



April 12, 2015	Omaha MSA	Lincoln MSA	Sioux City MSA	Santee	Grand Island MSA	Scottsbluff
Ozone - Max 8-hr (ppb)	53	46	44	46	No Data	No Data
$PM_{2.5}$ – Max 24-hr (ug/m^3)	15.2	16.5	22.4	No Data	7.8	3.3

Few fires. Heavy smoke plume has moved to the northeast with lighter smoke plume over parts of Nebraska. Nebraska ozone levels low, but $PM_{2.5}$ elevated: AQI *Moderate* in Omaha, Lincoln & Sioux City MSAs. $PM_{2.5}$ levels in Sioux City MSA higher than previous day (5th high $PM_{2.5}$ Jan-Sep 2015).

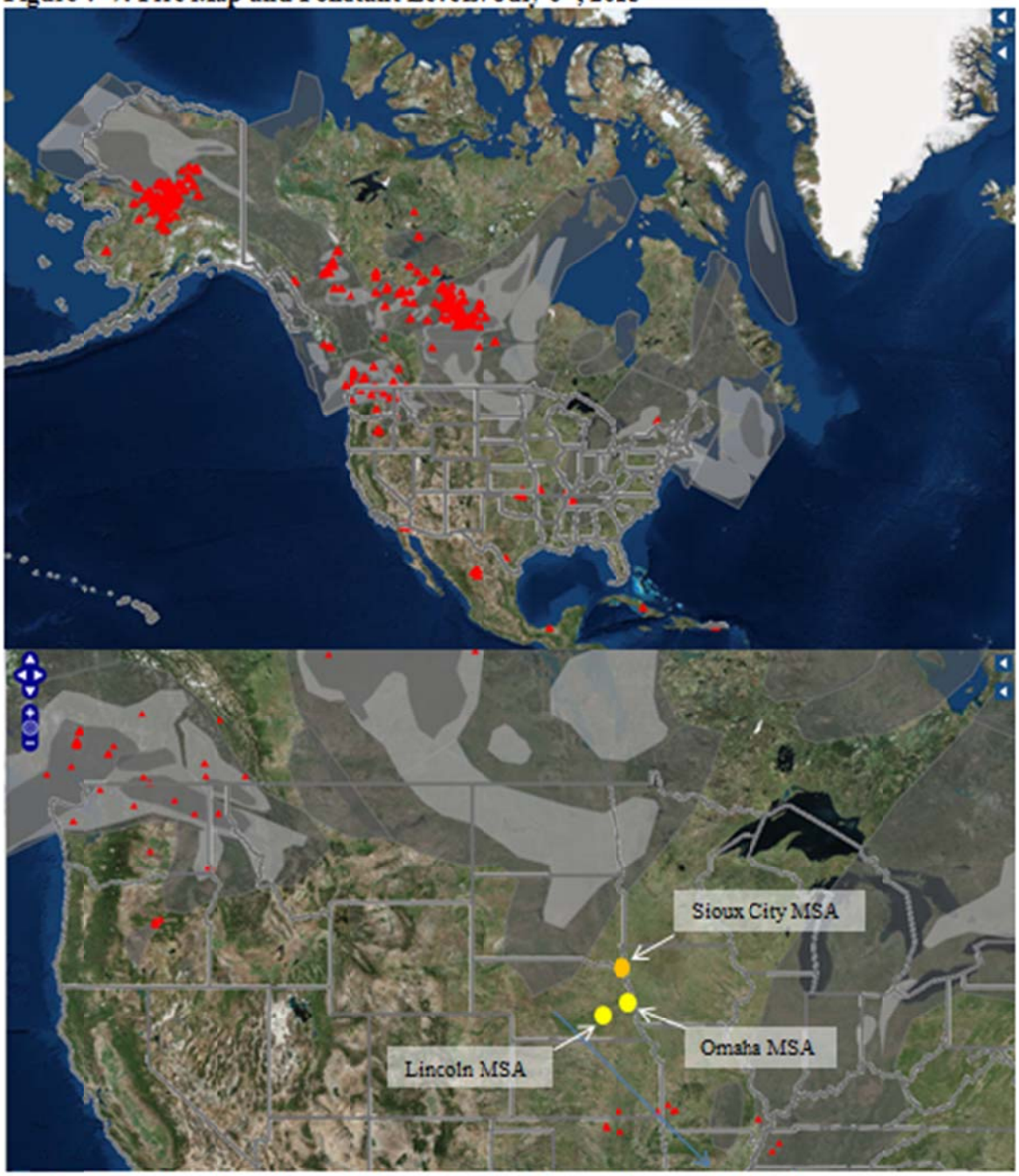
Figure V-6: Fire Map and Pollutant Levels: April 13th, 2015



April 13, 2015	Omaha MSA	Lincoln MSA	Sioux City MSA	Santee	Grand Island MSA	Scottsbluff
Ozone - Max 8-hr (ppb)	48	46	44	48	No Data	No Data
$PM_{2.5}$ – Max 24-hr (ug/m^3)	3.0	2.7	4.5	No Data	No Data	No Data

Few fires. No smoke plume, Nebraska pollutant levels low: AQI *Good* at all sites.

Figure V-7: Fire Map and Pollutant Levels: July 6th, 2015



Smoke plume from Canadian wild-fires extending into north-central Nebraska.

Lincoln MSA	Ozone = 37 ppb	& $PM_{2.5}$ = 27 $\mu g/m^3$	AQI: *Moderate*
Omaha MSA	Ozone = 39 ppb	& $PM_{2.5}$ = 28 $\mu g/m^3$	AQI: *Moderate*
Sioux City MSA	Ozone = 39 ppb	& $PM_{2.5}$ = 39 $\mu g/m^3$	AQI: *Unhealthy for Sensitive Groups*

E. General Population Trends and Network Design

Population related data is reviewed as part of the network planning process because:

- Population growth may be associated with pollution source growth;
- High population density generally correlates with high air pollution potential; and
- Some 40 CFR Part 58 requirements are based on population and/or federally defined metropolitan statistical definitions.

Attachment C contains a review of population growth and growth trends in Nebraska. The data in Attachment C is based on 2010 census and 2014 survey estimate data.

Overall growth trends in Nebraska appear basically unchanged from those described in previous annual Network Plans. Most of the population growth is occurring in Nebraska's 3 most populous and densely populated counties: Douglas, Lancaster and Sarpy (i.e., the Omaha and Lincoln MSAs).

The basic design of the Nebraska ambient air monitoring network is consistent with these population trends: 61% of the monitoring sites and 73% of the pollutant monitors are located within the Omaha and Lincoln MSAs. The Omaha MSA network contains 52% of the monitoring sites in Nebraska and 67% of the monitors.

F. Funding

Air monitoring is supported by a combination of federal, cash, state and local funding sources. Table V-4 below provides a summary of the primary funding sources used for air monitoring.

Federal CAA §103 grant funding for April 2015 thru March 2016 was reduced by $10,000. §103 funding is used to operate $PM_{2.5}$ and IMPROVE monitors. This cut was absorbed without reductions in the $PM_{2.5}$ and IMPROVE monitoring network.

EPA is considering site priorities within the IMPROVE monitoring network. There are currently 2 IMPROVE sites managed by NDEQ with §103 funding: one near Halsey in the Nebraska National Forest and one in the Crescent Lake National Wildlife Refuge. If EPA does cut funding for one of these sites, then the NDEQ anticipates that EPA will identify the lower priority site. NDEQ will work with EPA to facilitate closure of either or both IMPROVE sites, if EPA does not fund their continued operation.

Initial indications are that Federal CCA §105 funding for October 2015 thru September 2016 will be maintained at current levels.

Current funding levels are adequate to continue the operation of the existing Nebraska air monitoring network, provided major new equipment purchases are not required. However, equipment used for TRS monitoring and some of the $PM_{2.5}/PM_{10}$ sampling equipment is nearing the end of its useful life and is need of replacement. The need to expand the ozone monitoring network within Nebraska is also under review. Opportunities for network adjustments are discussed in the Network Assessment section below.

Table V-3: Primary Funding Sources used to Support Air Monitoring in Nebraska	
Nebraska Department of Environmental Quality (NDEQ)	
Funding Source	**Comments**
State General Funds	At a minimum must be sufficient to meet minimum federal match requirements
State Title V Funds	Fees paid by major sources based on the quantity of air pollutants they emit. NDEQ collects Title V fees for sources through-out Nebraska, except those regulated by LLCHD and Omaha Air Quality Control. Title V funds cannot be used for state/local match.
CAA §105 Funds	Federal grant funds used for air monitoring activities set forth in a bi-annually negotiated EPQA-NDEQ work plan. Requires a 40% state/local match. A portion of this grant funding is passed on to DCHD and LLCHD.
CAA §103 Funds	Federal grant funds used for air monitoring activities set forth in a bi-annually negotiated EPQA-NDEQ work plan. This money is currently limited to funding $PM_{2.5}$ and IMPROVE monitoring, and sometimes for specified equipment purchases and/or special monitoring studies. Requires no state/local match. A portion of this grant funding is passed on to DCHD and LLCHD.
Douglas County Health Department (DCHD)	
Local County Funds	At a minimum must be sufficient to meet minimum federal match requirements
City of Omaha Title V funds	See *State Title V Funds* comments above. The Omaha Air Quality Control regulates air emission sources in the City of Omaha, including the collection of Title V fees from major sources. A portion of the Omaha Title V funds are directed to DCHD to support air monitoring. Title V funds can not be used for state/local match.
CAA §105 Funds	NDEQ passes-through a portion of the Federal §105 funds to DCHD for activities described in an NDEQ/DCHD work plan. DCHD is required to meet the 40% state/local match requirement.
CAA §103	NDEQ passes-through a portion of the federal §103 funds to DCHD for activities described in an NDEQ/DCHD work plan, primarily $PM_{2.5}$ related monitoring activities. There is no state/local match requirement.
Metropolitan Area Planning Assoc. (MAPA) Funds	Typically federal grant funds obtained by MAPA are for specific purposes such as transportation or homeland security related activities. Historically they have been used for equipment purchases and site set-up, not network operating costs.
Lincoln Lancaster County Health Department (LLCHD)	
Local County Funds	At a minimum must be sufficient to meet minimum federal match requirements
Lancaster County Title V funds	See *State Title V Funds* comments above. LLCHD regulates air emission sources in Lancaster County, including the collection of Title V fees from major sources. A portion of the Title V funds are used to support air monitoring activities performed by LLCHD. Title V funds cannot be used for state/local match.
CAA §105 Funds	NDEQ passes-through a portion of the Federal §105 funds to LLCHD for activities described in an NDEQ/LLCHD work plan. LLCHD is required to meet the 40% state/local match requirement.
CAA §103	NDEQ passes-through a portion of the federal §103 funds to LLCHD for activities described in an NDEQ/LLCHD work plan, primarily $PM_{2.5}$ related monitoring activities. There is no state/local match requirement.

VI. Network Assessment

This network assessment was undertaken to comply with 40 CFR Part 58.10 requirements for a 5-year network assessment. In that regard it relies on documentation contained in Section V above and Attachments A thru G. Also Attachment A provides detailed information on each site in the Nebraska SLAMS including: location, monitoring purpose and scale, monitoring initiation dates, and analytical methods.

General observations related to this network assessment are bulleted below. The pollutant-specific subsections that follow contain more detailed analysis and discussion

- Existing monitoring is finding attainment with the NAAQS, including the recently revised 70 ppb ozone NAAQS. See Attachment B for annual and design value data. An attainment designation of "unclassified" currently exists with respect to the 1–hour SO_2 NAAQS, and an attainment designation of "unclassified/attainment" currently exists with respect to the 1–hour NO_2 NAAQS. See SO_2 and NO_2 related bullets below, and Sections VI-B and VI-D below for more information on these issues.
- Population trends have not changed. The Omaha and Lincoln MSAs continue to be the fastest growing areas of Nebraska. More than half of the monitoring sites (i.e., 13 of 22 or 59%, see Table III-1) in Nebraska's SLAMS are located in these MSAs.
- All the minimum monitoring requirements of 40 CFR Part 58 Appendix D are being met. See Attachment D for the detailed review of these requirements.
- The NDEQ permitting and compliance programs ensure that new sources and facility expansions are installing and utilizing adequate emission controls. A temporal examination of pollutant levels demonstrates long-term declines and improved air quality. See Attachment E for details. Also see Attachment B for current pollutant levels.
- CO levels are well below the NAAQS as a result of mobile and stationary source emission controls. The need for CO monitoring is currently limited. The 2 sites in Omaha are sufficient.
- Ozone concentrations appear to be more uniform across the state than $PM_{2.5}$ levels as shown in Attachment B Table B-1. The Nebraska SLAMS has 3 ozone monitoring sites in the Omaha MSA and 1 site in the Lincoln MSA. Ozone levels in the Omaha MSA are higher than the Lincoln MSA.

  However, the highest concentration site in Nebraska is currently at the EPA CASTNET site near Santee, NE. This CASTNET site is not part of the Nebraska SLAMS, it is not operated by the NDEQ and is not subject to review under this Network Plan.

  Ozone concentrations in Nebraska are not surprising when compared to levels in surrounding states as shown in Attachment E Figure E-13.

  Ozone levels in Nebraska have declined significantly in the last 3 years (see Attachment B Table B-1) and there has been a long-term decline as well (see Attachment E Section 2). Although, significant cyclic patterns also exist in the historical data and recent declines would be consistent with short-term, multi-year declines seen in the past.

  At this point NDEQ does not anticipate deploying additional ozone monitoring sites before 2017. DCHD relocated the 30th & Fort site to 16th & Whitmore in 2015 due to construction activities. This relocation will continue thru 2016 and possibly beyond. See detailed discussions below.

- Current and historical monitoring for SO_2 indicates attainment with possible exceptions of areas impacted by SO_2 sources of 2000 tpy or more. As discussed in Section VI-D below, this is being addressed using modeling not monitoring.
- Current and historical monitoring for NO_2/NOx indicates attainment with the possible exception of near-road locations in Omaha. Attachment G contains DCHD's proposal for a near-road NO_2 site at 78th & Dodge in Omaha (i.e., the current CO monitoring site). Attachment H contains NDEQ's review and concurrence with the DCHD proposal. However, the NDEQ also notes that near-road monitoring in larger metro areas is finding attainment (see Attachment E Section 3 Table E-3). Thus, a funding commitment from EPA is expected if the Omaha near-road NO_2 site is to be developed.
- The highest $PM_{2.5}$ concentrations are found in the Omaha MSA (see Attachment B Tables B-6a & B-6b), and 4 of the 7 $PM_{2.5}$ monitoring sites in the Nebraska's SLAMS are located in the Omaha MSA. The second highest $PM_{2.5}$ levels are found in Lincoln, and there is one site there. The other 2 $PM_{2.5}$ sites in the Nebraska SLAMS are the background site at Scottsbluff and the transport site at Grand Island. $PM_{2.5}$ concentrations are significantly lower here than in the Lincoln or Omaha sites.
- PM_{10} is primarily a source-oriented pollutant concerns at this time. Based on monitoring results, NDEQ is proposing to shut-down the PM_{10} sites at Cozad and Gothenburg. The replacement of old monitoring equipment at the Weeping Water City site is anticipated. No additional sites or site relocations are planned
- Lead (Pb) is a source-oriented pollutant at this time. The NDEQ operates to source-oriented TSP-Pb monitoring sites: one in Auburn and one in Fremont. DCHD operates a non-source oriented TSP-Pb sampler at the Omaha NCore site pursuant to 40 CFR Part 58 Appendix D requirements. Based on monitoring results and lead emission reductions from Magnolia Metals, the NDEQ is proposing to shut-down the TSP-Pb site at Auburn. No additional sites or site relocations are planned.
- NDEQ currently operates one TRS site in Dakota City. Based on monitoring results, NDEQ is proposing to shut-down this site.

The pollutant-specific subsections below provide detailed analysis and discussion of the subjects summarized above.

A) Carbon Monoxide (CO):

Carbon monoxide is formed when carbon in fuels is not burned completely. It is a byproduct of highway vehicle exhaust, which contributes about 60 percent of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators.

See Attachment E for a complete historical review of CO monitoring in Nebraska. Historically CO monitoring in Nebraska has been conducted primarily in Lincoln and Omaha. These are the largest urban areas in Nebraska, and will have the highest ambient CO levels in high traffic, traffic congested, street-canyon areas.

Vehicle and stationary source emission standards have reduced CO emissions to levels well below the NAAQS. Figures E-1 and E-2 (see Attachment E) show 1-hour and 8-hour CO levels

in Omaha and Lincoln starting as far back as 1971. Ambient CO levels have decreased significantly since the 1970s, and have been at levels well below 50% of the NAAQS since 2000. This decrease in CO levels resulted from the effectiveness of emission controls installed on mobile and stationary sources.

The last CO monitoring site in Lincoln was shut-down in 2011. It was located at 26th and O Street, a high traffic, traffic congested, street canyon location. The 2009-11 DVs (i.e., the last 3 years the site operated) from the Lincoln site were at 11% and 31% of the 1-hour and 8-hour NAAQS.

Currently there are 2 CO monitoring sites remaining in Nebraska. One is at 78th and Dodge, a high traffic, traffic congested, valley location. The other is at the NCore site at 4102 Woolworth Ave. The NCore site is an urban-scale site designed to provide ambient air quality data typical of the urban core. CO monitoring at this site is required pursuant to 40 CFR Part 58 Appendix D.

Higher CO levels are seen at the 78th & Dodge site than at the NCore site, as anticipated. See Table B-2 in Attachment B for 2012 thru 2014 data including the 2012-14 DV. The CO levels in the Omaha MSA are in attainment with the NAAQS with maximum 2012-14 DVs at 7% of the 1-hour NAAQS and 26% of the 8-hour NAAQS.

South Dakota also ran a background site in Union County prior to 2014, which is in the Sioux City MSA. Maximum CO levels found at this site were below 5% of the 1-hour and 8-hour NAAQS. Table B-2 in Attachment B contains 2012 and 2013 data from this site.

Attachments G & H contain justifications for siting of the near-road NO_2 monitor at 78th & West Dodge. The same criteria that make this the optimum near-road site for NO_2, also apply to CO.

Thus the current CO monitoring network of two sites in Omaha is adequate, and there are no reasons to seek additional or alternative sites within Nebraska.

B) **Nitrogen Dioxide (NO_2):**

Nitrogen Oxides (NOx), which includes NO_2, are a family of poisonous, highly reactive gases. These gases form when fuel is burned at high temperatures. NOx pollution is emitted by automobiles, trucks and various non-road vehicles (e.g., construction equipment, boats, etc.) as well as industrial sources such as power plants, industrial boilers, cement kilns, and turbines. NOx often appears as a brownish gas. It is a strong oxidizing agent and plays a major role in the atmospheric reactions with volatile organic compounds (VOC) that produce ground-level ozone (smog) on hot summer days.

Historical NO_2 and NOx monitoring results are discussed in Attachment E. Monitoring conducted in the 1970s and 1980s demonstrated attainment with the NO_2 NAAQS in place at that time (see Figures E-14 thru E-17 in Attachment E). With attainment for NO_2 demonstrated, monitoring for NO_2 was discontinued in Nebraska after 1984.

In 2010, EPA promulgated a new 1-hour NO_2 NAAQS of 100 ppb. EPA has provided an attainment designation of "unclassified/attainment" with respect to this NAAQS. EPA feels more monitoring information is needed to address the "unclassified" areas at near-road locations in Omaha.

A near-road monitoring site in Omaha is required by January 1, 2017 pursuant to 40 CFR part 58 Appendix D Section 4.3.2. Attachment G is DCHD's proposal to use the existing 78th and Dodge CO site as the near-road NO_2 monitoring. Attachment H is NDEQ's review and concurrence with the DCHD proposal. However, the evidence available indicates that near-road locations in

Omaha will be in attainment with the 100 ppb 1-hour NO_2 NAAQS.

- The NOy-NO concentrations at the Omaha NCore site are 35% to 43% of the NAAQS. The NOy-NO component of NOx is comprised of NO_2 and possibly other NOx components, thus is at least equal to NO_2. However, the NCore site is not a near-road location.
- More compelling are the near-road monitoring results from Minneapolis and St. Louis, both larger urban areas than Omaha, that show near-road NO_2 levels at 43% and 50% of the NAAQS (see Table E-3 in Attachment E). This is consistent with information gleaned from inter-agency teleconferences; that the near-road sites operating in larger metro areas are finding 1-hour NO_2 levels below the 100 ppb NAAQS (i.e., attainment).

Thus although the 78th and West Dodge location is proposed as the best near-road site in Omaha, NE, the actual deployment of said site is dependent upon additional funding from EPA to establish said site. This is also discussed in Section VII below.

C) Ozone:

Ground level ozone is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NOx and VOC. It is an air pollutant typically associated with larger urban areas.

Attachment E contains a review of historical ozone monitoring data from the 1970s thru 2014. The most extensive monitoring has been conducted in Lincoln and Omaha. Ozone concentrations have trended downward in both of these MSAs. See Figures E-6 thru E-9.

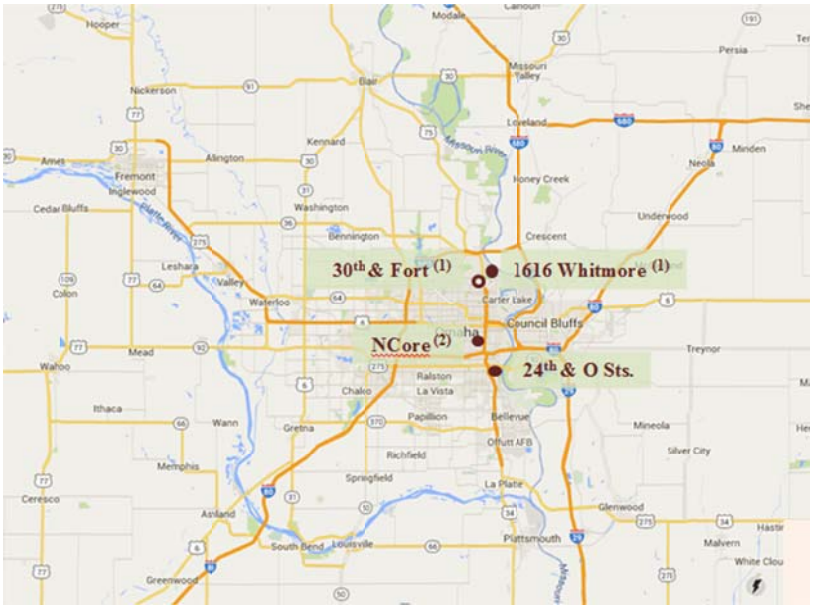
Currently there are ozone monitoring sites in the Omaha MSA (3sites in NE and 2 in IA) , the Lincoln MSA (1 site in Davey), the Sioux City MSA (1 site in Union County, SD) and near Santee, NE (an EPA CASTNET site). Figure E-9 shows how the ozone concentrations from these four locations compare from 2009 thru 2014.

The National Park Service also operated a site at the Scotts Bluff National Monument from 2010 thru 2012, and at the Agate Fossil Beds National Monument from 2007 thru 2009. Figures E-10 and E-11 show how ozone concentrations from these 2 sites compared to the other 4 locations (i.e., Omaha, Lincoln & Sioux City MSAs and Santee).

In recent years, ozone levels at all but one Nebraska location are surprisingly close with DVs in the 60 to 70 ppb range. The Davey site (Lincoln MSA) was the exception with annual 4th high values in the 50's (ppb) until 2014, when ozone levels increased to be very near those found at the other sites.

Figure VI-1 below shows the locations of the ozone monitoring sites in Omaha, NE, while Figure VI-2 shows the location of ozone monitoring sites in the Omaha MSA, as well as those in the adjacent Lincoln MSA. Figure E-5 shows the location of current and historical ozone monitoring sites in Nebraska and neighboring state areas of the Omaha and Sioux City MSAs.

Figure VI-1: Location of Ozone Monitoring Sites in Omaha, NE



Footnotes:

(1) The 30th & Fort St site was closed in 2015 due to construction, and relocated to 1616 Whitmore, which is approximately 1.5 miles northeast.

(2) The NCore site is located at 4201 Woolworth Ave.

Figure VI-2: Location of Ozone Monitoring Sites in the Omaha and Lincoln MSAs

Footnotes

(1) 30th & Fort site was closed in 2015 due to construction, & relocated to 1616 Whitmore, which is approximately 1.5 miles northeast.

(2) The NCore site is located at 4102 Woolworth Ave.

(3) Waverly site is a temporary investigative site operated in 2015.

(4) The boundaries of the Omaha MSA are not shown.

The 2012-14 DVs for the ozone monitoring sites in Nebraska and in neighboring state areas of the Omaha and Sioux City MSAs are in attainment with the revised ozone NAAQS of 70 ppm (finalized 10/1/15). See Attachment B Table B-1 for detailed information. The highest 2012-14 DV among these sites was 68 ppb at Santee. The Harrison County, IA and Pisgah, IA sites had the highest DV of the Omaha MSA sites, with both having 2012-14 DVs of 67 ppb.

Uncertified 2015 data from the EPA AirNow database, as shown in Table V-1 above, indicates that 2015 ozone levels through 9/30/15 are lower than 2014 levels. Thus it is anticipated that 2013-15 DVs will also be in attainment with the ozone NAAQS.

Figure E-13 in Attachment E shows ozone levels in Nebraska and surrounding states. The ozone concentrations being found in Nebraska are consistent with those being found in surrounding states, with the higher levels found in northeastern Colorado (Denver-Fort Collins), throughout Kansas, and in the Kansas City area likely impacting Nebraska.

Table E-6 in Attachment E provides a long term depiction of maximum ozone values in the Omaha MSA. Overall the data shows a downward trend, but also an irregular cyclic pattern. The last DV in the Omaha MSA above 70 ppb was in 2007, but if the cyclic pattern holds, a future DV above 70 ppb appears possible.

At this time DCHD anticipates maintaining the 1616 Whitmore monitoring site through 2016, and not re-establishing the 30th & Fort Street site. The Whitmore site recorded the highest ozone levels of all the sites in the Omaha MSA during 2015. Also the availability of the former 30th & Fort location is questionable.

NDEQ and LLCHD established an investigative ozone site in Waverly during 2015. The data from the Davey and Waverly site will be compared following the 2015 monitoring year. If the data indicates that ozone concentrations are higher in Waverly than Davey, then monitoring in Waverly may be continued, or the Davey site may be re-located to Waverly.

The NDEQ has been contemplating establishing an ozone site in Grand Island and possibly at other locations within Nebraska. At this time, any such deployment is not anticipated prior to 2017, except possibly a temporary investigative or special purpose site.

D) Sulfur Dioxide (SO_2):

Sulfur dioxide (SO_2) is one of a group of highly reactive gases known as "oxides of sulfur." The largest sources of SO_2 emissions are from fossil fuel combustion at power plants (73%) and other industrial facilities (20%). Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore, and the burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment. Low sulfur fuel requirements for cars and trucks have greatly reduced SO_2 emissions from mobile sources. SO_2 is linked with a number of adverse effects on the respiratory system.

Currently there are two SO_2 monitoring sites in Nebraska, both are in Omaha

- The NCore site at 4102 Woolworth Ave, and
- The source-oriented site at1616 Whitmore St (i.e, source-oriented with respect to OPPD's North Omaha Station).

Both sites are demonstrating attainment with the NAAQS at 38% and 81% of the 1-hour NAAQS, respectively.

Attachment E Section 4 is a historical review of SO_2 monitoring results in Nebraska. Maximum annual average SO_2 levels were seen prior to the mid-1980s (see Figures E-20 and E-21). The

source-oriented monitoring site at1616 Whitmore Street in Omaha last recorded an annual 1-hr 99th percentile value above 75 ppb in 2007 (see Figures E-22 and E-23).

EPA promulgated a 1-hour SO_2 standard of 75 ppb in 2010. Currently EPA has given Nebraska an attainment designation of "unclassifiable" pending the gathering of additional information. On August 21, 2015, EPA promulgated new requirements in 40 CFR Subpart BB, §51.1200 - §51.1205 that detailed the additional information needed. These requirements apply to state, local and tribal (SLT) air quality authorities that have sources emitting 2000 tons or more per year of SO_2. There are 6 Nebraska coal-fired power plants that meet this criteria as shown in Table V-2: NPPD Gerald Gentleman Station (24,500 tpy), OPPD Nebraska City Station (16,100 tpy), OPPD North Omaha Station (11,200 tpy), NPPD Sheldon Station (3,200 tpy), Gerald Whelan Energy Center (2,900 tpy) and Lon D Wright Power Plant (2,200 tpy).

There are three alternatives that SLT authorities may pursue to meet the Part 51 requirements:
1) Install a monitoring network in the vicinity of the sources;
2) Conduct modeling that demonstrates attainment; or
3) Provide enforceable limits for the source that hold SO_2 emissions below 2000 tpy.

Nebraska state and local agencies will use modeling and/or enforceable limits to meet the Part 51 requirements. SO_2 monitoring will not be used to meet these requirements. The monitoring option would be costly, and there are too many uncertainties associated with the monitoring option to justify pursuing it.

One uncertainty is the January 1, 2017 deadline for having the monitoring network in place. If this deadline is missed then Part 51 requires that one of the other two options must be pursued. Other uncertainties include the number and location of monitors that EPA would deem sufficient, especially if modeling indicated a non-attainment situation might occur.

Summary: Current monitoring sites are indicated attainment with the SO_2 NAAQS. Modeling, not monitoring, will be used to evaluate attainment with respect to emission impacts from SO_2 sources of 2000 tpy or more. Thus, additional SO_2 monitoring sites are neither needed nor planned.

E) Particulate Matter: PM_{10}, $PM_{2.5}$ and $PM_{10-2.5}$

Particulate matter or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles.

The size of particles is directly linked to their potential for causing health problems. EPA is concerned about particles that are 10 micrometers in diameter or smaller because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects.

From a monitoring perspective particulates currently fall in one of three groups:

- PM_{10}: Comprised of particulate matter that has an aerodynamic diameter of 10 microns or less. The coarse particulate fraction of PM_{10} (i.e., particulate matter with an aerodynamic diameter between 2.5 and 10 microns) originates from industrial, mining, materials handling facilities as well as dust from natural and anthropogenic origins. In most instances, the coarse fraction typically remains localized to its source of origin. Thus PM_{10} monitoring is typically source-oriented.
- $PM_{2.5}$: Comprised of particulate matter that has an aerodynamic diameter of 2.5 microns or less. $PM_{2.5}$ is a significant component of smoke and haze. It can be directly emitted from

sources such as forest fires, or it can form in situ from other pollutants (e.g., ammonia, sulfur oxides and nitrogen oxides) in the atmosphere. $PM_{2.5}$ monitoring sites are typically located at neighborhood, urban or regional scale sites.

- $PM_{10-2.5}$: Comprised of particulate matter that has an aerodynamic diameter between10 and 2.5 microns. $PM_{10-2.5}$ is not measured directly, but is calculated as the difference between PM_{10} and $PM_{2.5}$ levels. There is currently a single $PM_{10-2.5}$ monitoring site in Nebraska; it is at the Omaha NCore site. $PM_{10-2.5}$ monitoring is required at NCore sites.

Monitoring activities and NAAQS revisions are summarized below.

- PM monitoring was initiated in Nebraska using total suspended particulate (TSP) samplers beginning in 1959.
- EPA promulgated TSP NAAQS in 1971 and rescinded them in 1987.
- TSP monitoring in Nebraska was discontinued in 2000.
- The PM_{10} NAAQS were promulgated in 1987 to replace the TSP NAAQS, and was modified in 2006.
- PM_{10} monitoring was initiated in 1987 and continues to the present time.
- $PM_{2.5}$ NAAQS were promulgated in 1997, and strengthened in 2006 and 2012.
- $PM_{2.5}$ monitoring was initiated in 1999 and continues to the present time.

See Attachment E Table E-4 for a historical summary of the PM NAAQS and Table E-5 for the history of PM monitoring sites. Attachment E also contains a review of historical and current PM levels in Nebraska.

E-1) PM_{10}

Currently PM_{10} monitoring is conducted at 8 sites in or near 4 Nebraska communities: Omaha, Weeping Water, Cozad & Gothenburg. PM_{10} monitoring is also being conducted in the Iowa portion of the Omaha MSA, the Iowa and South Dakota portions of the Sioux City MSA. All of these sites are demonstrating attainment with the PM_{10} NAAQS as shown in Attachment B Table B-5a.

Historically, PM_{10} monitoring has been conducted in 14 Nebraska communities as shown in Attachment E Table E-8. The number of PM_{10} monitoring locations was ultimately reduced to 4 as attainment was demonstrated in the other areas. See Attachment E Section 5 for a more detailed review of PM_{10} monitoring and ambient levels.

a) Omaha MSA Sites excluding Cass County (Weeping Water area)

There are four sites in Omaha, NE and 1 site in Council Bluffs, IA. The location of these 5 sites is shown in Figure VI-4 below.

Average annual PM_{10} levels in Omaha have been generally decreasing since monitoring was initiated in 1987 as shown in Table E-29.

The four sites in Omaha are operated by DCHD and are discussed in more detail below.

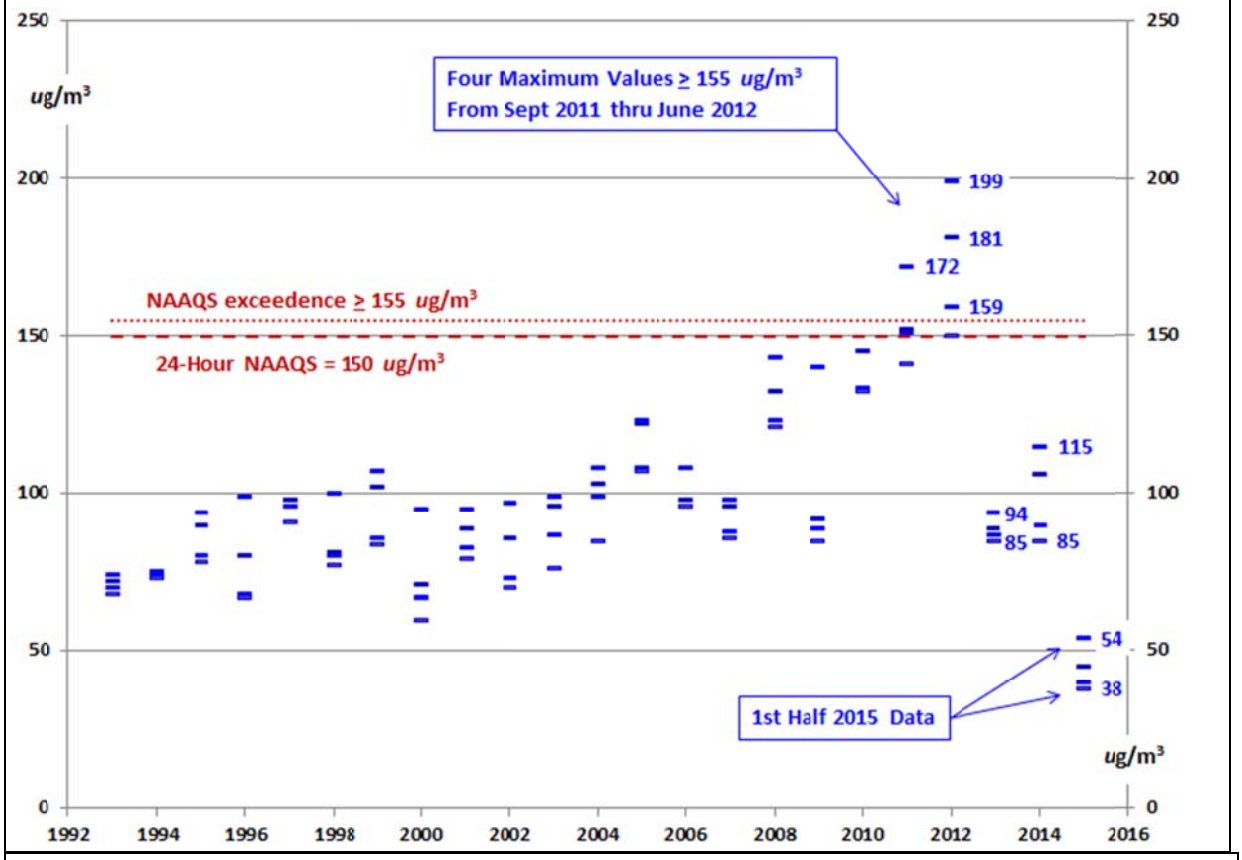
1) **46th & Farnam Site:** Monitoring was initiated at this site in 1993. Initially a hi-vol sampler that sampled once every 6 days was used at this site, then in 2008 a continuous Thermo FH 62 C14 sampler was installed.

   This is a source-oriented site with respect Omaha Steel Casting Company. Beginning in 2012, Omaha Steel began a staged relocation to a new facility in Wahoo, NE. The Omaha Steel facility at 46th & Farnam ceased production in 2014. Demolition of the site was started in the second-half 2015.

Figure VI-3 shows the 4 highest 24-hour PM_{10} values detected from January 1993 thru June 2015. Maximum 24-hour PM_{10} levels generally increased from 1993 thru 2012. From September 2011 thru June 2012, the 46th & Farnam site recorded four (4) 24-hour average PM_{10} values greater than the 150 $\mu g/m^3$ standard. From 2013 to present, PM_{10} values dropped dramatically as Omaha Steel undertook and completed its relocation.

DCHD has no immediate plans to close this monitoring site. Monitoring results and re-development activities will be considered as to when and whether to close this site.

Figure VI-3: Annual Maximum[(a)] 24-Hour PM_{10} values: January 1993 - June 2015



Footnote (a): The four highest 24-hour values from each year are shown.

2) **19th & Burt Site:** Monitoring was initiated at this site in 2001. It is a middle scale site located near downtown Omaha. Hi-vol primary and collocated samplers are located at this site. It is a middle scale site located near downtown Omaha.

Monitoring at this site has always demonstrated attainment with maximum annual 24-hour PM_{10} values ranging from 114 ug/m^3 in 2003 to 44 ug/m^3 in 2011. The maximum 24 hour value detected in 2012 thru 2014 was 56 ug/m^3 (see Table B-5a). DCHD intends to keep operating this site for the foreseeable future.

3) **2411 O Street Site:** Monitoring was initiated at this site in 1989 and continued thru 1992. In this 4 year period the highest annual 24-hour values found ranged from 105 ug/m^3 in 1990 to 61 ug/m^3 in 1991. Monitoring was discontinued after 1992.

Monitoring was re-initiated in 2007 in response to citizen air quality concerns. From

2007 thru 2014, maximum annual 24-hour PM_{10} values ranged from 83 ug/m^3 in 2008 to 47 ug/m^3 in 2009. The maximum 24-hour value detected in 2012 thru 2014 was 74 ug/m^3 (see Table B-5a).

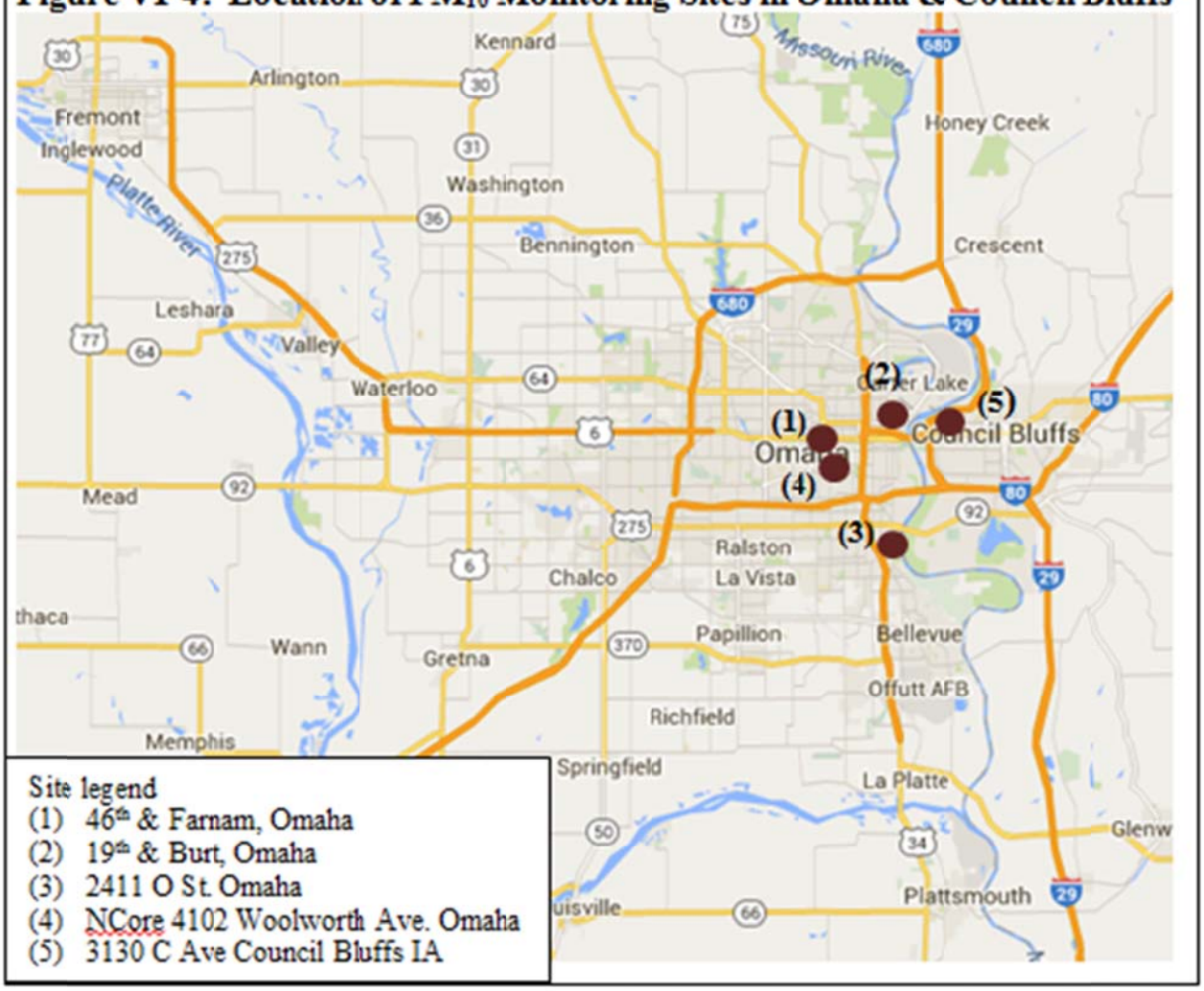
This is a neighborhood scale site. A hi-vol sampler is used on a once every 6 days schedule. There is a seasonally-operated ozone sampler also located at this site, too. DCHD intends to keep operating the PM_{10} sampler (and ozone monitor) at this site for the foreseeable future.

4) **NCore Site At 4102 Woolworth Ave:** $PM_{10-2.5}$ monitoring is required at all NCore sites pursuant to 40 CFR Part 58 Appendix D. To accomplish this DCHD operates two continuous Met One BAM samplers, one configured to sample for $PM_{2.5}$ and the other configured to sample for PM_{10}. The NCore site is a neighborhood-scale site.

   PM_{10} monitoring was initiated in 2011. The annual maximum 24-hour PM_{10} values found at the NCore site are: 86 ug/m^3 in 2011, 74 ug/m^3 in 2012, 62 ug/m^3 in 2013 and 75 ug/m^3 in 2014 (also see Table B-5a).

   DCHD has no plans to change the current PM_{10} or $PM_{2.5}$ sampler-types or configurations at the NCore site.

Figure VI-4: Location of PM_{10} Monitoring Sites in Omaha & Council Bluffs



b) Cass County - Weeping Water Area Sites

The NDEQ began PM_{10} monitoring in the Weeping Water area in 1988, and currently operates 2 sites.

- The WW City site located at the city wastewater treatment facility. This is a neighborhood scale, population and source-oriented site located in the city of Weeping Water. The Potash Corporation fertilizer and feed additive processing facility is located ¼ mile east of this site. Filter based primary and collocated sequential 2025 samplers are used at this site and operate on once every 3 day and once every 6 day schedules, respectively.
- The WW Farm site is located 2 miles west of the city in an agricultural setting. This is a neighborhood scale, source-oriented site. The Kerford Limestone Company mining and Iowa Limestone Company aggregate processing facilities are located 0.3 miles west of this site. A continuous TEOM sampler is used at this site

Annual average concentrations in the Weeping Water area have generally declined from 1988 to 2014 as shown in Figure E-30. In 2008, Martin Marietta moved their mining and processing facility located on the west edge of Weeping Water to a new location approximately 2 miles SW of the city. The new facility has better emission controls than the previous one. PM_{10} concentrations at the city site have dropped dramatically since this move.

As shown in Attachment B Table B-5a, 24-hour PM_{10} levels at both sites are in attainment with the 150 ug/m^3 NAAQS over the 2012-14 time frame. There was one 24-hour value at the WW Farm site that was over 150 ug/ m^3: a 179 ug/m^3 value on 1/5/12. Attainment with the NAAQS is evaluated over a 3-year time-frame, such that no more than 3 exceedences are allowed in the 3-year time-frame.

There was such an event in 2010 when four 24-hour PM_{10} values exceeded 150 ug/m^3 between October 20th and November 26th at the Weeping Water Farm site (10/20 @ 176, 10/26 @ 249, 10/27 @ 306 & 11/26 @ 209). Sources were notified and a similar episode has not re-occurred.

The NDEQ intends to continue to operate both the WW City and WW Farm sites for the foreseeable future. The NDEQ is anticipating upgrading the WW City site with a continuous MetOne BAM sampler to replace the primary and collocated filter-based samplers currently deplored there. The current samplers are more than 10 years old and in need of replacement.

c) Dawson County – Cozad and Gothenburg Sites

Monitoring in Gothenburg was initiated in 1991 and in Cozad in 1994. Monitoring in both communities was initiated in response to citizen concerns over dust or particulate levels. The primary sources in both communities were alfalfa dehy facilities (i.e., facilities that grind, dry and pelletize hay into feed). Both communities also have other grain and feed handling facilities. Both the Cozad and Gothenburg sites are neighborhood scale, population and source-oriented sites (see Attachment A).

The 2012-14 monitoring results are indicating that PM_{10} levels are less than 50% of the NAAQS (see Attachment B Table B-5a) in both communities. Annual average PM_{10} concentrations have generally declined over-time since monitoring was initiated. Both sites saw significant declines beginning in 2006/2007 (see Attachment E Tables E-31 & E-32).

Since 2007 the annual 24-hour maximum exceeded 100 ug/m^3 (67% of the NAAQS) two times at Cozad (119 ug/m^3 in 2007 & 120 ug/m^3 in 2011), and one time at Gothenburg (139 ug/m^3 in 2011. The 24-hour maximums thru the first half of 2015 were 46 ug/m^3 at Cozad and 45 ug/m^3 at Gothenburg.

The R&P 2025 samplers deployed at this site are over 10 years old and in need of replacement. Based on monitoring results from the last several years, and barring some unexpected increase in PM_{10} levels in the 2nd half of 2015, the NDEQ does not feel it is justified to upgrade and maintain these sites. Thus it is proposed that the Cozad and Gothenburg PM_{10} sites be closed at the end of 2015.

E-2) $PM_{2.5}$

Attachment E Section V.C provides a thorough review of the current and historical $PM_{2.5}$ network in Nebraska. Currently there are 7 $PM_{2.5}$ monitoring sites in the Nebraska SLAMS. Four sites in the Omaha MSA operated by DCHD (Berry St in Omaha, NCore in Omaha, Bellevue and Blair); one site in Lincoln operated by LLCHD, and one site each in Grand Island and Scottsbluff operated by the NDEQ.

In the Omaha MSA there is also a site in Council Bluffs, IA operated by the IA DNR. Figure VI-5 below shows the location of the five $PM_{2.5}$ monitoring sites currently operating the Omaha MSA.

Similarly in the Sioux City MSA, there is one site in Iowa operated by the IA DNR and one site in South Dakota operated by the SD DENR.

The results from all of these sites (i.e., sites in Nebraska and adjacent state areas of the Omaha & Sioux City MSAs) are indicating attainment with the NAAQS. The 2012-14 DVs were less than 70% of the 35 ug/m^3 24-hour NAAQS and less than 85% of the 12 ug/m^3 annual average NAAQS. See Attachment B Tables B-6a and B-6b.

As $PM_{2.5}$ forms in situ, and is a component of smoke and haze. As such it is subject to considerable more transport than PM_{10}. $PM_{2.5}$ sites are generally not closely source-oriented.

Figure VI-5: $PM_{2.5}$ Monitoring Sites in the Omaha MSA

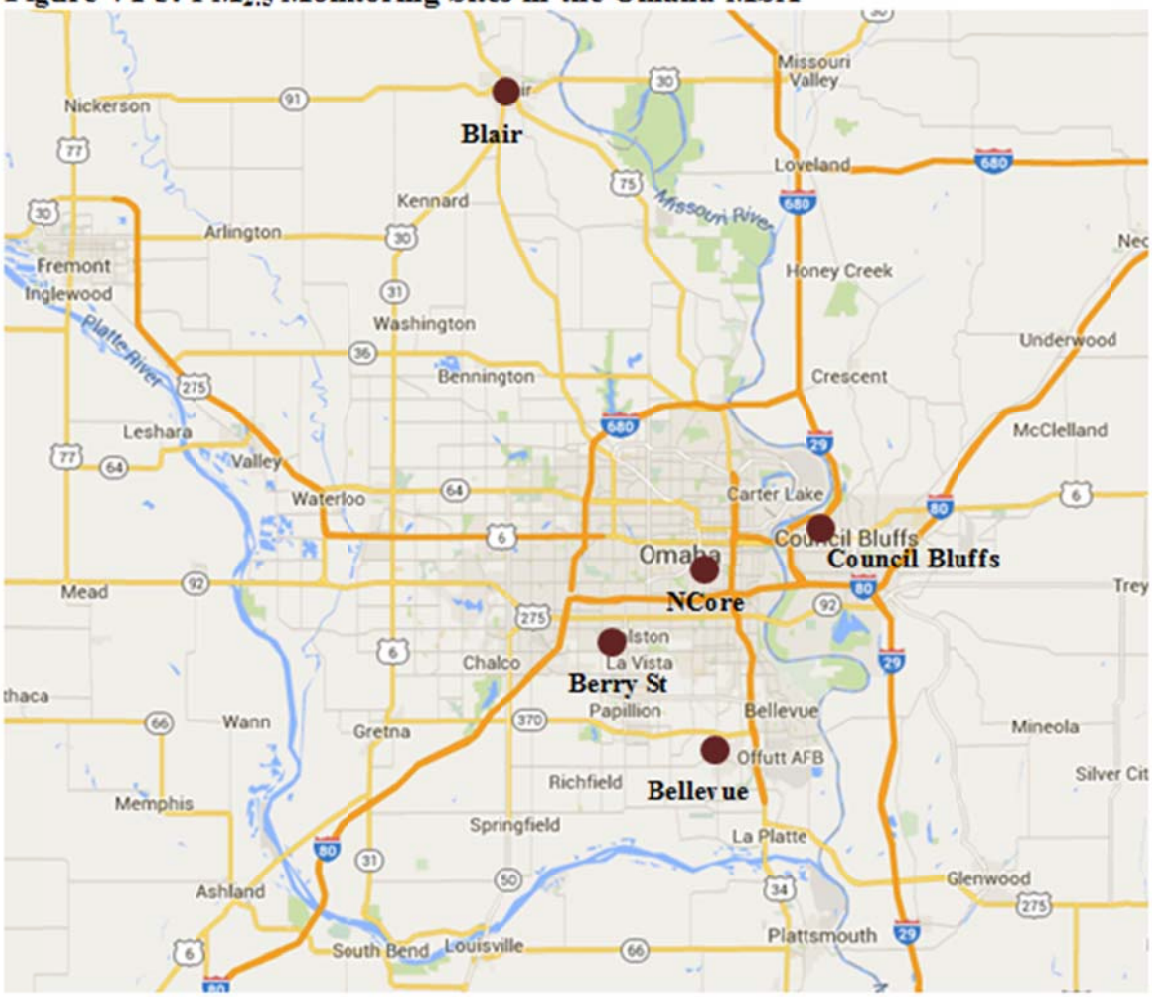
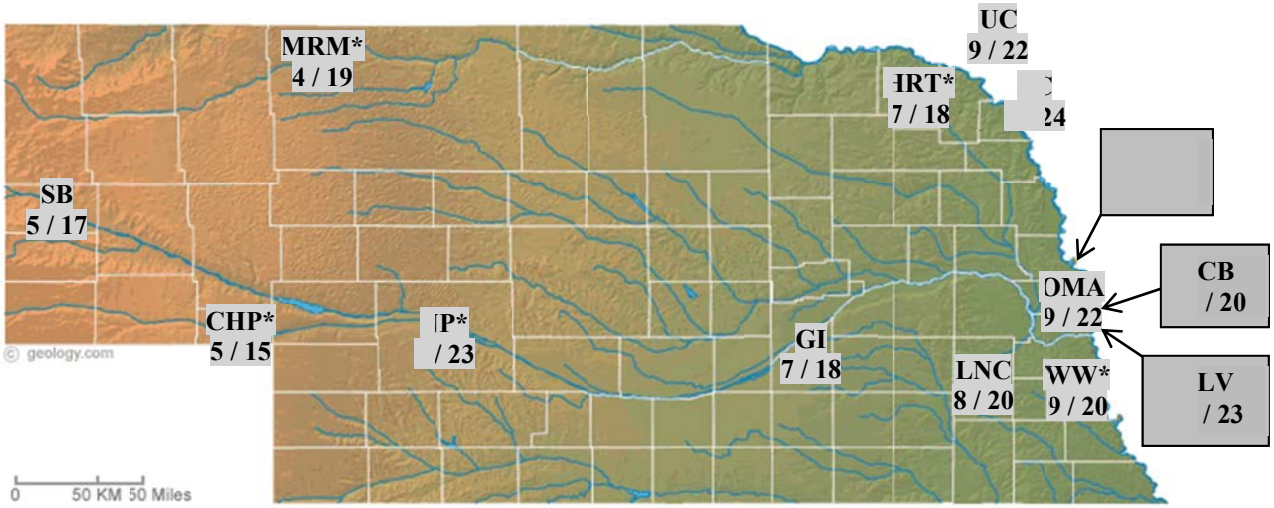


Figure VI-6: Annual Average & 24-Hour $PM_{2.5}$ Design Values & Extrapolated Design Values for Historical Sites [(a) (b) (c)]



Footnotes:

(a) The site letter designations are explained in Attachment E, Figure E-33. The first number is the 2012-14 annual average design value (DV), which is the 3 year average of the 2012-14 annual averages. The second number is the 2012-14 99th percentile DV, which is the 3 year average of the 2012-14 99th percentile values.

(b) Sites marked with a * were not operating in 2014. The 2014 DV for these sites were estimated using the data trends from nearby sites. See Attachment E Section V.C and Figure E-33 for details.

(c) Annual Average NAAQS = 12 $\mu g/m^3$ & 99th Percentile NAAQS = 35 $\mu g/m^3$

Figure VI-6 shows the locations of current and historical $PM_{2.5}$ monitoring sites (also see Figure E-33 in Attachment E). Figure VI-6 (Figure E-33) shows the 2012-14 DVs for the current sites and extrapolated 2012-14 DVs for four historical sites. Figures VI-6 and E-33 indicate that $PM_{2.5}$ levels are highest in the Omaha, Lincoln and Sioux City MSAs, and decrease as one travels westward through the state.

This is in contrast to ozone, which is also formed in situ, whose concentrations are more ubiquitously similar through-out the state and in surrounding state areas. See the ozone concentration map in Attachment E Figure E-13.

Also, the Nebraska panhandle appears to be less impacted by transport from Denver/Fort Collins with respect to $PM_{2.5}$ than it is for ozone. Although $PM_{2.5}$ levels in Colorado are also not as high as ozone when expressed as a percent of the NAAQS; i.e., the maximum 2012-14 ozone DV in Denver is 117% of the 70 ppb NAAQS, while the maximum $PM_{2.5}$ DVs are at 83% of the NAAQS.

As shown in Attachment E, Figures E-34 to E-38 ozone levels are decreasing at all 4 of the current monitoring locations in Nebraska: Omaha, Lincoln, Grand Island and Scottsbluff.

As shown in Figures VI-5 and VI-6, the current and historical $PM_{2.5}$ network provides good state-wide coverage. At this time the NDEQ feels the current $PM_{2.5}$ monitoring network is providing adequate coverage of the state. There are no plans to add, close or relocate $PM_{2.5}$ sites at this time.

F) Lead:

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been from fuels in on-road motor vehicles (i.e., cars and trucks using leaded gasoline), lead mining and processing facilities, and industrial sources. It exists as particulate matter in the atmosphere. It is monitored using total suspended particulate (TSP) samplers, although in certain cases PM_{10} samplers can also be used. All lead sampling in Nebraska is conducted with TSP samplers. Attachment E, Section VI discusses historical lead levels in Nebraska from 1959 thru 2014.

Today in the USA, the highest levels of lead in air are usually found near lead smelters and lead mining areas. Historically, the ASARCO lead refinery in Omaha was Nebraska's largest stationary-source, lead emitter. The ASARCO facility closed in 1997, and Nebraska does not have any lead smelting or mining facilities at this time. Today, Nebraska's largest lead emitters are foundries, as discussed below.

EPA regulations phased-out the use of leaded gasoline from 1975 thru 1986. Lead emissions from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and nation-wide levels of lead in the air decreased by 94 percent between 1980 and 1999. By 1998 all areas o Nebraska were in attainment with the NAAQS that applied at that time. See Figures E-39 and E-40 in Attachment E.

EPA promulgated the first lead NAAQS in 1978. It was set at 1.5 ug/m^3 based on a calendar quarter average that was not to be exceeded. All areas of Nebraska were in attainment with this NAAQS by 1998 after the closure of the ASARCO facility. Lead monitoring was discontinued after 2002. See Figures E-39 and E-40.

In 2008, EPA strengthened the lead NAAQS to 0.15 ug/m^3 based on running 3-month averages that were not to be exceeded. Monitoring was required by 2010 near sources that emitted 1 ton per year or more of lead, and by 2012 near sources emitting 0.5 tpy or more. Also in 2012, lead monitoring was required at the Omaha NCore site.

As explained in Attachment E Section VI, Nebraska had two sites that met the 1 tpy threshold: Magnolia Metals in Auburn and Magnus In Fremont. Monitoring was initiated in 2010 near these facilities. Lead monitoring was initiated in 2012 at the Omaha NCore site.

There is one additional site, Nucor Steel in Norfolk, that met the 0.5 tpy threshold. Nucor Steel submitted modeling showing lead levels around the facility would not exceed 50% of the NAAQS. NDEQ and EPA concurred with the modeling results. In accordance with 40 CFR Part 58 Appendix D, the requirement for monitoring near Nucor was waived. See Attachment E Section VI for additonal details.

Lead monitoring is currently conducted at 3 locations in Nebraska: Auburn, Fremont and Omaha. The monitoring is showing attainment at all 3 sites; see Figures E-42.

As described in Attachment F, Magnolia Metals in Auburn has installed emission controls since 2010. Lead emissions from this facility have been reduced to 0.1 tpy (20% of the monitoring requirement threshold) and ambient lead levels monitored at the site have dropped to less than 5% of the NAAQS. Thus, the NDEQ is proposing to close this site as described and justified in Attachment F.

No other changes or additions to the lead monitoring network are planned or anticipated.

G) Total Reduced Sulfur (TRS)

The NDEQ operates a TRS site to monitor compliance with the Nebraska TRS standard set forth in Chapter 4 of NDEQ Title 129: Nebraska Air Quality Regulations. The 30-minute average TRS standard is 0.1 ppm.

As discussed in Attachment E Section 7, this site, along with other sites in South Sioux City and Lexington were established to monitor TRS levels in the vicinity of anaerobic lagoons operated by IBP in those communities. Those lagoons were covered in 2000 and ambient TRS levels dropped precipitously thereafter. See Figures E-43 and E-44.

The last excursion of the NE TRS standard was in May 2010, an excursion of 40 minutes with a maximum 30-minute average of 0.137 ppm. The maximum 30-minute average recorded in the 1st half of 2015 was 0.035 ppm.

The analyzer and calibration available for TRS is more than 10 years old and in need of replacement. With the standard being met continuously for the last 5 years, the NDEQ feels it prudent to close this site at the end of 2015, unless there are significant increases in the TRS levels in the 2nd half of 2015.

VII. Anticipated Nebraska Air Monitoring Network Modifications

This section contains a bulleted summary of the Nebraska SLAMS and TRS monitoring network modifications discussed in Section VI. Discussion of the impact of the changes on the NDEQ monitoring program are also included.

A) Omaha MSA: Sites Operated by DCHD

- NCore site: No changes.
- Carbon monoxide (CO): Two sites operating: 78th & Dodge and NCore sites. No changes anticipated.
- Ozone: Three sites operating: 1616 Whitmore, 2411 O St. and NCore sites.
  - The 30th & Fort site was relocated to 1616 Whitmore St (an existing SO_2 site) in 2015 due to construction activity. The 1616 Whitmore site will be retained thru 2016 and possibly beyond. The 30th & Fort site will not be re-established in 2016, and possibly never.
  - No other changes in the DCHD ozone network are anticipated.
- Nitrogen Dioxide (NO_2): No sites currently operating.
  - Near-road NO_2 monitoring is currently required by January 1, 2017 as set forth in 40 CFR Part 58 Appendix D. Attachments G & H identify 78th & West Dodge as the best site for the near-road NO_2 site. NDEQ notes that monitoring results from larger metropolitan areas are demonstrating attainment at their near-road sites. Thus the commitment to establish this site is contingent upon EPA committing funding to establish this site.
  - The NCore site monitors for NO and NOy. The NO-NOy parameter will be equal to or greater than NO_2. Attainment is indicated by the NO-NOy results.
- Sulfur Dioxide (SO_2): Two sites operating: 1616 Whitmore and NCore sites. No changes anticipated.
- NDEQ will utilize modeling to evaluate attainment in areas potentially impacted by sources emitting 2000 tons per year or more of SO_2.
- PM_{10}: Four sites operating: 2411 O St, 46th & Farnam, 19th & Burt and NCore sites. One possible change, a closure.
  - The 46th & Farnam site is source oriented with respect to Omaha Steel, which

discontinued operations at this site at the end of 2014. Site demolition is ongoing in the second half of 2015. DCHD will evaluate the need for this site after demolition is completed, taking into consideration redevelopment plans and PM_{10} levels. DCHD anticipates operating the site through 2016 and possibly beyond at this time, but closure in 2016 is not precluded.

- $PM_{2.5}$: Four sites operating: Berry St, Bellevue, Blair and NCore sites. No changes anticipated.
- TSP-Pb: One site operating: NCore site. No changes anticipated.

B) Omaha MSA- Cass County: Weeping Water Sites operated by NDEQ

- PM_{10}: Two sites operating: Weeping Water City and Weeping Water Farm sites. No site changes. Replacement of older R&P 2025 primary and collocated samplers with a continuous MetOne BAM sampler is anticipated in 2016.

C) Lincoln MSA: Sites Operated by LLCHD

- Ozone: One SLAMS site operated at Davey and one temporary investigative site operated at Waverly during 2015. Ozone levels from both sites will be reviewed at the end of the 2015 monitoring year to determine which has higher ozone levels. If ozone levels in Waverly are higher, then re-location of the ozone monitor could be undertaken.
- $PM_{2.5}$: One site operating: 3140 N Street site. No changes anticipated.

D) Sioux City MSA: One TRS Site Operated by NDEQ

Propose closing th Pine Stree site at the end of 2015. Consistent compliance has been demonstrated for the last 5 years. Equipment will need to be replaced if this site is not closed.

E) Grand Island MSA: One $PM_{2.5}$ Site Operated by NDEQ

- $PM_{2.5}$: The Nebraska transport site is located at the Grand Island Senior High. No changes.
- Ozone: No sites operating or required. NDEQ was considering opening an ozone site in the Grand Island MSA in 2016. Based on the low ozone levels found in the current 2012-14 design period, a deployment determination is being deferred at this time.

F) Scottsbluff MiSA: One $PM_{2.5}$ Site Operated by NDEQ

This is Nebraska's background $PM_{2.5}$ site. it is located at the Scottsbluff High School. No changes are anticipated.

G) Dawson County: Cozad and Gothenburg PM_{10} Site Operated by NDEQ

NDEQ is proposing closing both of these sites at the end of 2015. PM_{10} levels at both sites are in attainment with the NAAQS by a significant margin, and have been for several years. Annual average PM10 values are decreasing at both sites.

H) Closure of the NDEQ PM_{10} Lab

After the closure of the Cozad and Gothenburg sites, and deployment of a continuous sampler at the Weeping Water city site, the NDEQ will no longer need to operate the PM_{10} lab for processing and weighing filters. This will provide a significant savings in FTE resources that can be deployed elsewhere.

I) IMPROVE Network:

EPA is evaluating siting priorities within the IMPROVE network. If EPA determines that either or both of Nebraska's IMPROVE sites are low priority such that §103 funding for their continued

operation is cut, then NDEQ will work with EPA to facilitate their closure.

J) Other Considerations

The NDEQ is proposing 3 site closures and one site upgrade. Both site closures and upgrades require resources and time (i.e., FTEs) to complete.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Omaha NCore Site Operated by DCHD

Site Name: Omaha NCore [1] **Location: 4102 Woolworth St., Omaha**	AIRS ID: 31-055-0019 [1] Latitude: 41.246792º Longitude: -95.973964º
Operating Agency: Douglas County Health Department	
Purpose: NCore	Scale: Neighborhood
Monitor/Pollutant: Carbon Monoxide (CO) - Trace Level	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 48i-TLE	EPA Method: RFCA-0981-054 (AQS 554)
Start-Up Date: 1/20/11	Closure Date: Currently operating
Monitor/Pollutant: Ozone (O_3)	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 49i	EPA Method: EQOA-0880-047
Start-Up Date: 4/1/11	Closure Date: Currently operating
Monitor/Pollutant: Nitrogen Oxides (NO/NO_y)	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 42i NO/NO2/NOx	EPA Method: RFNA-1289-074
Start-Up Date: 1/20/11	Closure Date: Currently operating
Monitor/Pollutant: Sulfur Dioxide (SO_2) – Trace Level	
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 43i-TLE	EPA Method: EQSA-0486-060 (AQS 560)
Start-Up Date: 1/20/11	Closure Date: Currently operating
Monitor/Pollutant: $PM_{2.5}$	
Type/POC: Primary Continuous / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020 [3] [4]	EPA Method: EQPM-0308-170
Start-Up Date: 2/1/04 [3]	Closure Date: Currently operating
Monitor/Pollutant: $PM_{2.5}$	
Type/POC: Collocated [2] / POC 002	Monitoring Frequency: Once every 6 days [2]
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-0498-118
Start-Up Date: 1/1/99	Closure Date: Currently operating
Monitor/Pollutant: $PM_{2.5}$ Speciation	
Type/POC: Speciation / POC 005 [6]	Monitoring Frequency: Once every 3 days
Analyzer/Sampler: $PM_{2.5}$ Speciation	Sampler Type: SASS and a 3000 URG
Start-Up Date: 5/25/01	Closure Date: Currently operating
Monitor/Pollutant: PM_{10} – STP & Local Conditions	
Type/POC: Continuous [3] / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020 [4]	EPA Method: EQPM-0798-122
Start-Up Date: 1/1/11 [4]	Closure Date: Currently operating
Monitor/Pollutant: $PM_{10-2.5}$ – Local Conditions	
Type/POC: Continuous [3] / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020 [4]	EPA Method: EQPM-0709-185
Start-Up Date: 1/1/11 [4]	Closure Date: Currently operating
Continued on next page	

Attachment A: Ambient Air Monitoring Sites in Nebraska

Omaha NCore Site Operated by DCHD

Site Name: Omaha NCore	AIRS ID: 31-055-0019 (See Comment 1)
Location: 4102 Woolworth St., Omaha	Latitude: 41.246792º Longitude: -95.973964º
Operating Agency: Douglas County Health Department	(continued from previous page)

Monitor Information – Lead (Pb)

Type/POC: Primary / POC 1	Monitoring Frequency: Once every 6 days
Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS)	EPA Method: EQL-0310-189
Start-Up Date: 12/1/12	Closure Date: Currently operating

Meteorological Parameters – Manufacturer & Model – Start Date

Wind Direction & Velocity – MetOne 50.5 Sonic - 5/13/11

Temperature - MetOne Model 083D – 4/12/11

Barometric Pressure – MetOne Model 090D – 4/12/11

Relative Humidity – MetOne 083D – 4/12/11

Solar Radiation – MetOne Model 096-1 – 4/12/11

Closure Date: Currently operating

Atmospheric Radiation – RadNet Air Monitor

RadNet is a nationwide system that monitors the nation's air, drinking water, precipitation, and pasteurized milk to determine levels of radiation in the environment. RadNet sample analyses and monitoring results provide baseline data on background levels of radiation in the environment and can detect increased radiation from radiological incidents. The RadNet monitor is not subject to the network planning process set forth in 40 CFR Part 58.10. It is recognized in this Network Plan for informational purposes only. The RadNet monitor began operating at the Woolworth site in June 2006.

Comments:

1. Site History: Site 31-055-0019 was referred to as the "Woolworth site" through 12/31/10. The Woolworth site was a PM monitoring site with $PM_{2.5}$ filter-based, continuous and speciation monitors located on the roof of Douglas County Hospital. To accommodate NCore monitoring more space was required and the site was moved approximately 550 ft north to the roof of an adjacent/attached building. The move was initiated in December 2010 with the moving of the $PM_{2.5}$ monitors.
2. The POC 1 filter-based sequential monitor was used as the primary site monitor for NAAQS attainment evaluation through September 2009. At that point, it was converted to the collocated sampler with the POC 3 continuous monitor becoming the primary monitor. The POC 2 collocated sampler was shut down after taking the 9/22/09 sample.
3. The POC 3 continuous $PM_{2.5}$ monitor operated from 2/1/04 thru 1/5/09 using an R&P TEOM continuous $PM_{2.5}$ monitor. The TEOM monitor is not an FRM/FEM. On 1/6/09 a Met One BAM monitor was brought on line. The Met One BAM monitor is an FEM. Through September 2009 the BAM unit was run as an auxiliary monitor for AirNow and AQI reporting purposes. A review found good correlation between the POC 1 and POC 3 data. On October 1, 2009 the POC 3 monitor was designated the primary monitor for evaluating NAAQS attainment status. On January 1, 2011 the continuous monitor was re-designated as POC 1, to facilitate AQS data analysis issues.
4. Between 10/28/10 and 1/3/11, the $PM_{2.5}$ Met One BAM-1020 was temporarily removed from service so that it could be reconfigured to operate as the $PM_{2.5}$ portion of a dichotomous $PM_{10-2.5}$ monitoring system. The other part of the dichotomous $PM_{10-2.5}$ monitoring system is a PM_{10} Met One BAM-1020, which is configured to report PM_{10} data in local and STP conditions. The dichotomously-configured $PM_{2.5}$ and PM_{10} BAM units, which comprise the $PM_{10-2.5}$ monitoring system, were put on-line on 1/1/11.
5. The POC 5 speciation monitor is comprised two speciation samplers: a SASS and a 3000 URG. The speciation data derived from both samplers are reported as POC 005 results.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Carbon Monoxide Sites in the Omaha MSA that are Operated by DCHD

Site Name: 78th & Dodge – Omaha **Location: 78th St and W Dodge Rd, Omaha**	AIRS ID: 31-055-0056 Latitude: 41.259175º Longitude: -96.028628º
Operating Agency: Douglas County Health Department	
Monitor Information	**Pollutant: Carbon Monoxide (CO)**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 48c	EPA Method:
Purpose: Highest Concentration	Scale: Microscale
Start-Up Date: 10/01/07	Closure Date: Currently operating
Comments: None	

Sulfur Dioxide Sites in the Omaha MSA that are Operated by DCHD

Site Name: Whitmore – Omaha **Location: 1616 Whitmore St, Omaha**	AIRS ID: 31-055-0053 Latitude: 41.297778º Longitude: -95.937500º
Operating Agency: Douglas County Health Department	
Monitor Information	**Pollutant: Sulfur Dioxide (SO_2)**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 43c-tle	EPA Method: EQSA-0486-060
Purpose: High Conc. & Population Oriented	Scale: Neighborhood
Start-Up Date: 7/1/99	Closure Date: Currently operating*
Comments: In 2015, an ozone monitor was also located at this site.	

Attachment A: Ambient Air Monitoring Sites in Nebraska

Ozone Sites in the Omaha MSA that are Operated by DCHD

Site Name: South Omaha – Ozone **Location: 2411 O Street, Omaha**	AIRS ID: 31-055-0028 Latitude: 41.207500º Longitude: -95.947500º
Operating Agency: Douglas County Health Department	
Monitor Information	**Pollutant: Ozone (O_3)**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 49C	EPA Method: EQOA-0880-047
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 7/1/78	Closure Date: Currently operating
Comments: There is also a PM_{10} monitor located at this site.	

Site Name: Whitmore – Omaha **Location: 1616 Whitmore St, Omaha**	AIRS ID: 31-055-0053 Latitude: 41.297778º Longitude: -95.937500º
Operating Agency: Douglas County Health Department	
Monitor Information	**Pollutant: Ozone (O_3)**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 49C	EPA Method: EQOA-0880-047
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 5/1/81	Closure Date: Currently operating
Comment: The ozone monitor from the 30th & Fort St. site was re-located to this site in 2015, due to construction activities.	

Site Name: 30th & Fort - Omaha **Location: 30th & Fort Sts., Omaha**	AIRS ID: 31-055-0035 Latitude: 41.306111º Longitude: -95.960278º
Operating Agency: Douglas County Health Department	
Monitor Information	**Pollutant: Ozone (O_3)**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 49C	EPA Method: EQOA-0880-047
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 5/1/81	Closure Date: 11/1/14 (may be temporary)
Comments: Re-located to 1616 Whitmore St at the end of the 2014 monitoring season due to construction activity.	

Attachment A: Ambient Air Monitoring Sites in Nebraska

$PM_{2.5}$ Sites in the Omaha MSA that are Operated by DCHD (Continued)

Site Name: Berry Street Omaha **Location: 9225 Berry Street, Omaha**	AIRS ID: 31-055-0052 Latitude: 41.333056º Longitude: -96.099722º
Operating Agency: Douglas County Health Department	
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 1/1/99	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Once every 3 days EPA Method: RFPS-0498-118 Scale: Neighborhood Closure Date: Currently operating
Monitor Information Type/POC: Collocated / POC 002 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 10/1/14	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Once every 6 days EPA Method: RFPS-0498-118 Scale: Neighborhood Closure Date: Currently operating
Comments: None	

Site Name: Bellevue **Location: 2912 Coffey Ave., Bellevue**	AIRS ID: 31-153-0007 Latitude: 41.166944º Longitude: -95.923889º
Operating Agency: Douglas County Health Department	
Monitor Information Type/POC: Primary Continuous / POC 001 Analyzer/Sampler: Met One BAM-1020 (1) Purpose: Population & Source Oriented Start-Up Date: 3/1/99	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Continuous EPA Method: EQPM-0308-170 Scale: Neighborhood Closure Date: Currently operating
Comments: (1) This site was operated with a 2025 sequential sampler from 3/1/99 thru 6/30/10 (RFPS-0498-118). On 7/1/10 a Met One BAM monitor began operating.	

Site Name: Blair **Location: 2242 Wright St., Blair**	AIRS ID: 31-177-0002 Latitude: 41.551136º Longitude: -96.146753
Operating Agency: Douglas County Health Department	
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 4/6/09	**Pollutant: $PM_{2.5}$** Monitoring Frequency: Once every 3 days EPA Method: RFPS-0498-118 Scale: Neighborhood Closure Date: Currently operating
Comments: None	

Attachment A: Ambient Air Monitoring Sites in Nebraska

PM_{10} Sites in the Omaha MSA that are Operated by DCHD

Site Name: 19th & Burt, Omaha **Location: 19th & Burt Sts., Omaha**	AIRS ID: 31-055-0054 Latitude: 41.267770º	Longitude: -95.940830º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Hi-Vol Filter Purpose: Population & Source Oriented Start-Up Date: 6/1/01	**Pollutant: PM_{10}** Monitoring Frequency: Once every 6 days EPA Method: RFPS 1287-063 Scale: Middle Closure Date: Currently operating	
Monitor Information Type/POC: Collocated / POC 002 Analyzer/Sampler: Hi-Vol Filter Purpose: Population & Source Oriented Start-Up Date: 6/1/01	**Pollutant: PM_{10}** Monitoring Frequency: Once every 6 days (1) EPA Method: RFPS 1287-063 Scale: Middle Closure Date: Currently operating	
Comments: None		

Site Name: 46th & Farnam, Omaha **Location: 46th & Farnam Sts, Omaha**	AIRS ID: 31-055-0045 Latitude: 41.257500º	Longitude: -95.976111º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary Continuous / POC 001 Analyzer/Sampler: Thermo FH 62 C14 Purpose: Source Oriented Start-Up Date: 1/1/93 (See Comments)	**Pollutant: PM_{10}** Monitoring Frequency: Continuous EPA Method: EQPM-1102-150 Scale: Middle Closure Date: Currently operating	
Comments: This site utilized a Hi-Vol sampler on a once every 6 day sampling schedule until 1/1/08, when a continuous sampler was installed.		

Site Name: South Omaha - PM_{10} **Location: 2411 O Street, Omaha**	AIRS ID: 31-055-0028 Latitude: 41.207500º	Longitude: -95.947500º
Operating Agency: Douglas County Health Department		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: Hi-Vol Filter Purpose: Population & Source Oriented Start-Up Date: 6/1/06 (See Comments)	**Pollutant: PM_{10}** Monitoring Frequency: Once every 6 days EPA Method: RFPS 1287-063 Scale: Neighborhood Closure Date: Currently operating	
Comments: • This site was originally established for ozone monitoring on 2/1/78. • The PM_{10} sampler was initially set-up at 25th & L Sts and then moved to 2411 O St on 8/22/07.		

Attachment A: Ambient Air Monitoring Sites in Nebraska

PM_{10} Sites in the Weeping Water Area* that are Operated by NDEQ

Site Name: Weeping Water City (at WWTF) **Location: 102 P Street, Weeping Water**	AIRS ID: 31-025-0002 Latitude: 40.866228	Longitude: -96.137678
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information Type/POC: Primary / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 1/1/85	**Pollutant: PM_{10}** Monitoring Frequency: Once per 3 days EPA Method: RFPS-1298-127 Scale: Neighborhood Closure Date: Currently operating	
Monitor Information Type/POC: Collocated / POC 001 Analyzer/Sampler: 2025 Sequential Purpose: Population & Source Oriented Start-Up Date: 1/1/85	**Pollutant: PM_{10}** Monitoring Frequency: Once per 6 days EPA Method: RFPS-1298-127 Scale: Neighborhood Closure Date: Currently operating	
Comments: Located at the city waste water treatment facility.		

Site Name: Weeping Water Farm **Location: 5102 Hwy 50, Cass Co.**	AIRS ID: 31-025-0009 Latitude: 40.873309º	Longitude: -96.183359º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information Type/POC: Primary Continuous / POC 001 Analyzer/Sampler: R&P TEOM Purpose: Source Oriented Start-Up Date: 4/8/05	**Pollutant: PM_{10}** Monitoring Frequency: Continuous EPA Method: RFPS 1090-079 Scale: Neighborhood Closure Date: Currently operating	
Comments: None		

* The Weeping Water Area is in Cass County, which is part of the Omaha MSA. This is a relatively non-urbanized area of the county with limestone mining and processing activities. The PM_{10} monitoring conducted here is for evaluation of air quality in the vicinity of Weeping Water, and not the Omaha MSA as a whole.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Sites in the Lincoln MSA that are Operated by LLCHD

Site Name: Davey **Location: 1st & Maple Sts., Davey**	AIRS ID: 31-109-0016 Latitude: 40.984722º Longitude: -96.677222º
Operating Agency: Lincoln Lancaster County Health Department	
Monitor Information	**Pollutant: Ozone**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Teledyne API 400E	EPA Method: EQOA-0992-087
Purpose: Population Oriented	Scale: Urban
Start-Up Date: 1/1/85	Closure Date: Currently operating
Comments: This site was upgraded at the beginning of the 2014 ozone season with the Teledyne API 400E analyzer replacing the Dasibi 1003 AH analyzer.	

Site Name: LLCHD Building **Location: 3140 N St., Lincoln**	AIRS ID: 31-109-0022 Latitude: 40.812590º Longitude: -96.683020º
Operating Agency: Lincoln Lancaster County Health Department	
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Primary / POC 001	Monitoring Frequency: Once every 3 days
Analyzer/Sampler: R&P 2025 Seq. Filter	EPA Method: RFPS 0498-118
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 1/1/99	Closure Date: Currently operating
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Collocated / POC 002	Monitoring Frequency: Once every 6 days
Analyzer/Sampler: R&P 2025 Seq. Filter	EPA Method: RFPS 0498-118
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 1/1/99	Closure Date: Currently operating
Monitor Information	**Pollutant: $PM_{2.5}$**
Type/POC: Continuous / POC 003(1)	Monitoring Frequency: Continuous
Analyzer/Sampler: Met One BAM-1020	EPA Method: EQPM-0308-170
Purpose: Population Oriented	Scale: Neighborhood
Start-Up Date: 7/1/06	Closure Date: Currently operating
Comment: (1) The MetOne BAM monitor reports to AirNow, but not AQS.	

Site Name: Waverly **Location: 141st & Oldfield Sts. Waverly**	AIRS ID: Temporary Investigative Latitude: 40.92181º Longitude: -96.53011º
Operating Agency: Lincoln Lancaster County Health Department	
Monitor Information	**Pollutant: Ozone**
Type/POC: Primary / POC 001	Monitoring Frequency: Continuous
Analyzer/Sampler: Thermo 49c	EPA Method: EQOA-0880-047
Purpose: Investigative	Scale: Urban
Start-Up Date: on or about 6/1/15	Closure Date: On or before 11/1/15
Comments: Results from this site to be compared to those from the Davey site.	

Attachment A: Ambient Air Monitoring Sites in Nebraska

$PM_{2.5}$ Sites Operated by NDEQ

Site Name: Grand Island Senior High	AIRS ID: 31-079-0004	
Location: 2124 N Lafayette Ave, Grand Island	Latitude: 40.942099º	Longitude: -98.364967º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information	**Pollutant: $PM_{2.5}$**	
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 3 days	
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-0498-118	
Purpose: Transport & Population Oriented	Scale: Regional & Neighborhood	
Start-Up Date: 5/7/04	Closure Date: Currently operating	
Comments: None		

Site Name: Scottsbluff Senior High School	AIRS ID: 31-157-0004	
Location: Hwy 26 & 5th Ave, Scottsbluff	Latitude: 41.876853º	Longitude: -103.656561º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information	**Pollutant: $PM_{2.5}$**	
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 3 days	
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-0498-118	
Purpose: Background & Population Oriented	Scale: Regional & Neighborhood	
Start-Up Date: 5/13/09	Closure Date: Currently operating	
Comments: Electric power is supplied to this site by wind and solar generating units.		

PM_{10} Sites Operated by NDEQ (Outside of the Omaha MSA/Weeping Water Area)

Site Name: Cozad	AIRS ID: 31-047-0001	
Location: 215 W 8th Street, Cozad	Latitude: 40.859444º	Longitude: -99.987778º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information	**Pollutant: PM_{10}**	
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 6 days	
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-1298-127	
Purpose: Source and Population Oriented	Scale: Neighborhood	
Start-Up Date: 10/1/94	Closure Date: Currently operating	
Comments: None		

Site Name: Gothenburg	AIRS ID: 31-047-0003	
Location: 409 9th Street, Gothenburg	Latitude: 40.927500º	Longitude: -100.162778º
Operating Agency: Nebraska Department of Environmental Quality		
Monitor Information	**Pollutant: PM_{10}**	
Type/POC: Primary FRM/ POC 1	Monitoring Frequency: Once every 6 days	
Analyzer/Sampler: 2025 Sequential	EPA Method: RFPS-1298-127	
Purpose: Source and Population Oriented	Scale: Neighborhood	
Start-Up Date: 9/1/91	Closure Date: Currently operating	
Comments: None		

Attachment A: Ambient Air Monitoring Sites in Nebraska

Lead (Pb) Sites Operated by NDEQ

Site Name: Fremont **Location: 1255 Front St., Fremont, NE** Operating Agency: Nebraska Department of Environmental Quality	AIRS ID: 31-053-0005 Latitude: 41.90583º	Longitude: -97.31583º
Monitor Information Type/POC: Primary / POC 1 Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS) Purpose: Source Oriented Start-Up Date: 3/9/10	**Pollutant: Lead (Pb)** Monitoring Frequency: Once every 6 days EPA Method: EQL-0310-189 Scale: Micro-scale Closure Date: Currently operating	
Monitor Information Type/POC: Collocated / POC 2 Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS) Purpose: Source Oriented Start-Up Date: 3/9/10	**Pollutant: Lead (Pb)** Monitoring Frequency: Once every 6 days EPA Method: EQL-0310-189 Scale: Micro-scale Closure Date: Currently operating	
Comments: Highest concentration site		

Site Name: Auburn **Location: RR2, Auburn, NE** Operating Agency: Nebraska Department of Environmental Quality	AIRS ID: 31-127-0002 Latitude: 40.40254º	Longitude: -95.84164º
Monitor Information Type/POC: Primary / POC 1 Analyzer/Sampler: Hi-Vol TSP-Pb (ICP-MS) Purpose: Source Oriented Start-Up Date: 5/8/10	**Pollutant: Lead (Pb)** Monitoring Frequency: Once every 6 days EPA Method: EQL-0310-189 Scale: Micro-scale Closure Date: Currently operating	
Comments: Highest concentration site		

Attachment A: Ambient Air Monitoring Sites in Nebraska

Total Reduced Sulfur (TRS) Sites operated by NDEQ

Site Name: Pine Street – Dakota City **Location: 501 Pine St, Dakota City**	AIRS ID: State SPM, AIRS ID not assigned Latitude: 42.421867º Longitude: -96.403031º
Operating Agency: Nebraska Department of Environmental Quality	
Monitor Information	**Pollutant: Total Reduced Sulfur (TRS)**
Type/POC: State TRS monitor	Monitoring Frequency: Continuous
Analyzer/Sampler: API 102A w TOX	Method: NDEQ T129 Chap 4.007
Purpose: Source Oriented	Scale: Neighborhood
Start-Up Date: 9/15/97	Closure Date: Currently operating
Comments: None	

Interagency Monitoring of Protected Visual Environments (IMPROVE) Sites *

Site Name: Crescent Lake IMPROVE **Location: Crescent Lake WRA, Gosper Co.**	AIRS ID: Not applicable, See Comments Latitude: 41.7627º Longitude: -102.4336º
Operating Agency: Nebraska Department of Environmental Quality / US Fish & Wildlife Service	
Monitor Information	**Pollutant: IMPROVE** (See Comments)
Type/POC: IMPROVE	Monitoring Frequency: Continuous
Method Description: : IMPROVE	EPA Method: Not applicable
Purpose: Background & Transport	Scale: Regional
Start-Up Date: 2002	Closure Date: Currently operating
Comments: None	

Site Name: NE National Forest IMPROVE **Location: Nebraska National Forest, Thomas Co.**	AIRS ID: Not applicable, See Comments Latitude: 41.8888º Longitude: -100.3387º
Operating Agency: Nebraska Department of Environmental Quality / US Forest Service	
Monitor Information	**Pollutant: IMPROVE** (See Comments)
Type/POC: IMPROVE	Monitoring Frequency: Continuous
Method Description: : IMPROVE	EPA Method: Not applicable
Purpose: Background & Transport	Scale: Regional
Start-Up Date: 2002	Closure Date: Currently operating
Comments: None	

* Interagency Monitoring of Protected Visual Environments (IMPROVE) monitors are operated to evaluate regional haze that may impact Federal Class I areas in National Parks and Wilderness Areas. Fine particulate and particulate speciation monitoring is conducted at these sites. They do not have an AIRS ID.

Attachment A: Ambient Air Monitoring Sites in Nebraska

Monitoring Sites not subject to the Network Plan Review Process**

** These sites are included in the Network Plan for informational purposes only.

Site Name: Mead NADP **Location: U of Ne Field Lab, Saunders Co.** Operating Agency: University of Nebraska	AIRS ID: Not applicable, See Comments Latitude: 41.1528º Longitude: -96.4912
Monitor Information Type/POC: NTN/MDN Method Description: NTN/MDN Purpose: Background & Transport Start-Up Date: 7/25/78	**Pollutant: TNT/MDN** Monitoring Frequency: Continuous EPA Method: Not applicable Scale: Regional Closure Date: Currently operating

Comments: The Mead and North Platte National Atmospheric Deposition Program (NADP) sites are operated by the University of Nebraska with analytical and data processing support from the NADP. NADP sites are not subject to review under the provisions of 40 CFR Part 58.10, and thus are not subject to review under this Network Plan. They are included herein for informational purposes only.

- Monitoring methods are specific to this program and are not Federal Reference or Equivalent Methods (FRM/FEM).
- The National Trends Network (NTN) sites collect deposition data on acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., calcium, magnesium, potassium and sodium).
- Mercury Deposition Network (MDN) sites collect mercury deposition data.
- The NADP oversees both NTN and MDN sites, and provides analytical and data processing support.
- The Mead site initiated operation as an NTN site in 1978 and began MDN operations in June 2007.

Site Name: North Platte NADP **Location: U of Ne Ag Station, Lincoln, Co.** Operating Agency: University of Nebraska	AIRS ID: Not applicable, See Comments Latitude: 41.0592º Longitude: -100.7464º
Monitor Information Type/POC: NTN Method Description: NTN Purpose: Background & Transport Start-Up Date: 9/24/85	**Pollutant:** NTN Monitoring Frequency: Continuous EPA Method: Not applicable Scale: Regional Closure Date: Currently operating

Comments: The Mead and North Platte National Atmospheric Deposition Program (NADP) sites are operated by the University of Nebraska with analytical and data processing support from the NADP. NADP sites are not subject to review under the provisions of 40 CFR Part 58.10, and thus are not subject to review under this Network Plan. . They are included herein for informational purposes only.

- Monitoring methods are specific to this program and are not Federal Reference or Equivalent Methods (FRM/FEM).
- The National Trends Network (NTN) sites collect deposition data on acidity, sulfate, nitrate, ammonium, chloride, and base cations (e.g., calcium, magnesium, potassium and sodium).
- Mercury Deposition Network (MDN) data was collected at this site from October 2009 thru October 2011 using Nebraska Environmental Trust funding.
- The NADP oversees both NTN and MDN sites, and provides analytical and data processing support.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

This attachment compares ambient air quality data from 2012 thru 2014 to the NAAQS, or in the case of Total Reduced Sulfur to Nebraska's state standard. The annual data presented below was retrieved from the EPA AQS data-base. The 2013 data was not yet certified and could be subject to change. The values compared to the NAAQS were calculated as set forth in 40 CFR Part 58.

The NDEQ operates an ambient air monitoring program in Nebraska, and provides oversight for the DCHD and LLCHD monitoring programs. Data from sites outside Nebraska and from sites within Nebraska not operated by the NDEQ, DCHD and LLCHD (collectively abbreviated "non-NDEQ sites") are included below. The NAAQS comparisons for these non-NDEQ sites are not official, and are included for comparison purposes only.

Table B-1: Ozone Data

Comparison of 3-Year Design Values for 8-hour Ozone to NAAQS (1)					
Site	**2012**	**2013**	**2014**	**DV (1)**	**% NAAQS**
Omaha MSA and Near-By Montgomery Co., IA (4)					
Omaha NCore (2)	0.071	0.066	0.063	0.066	88%
2411 O St., Omaha	0.066	0.058	0.059	0.061	81%
30th & Fort, Omaha	0.077	0.061	0.060	0.066	88%
Harrison Co, IA (orig. Pisgah site) (3)	0.076	0.065	0.062	0.067	89%
Pisgah, IA (new in 2009) (3)	0.075	0.065	0.063	0.067	89%
Montgomery County, IA (3) (4)	0.071	0.060	0.059	0.063	84%
Lincoln MSA					
First & Maple, Davey	0.058	0.055	0.061	0.058	77%
Sioux City MSA and Surrounding Area (6)					
31102 471st Ave, Union Co, SD (5)	0.068	nd	0.062	0.064 Combined	85%
31986 475th Ave, Union Co, SD (5)	nd	0.063	nd		
Emmetsburg, IA (6)	0.070	0.064	0.063	0.065	87%
Sioux Falls, SD (6)	0.072	0.072	0.066	0.070	93%
Nebraska Non-MSA					
Santee Indian Reservation (7)	0.075	0.067	0.063	0.068	91%
Scotts Bluff National Monument (8)	0.067	nd	nd	0.065	87%

Notes and Explanations: (EPA AQS data retrieval 5/20/15)

(1) Concentrations are in units of ppm.. The Design Value (DV) is the truncated 3-year average of the 4th highest max for each year. The NAAQS = 0.075 ppm (promulgated 3/27/2008).

(2) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(3) The following sites are operated by the IA DNR: Harrison Co, IA, Pisgah, IA, Montgomery Co, IA and Emmetsburg, IA.

(4) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(5) The Union Co., SD site is in the Sioux City MSA & operated by the SD Dept. of Environment & Natural Resources

(6) The Emmetsburg, IA and Sioux Falls, SD sites are located outside the Sioux City MSA.

(7) Santee Indian Reservation site is 76 mi WNW of Sioux City & is operated by EPA as part of CASTNET.

(8) The Scotts Bluff NM site was operated by the National Park Service; using a method that is not an EPA reference or equivalent method (FRM/FEM). It was not operated in 2011 & 2012, but not in 2013

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-2: Carbon Monoxide Data

Comparison of 3-Year Maximum Value for 1-Hour Carbon Monoxide to NAAQS (1) (2)					
Site	**2012**	**2013**	**2014**	**Design Value (2)**	**% NAAQS**
Omaha MSA					
78th & Dodge Sts, Omaha	2.6	2.4	1.8	2.6	7%
Omaha NCore (4)	1.3	0.9	2.2	2.2	6%
Sioux City MSA					
31986 475th Ave, Union Co, SD (5)	0.6	0.5	nd	0.6	2%

Comparison of 3-Year Maximum Value for 8-Hour Carbon Monoxide to NAAQS (1) (3)					
Site	**2012**	**2013**	**2014**	**Design Value (3)**	**% NAAQS**
Omaha MSA					
78th & Dodge Sts., Omaha	2.3	1.9	1.5	2.3	26%
Omaha NCore (4)	0.8	0.6	1.0	1.0	11%
Sioux City MSA					
31986 475th Ave, Union Co, SD (5)	0.3	0.3	nd	0.3	3%

Notes and Explanations:

(1) The CO NAAQS were last revised in 1984. The latest review was concluded in August 2011 when EPA determined no changes in the CO NAAQS were warranted.

(2) The 1-hour NAAQS = 35 ppm. The Design Value is the highest annual 2nd highest maximum value over the last 3 years. The annual values shown are the annual 2nd highest maximum values. Concentrations are in units of ppm.

(3) The 8-hour NAAQS = 9 ppm. The Design Value is the highest annual 2nd highest maximum value over the last 3 years. The annual values shown are the 2nd highest 8-hour maximum values. Concentrations are in units of ppm.

(4) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(5) The Union Co., SD site is operated by the South Dakota Department of Environment & Natural Resources. CO data was not collected in 2014.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-3: Sulfur Dioxide Data

Comparison of 1-Hour Sulfur Dioxide Levels to the Primary NAAQS (1)

Site	2012	2013	2014	Design Value (1)	% NAAQS
Omaha MSA					
1616 Whitmore St., Omaha	0.073	0.056	0.054	0.061	81%
Omaha NCore (3)	0.038	0.027	0.021	0.028	38%
Sioux City MSA Sites					
1221 260th St. Sergeant Bluff, IA (4)	0.039	0.021	0.010	0.023	31%
31986 475th Ave, Union Co, SD (5)	0.009	0.006	0.005	0.006	8%
31307 473rd Ave, Union Co, SD (5)	0.007	0.005	nd	0.006	8%

Comparison of 3-Hour Sulfur Dioxide Levels to the Secondary NAAQS (2)

Site	2012	2013	2014	Design Value (2)	% NAAQS
Omaha MSA					
1616 Whitmore St., Omaha	0.076	0.052	0.047	0.076	15%
Omaha NCore (3)	0.026	0.027	0.018	0.027	5%
Sioux City MSA					
1221 260th St. Sergeant Bluff, IA (4)	0.015	0.014	0.014	0.015	3%
31986 475th Ave, Union Co, SD (5)	0.007	0.005	0. 004	0.007	1%
31307 473rd Ave, Union Co, SD (5)	0.005	0.003	nd	0.006	1%

Notes and Explanations: (EPA AQS data retrieval 5/21/15)

(1) The 1-hour NAAQS is 75 ppb or 0.075 ppm. The Design Value is the three-year average of the annual 99th percentile values. This NAAQS was promulgated on June 22, 2010. The annual values shown are annual 99th percentile values in ppm units.

(2) The 3-hour NAAQS is 0.5 ppm not to be exceeded more than once per year. It is a secondary standard promulgated in 1971, and retained without change in 1996. The Design Value is the highest annual 2nd highest maximum 3-hour reading over the last three years. The annual values shown are 2nd highest maximum values. All concentrations expressed in units of ppm.

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Sergeant Bluff IA site began operation 7/1/12 and is operated by the IA DNR.

(5) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-3: Sulfur Dioxide Data (continued)

Comparison of 24-Hour Sulfur Dioxide Levels to the Pre-2010 NAAQS (6) (7)					
Site	**2012**	**2013**	**2014**	**Design Value (1)**	**% NAAQS**
Omaha MSA					
1616 Whitmore St., Omaha	0.025	0.019	0.016	0.025	18%
Omaha NCore (3)	0.006	0.006	0.006	0.006	4%
Sioux City MSA					
1221 260th St. Sergeant Bluff, IA (5)	0.003	0.003	0.006	0.006	4%
31986 475th Ave, Union Co, SD (6)	0.002	0.002	0.001	0.002	2%
31307 473rd Ave, Union Co, SD (6)	0.002	0.002	nd	0.002	1%

Comparison of Annual Average Sulfur Dioxide Levels to the Pre-2010 NAAQS (8) (9)					
Site	**2012**	**2013**	**2014**	**Design Value (1)**	**% NAAQS**
Omaha MSA					
1616 Whitmore St., Omaha	0.0023	0.0021	0.0017	0.0023	8%
Omaha NCore (3)	0.0009	0.0007	0.0006	0.0009	3%
Sioux City MSA					
1221 260th St. Sergeant Bluff, IA (4)	0.0003	0.0003	0.0002	0.0003	1%
31986 475th Ave, Union Co, SD (5)	0.0004	0.0003	0.0003	0.0004	1%
31307 473rd Ave, Union Co, SD (5)	0.0003	0.0004	nd	0.0004	1%

Notes and Explanations:

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Sergeant Bluff IA site began operation 7/1/12 and is operated by the IA DNR.

(5) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

(6) The 24-hour NAAQS is a primary standard promulgated in 1971 and retained without change in 1996. It will no longer apply once the attainment status to the 1-hour NAAQS is determined per regulations changes in 2010.

(7) The 24-hour NAAQS is 0.14 ppm not to be exceeded more than once per year. The Design Value is the highest annual 2nd highest maximum 24-hour reading over the last three years. The annual values shown are 2nd highest maximum values. The 24-hour NAAQS is a primary standard. All concentrations expressed in units of ppm.

(8) The Annual Average NAAQS is a primary standard promulgated in 1971 and retained without change in 1996. It will no longer apply once the attainment status to the 1-hour NAAQS is determined per regulations changes in 2010.

(9) The Annual Average NAAQS is 0.03 ppm not to be exceeded in a calendar year. The Design Value is the highest annual average over the last 3 years. The Annual Average NAAQS is a primary standard. All concentrations expressed in units of ppm.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-4a: Nitrogen Dioxide Data

Comparison of 1-Hour Maximum Levels of Nitrogen Dioxide to NAAQS					
Site	**2012**	**2013**	**2014**	**Design Value (1)**	**% NAAQS**
Sioux City MSA					
31986 475th Ave, Union Co, SD (3)	0.016	0.018	0.021	0.018	18%
31307 473rd Ave, Union Co, SD (3)	0.057	0.040	nd	0.049	49%
Comparison of 3-Year Maximum Annual Average Value for Nitrogen Dioxide to NAAQS					
Site	**2012**	**2013**	**2014**	**Design Value (2)**	**% NAAQS**
Sioux City MSA					
31986 475th Ave, Union Co, SD (3)	0.003	0.003	0.003	0.003	6%
31307 473rd Ave, Union Co, SD (3)	0.006	0.004	nd	0.005	9%

Notes and Explanations:
(1) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

Table B-4b: 2011-2013 Nitrogen Oxide Data from the Omaha NCore Site (1)(2)

Parameter	2012	2013	2014	Approx. DV (3)(4)(8)	% NAAQS
1-Hour Data: Annual Maximum					
NOy (6)	0.158	0.104	0.110	na	na
NO (7)	0.133	0.084	0.076	na	na
NOy-NO (8)	0.051	0.040	0.042	na	na
1-Hour Data: 98th Percentile (5)					
NOy (6)	0.113	0.078	0.087	na	na
NO (7)	0.103	0.051	0.056	na	na
NOy-NO (8)	0.045	0.035	0.039	0.040	40%
1-Hour Data: Annual Average					
NOy (6)	0.010	0.009	0.008	na	na
NO (7)	0.002	0.002	0.002	na	na
NOy-NO (8)	0.008	0.007	0.007	0.008	16%

Footnotes:
(1) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.
(2) All concentrations expressed in ppm units.
(3) The 1-hour NO_2 NAAQS is 0.100 ppm (promulgated Feb. 2010). NAAQS attainment is achieved if the 3-year average of the annual 98th percentile of the daily maximum 1-hour values does not exceed 0.100 ppm.
(4) The Annual Average NO_2 NAAQS is 0.053 ppm not to be exceeded in a calendar year. It was promulgated 1971, and retained in the 1996 and 2010 reviews. The Design Value is the highest annual average over the 3-year comparison period.
(5) Percentile determination: (Days $\geq$ 75% complete data): 2011 331 d => 7th high value, 2012 356 d => 8th high value & 2013 341 d => 7th high value.
(6) NOy – Reactive oxides of nitrogen, which includes NO, NO_2 and other nitrogen oxides, including organic nitrogen oxide compounds.
(7) NO – Nitrogen oxide
(8) NOy-NO provides an approximation of nitrogen dioxide (NO_2), with some possibility of over-estimating the true NO_2 concentration. For this reason, the NOy-NO parameter can be used to demonstrate attainment, but not non-attainment.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-5a: PM_{10} - Maximum 24-Hour Data (1) (2)

Site	2012	2013	2014	Design Value (1)	% NAAQS
Omaha MSA & Montgomery Co., IA (6)					
Omaha NCore (3)	74	62	75	68	45%
2411 O St, Omaha	71	67	74	62	41%
46th & Farnam Sts, Omaha (4)	199	94	115	150	100%
19th & Burt Sts, Omaha	51	56	49	49	33%
3130 C Ave, Council Bluffs, IA (5)	64	65	53	60	40%
Montgomery Co., IA (outside Omaha MSA) (5) (6)	65	45	50	50	33%
Weeping Water WWTF (7)	75	45	49	49	33%
Weeping Water Lauritzen Farm (7)(8)	179	108	148	129	86%
Sioux City MSA Sites					
821 30th St, Sioux City, IA (5)	78	57	51	58	39%
31986 475th Ave, Union Co, SD (9)	101	103	77	82	55%
31307 473rd Ave, Union Co, SD (9)	82	49	nd	67	45%
Other Nebraska Sites					
Cozad	99	94	62	74	49%
Gothenburg	73	97	69	69	46%

Notes and Explanations:

(1) NAAQS = 150 µg/m^3, not to be exceeded more than once per year on average over 3 years, where exceedence is defined as a value of 155 □g/m^3 or more. The Design Value is the 4th highest 24-hour value found in the 3-year design period. Concentrations are in units of µg/m^3 at standard temperature (25º C) and pressure (760 mm Hg) conditions.

(2) NAAQS History: The primary 24-hour NAAQS was initially set at 150 □g/m^3 in 1987, and was retained at this level in the 1997, 2006 and 2012 PM NAAQS reviews.

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The 46th & Farnam site recorded three PM_{10} values above 150 in 2012: 199 *u*g/m^3 on 5/14/12, 181 *u*g/m^3 on 6/5/12 and 159 *u*g/m^3 on 1/5/12. The primary PM source in the area relocated and ceased operations in the area in 2014.

(5) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(6) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(7) Weeping Water is a limestone mining and processing area in Cass County, which is located 15 to 20 miles south of the main urbanized area within the Omaha MSA.

(8) The Weeping Water Lauritzen Farm site recorded one 24-hour PM_{10} value above 150 □g/m^3 in 2010: 179 on 1/5/12.

(9) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-5b: PM_{10} - Annual Average Data (1)

Site	2012	2013	2014	3-Year Average	% Old Std
Omaha MSA and Montgomery Co., IA (4)					
Omaha NCore (2)	24.6	20.8	21.8	22.4	45%
2411 O St, Omaha	30.1	24.0	25.1	26.4	53%
46th & Farnam Sts, Omaha	52.4	32.0	24.4	36.3	73%
19th & Burt Sts, Omaha	25.0	21.4	20.8	22.4	45%
3130 C Ave, Council Bluffs, IA (3)	28.4	23.8	22.1	24.8	50%
Montgomery Co., IA (outside Omaha MSA) (3) (4)	21.7	16.8	17.3	18.6	37%
Weeping Water WWTF (5)	25.1	19.0	19.6	21.2	42%
Weeping Water Lauritzen Farm (5)	34.7	27.7	28.3	30.2	60%
Sioux City MSA					
821 30th St, Sioux City, IA (3)	22.8	18.3	17.6	19.6	39%
31986 475th Ave, Union Co, SD (6)	22.4	18.5	18.1	19.7	39%
31307 473rd Ave, Union Co, SD (6)	19.2	14.1	nd	16.7	33%
Other Nebraska Sites					
Cozad	29.4	25.4	21.1	25.3	51%
Gothenburg	29.5	27.2	22.7	26.5	53%

Notes and Explanations:

(1) There is currently no NAAQS for the annual average PM_{10} concentration. An annual average NAAQS of 50 $\mu g/m^3$ was established in 1987, and then rescinded on December 18, 2006. Comparison to the rescinded NAAQS is provided for informational purposes only. Concentrations are in units of $\mu g/m^3$.

(2) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(3) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(4) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(5) Weeping Water is a limestone mining and processing area in Cass County, which is located 15 to 20 miles south of the main urbanized area within the Omaha MSA.

(6) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-6a: $PM_{2.5}$ - 98th Percentile, 24-Hour Data (1) (2)

Site	2012	2013	2014	Design Value (1)	% NAAQS
Omaha MSA & Montgomery Co., IA (5)					
Omaha NCore (3)	21.3	22.2	23.1	22	63%
9225 Berry St.; Omaha	24.8	21.0	19.5	22	62%
2912 Coffey Ave., Bellevue	23.5	24.0	22.3	23	66%
2242 Wright St., Blair	24.1	20.6	16.9	21	59%
3130 C Ave., Council Bluffs, IA (4)	28.5	22.4	19.6	24	67%
Montgomery Co., IA (outside Omaha MSA) **(4) (5)**	20.5	21.0	18.4	20	57%
Lincoln MSA					
3140 N Street, Lincoln	20.0	19.5	19.9	20	57%
Sioux City MSA & Emmetsburg, IA (7)					
821 30th St, Sioux City, IA (4)	24.9	21.5	24.5	24	68%
31986 475th Ave, Union Co, SD (6)	19.7	22.8	23.1	22	62%
31307 473rd Ave, Union Co, SD (6)	20.8	23.5	nd	22	63%
Emmetsburg, IA (outside Sioux City MSA) (4)(7)	22.4	20.9	20.4	21	61%
Other Nebraska Sites					
Grand Island Senior High	17.5	21.3	13.9	18	50%
Scottsbluff (8)	17.9	12.2	20.4	17	48%

Notes and Explanations:

(1) The Design Values are the 3-year average of the annual 98th percentile values. To determine attainment status, the Design Values are compared to the 35 µg/m^3 NAAQS. Concentrations are in units of µg/m^3.

(2) NAAQS History: The 24-hour $PM_{2.5}$ NAAQS was initially established at 65μg/m^3 in 1997. It was lowered to 35 mg/m^3 in 2006 and retained at the 35 μg/m^3 level in 2012.

(3) Omaha NCore is a multi-pollutant monitoring site located at 4102 Woolworth Street.

(4) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(5) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(6) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

(7) Emmetsburg is located outside the Sioux City located approximately 97 miles northeast of Sioux City. Data from this site is included here for comparison purposes only.

(8) Data completeness fell to 71% in the 4th quarter of 2014 and was 80% for the entire year. Data loss issues were associated with power losses and monitor malfunctions.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-6b: $PM_{2.5}$ - Annual Average Data (1) (2)

Site	2012	2013	2014	Design Value (1)	% NAAQS
Omaha MSA & Montgomery Co., IA (4)					
Omaha NCore (3)	8.4	9.2	8.8	8.8	74%
9225 Berry St.; Omaha	11.7	8.6	8.1	9.4	79%
2912 Coffey Ave., Bellevue	10.4	11.0	8.7	10.0	83%
2242 Wright St., Blair	9.2	8.3	7.4	8.3	69%
3130 C Ave., Council Bluffs, IA (3)	10.8	9.6	9.0	9.8	82%
Montgomery Co., IA (outside Omaha MSA) (3) (4)	8.8	8.3	7.7	8.3	69%
Lincoln MSA Site					
3140 N Street, Lincoln	8.7	8.2	7.7	8.2	68%
Sioux City MSA & Emmetsburg, IA (6)					
821 30th St, Sioux City, IA (3)	9.7	9.3	8.4	9.1	76%
31986 475th Ave, Union Co, SD (5)	9.9	8.9	8.6	9.1	76%
31307 473rd Ave, Union Co, SD (5)	7.5	10.5	nd	9.0	75%
Emmetsburg, IA (outside Sioux City MSA) (6)	8.7	8.1	7.8	8.2	68%
Other Nebraska Sites					
Grand Island Senior High	7.6	7.6	6.5	7.2	60%
Scottsbluff (8)	5.6	5.1	5.2	5.3	44%

Notes and Explanations:

(1) The Design Values are the 3 year average of the annual average values. To determine attainment status, the Design Values compared to the 12 µg/m^3 NAAQS. Concentrations are in units of µg/m^3.

(2) NAAQS History: The annual average $PM_{2.5}$ NAAQS was initially established in 1997 at 15 μg/m^3. It was retained at this level in the 2006 review and then lowered to 12 μg/m^3 in December 2012.

(2) The Omaha NCore site is located at 4102 Woolworth Street. It is a multi-pollutant monitoring site.

(3) The Council Bluffs, Montgomery Co., Emmetsburg and Sioux City IA sites are operated by the IA DNR

(4) The Montgomery County, IA site is located outside the Omaha MSA at Viking Lake State Park;~18 miles east of the Mills-Montgomery County line and ~ 45 miles SE of the I-29/I-80 intersection.

(5) The Union Co., SD sites are operated by the South Dakota Department of Environment & Natural Resources

(6) Emmetsburg is located well outside the Sioux City located approximately 97 miles northeast of Sioux City. Data from this site is included here for comparison purposes only.

Attachment B: Comparison of Ambient Air Monitoring Data to NAAQS

Table B-7: Lead in Total Suspended Particulate (TSP-Pb)

Comparison of 3-Year Maximum Values of 3-Month Average Values (1) (2)					
Site	**2012**	**2013**	**2014**	**DV (1)**	**% NAAQS**
Sioux City MSA					
Auburn	0.05	0.03	0.008	0.05	35%
Fremont	0.14	0.11	0.09	0.14	93%
Omaha NCore	0.006	0.006	0.01	0.01	7%

Notes and Explanations:

(1) Concentrations are in units of $\mu g/m^3$. The 3-month average NAAQS = 0.15 $\mu g/m^3$. The DV or Design Value is the highest 3 month average in the last 3 years.

(2) NAAQS History: The initial NAAQS was promulgated in 1978 and was set at 1.5 $\mu g/m^3$ calendart quarter average. In 2008, it was modified to 0.15 $\mu g/m^3$ 3-month running average.

Abbreviation: nd – no data, site not operating

Table B-8: Total Reduced Sulfur (TRS) Data

Comparison of 3-Year Maximum Value for 1-Minute TRS to the State Standard (1) (2)					
Site	**2012**	**2013**	**2014**	**Maximum Value**	**% NE Std**
Sioux City MSA					
501 Pine St. Dakota City	0.180	0.058	0.163	0.180	1.8%
Comparison of 3-Year Maximum Value for 30-Minute TRS to the State Standard (1) (3)					
Site	**2012**	**2013**	**2014**	**Maximum Value**	**% NE Std**
Sioux City MSA					
501 Pine St. Dakota City	0.086	0.042	0.088	0.088	88.0%

Notes and Explanations:

(1) Concentrations are in units of ppm.

(2) The 1-minute Nebraska Air Quality Standard is 10 ppm.

(3) The 30-minute Nebraska Air Quality Standard is 0.10 ppm.

Attachment C – Population Dynamics

Population related data is reviewed as part of the network planning process because:

- Population growth may be associated with pollution source growth;
- High population density generally correlates with high air pollution potential; and
- Some 40 CFR Part 58 requirements are based on population and/or Federally defined metropolitan statistical definitions.

US Census Bureau & US Office of Management and Budget Basics:

The US Census Bureau conducts a comprehensive population census every 10 years referred to as a decennial census. The last decennial census was completed in 2010. In addition, the US Census Bureau conducts annual surveys to provide annual population estimates for each interim year.

The U.S. Office of Management and Budget (OMB) uses the decennial census data to categorize urbanized areas by population and business inter-connections. These urban categories are used to define some Federal program applications, including, in some instances, air monitoring requirements. Four such categories are:

- Metropolitan Statistical Areas (MSAs), which contain an *urbanized area,* where an *urbanized area* is a densely settled territory delineated by the US Census Bureau that contains 50,000 or more people;
- Micropolitan Statistical Areas (MiSAs), which contain an *urban cluster* with a population of 10,000 to 49,999, where an *urban cluster* is a densely settled territory delineated by the US Census Bureau that contains at least 2,500 people, but fewer than 50,000 people.
- Combined Statistical Areas (CSAs), which are adjacent MSAs and MiSAs with social and economic ties.
- Core-Based Statistical Areas (CBSA) is a geographic area defined by the Office of Management and Budget (OMB) that centers on an urban center of at least 10,000 people and adjacent areas that are socioeconomically tied to the urban center by commuting. Both MSAs and MiSAs are CBSAs.

These designations are important from an ambient monitoring perspective because:

- They are sometimes used in defining minimum monitoring requirements, and
- They are often used as the default boundary when defining non-attainment areas.

Figure C-1 (above) shows the location and boundaries of MSAs and MiSAs in Nebraska as delineated following the 2010 decennial census. There are also two CSAs within NE:

- Omaha-Council Bluffs-Fremont NE-IA CSA, which is the Omaha MSA plus Dodge County, NE; and
- Sioux City-Vermillion IA-NE-SD CSA, which is the Sioux City MSA plus Clay County, SD.

Population Demographics and Growth Trends:

Most of the area of Nebraska is rural and used for agricultural production (farming and ranching). Conversely, most of the population of Nebraska (59%) resides in the Omaha and Lincoln MSAs, and 82% of the population resides within the boundaries of designated MSAs and MiSAs (see Table C-1). Even within the MSAs and MiSAs, agricultural usage is the predominant land use except for the two most densely populated counties of Douglas and Sarpy.

Figure C-1: Nebraska Metropolitan Statistical Areas (MSAs) and Micropolitan Statistical Areas (MiSAs)

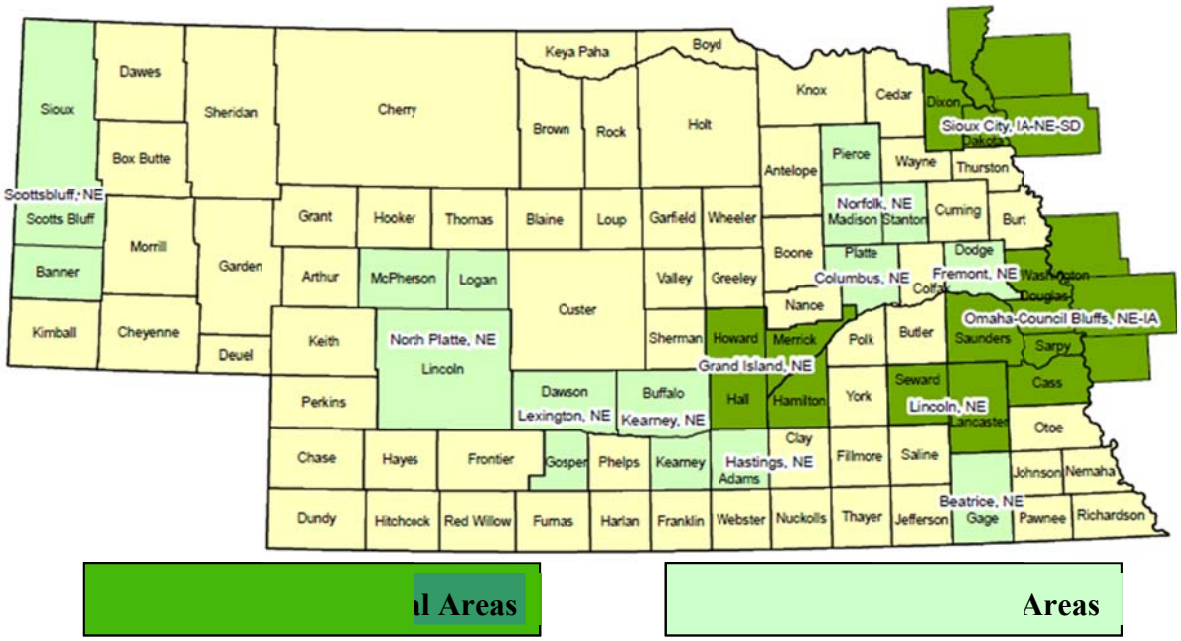


Table C-1: Population within Nebraska's MSAs and MiSAs			
Area	Population	% NE (b)	Cum % NE [c]
Nebraska	1,881,503	100%	na
Omaha MSA [a]	782,138	42%	42%
Lincoln MSA	318,945	17%	59%
Grand Island MSA	84,755	5%	63%
Sioux City MSA [a]	26,632	1%	64%
Kearney MiSA	54,868	3%	67%
Norfolk MiSA	48,445	3%	70%
Hastings MiSA	37,772	2%	72%
Scottsbluff MiSA	37,229	2%	74%
North Platte MiSA	37,063	2%	76%
Fremont MiSA	36,744	2%	78%
Columbus MiSA	32,666	2%	80%
Lexington MiSA	26,066	1%	81%
Beatrice MiSA	21,663	1%	82%

(a) Only Nebraska residents within the Omaha and Sioux City MSAs were used in the population counts shown in this table.
(b) ***% NE*** refers to the percent of Nebraska residents residing in each MSA or MiSA.
(c) ***Cum % NE*** refers to the cumulative sum of the ***% NE*** column. Thus 59% of Nebraska's residents live in the Omaha and Lincoln MSAs, while 82% live in an MSA or MiSA.

Table C-2 lists the top 10 Nebraska counties with respect to 2014 population, 2010 to 2014 population growth, and 2010 to 2014 percent population growth rate. As shown in Table C-2, the 5 most populated counties (Douglas, Lancaster, Sarpy, Hall and Buffalo counties) also have the fastest growth rate, and they are also among the top 8 counties for percent population growth. The population of these 5 counties accounts for 60% of Nebraska's population and their 2010 to 2014 population growth exceeds the population growth of the entire state by 1,466 people (because 62 of Nebraska's 93 counties lost population, see Table C-6).

Also shown in Table C-2, the 3 most populated and fastest growing counties (Douglas, Lancaster and Sarpy Counties) dominate within these categories with 54% of Nebraska's residents living in these 3 counties and a combined annual population growth rate of 13,209. The 2010-14 population growth in these 3 counties exceeds the population growth of the entire state by 1192 people (because 62 of Nebraska's 93 counties lost population, see Table C-6).

Douglas and Sarpy Counties are in the Omaha MSA and have a combined population of approximately 715,400. This is 79% of the population in the entire MSA (including the IA counties) and 91% of the population within the Nebraska portion of the Omaha MSA. Both of these counties are highly urbanized, and along with Council Bluffs, IA form the urban core of the Omaha MSA. See Figure C-2 for additional information on the Omaha MSA.

Lancaster County is in the Lincoln MSA and 95% of the Lincoln MSA population lives in it. The City of Lincoln is the urbanized core of the Lincoln MSA with a population of approximately 273,000 or 86% of the MSA population. See Figure C-3 for additional information on the Lincoln MSA.

Table C-3 contains population and growth data pertaining to Nebraska's 16 most populated counties in 2000, 2010 and 2014. The counties listed for 2000, 2010 & 2014 did not change and there were only minor ranking changes during the 2000 thru 2014 time frame. These 16 counties include the highest populated counties from each of the 4 MSAs and the 9 MiSAs. This illustrates that the population of Nebraska is located predominantly in the urbanized cores and this has not changed since 2000.

Additional population and population growth data on the Omaha, Lincoln, Sioux City and Grand Island MSA's can be found in Figures C-2 thru C-5.

Table C-4 provides population and population growth information on Nebraska's MiSAs.

Table C-5 provides population and population growth information on 9 additional counties that are outside of the designated MSAs and MiSAs with populations greater than 10,000.

Table C-6 provides 2010 thru 2014 population and population growth data on all 93 Nebraska counties. The counties are ranked using their 2010 thru 2014 population growth with the fastest growing counties at the top of the table.

Table C-6 also has a column for population density which ranges from a high of 1641 persons per square mile in Douglas County to $\leq$ 1 person per square mile in 11 counties. There are also 49 counties (53% of Nebraska's 93 counties) with a population density of $\leq$ 10 persons per square mile. This is indicative of the rural nature of most of Nebraska.

Table C-2: Top Ten Nebraska Counties for Population and Population Growth: 2010 to 2014

2014 Population				Population Growth: 2010 - 2014					Annualized Percent Population Growth				
Rank	County or State	2014 Population	% State Pop.	Rank	County	2014 Population	Pop. Growth per Year	Annual % Pop. Growth	Rank	County	2014 Population	Annual % Pop. Growth	Pop. Growth per Year
1	**Douglas**	543,244	29%	1	**Douglas**	543,244	6163	1.2%	1	Banner	764	2.3%	17
2	**Lancaster**	301,795	16%	2	**Lancaster**	301,795	3915	1.3%	2	**Sarpy**	172,193	1.9%	3111
3	**Sarpy**	172,193	9%	3	**Sarpy**	172,193	3111	1.9%	3	Blaine	504	1.6%	8
4	**Hall**	61,492	3%	4	**Hall**	61,492	674	1.1%	4	Thomas	687	1.4%	9
5	**Buffalo**	48,224	3%	5	**Buffalo**	48,224	513	1.1%	5	**Lancaster**	301,795	1.3%	3915
6	Dodge	36,744	2%	6	Platte	32,666	100	0.3%	6	**Douglas**	543,244	1.2%	6163
7	Scotts Bluff	36,465	2%	7	Seward	17,150	91	0.5%	7	**Hall**	61,492	1.1%	674
8	Lincoln	35,815	2%	8	York	13,917	68	0.5%	8	**Buffalo**	48,224	1.1%	513
9	Madison	35,174	2%	9	Cass	25,524	68	0.3%	9	Kearney	6,644	0.6%	37
10	Platte	32,666	2%	10	Madison	35,174	56	0.2%	10	Seward	17,150	0.5%	91
na	Nebraska	1,881,503	100%	na	Nebraska	1,881,503	12,910	0.7%	na	Nebraska	1,881,503	0.7%	12,910

Observations from data above and from additional data in Table C-3:

(1) The five counties identified with **Bold-Font** & green highlight appeared in all 3 lists: top 10 for population, population growth and % annualized growth. They are **Buffalo, Douglas, Hall, Lancaster,** and **Sarpy** Counties.

(2) The five counties with the highest populations are **Buffalo, Douglas, Hall, Lancaster,** and **Sarpy** Counties and 60% of Nebraska's population lives within these counties.

(3) The five counties with the highest population growth are also **Buffalo, Douglas, Hall, Lancaster,** and **Sarpy** Counties. The total population growth in these 5 counties was 57,501 or 111% of Nebraska's total population gain from 2010 thru 2014 (more than 100% because 62 of Nebraska's 93 counties lost population, a total of 1945 people). These 5 counties also accounted for nearly 96% of the population growth in the 31 counties that had population gains.

(4) The population gain in Nebraska's 3 most populated counties, Douglas, Lancaster & Sarpy, 54% of the state's population and 102 % of the state's population growth. Also 89% of the population growth in Nebraska's 10 fastest growing counties.

(5) Seward County, which is in the Lincoln MSA with Lancaster County, is Nebraska's 18th most populated county, and exhibited the 7th highest population growth from 2010 thru 2014.

(6) Banner, Blaine and Thomas Counties had the high percent growth rate between 2010 and 2014. These are very rural counties with low populations and low population densities (i.e., 0.7 to 1 person/square mile). The population gains in these counties does not appear to be of importance from an air quality perspective (i.e., does not relate to a significant increase in air pollution emissions).

The population data used in this table was obtained from the US Census Bureau. Population estimate data was used for both 2010 and 2014.

Table C-3: Sixteen Most Populated Nebraska Counties: 2000, 2010 & 2014 [(a) (b) (c)]

2000			2010			2014					
Rank	County	Population Estimate 7/1/00	Rank	County	Population Estimate 7/1/10	Rank	County	Population Estimate 7/1/14	% State Pop.	Cum. % State Pop.	MSA or *MiSA*
1	Douglas	464,829	1	Douglas	518,594	1	Douglas	543,244	29%	29%	Omaha
2	Lancaster	251,549	2	Lancaster	286,134	2	Lancaster	301,795	16%	45%	L:incoln
3	Sarpy	123,248	3	Sarpy	159,748	3	Sarpy	172,193	9%	54%	Omaha
4	Hall	53,559	4	Hall	58,797	4	Hall	61,492	3%	57%	Grand Island
5	Buffalo	42,336	5	Buffalo	46,174	5	Buffalo	48,224	3%	60%	*Kearney*
6	Scotts Bluff	37,021	6	Scotts Bluff	37,060	6	Dodge	36,744	2%	62%	*Fremont*
7	Dodge	36,214	7	Dodge	36,701	7	Scotts Bluff	36,465	2%	64%	*Scottsbluff*
8	Madison	35,233	8	Lincoln	36,267	8	Lincoln	35,815	2%	66%	*North Platte*
9	Lincoln	34,649	9	Madison	34,950	9	Madison	35,174	2%	68%	*Norfolk*
10	Platte	31,547	10	Platte	32,268	10	Platte	32,666	2%	69%	*Columbus*
11	Adams	31,180	11	Adams	31,333	11	Adams	31,457	2%	71%	*Hastings*
12	Dawson	24,439	12	Cass	25,254	12	Cass	25,524	1%	72%	Omaha
13	Cass	24,374	13	Dawson	24,354	13	Dawson	24,096	1%	74%	*Lexington*
14	Gage	22,945	14	Gage	22,286	14	Gage	21,663	1%	75%	*Beatrice*
15	Dakota	20,313	15	Dakota	21,029	15	Saunders	20,919	1%	76%	Omaha
16	Saunders	19,811	16	Saunders	20,858	16	Dakota	20,850	1%	77%	Sioux City, IA
NA	Nebraska	1,713,279	NA	Nebraska	1,829,865	NA	Nebraska	1,881,503	100 %	NA	NA

Footnotes:

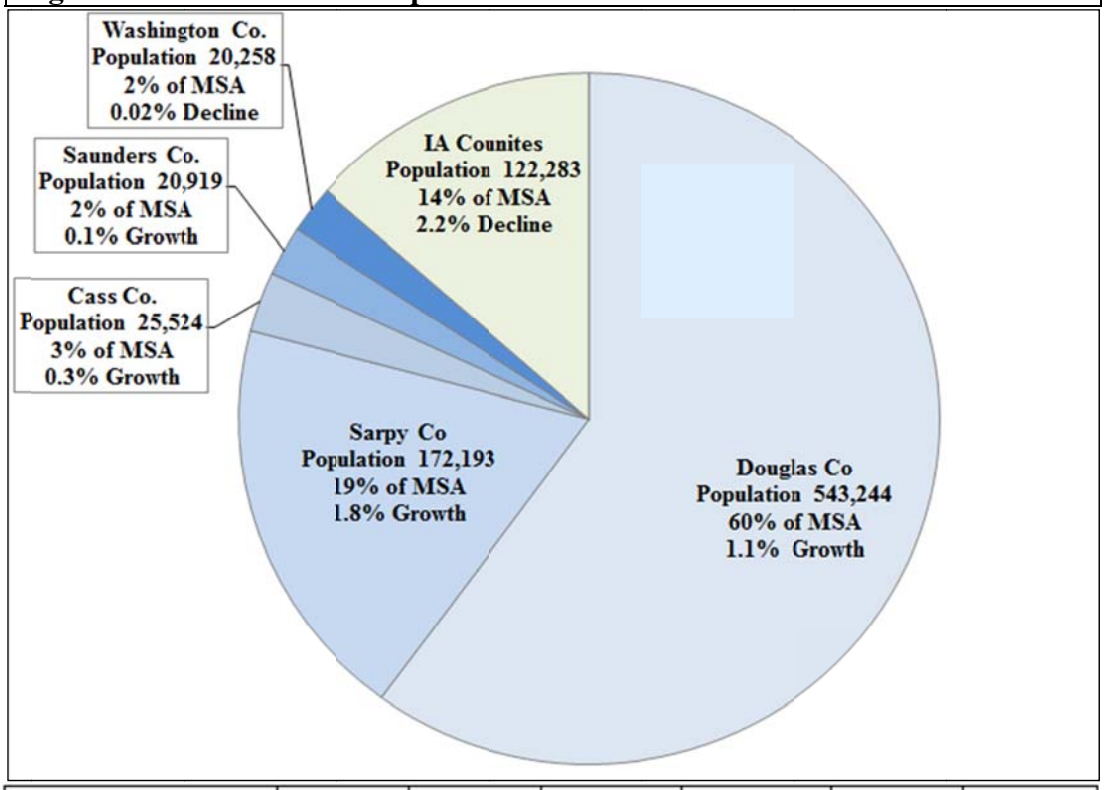
(a) The 16 most populated counties shown in this table are within Metropolitan and Micropolitan Statistical Areas (MSAs/MiSAs) that exist partially or wholly within Nebraska . Counties within all 13 of Nebraska's MSAs/MiSAs are represented in this table, although not all of the counties within the MSAs/MiSAs are in this table.

(b) The **absence of green highlight** indicates a ranking switch in the subsequent time period.

Observations:

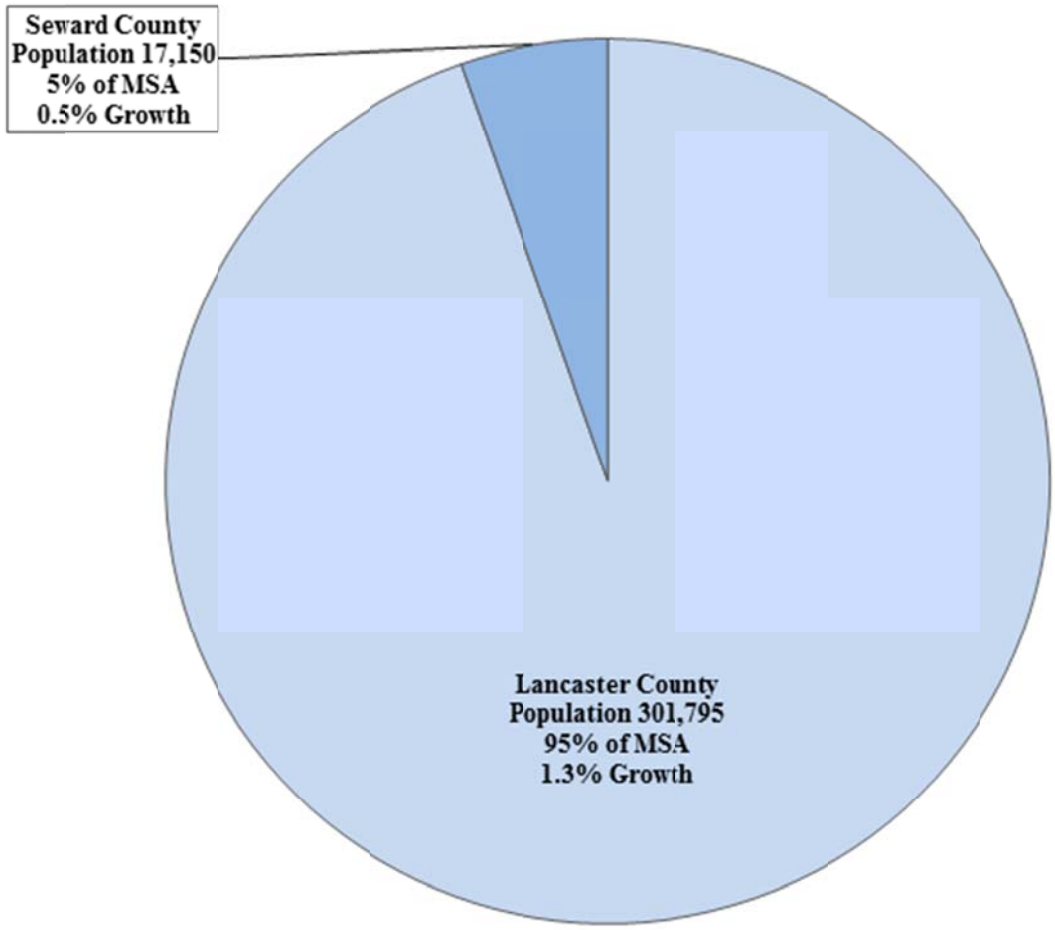
- Over half (54%) of the people in Nebraska live in its 3 most populated counties, 60% live in the 5 most populated counties, and over 75% live in the 16 most populated counties.
- The 16 most populated counties were the same in 2014 as they were in 2010 and 2000.
- There have been only minor ranking changes within this group of 16 counties from 2000 thru 2014.

Figure C-2: Omaha MSA Population Distribution Chart & Table



	2000 Population	2010 Population	2014 Population	% MSA Population in 2014	2010-14 Avg. Ann. Growth	2010-14 Avg. Ann. % Growth
Omaha MSA	**769,117**	**868,113**	**904,421**	**100%**	**9077**	**1.0%**
NE Counties	**650,905**	**744,730**	**782,138**	**86%**	**9352**	**1.2%**
Douglas Co.	464,712	518,594	543,244	60%	6163	1.1%
Omaha (city)	390,007	424,687	446,599	49%	5478	1.2%
Sarpy Co.	123,157	159,748	172,193	19%	3111	1.8%
Bellevue (city)	44,382	51,381	53,936	6.0%	639	1.2%
Papillion (city)	16,363	19,398	23,270	2.6%	968	4.2%
LaVista (city)	11,699	16,087	17,636	1.9%	387	2.2%
Cass Co.	24,394	25,254	25,524	2.8%	68	0.3%
Plattsmouth (city)	6887	6,500	6,495	0.7%	-1	-0.02%
Saunders Co.	19,852	20,858	20,919	2.3%	15	0.07%
Wahoo (city)	3,942	4,524	4,485	0.5%	-10	-0.2%
Washington Co.	18,790	20,276	20,258	2.2%	-5	-0.02%
Blair (city)	7512	8,005	7,986	0.9%	-5	-0.06%
IA Counties	**118,212**	**123,383**	**122,283**	**14%**	**-275**	**-0.2%**
Pottawatamie Co.	87,966	93,384	93,128	10.3%	-64	-0.07%
Council Bluffs (city)	58,268	62,386	62,245	6.9%	-35	-0.06%
Carter Lake (city)	3248	3,793	3,766	0.4%	-7	-0.2%
Mills Co.	14,555	15,074	14,831	1.6%	-61	-0.4%
Glenwood (city)	5358	5,276	5,242	0.6%	-9	-0.2%
Harrisson Co.	15,691	14,925	14,324	1.6%	-150	-1.0%
Missouri Valley (city)	2992	2,832	2,692	0.3%	-35	-1.3%
Observation: Most of the population growth is in Douglas and Sarpy Counties						

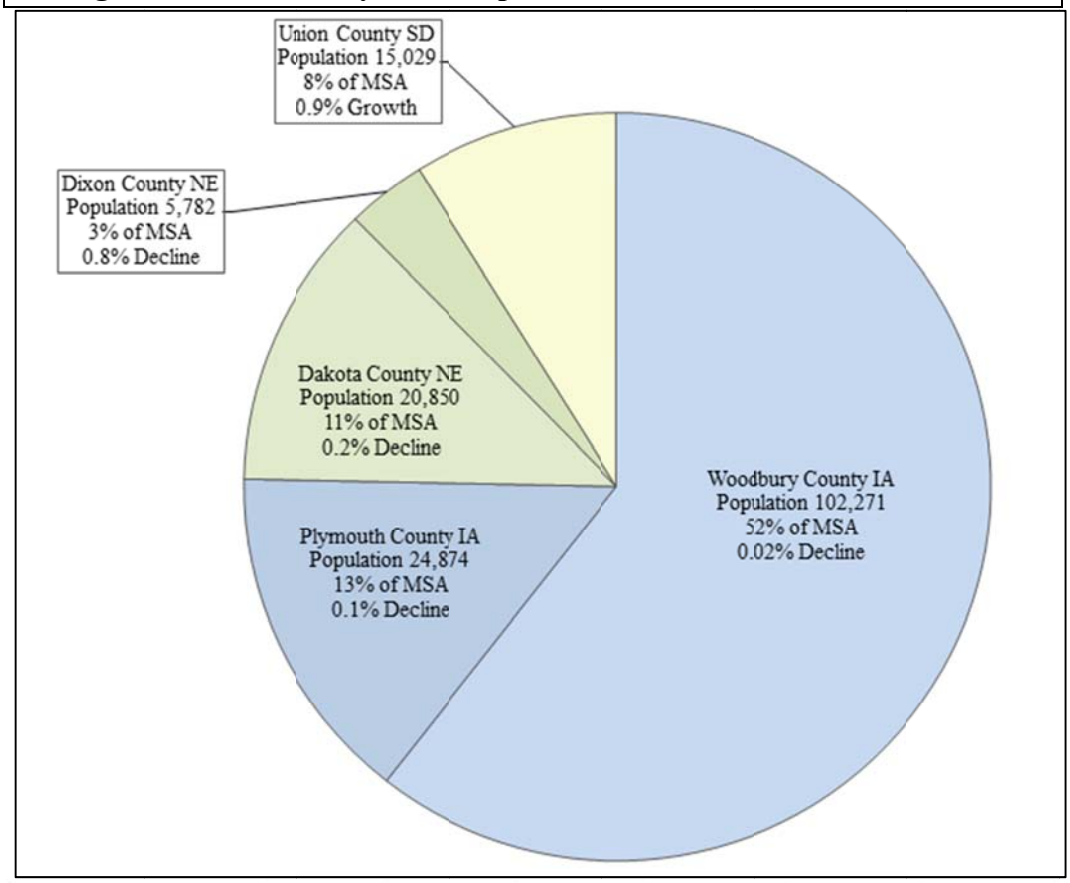
Figure C-3: Lincoln MSA Population Distribution Chart & Table



	2000 Population	2010 Population	2014 Population	% MSA Population in 2014	2010-14 Avg. Ann. Growth	2010-14 Annual % Growth
Lincoln MSA[(a)]	267,955	302,922	318,945	100%	4006	1.3%
Lancaster County	251,425	286,134	301,795	95%	3915	1.3%
Lincoln (city)	225,581	259,102	272,996	86%	3474	1.3%
Waverly (city)	2,448	3,291	3,709	1%	104	2.8%
Seward County	16,530	16,788	17,150	5%	90	0.5%
Seward (city)	6,319	6,982	7,128	2%	36	0.5%

Observation: Most of the population and growth is in Lancaster County and the City of Lincoln.

Figure C-4: Sioux City MSA Population Distribution Chart & Table

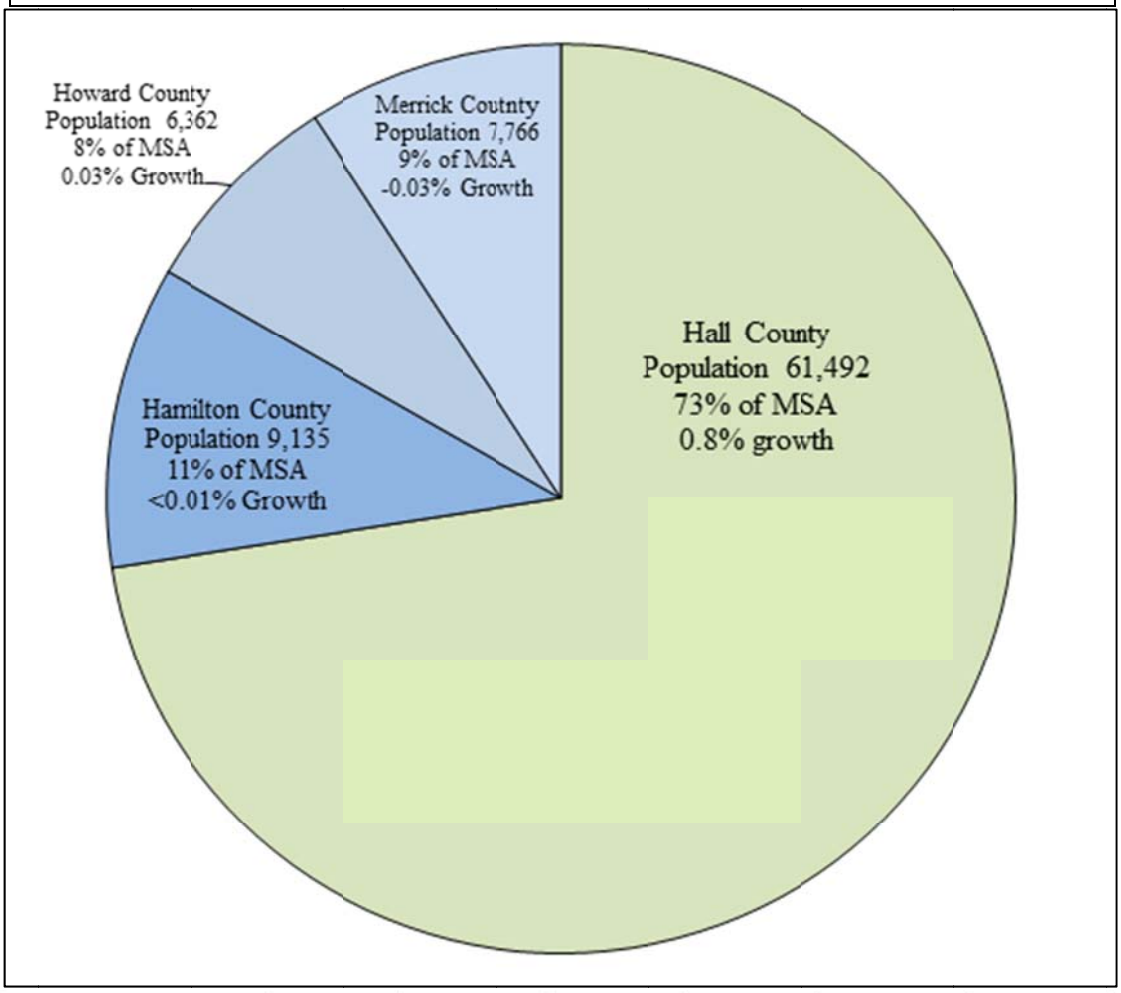


	2000 Population	2010 Population	2014 Population	% MSA Population in 2014	2010-14 Avg. Ann. Growth	2010-14 Avg. Ann. % Growth
Sioux City MSA	**167,771**	**168,793**	**168,806**	**100%**	**-3**	**-0.00%**
IA Counties & Cities	**128,771**	**127,314**	**127,145**	**75%**	**-42**	**-0.03%**
Woodbury Co	103,786	102,337	102,271	61%	-17	-0.02%
Sioux City	85,000	82,802	82,511	49%	-73	-0.1%
Sargent Bluff (city)	3,411	4,234	4,417	3%	46	1%
Plymouth Co	24,879	24,977	24,874	15%	-26	-0.1%
Lemars (city)	9,258	9,820	9,764	6%	-14	-0.1%
NE Counties & Cities	**26,542**	**26,999**	**26,632**	**16%**	**-92**	**-0.3%**
Dakota Co.	20,296	21,029	20,850	12%	-45	-0.2%
South Sioux City	12,004	13,374	13,360	8%	-4	-0.03%
Dakota City	1,820	1921	1904	1%	-4	-0.2%
Dixon Co.	**6,246**	**5,970**	**5,782**	**3%**	**-47**	**-0.8%**
Wakefield (city)	1,150	1445	1408	1%	-9	-0.6%
SD Counties & Cities	**12,564**	**14,480**	**15,029**	**9%**	**137**	**0.9%**
Union Co.	12,564	14,480	15,029	9%	137	0.9%
North Sioux City	2,237	2,535	2,636	2%	25	1%
Elk Point (city)	1,701	1,975	1,940	1%	-9	-0.4%
Beresford (city)	1,566	1,651	1,634	1%	-4	-0.3%

Observations:

- Most of the population is in Woodbury County, IA and Sioux City, IA.
- There was minimal overall population growth in the Sioux City MSA in the 2010-2014 time frame. Growth did occur in Union County, SD, North Sioux City, SD & Sargent Bluff, IA.

Figure C-5: Grand Island MSA Population Distribution Chart & Table



	2000 Population	2010 Population	2014 Population	% MSA Population in 2014	2010-14 Avg. Ann. Growth	2010-14 Avg. Ann. % Growth
Grand Island MSA[a]	77708 [b]	82,043	84,755	100%	678	0.8%
Hall County	53,534	58,797	61,492	73%	674	0.8%
Grand Island (city)	42,940	48,809	51,236	60%	607	0.7%
Hamilton County	9,403	9,127	9,135	11%	2	0.002%
Aurora (city)	4,225	4,487	4,472	5%	-4	-0.004%
Howard County	6,567	6,265	6,362	8%	24	0.03%
St. Paul (city)	2,218	2,302	2,335	3%	8	0.01%
Merrick County	8,204	7,854	7,766	9%	-22	-0.03%
Central City	2,998	2,936	2,890	3%	-12	-0.01%

Footnotes:
(a) In 2000, Grand Island was a micropolitan statistical area (MiSA) encompassing 3 counties: Hall Howard & Merrick.
(b) The 2000 population of the "Grand Island MSA" includes Hamilton County, although it was not part of the Grand Island MiSA in 2000

Observations: Most of the population of the Grand Island MSA is in Hall County and the City of Grand Island. Population growth is also fastest within these areas.

Table C-4: Micropolitan Statistical Area (MiSA) Population Data: 2010 thru 2014

MiSA	Counties & Cities	2010 Population	2014 Population	Avg. Ann. Population Growth	Annual Percent Growth	Percent of MiSA
Kearney MiSA		52,671	54,868	549	1.0%	100%
	Buffalo County	46,174	48,224	513	1.1%	88%
	Kearney (city)	30,858	32,469	403	1.3%	59%
	Kearney County	6,497	6,644	37	0.6%	12%
Norfolk MSA		48,339	48,445	27	0.1%	100%
	Madison County	34,950	35,174	56	0.2%	73%
	Norfolk (city)	24,263	24,444	45	0.2%	50%
	Pierce County	7,261	7,202	-15	-0.2%	15%
	Stanton County	6,128	6,069	-15	-0.2%	13%
Hastings MiSA		37,875	37,772	-26	-0.1%	100%
	Adams County	31,333	31,457	31	0.1%	83%
	Hastings (city)	25,182	24,915	-67	-0.3%	66%
	Clay County	6,542	6,315	-57	-0.9%	17%
Scottsbluff MiSA		37,758	37,229	-132	-0.4%	100%
	Scotts Bluff County	37,060	36,465	-149	-0.4%	98%
	Scottsbluff (city)	15,077	14,875	-51	-0.3%	40%
	Gering (city)	8,520	8,372	-37	-0.4%	22%
	Banner County	698	764	17	2.3%	2%
North Platte MiSA		37,573	37,063	-128	-0.3%	100%
	Lincoln County	36,267	35,815	-113	-0.3%	97%
	North Platte (city)	24,715	24,327	-97	-0.4%	66%
	Logan County	768	750	-5	-0.6%	2%
	McPherson County	538	498	-10	-1.9%	1%
Fremont MiSA		36,701	36,744	11	0.0%	100%
Part of Omaha CSA	Dodge County	36,701	36,744	11	0.0%	100%
	Fremont (city)	26,419	26,500	20	0.1%	72%
Columbus MiSA		32,268	32,666	100	0.3%	100%
	Platte County	32,268	32,666	100	0.3%	100%
	Columbus (city)	22,216	22,630	104	0.5%	69%
Lexington MiSA		26,402	26,066	-84	-0.3%	100%
	Dawson County	24,354	24,096	-65	-0.3%	92%
	Lexington (city)	10,241	10,146	-24	-0.2%	39%
	Cozad (city)	3,993	3,912	-20	-0.5%	15%
	Gothenburg (city)	3,574	3,542	-8	-0.2%	14%
	Gosper County	2,048	1,970	-20	-1.0%	8%
Beatrice MiSA		22,286	21,663	-156	-0.7%	100%
	Gage County	22,286	21,663	-156	-0.7%	100%
	Beatrice (city)	12,421	12,055	-92	-0.7%	56%

Observation: Four of these 9 MiSAs experienced population growth from 2010 to 2014: Kearney, Norfolk, Fremont & Columbus. Only the Kearney MiSA had an annual population gain ≥ 1%.

Table C-5: Nebraska Counties Outside of MSAs and MiSAs that have Populations Greater Than 10,000

Counties & Cities	2010 Population	2014 Population	Avg. Ann. Population Growth	Annual Percent Growth	Percent of MiSA
Otoe Co	15,758	15,797	10	0.1%	100%
Nebraska City	7,299	7,265	-9	-0.1%	46%
Otoe County is adjacent to the Omaha and Lincoln MSAs.					
Saline Co	14,231	14,252	5	0.0%	100%
Crete (city)	6,992	7,034	11	0.1%	49%
Saline County lies SW and is adjacent to the Lincoln MSA					
York Co	13,645	13,917	68	0.5%	100%
York (city)	7,758	7,957	50	0.6%	57%
York County. lies between and abuts the Lincoln and Grand Island MSAs					
Box Butte Co	11,293	11,340	12	0.1%	100%
Alliance (city)	8,480	8,519	10	0.1%	75%
Alliance is the largest Nebraska city outside of an MSA or MiSA. Box Butte County is adjacent to the Scottsbluff MiSA.					
Red Willow Co	11,052	10,867	-46	-0.4%	100%
McCook (city)	7,695	7,611	-21	-0.3%	70%
Custer Co	10,913	10,728	-46	-0.4%	100%
Broken Bow (city)	3,553	3,482	-18	-0.5%	32%
Custer County is adjacent to the North Platte, Lexington & Kearney MiSAs.					
Colfax Co	10,539	10,504	-9	-0.1%	100%
Schuyler (city)	6,228	6,169	-15	-0.2%	59%
Colfax County lies between and abuts the Columbus, Fremont & Norfolk MiSAs.					
Holt Co	10,451	10,403	-12	-0.1%	100%
O'Neill (city)	3,710	3,663	-12	-0.3%	35%
Atkinson (city)	1,247	1,257	3	0.2%	12%
Cheyenne Co	9,961	10,148	47	0.5%	100%
Sidney (city)	6,732	6,914	46	0.7%	68%
Cheyenne Co. is adjacent to the southeast corner of the Scottsbluff MiSA.					

Observations:

- Five of these 9 counties experienced population growth between 2010 and 2014: Otoe, Saline, York, Box Butte & Cheyenne. Population growth rates were < 1% per year.
- Micropolitan Statistical Areas (MiSAs) have a core urban area with a population of 10,000 to 49,999. None of these counties appear to be approaching this threshold.
- Colfax, Otoe, Saline and York Counties are adjacent to other MSAs and or MiSAs.

Table C-6: Population and Population Growth Data for Nebraska & Nebraska Counties Sorted by 2010 to 2014 Population Growth [(a)]

Rank	County	Population Estimate 7/1/10	Population Estimate 7/1/10	Pop. Density (b)	2010-14 Population Growth	2010-14 Annual % Growth	2013-14 Population Growth	2013-14 Percent Growth
	Nebraska	1,829,865	1,881,503	24.5	51,638	0.69%	12,534	0.67%
1	Douglas	518,594	543,244	1641.3	24,650	1.13%	5,715	1.05%
2	Lancaster	286,134	301,795	359.8	15,661	1.30%	4,510	1.49%
3	Sarpy	159,748	172,193	715.9	12,445	1.81%	2,835	1.65%
4	Hall	58,797	61,492	112.5	2,695	1.10%	569	0.93%
5	Buffalo	46,174	48,224	49.8	2,050	1.06%	166	0.34%
6	Platte	32,268	32,666	48.2	398	0.30%	153	0.47%
7	Seward	16,788	17,150	29.8	362	0.53%	86	0.50%
8	York	13,645	13,917	24.2	272	0.49%	54	0.39%
9	Cass	25,254	25,524	45.6	270	0.26%	143	0.56%
10	Madison	34,950	35,174	40.9	224	0.16%	-77	-0.22%
11	Cheyenne	9,961	10,148	8.5	187	0.46%	69	0.68%
12	Kearney	6,497	6,644	12.9	147	0.55%	91	1.37%
13	Adams	31,333	31,457	55.8	124	0.10%	-124	-0.39%
14	Howard	6,265	6,362	11.2	97	0.38%	21	0.33%
15	Banner	698	764	1.0	66	2.16%	-13	-1.70%
16	Harlan	3,427	3,492	6.3	65	0.47%	-21	-0.60%
17	Saunders	20,858	20,919	27.7	61	0.07%	38	0.18%
18	Box Butte	11,293	11,340	10.5	47	0.10%	30	0.26%
19	Cherry	5,715	5,762	1.0	47	0.20%	-17	-0.30%
20	Dodge	36,701	36,744	68.8	43	0.03%	127	0.35%
21	Otoe	15,758	15,797	25.7	39	0.06%	80	0.51%
22	Thomas	650	687	1.0	37	1.35%	-9	-1.31%
23	Blaine	472	504	0.7	32	1.59%	23	4.56%
24	Saline	14,231	14,252	24.8	21	0.04%	-46	-0.32%
25	Chase	3,963	3,978	4.4	15	0.09%	1	0.03%
26	Thayer	5,218	5,230	9.1	12	0.06%	34	0.65%
27	Hamilton	9,127	9,135	16.8	8	0.02%	13	0.14%
28	Hitchcock	2,893	2,901	4.1	8	0.07%	28	0.97%
29	Grant	612	619	0.8	7	0.28%	-6	-0.97%
30	Deuel	1,937	1,940	4.4	3	0.04%	6	0.31%
31	Phelps	9,185	9,187	17.0	2	0.01%	-10	-0.11%

Footnote:

(a) This table contains population estimates for 7/1/10 and 7/1/14 published by the US Census Bureau.

(b) ***Pop. Density*** is the population of the county divided by its surface area in square miles (people/sq. mile).

Table C-6: Population and Population Growth Data for Nebraska & Nebraska Counties Sorted by 2010 to 2014 Population Growth [(a)]

Rank	County	Population Estimate 7/1/10	Population Estimate 7/1/10	Pop. Density (b)	2010-14 Population Growth	2010-14 Annual Percent Growth	2013-14 Population Growth	2013-14 Percent Growth
32	Thurston	6,973	6,969	17.7	-4	-0.01%	72	1.03%
33	Hooker	734	728	1.0	-6	-0.21%	-4	-0.55%
34	Sioux	1,312	1,303	0.6	-9	-0.17%	-16	-1.23%
35	Arthur	464	453	0.6	-11	-0.61%	2	0.44%
36	Keya Paha	821	810	1.0	-11	-0.34%	13	1.60%
37	Logan	768	750	1.3	-18	-0.60%	-14	-1.87%
38	Washington	20,276	20,258	51.9	-18	-0.02%	27	0.13%
39	Hayes	960	933	1.3	-27	-0.72%	-40	-4.29%
40	Johnson	5,216	5,185	13.8	-31	-0.15%	56	1.08%
41	Colfax	10,539	10,504	25.4	-35	-0.08%	98	0.93%
42	Garfield	2,041	2,003	3.5	-38	-0.47%	-30	-1.50%
43	Loup	626	588	1.0	-38	-1.62%	7	1.19%
44	McPherson	538	498	0.9	-40	-2.01%	-25	-5.02%
45	Frontier	2,753	2,705	2.8	-48	-0.44%	-7	-0.26%
46	Holt	10,451	10,403	4.3	-48	-0.12%	-35	-0.34%
47	Valley	4,258	4,204	7.4	-54	-0.32%	7	0.17%
48	Wheeler	821	766	1.3	-55	-1.80%	8	1.04%
49	Pierce	7,261	7,202	12.5	-59	-0.20%	38	0.53%
50	Stanton	6,128	6,069	14.1	-59	-0.24%	-15	-0.25%
51	Greeley	2,544	2,482	4.4	-62	-0.62%	-1	-0.04%
52	Furnas	4,954	4,888	6.8	-66	-0.34%	32	0.65%
53	Boyd	2,100	2,033	3.8	-67	-0.82%	14	0.69%
54	Nemaha	7,247	7,175	17.5	-72	-0.25%	-3	-0.04%
55	Pawnee	2,775	2,702	6.3	-73	-0.68%	-24	-0.89%
56	Sherman	3,149	3,074	5.4	-75	-0.61%	-36	-1.17%
57	Gosper	2,048	1,970	4.3	-78	-0.99%	-4	-0.20%
58	Rock	1,524	1,443	1.4	-81	-1.40%	26	1.80%
59	Merrick	7,854	7,766	16.0	-88	-0.28%	-35	-0.45%
60	Perkins	2,987	2,891	3.3	-96	-0.83%	-19	-0.66%
61	Kimball	3,827	3,713	3.9	-114	-0.77%	26	0.70%
62	Cuming	9,144	9,027	15.8	-117	-0.32%	22	0.24%
63	Polk	5,389	5,271	12.0	-118	-0.56%	21	0.40%

Footnote:

(a) This table contains population estimates for 7/1/10 and 7/1/14 published by the US Census Bureau.

(b) ***Pop. Density*** is the population of the county divided by its surface area in square miles (people/sq. mile).

Table C-6: Population and Population Growth Data for Nebraska & Nebraska Counties Sorted by 2010 to 2014 Population Growth [(a)]

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Rank	County	Population Estimate 7/1/10	Population Estimate 7/1/14	Pop. Density (b)	2010-14 Population Growth	2010-14 Annual Percent Growth	2013-14 Population Growth	2013-14 Percent Growth
64	Butler	8,370	8,249	14.1	-121	-0.37%	-75	-0.91%
65	Dundy	2,008	1,886	2.1	-122	-1.62%	-83	-4.40%
66	Dawes	9,172	9,042	6.5	-130	-0.36%	-51	-0.56%
67	Nuckolls	4,507	4,369	7.6	-138	-0.79%	-26	-0.60%
68	Boone	5,496	5,353	7.8	-143	-0.67%	-22	-0.41%
69	Franklin	3,231	3,076	5.3	-155	-1.26%	-15	-0.49%
70	Webster	3,814	3,658	6.4	-156	-1.07%	-17	-0.46%
71	Nance	3,729	3,570	8.1	-159	-1.11%	-30	-0.84%
72	Garden	2,078	1,911	1.1	-167	-2.18%	7	0.37%
73	Wayne	9,600	9,431	21.3	-169	-0.45%	-6	-0.06%
74	Morrill	5,040	4,862	3.4	-178	-0.92%	-20	-0.41%
75	Dakota	21,029	20,850	79.0	-179	-0.21%	-94	-0.45%
76	Custer	10,913	10,728	4.2	-185	-0.43%	-68	-0.63%
77	Red Willow	11,052	10,867	15.2	-185	-0.43%	-156	-1.44%
78	Knox	8,668	8,482	7.7	-186	-0.55%	-75	-0.88%
79	Dixon	5,970	5,782	12.1	-188	-0.81%	-53	-0.92%
80	Sheridan	5,457	5,259	2.2	-198	-0.94%	7	0.13%
81	Jefferson	7,534	7,335	12.8	-199	-0.68%	-212	-2.89%
82	Brown	3,144	2,941	2.4	-203	-1.73%	17	0.58%
83	Richardson	8,343	8,128	14.7	-215	-0.66%	3	0.04%
84	Cedar	8,829	8,610	11.6	-219	-0.64%	-76	-0.88%
85	Clay	6,542	6,315	11.0	-227	-0.90%	-68	-1.08%
86	Fillmore	5,889	5,661	9.8	-228	-1.01%	-24	-0.42%
87	Keith	8,359	8,121	7.7	-238	-0.73%	0	0.00%
88	Dawson	24,354	24,096	23.8	-258	-0.27%	-56	-0.23%
89	Antelope	6,658	6,398	7.5	-260	-1.02%	-58	-0.91%
90	Burt	6,838	6,573	13.3	-265	-1.01%	-10	-0.15%
91	Lincoln	36,267	35,815	14.0	-452	-0.32%	-277	-0.77%
92	Scotts Bluff	37,060	36,465	49.3	-595	-0.41%	-405	-1.11%
93	Gage	22,286	21,663	25.3	-623	-0.72%	-153	-0.71%

Footnote:

(a) This table contains population estimates for 7/1/10 and 7/1/14 published by the US Census Bureau.

(b) ***Pop. Density*** is the population of the county divided by its surface area in square miles (people/sq. mile).

Attachment D: Compliance Verification with 40 CFR Part 58

This attachment reviews compliance with 40 CFR Part 58 Appendixes A, C, D and F as set forth on July 1, 2015. The review found the Nebraska Ambient Monitoring Network to be in compliance with these requirements.

I. Appendix A Review

40 CFR Part 58 Appendix A sets forth quality assurance requirements for the collection, calculation and reporting of air monitoring data. To ensure compliance with these requirements, the NDEQ has a *Quality Assurance Project Plan (QAPP) for the Nebraska Ambient Air Monitoring Program for Criteria Pollutants, NCore Parameters, PM2.5 Speciation, and Total reduced Sulfur.* EPA Region 7 reviewed and approved this QAPP in November 2014. Actual procedures for operating monitors, as well as for collecting, reviewing and submitting data are set forth in Standard Operating Procedures (SOPs). The SOPs ensures that support the Measurement Quality Objectives set forth in the QAPP.

40 CFR Part 58 Appendix A also sets forth requirements specifying the number of collocated monitors required for $PM_{2.5}$, PM_{10}, $PM_{10\text{-}2.5}$ and Lead (Pb) monitors. Table D-1 summarizes the collocated sites in Nebraska. Nebraska is meeting collocation requirements.

II. Appendix C Review

Appendix C contains requirements for approved ambient air monitoring methodologies. Any monitor that is used to evaluate NAAQS compliance must be a Federal Reference Method (FRM) or a Federal Equivalent Method (FEM) or an alternatively approved method as defined in Appendix C. The network description tables in Attachment A of the network plan identify the monitoring method used by each monitor in the Nebraska ambient air monitoring network. All monitors used to evaluate compliance with the NAAQS are FRM or FEM certified. The only monitors that are not FRM/FEM certified are the TRS monitors used to evaluate compliance with Nebraska's TRS standard.

Attachment D: Verification of Compliance with 40 CFR Part 58

Table D-1: Compliance Summary: Collocation Requirements of Appendix A[1]

Parameter	Method	Percent Collocation Required	NDEQ/LLCHD [2]			DCHD [2]		
			# of Sites	# Collocated	% Collocated	# of Sites	# Collocated	% Collocated
PM_{10}	Hi-Vol Sampler	15%	0	0	na	2	1	50%
PM_{10}	Sequential 2025 Sampler	15%	3	1	33%	0	0	na
PM_{10}	Continuous Monitor	None	1	0	(3)	1	0	(3)
$PM_{2.5}$	Sequential 2025 Sampler	15%	3	1	33%	2	1	50%
$PM_{2.5}$	Met One BAM Method [5]	15%	1	1	100% [4]	2	1	50%
$PM_{10-2.5}$	Met One BAM Method	None	0	0	na	1	0	(5)
TSP-Lead	Hi-Vol Sampler	15% except NCore	2	1	50%	1	0	(6)

Footnotes:

(1) Collocation Requirements: Appendix A requires 15% of the sites in each parameter/method category to have collocated monitors with certain exceptions and additional requirements.

(2) Collocation requirements apply to each Primary Quality Assurance Organization (PQAO) separately. There are two PQAO's in Nebraska: DCHD and NDEQ/LLCHD.

(3) Collocated monitors are not required for continuous PM_{10} monitors.

(4) LLCHD operates a MetOne BAM $PM_{2.5}$ sampler for AirNow and AQI reporting. It is collocated with the primary and collocated sequential samplers at the site.

(5) DCHD operates 2 MetOne BAM samplers at the NCore site. One is set-up to sample $PM_{2.5}$ and the other samples PM_{10}. $PM_{10-2.5}$ is calculated using the results from these 2 samplers. There is a sequential $PM_{2.5}$ collocated sampler at the NCore site, but not a collocated PM_{10} sampler. Collocated PM_{10} samplers are not required in Appendix A for continuous PM_{10} samplers. EPA has designated some NCore sites to have collocated samplers for $PM_{10-2.5}$; the Omaha NCore site is not one of them.

(5) Collocated TSP-Lead monitoring is not required at NCore sites unless specifically required by EPA; and EPA has not designated the Omaha NCore site to have a collocated TSP-Lead sampler.

Network Descriptions	
NDEQ Sequential 2025 PM_{10}: Weeping Water (collocated), Cozad & Gothenburg	DCHD Hi-Vol PM_{10}: 19& Burt (collocated) and South Omaha
NDEQ Continuous PM_{10}: Weeping Water Farm (collocation not required)	DCHD Continuous PM_{10}: 46th & Farnam (collocation not required)
NDEQ TSP-Lead: Fremont (collocated) & Auburn	DCHD Sequential 2025 $PM_{2.5}$: Berry St & Blair (collocation at NCore)
NDEQ & LLCHD Sequential 2025 $PM_{2.5}$: Lincoln (collocated), Grand island & Scottsbluff	DCHD MetOne BAM $PM_{2.5}$: NCore (collocated) & Bellevue
	DCHD Met MetOne BAM $PM_{10-2.5}$: NCore (collocation not required)
	DCHD TSP-Lead: NCore (collocation not required)

III. Appendix D Review

Appendix D sets forth monitoring objectives and minimum monitoring site requirements that must be met. The review that follows demonstrates that the Nebraska ambient air monitoring network meets the Appendix D requirements in effect on February 28, 2013.

EPA periodically re-evaluates the NAAQS and monitoring requirements. Regulatory modifications may impact the minimum monitoring requirements in one of two ways:

- Appendix D minimum monitoring requirements may be changed (i.e., more or less monitoring could be required); or
- Monitoring needs may change as a result of a NAAQS modification (e.g., when the annual average $PM_{2.5}$ NAAQS was lowered from 15 g/m^3 to 12 g/m^3, the 85% of NAAQS threshold set forth in 40 CFR Part 58 Appendix D Sec. 4.7 Table D.5 was crossed, and the minimum number of $PM_{2.5}$ monitoring sites for the Omaha MSA increased from 1 to 2).

III.A: Appendix D - Objectives Review

Appendix D Section 1.1 sets forth 3 objectives that ambient air monitoring networks must be designed to meet:

- Provide air pollution data to the general public in a timely manner.
- Support compliance with ambient air quality standards and emissions strategy development.
- Support for air pollution research studies.

Each of these objectives is discussed below.

1. Timely Dissemination of Data - Met

Air monitoring data is made available to the public and other parties in several ways.

a. Ambient air monitoring data is reviewed quarterly and entered into the national EPA-operated AQS database. The AQS database is available to federal, state and local monitoring agency personnel, as well as some other public agencies and researchers. AQS data cannot be directly accessed by the general public, but the NDEQ does respond to data requests.

b. Air Quality Index reporting is performed by DCHD and LLCHD for their respective jurisdictions. The AQI information is made available on their respective city websites.

c. Monitoring data from continuous particulate, ozone and CO monitors in the Omaha and Lincoln MSAs report directly to the EPA AirNow system. The general public can access air quality index information on-line at www.airnow.gov

d. Daily maximum TRS monitoring data is available to the public on the NDEQ web site. This data is typically entered on a monthly basis. The NDEQ also responds to telephone or email requests for more timely or detailed information.

e. The NDEQ publishes an annual Air Quality Report. This report is available on-line and upon request. Similarly the annual Network Plan reports are also available to the public on-line or upon request.

2. Support compliance with ambient air quality standards and emissions strategy development – Met

In the first quarter of each year, the NDEQ reviews all of the data collected by DCHD, LLCHD and NDEQ during the previous year as part of the data certification process. At this time design values are calculated and compared with the NAAQS. This design value information is then incorporated into the annual Network Plan. The annual Network Plans discuss attainment/non-attainment status and monitoring strategies that may be related.

The NDEQ, DCHD and LLCHD also perform data validation reviews at least once each quarter and in many instances monthly. Any potential non-attainment or near non-attainment circumstances will be recognized during these reviews. If such conditions are identified, efforts are made to ascertain the cause and to the extent possible bring about corrective action through regulatory and/or voluntary mechanisms.

An Air Now summary report for ozone is emailed daily to an NDEQ staffer and, starting in 2015, a similar email report is being established for $PM_{2.5}$. When elevated ozone or $PM_{2.5}$ levels are reported, this information is passed on to air quality managers at DCHD, LLCHD and NDEQ.

The examples below illustrate how state and local air quality programs have recognized air quality issues and reacted to them.

a. In the fall of 2011, the 3-month average lead concentration at the Fremont site exceeded the NAAQS. EPA and the one known source were notified. The data was discussed and presented to EPA for review. NDEQ and the source conducted an on-site review of the facility and potential emission sources (see Section V.B.2 in this network plan for additional information).

   In 2012, NDEQ continued to calculate daily and 3-month average lead monitoring data as the data became available; and to disseminate this information to the primary known source. High daily lead levels in May thru early July brought the 3-month average within 93% of the NAAQS, and these lead levels were discussed with the primary known source. Lower lead levels were seen beginning in July and continuing thereafter. The impact of this information exchange with the source is difficult to evaluate, but it may have played an important role in facilitating the source in remaining diligent with their control efforts.

b. From September 2011 thru June 2012, the 46th & Farnam site recorded four (4) 24-hour average PM_{10} values greater than the 150 ug/m^3 standard. The 46th & Farnam site is source-oriented with respect to Omaha Steel Castings Company, and the company had initiated a move to a new location in Wahoo, NE.

   Douglas County Health Department made Omaha Air Quality and Omaha Steel aware of the high values in a timely manner. Omaha Air Quality met with Omaha Steel to discuss potential PM_{10} sources and controls. Omaha Steel proceeded with process-handling and housekeeping changes intended to reduce PM_{10} emissions. These efforts were effective in reducing PM_{10} levels. Omaha Steel completed their move to their new facility in 2014 and closed the 46th & Farnam site.

c. In the summer of 2012, Nebraska monitoring sites began reporting ozone levels above those seen in recent years. The NDEQ began using Air Now data to track the current 4th highest values for sites in and around Nebraska as the ozone season progressed. Although the 4th high values at 2 sites in the Omaha MSA exceeded 0.075 ppm 8-hour ozone NAAQS, the 3-year average design values did not exceed the NAAQS (i.e., the maximum unofficial 2010-2012 DVs = 0.069 ppm).

d. In the spring of 2014, smoke from controlled grassland fires in the Flint Hills area of Kansas was impacting Nebraska. AirNow data was used to track the degree and extent of the impact on ambient ozone and $PM_{2.5}$. At times, the impact from these controlled burns raised ozone and $PM_{2.5}$ levels in Nebraska. Both DCHD and LLCHD issued air quality alerts related to these burns.

3. Support for air pollution research studies – Met

The NDEQ, DCHD and LLCHD operate the Nebraska SLAMS network in accordance with the monitor specifications, site placement and QA requirements set forth in 40 CFR Part 50 and 58. EPA R7 provides oversight to ensure that regulatory requirements are met with respect to methodology and QA.

Data is reviewed quarterly before being submitted to EPA's AQS database. Once in AQS, the data is available for pollution research studies.

Near real-time data is also reported to the EPA AirNow data from the continuous PM, CO and ozone monitors operating in the Omaha and Lincoln MSA. This data is also available for research purposes.

III.B: Appendix D – Minimum Monitoring Site Requirements

Nebraska has the minimum number of monitoring sites required by Appendix D. The minimum monitoring site requirements for each of the four MSAs are examined separately and documented in Tables D-2.a thru D-2.d below.

The review for non-MSA areas of the state was performed on a pollutant specific basis. This review is documented in narrative form in Section III.C below.

It should be noted that the number of monitoring sites required in a network generally needs to be greater than the minimum number required by Appendix D. This is stated in Appendix D Section 1.1.2: "… total number of monitoring sites that will serve the variety of data needs will be substantially higher than these minimum requirements provide…"

III.C: Appendix D Minimum Monitoring Requirements for non-MSAs

NCore – (40 CFR Part 58 App. D Sec. 3) None required or operated.

At this time there is no requirement or plan to develop an NCore site in Nebraska, other than the current site in Omaha.

Ozone (O_3) – (40 CFR Part 58 App. D Sec. 4.1) No sites required or operated.

At this time there is no requirement to deploy ozone monitoring sites outside of the MSAs.

In 2010, EPA proposed regulations requiring 1 to 3 rural ozone monitoring sites in Nebraska. These regulations were withdrawn pending further review of the ozone NAAQS. In November 2014, EPA proposed a revision to the ozone NAAQS, which is scheduled to be finalized in November 2015. The current proposal does not require rural ozone monitoring. However, although not required, ozone monitoring in some rural areas of Nebraska may need to be conducted to evaluate attainment with the new NAAQS, as well as transport issues.

Carbon Monoxide (CO) – (40 CFR Part 58 App. D Sec. 4.2) No sites required or operated.

At this time there is no requirement or plan to conduct CO monitoring outside the MSAs. Elevated CO levels are primarily associated with vehicle emissions and congested traffic areas. Highest levels would be anticipated in the Omaha and Lincoln MSAs. Highest concentration site monitoring in Lincoln and Omaha has consistently found CO levels well below the NAAQS. Thus, there is not a need for additional monitoring sites in less populated communities.

Nitrogen Dioxide (NO_2) – (40 CFR Part 58 App. D Sec. 4.3) No sites required or operated.

At this time there is no requirement or plan to conduct NO_2 monitoring outside the MSAs.

Sulfur Dioxide (SO_2) – (40 CFR Part 58 App. D Sec. 4.4) No sites required or operated.

At this time there is no requirement or plan to conduct SO_2 monitoring outside the Omaha MSA. However, source-oriented monitoring near one or more power plants may be required in the future. In 2010, EPA established a new 1-hour SO_2 NAAQS at 75 ppb. In 2013, EPA deferred making an attainment determination relative to this NAAQS due to lack of monitoring and/or modeling data to support an attainment determination. EPA is still considering this issue and has not proposed any additional monitoring requirements (i.e., changes in Appendix D monitoring requirements for SO_2 have not been proposed or finalized; no has the Regional Administrator required any additional monitoring in NE).

Lead (Pb) – (40 CFR Part 58 App. D Sec. 4.5) Two required and 2 sites operated.

In 2008, EPA finalized changes to Appendix D that required source-oriented monitoring near sources with lead emissions of 1 tpy or more. This included two sources: Magnus Farley in Fremont and Magnolia Metals in Auburn. These sites were established in 2010.

Since monitoring was initiated in 2010, Magnolia Metals in Auburn, NE has installed air emission control technology such that their 2014 emission inventory now indicates their lead emissions to be 0.1 tpy. The 2015 Network Plan is proposing that the Auburn lead monitoring site be closed.

In 2010, EPA finalized additional monitoring requirements that lowered the threshold for source-oriented monitoring to $\geq$ 0.5 tpy. Emission estimates for Nucor Steel in Norfolk exceeded the 0.5 tpy threshold. In Appendix D Section 4.5(a)(ii) there is an allowance for not conducting monitoring if it can be shown that ambient lead concentrations will not exceed 50% of the NAAQS. Nucor Steel submitted a modeling study showing that ambient lead concentrations would not exceed 50% of the NAAQS. This waiver was approved in 2014 and must be renewed every 5 years (i.e., in 2019).

PM_{10} Particulate Matter (40 CFR Part 58 App. D Sec. 4.6) No sites required. Two sites operated.

There are no minimum PM_{10} monitoring requirements for areas outside of MSAs. Both of the Nebraska PM_{10} sites located outside of the Omaha MSA are source and population oriented. One is deployed in downtown Cozad; the other one is in downtown Gothenburg. These sites were established to monitor for possible impacts from agricultural processing facilities, primarily alfalfa processing facilities in these two communities. The PM10 levels in these communities are currently well below the NAAQS. The 2015 Network Plan is proposing that these PM_{10} monitoring sites be closed.

Fine Particulate Matter: $PM_{2.5}$ (40 CFR Part 58 Appendix D Section 4.7 & 4.7.3) Two (2) sites required and 2 operated.

States are required to operate a background site and a transport site for $PM_{2.5}$. Nebraska's background site is in Scottsbluff, and the transport site is in Grand Island.

Coarse Particulate Matter: $PM_{10-2.5}$ (40 CFR Part 58 App D Sec 4.8) No sites required or operated.

Photochemical Assessment Monitoring Stations (PAMS) (40 CFR Part 58 Appendix D Section 5) No sites required or deployed.

PAMS are only required in areas classified as serious, severe, or extreme non-attainment for O_3. No such areas exist in Nebraska at this time.

IV: Appendix E Review

This appendix sets forth requirements for probe and monitoring path placement, including: horizontal and vertical placement, spacing from minor sources, spacing from obstructions, spacing from trees, spacing from roadways, cumulative interferences on a monitoring path, maximum monitoring path length, and probe material and sample residence time. Compliance with these criteria is verified when the site is set-up and periodically thereafter. Compliance is evaluated using review sheets developed for that purpose.

Tables D-2.a thru D-2.c: Minimum Monitoring Reviews for Each Nebraska MSA

Table D-2.a: 40 CFR Part 58 Appendix D Review: Omaha MSA (MSA Population ~ 904,000) *

Pollutant	App. D Citation	Review Criteria & *Comments*	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	The Omaha MSA population is between 350K to 4M and O_3 levels are ≥ 85% of NAAQS (*See Design Values in Attachment B).*	2	3 Includes NCore	Y
CO	Sec. 4.2	The population threshold for requiring a near-road CO monitoring site in a CBSA is 1 million. The population of the Omaha MSA is below this threshold.	0	2 Includes NCore	Y
NO_2	Sec. 4.3.2	The Omaha MSA has a populations of 500K to 1M and is currently required to have a near-road NOx site by 1/1/2017, as set forth in 40 CFR Part 58.10.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring only required if CBSA ≥ 1M (Omaha MSA population < 1 M)	0	1 @ NCore	Y
	Sec. 4.3.4	Regional Administrator required monitoring: None at this time.	0	0	Y
SO_2	Sec. 4.4	The need for SO_2 sites is based on the *Population Weighted Emissions Index* (PWEI). Omaha's PWEI = 27,747, which falls within the 5000 to 100000 range requiring 1 site. *The current network of one highest concentration site and one NCore site exceeds the minimum requirements. No changes are proposed.*	1	2 Includes NCore	Y
		Regional Administrator required monitoring: None at this time.	0	0	Y
Lead	Sec. 4.5 (a)	There are no sources emitting ≥ 0.5 tpy of lead in the Nebraska portion of the Omaha MSA.	0	0	Y
	Sec. 4.5 (b)	One community-based site required at NCore site. EPA has been considering rescinding this requirement, but has not proposed or promulgated regulations.	1	1	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring: None at this time.	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	The Omaha MSA has a population between 500K – 1M. and a high PM_{10} concentration range with 1 max value > 120% of NAAQS at 46th & Farnam St Site in 2012. With the closing of the Omaha Steel facility at 46th & Farnam, the only sites with PM_{10} exceeding 80% of NAAQS may be in the Weeping Water area (sites operated by NDEQ). See Attachment B for PM_{10} data.	4-8	6 Includes NCore & 2 sites @ Weeping Water	Y
$PM_{2.5}$	Sec 4.7 Table D-5	The Omaha MSA has a population between 500K – 1M. and $PM_{2.5}$ levels ≥ 85% of NAAQS range (*See Design Values in Attachment B).*	2	4 Includes NCore	Y
	Sec 4.7.2	Continuous monitor required.	1	1 @ NCore	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network monitoring required (included SASS and URG samplers as one)	1	1 @ NCore	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3.	0	0	NA
NCore	Sec. 3	Omaha has been designated to operate an NCore site with lead and NOx/NOy monitoring.	1	1	Y

* Unless noted otherwise, this analysis does not count monitors located in IA toward meeting the minimum monitoring requirements. It does consider pollutant levels measured at IA sites, when determining minimum monitoring needs for ozone and $PM_{2.5}$.

Table D-2.b: 40 CFR Part 58 Appendix D Review: Lincoln MSA (Population ~ 319,000)

Pollutant	App. D Citation	**Review Criteria & *Comments***	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	The Lincoln MSA population is between 50K to 350K and O_3 levels < 85% of NAAQS (*See Design Values in Attachment B).*	0	1	Y
CO	Sec. 4.2	No minimum requirement	0	0	Y
NO_2	Sec. 4.3.2	Near-road monitoring: No requirement for CBSA < 500K.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring only required if CBSA ≥ 1M (Lincoln MSA population < 1 M).	0	0	Y
	Sec. 4.3.4	Regional Administrator required monitoring: none.	0	0	Y
SO_2	Sec. 4.4	The number of SO_2 sites required is based on the *Population Weighted Emissions Index* (PWEI). Lincoln's PWEI = 1,371, which falls below 5000. Thus no sites are required.	0	0	Y
		Regional Administrator required monitoring: none.	0	0	Y
Lead	Sec. 4.5 (a)	There are no sources emitting ≥ 0.5 tpy of lead.	0	0	Y
	Sec. 4.5 (b)	Community-based monitor only required if CBSA population ≥ 500K.	0	0	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring: none.	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	The Lincoln MSA population is between 250K – 500K. Monitoring is only required if current monitoring indicates PM_{10} ≥ 85% of NAAQS. *Also the highest 24-hr value found from 1988-98 was 102 $\mu g/m^3$* or 68% of the NAAQS.	0-1	0	Y
$PM_{2.5}$	Sec 4.7 Table D-5	The Lincoln MSA population is between 50K – 500K and $PM_{2.5}$ levels < 85% of NAAQS (*See Design Values in Attachment B).*	0	1	Y
	Sec 4.7.2	Continuous monitor not required.	0	1	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network monitoring not required.	0	0	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3.	0	0	Y
NCore	Sec. 3	Lincoln has not been designated to operate an NCore site.	0	0	Y

Table D-2.c: 40 CFR Part 58 Appendix D Review: Sioux City MSA (Population ~ 169,000) **

Pollutant	App. D Citation	Review Criteria & *Comments*	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	Sioux City MSA population is between 50K -350K. There is one ozone monitor in the MSA and it is located in a rural area of Union County, SD. It operated at 471st Ave in 2012 & 2014 and at 475st Ave in 2013. The 3-year average from these sites was 64 ppb or 85% of the NAAQS, but this is not a Design Value (DV), since it uses data from 2 different sites. Appendix D Sec. 4.1, Table D-2 says that for MSAs of this size 1 ozone site is required if the DV ≥ 85% of the NAAQS, but an ozone site is not required in the absence of a DV. Thus an ozone site in Nebraska is not required, and SD operates an ozone site in union County.	0	0	Y
CO	Sec. 4.2	No minimum requirement.	0	0	Y
NO_2	Sec. 4.3.2	Near-road monitoring: No requirement for CBSA < 500K.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring only required if CBSA ≥ 1M (Sioux City MSA population < 1 M)	0	0	Y
	Sec. 4.3.4	Regional Administrator required monitoring; none.	0	0	Y
SO_2	Sec. 4.4	The number of SO_2 sites required is based on the *Population Weighted Emissions Index* (PWEI). Sioux City MSA's PWEI = 5033, which falls within the 5000 to 100000 range requiring 1 site. *Two sites exist in the MSA: one in Union County, SD & one near Sergeant Bluff, IA.*	1	0	Y See comment
		Regional Administrator required monitoring: none	0	0	Y
Lead	Sec. 4.5 (a)	There are no sources emitting ≥ 0.5 tpy of lead in the Nebraska portion of the Sioux City MSA.	0	0	Y
	Sec. 4.5 (b)	Community-based lead monitoring is only required when CBSA population ≥ 500K.	0	0	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring: none.	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	The Sioux City MSA population is between 100K – 250K and PM_{10} levels are < 80% of NAAQS (*See Design Values in Attachment B).*	0	0	Y
$PM_{2.5}$	Sec 4.7 Table D-5	The Sioux City MSA population is between 50K – 500K and $PM_{2.5}$ levels are < 85% of NAAQS (*See Design Values in Attachment B).*	0	0	Y
	Sec 4.7.2	Continuous monitor not requied	0	0	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network monitoring not requried	0	0	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3	0	0	Y
NCore	Sec. 3	The Nebraska portion of the Sioux City MSA has not been designated to operate an NCore site.	0	0	Y

* Unless noted otherwise, this analysis does not count monitors located in IA and SD toward meeting the minimum monitoring requirements. It does use pollutant levels measured at IA and SD monitoring sites, when determining minimum monitoring needs for ozone and PM.

Table D-2.d: 40 CFR Part 58 Appendix D Review: Grand Island MSA (Population ~ 84,800) **

Pollutant	App. D Citation	**Review Criteria & *Comments***	Sites Required	Sites Operated	Criteria Met?
Ozone	Sec. 4.1 Table D-2	Grand Island MSA population is between 50K -350K. Monitoring is only required if current monitoring indicates O_3 > 85% of NAAQS as set forth in Table D-2. See Section V.F.2 in this Network Plan for further discussion.	0	0	Y
CO	Sec. 4.2	No minimum requirement.	0	0	Y
NO_2	Sec. 4.3.2	Near-road monitoring: No requirement for CBSA < 500K.	0	0	Y
	Sec.4.3.3	Area-Wide monitoring only required if CBSA ≥ 1M (Grand Island MSA population < 1 M)	0	0	Y
	Sec. 4.3.4	Regional Administrator required monitoring: none	0	0	Y
SO_2	Sec. 4.4	*Population Weighted Emissions Index* (PWEI) = 210, which falls below 5000. No minimum number of sites required. See Table D-3 below for PWEI calculation data.	0	0	Y
		Regional Administrator required monitoring	0	0	Y
Lead	Sec. 4.5 (a)	There are no sources emitting ≥ 0.5 tpy of lead	0	0	Y
	Sec. 4.5 (b)	Community-based lead monitoring is only required when CBSA population ≥ 500K.	0	0	Y
	Sec. 4.5 (c)	Regional Administrator required monitoring: none	0	0	Y
PM_{10}	Sec. 4.6 Table D-4	PM_{10} monitoring is not required if MSA population < 100,000	0	0	Y
$PM_{2.5}$	Sec 4.7 Table D-5	Grand Islands's CBSA population is between 50K – 500K and $PM_{2.5}$ levels are < 85% of NAAQS (*See Design Values in Attachment B)*	0	0	Y
	Sec 4.7.2	Continuous monitoring is not required	0	0	Y
	Sec. 4.7.4	$PM_{2.5}$ Speciation Trends Network monitoring is not required	0	0	Y
PAMS	Sec. 5	Only required for areas classified as serious, severe, or extreme non-attainment for O_3	0	0	Y
NCore	Sec. 3	The Grand Island MSA has not been designated to operate a NCore site	0	0	Y

Table D-3: Population Weighted Emissions Index (PWEI) Data for Nebraska Core Based Statistical Areas (CBSAs) [(a) (b) (c)] Page 1 of 3

CBSA	County	Population 7/1/14 [(c)]	SO_2 Emissions (tons/year)		SO_2 Emissions (% Change)	PWEI [(a) (b)]	
			2008 EI	2011 EI		2008 EI	2011 EI
Omaha MSA	Douglas Co., NE	543,244	15,288	14,311	-6%	37,159	**27,747**
	Sarpy Co., NE	172,193	58	29	-50%		
	Cass Co., NE	25,524	1,226	1,094	-11%		
	Saunders Co. NE	20,919	179	20	-89%		
	Washington Co., NE	20,258	25	60	140%		
	Pottawattamie Co., IA	93,128	22,243	15,101	-32%		
	Mills Co., IA	14,831	27	22	-19%		
	Harrison Co., IA	14,324	41	43	5%		
	Totals	**904,421**	**41,086**	**30,679**	**-25%**		
Lincoln MSA	Lancaster Co., NE	301,795	5,027	4,254	-15%	1,616	**1,371**
	Seward Co., NE	17,150	40	43	8%		
	Totals	**318,945**	**5,067**	**4,297**	**-15%**		
Sioux City MSA	Woodbury Co., IA	102,271	35698	29,693	-17%	6,045	**5,033**
	Plymouth Co., IA	24,874	35	18	-49%		
	Dakota Co., NE	20,850	17	14	-18%		
	Dixon Co., NE	5,782	25	13	-48%		
	Union Co., SD	15,029	17	74	335%		
	Totals	**168,806**	**35,808**	**29,813**	**-17%**		

Observation: The EPA's emission inventory data indicates that SO_2 emissions from all 4 of Nebraska's MSA decreased 15% to 25% from 2008 to 2011. See Grand Island MSA data on next page.

Footnotes at bottom of page 3 of this table.

Table D-3: Population Weighted Emissions Index (PWEI) Data for Nebraska Core Based Statistical Areas (CBSAs) [(a) (b) (c)] Page 2 of 3

CBSA	County	Population 7/1/14 [(c)]	SO_2 Emissions (tons/year)		SO_2 Emissions (% Change)	PWEI [(a) (b)]	
			2008 EI	2011 EI		2008 EI	2011 EI
Grand Island MSA	Hall Co.	61,492	3,146	2,378	-24%	275	**210**
	Hamilton Co.	9,135	33	29	-12%		
	Howard Co.	6,362	18	40	122%		
	Merrick Co.	7,766	44	33	-25%		
	Total	**84,755**	**3,241**	**2480**	**-23%**		
Kearney MiSA	Buffalo Co.	48,224	87	89	2%	6	**6**
	Kearney Co.	6,644	17	15	-12%		
	Totals	**54,868**	**104**	**104**	**0%**		
Norfolk MiSA	Madison Co.	35,174	25	24	-4%	16	**13**
	Pierce Co.	7,202	35	30	-14%		
	Stanton Co.	6,069	264	206	-22%		
	Totals	**48,445**	**325**	**260**	**-20%**		
Hastings MiSA	Adams Co.	31457	2547	3324	31%	97	**126**
	Clay Co.	6315	25	17	-32%		
	Totals	**37772**	**2572**	**3341**	**30%**		
Scottsbluff MiSA	Banner Co.	764	3	1	-67%	8	**8**
	Scotts Bluff Co.	36465	205	203	-1%		
	Totals	**37229**	**208**	**204**	**-2%**		

Footnotes at bottom of page 3 of this table.

Table D-3: Population Weighted Emissions Index (PWEI) Data for Nebraska Core Based Statistical Areas (CBSAs) [(a) (b) (c)] Page 3 of 3

CBSA	County	Population 7/1/14 ()	SO_2 Emissions (tons/year)		SO_2 Emissions (% Change)	PWEI [(a) (b) (d)]	
			2008 EI	2011 EI		2008 EI	2011 EI
North Platte MiSA	Lincoln Co.	35,815	31,470	29,246	-7%	1166	**1085**
	Logan Co.	750	2	37	1750%		
	McPherson Co.	498	1	2	100%		
	Totals	**37,063**	**31,473**	**29,285**	**-7%**		
Fremont MiSA	Dodge Co.	**36,744**	**1,999**	**1426**	**-29%**	73	**52**
Columbus MiSA	Platte Co.	**32,666**	**42**	**330**	**686%**	1	**11**
Lexington MiSA	Dawson Co.	24,096	78	64	-18%	2	**2**
	Gosper Co.	1970	5	14	180%		
	Totals	**26,066**	**83**	**78**	**-6%**		
Beatrice MiSA	Gage Co.	**21,663**	**49**	**87**	**78%**	1	**2**

Footnotes:
(a) Population Weighted Emission Index (PWEI) = (CBSA Population) x (SO2 Emissions (tpy))/1,000,000
(b) SO2 Emission data was obtained from the EPA Emission Inventory database for 2008 and 2011. The 2011 EI data is the most recent data available from EPA at the time this table was created (July 2015).
(c) US Census population estimate data for 7/1/2014 was used in this table and the PWEI calculations.
(d) The PWEI was calculated using 2008 and 2011 Emission Inventory (EI) data. The PWEI calculated with 2011 EI data is currently applicable. The PWEI was also calculated with 2008 EI data to document any change that might have occurred.

This attachment contains information on historical ambient monitoring activities in Nebraska and temporal & geographic criteria pollutant concentration variation.

The earliest monitoring in Nebraska was initiated in 1957 for total suspended particulate matter (TSP). Monitoring for other pollutants followed. Table E-1 contains the ambient air monitoring start date for various particulate and gaseous pollutant parameters.

Table E-1:

Pollutant	Location of Initial Monitoring	Year
Particulate – TSP	Lincoln and Omaha	1957
Lead	Halsey National Forest	1965
Sulfur Dioxide	Omaha	1967
Carbon Monoxide	Omaha	1971
Nitrogen Dioxide	Omaha	1972
Ozone	Omaha	1972
Particulate – PM_{10}	Hastings, Louisville, Omaha, Weeping Water	1987
Total Reduced Sulfur	Dakota City, South Sioux City and Lexington	1997
Particulate – $PM_{2.5}$	Bellevue, Blair, Chappell, Grand Island, Hartington, Lincoln, Merriman, North Platte, Omaha, Scottsbluff & Weeping Water	1999

The Federal Clean Air Act (CAA) of 1970 and subsequent modifications in 1977 and 1990, set forth:

- National Ambient Air Pollutant Standards for 6 criteria pollutants;
- Requirements for ambient air monitoring;
- Requirements for air emission permits;
- Requirements for air emission standards for mobile and stationary sources; and
- Requirements for an air emission source compliance and enforcement system.

These CAA mandated emission control and compliance programs have been generally effective in reducing ambient air pollutant concentrations of the 6 criteria pollutants as can be seen in the pollutant-specific subsections of this attachment.

The EPA web site below provides summary information on the history of the CAA and its implementation: www2.epa.gov/laws-regulations/summary-clean-air-act

1) Carbon Monoxide (CO)

Carbon monoxide pollution is associated primarily with mobile sources. CAA mandated vehicle tail-pipe emissions were initiated in 1975 and have been strengthened periodically since then. The EPA website below contains a brief history of mobile source emission standards: www.epa.gov/otaq/consumer/milestones.htm

Highest concentration CO areas are typically located in high-traffic, traffic-congestion, street canyon areas. Historically CO monitoring in Nebraska has been conducted in Omaha and Lincoln at the following sites.

Lincoln Sites

- 27th & O St. area: 1973 to Feb 2012
- 51st & Colby Sts.: 1975 to 1985
- 20th & P Sts.: 1984 to 1986
- 28th & C Sts.: 1986 to 1988
- 3040 Arlington St: 1988 to 1997

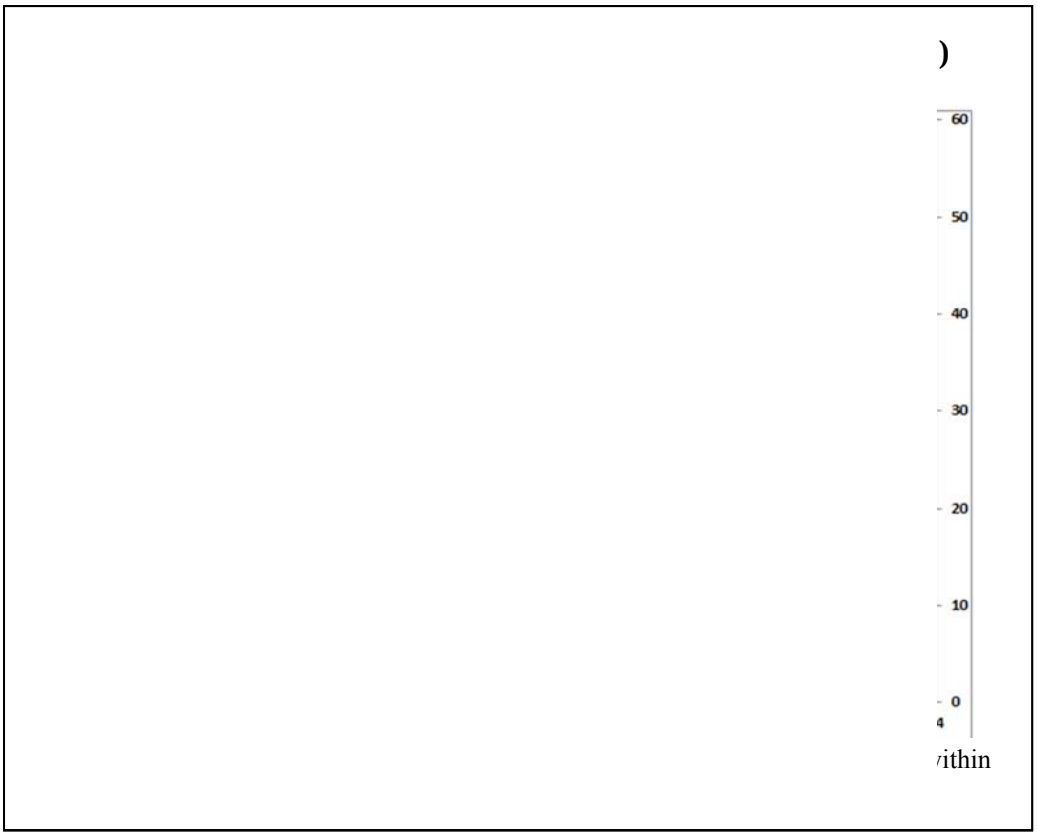
Omaha Sites

- 11th & Douglas: 1971 to 1980
- North 30th St.: 1975 to 2007
- 74th & Dodge: 1981 to 2006
- 78th & Dodge (current highest concentration site): 2007 to present
- 41st & Woolworth (NCore site): 2011 to present

Figures E-1 and E-2 show the annual 2nd maximums found in Lincoln and Omaha since monitoring was initiated to present. As the figures demonstrate, ambient CO levels have been reduced significantly since the 1970s, with CO levels below 50% of the NAAQS since 2000. This is largely contributable to the Federal tailpipe emission standards for automobiles and trucks.

CO monitoring was also conducted in the Comstock in 1980, and Homer in 1981. Second high maximum 1-hour and 8-hour concentrations were less than 25% of the NAAQS.

Figures E-3 and E-4 show the approximate location of the current and historical CO monitoring sites in Nebraska.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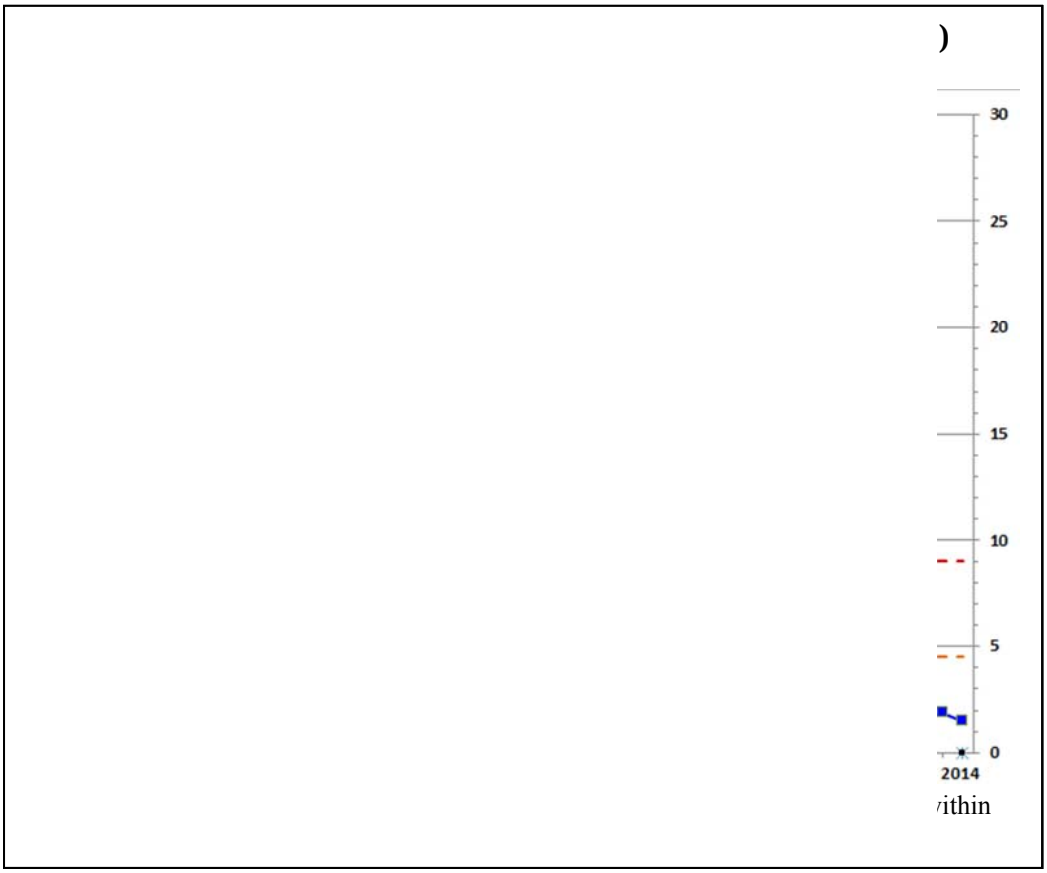
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Figure E-3: Location of Current ● and Historical ○ CO Monitoring sites in Nebraska

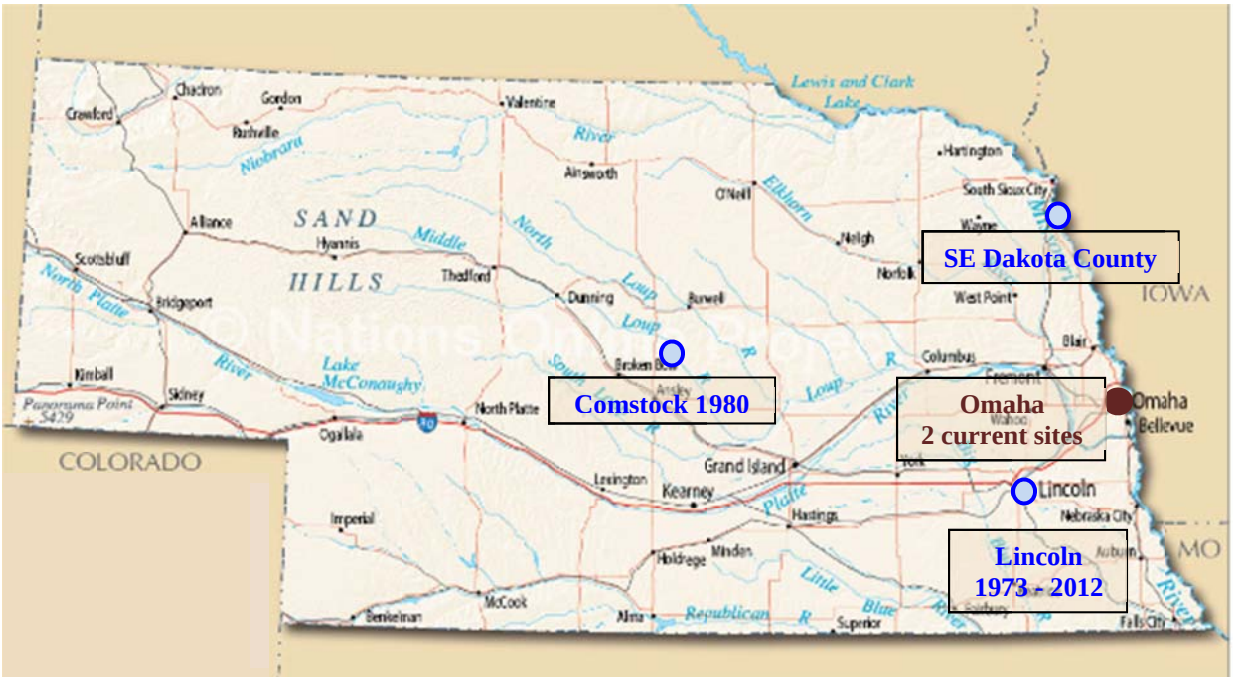
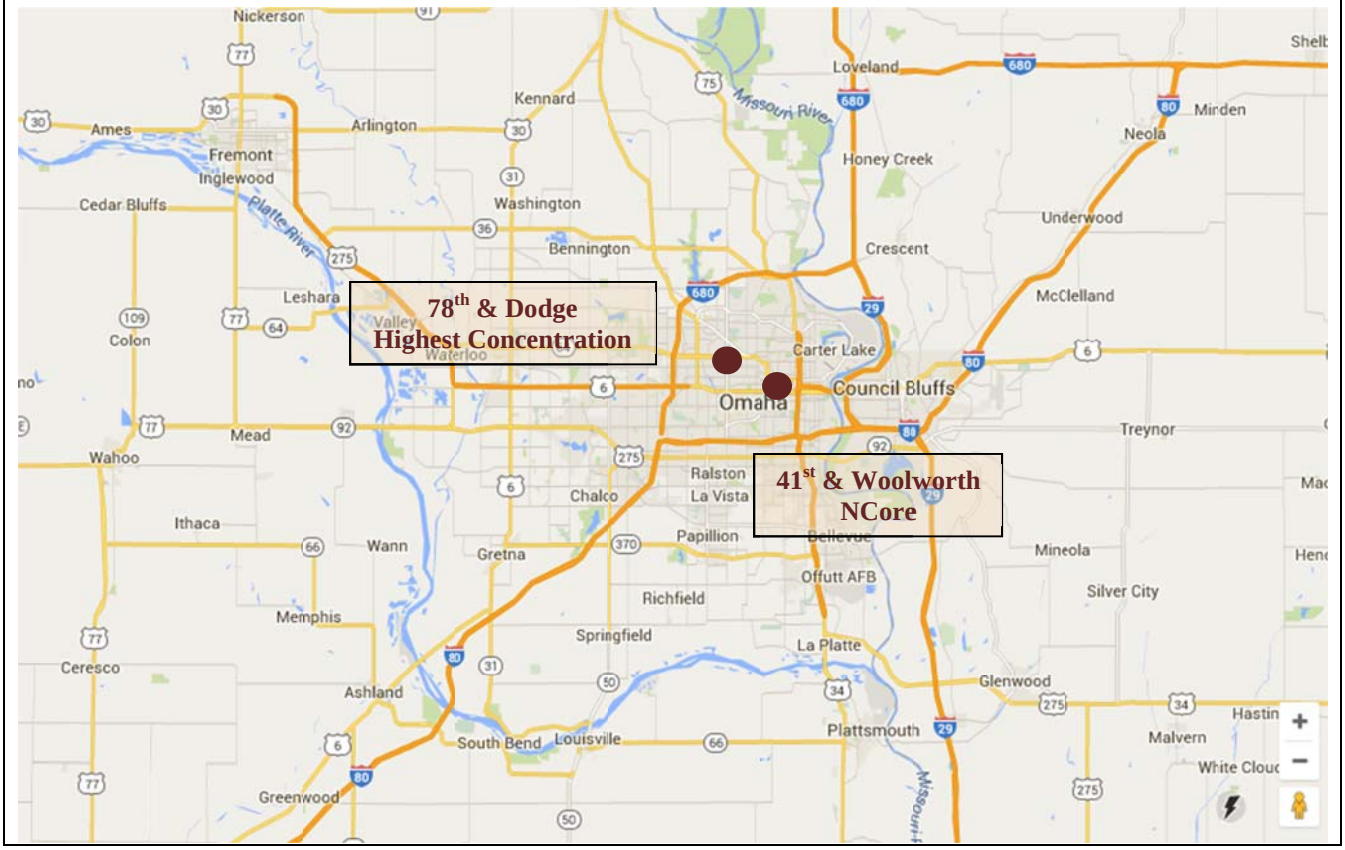


Figure E-4: Location of Current CO Monitoring sites in Omaha



2) Ozone

2.A. Ozone Formation and Monitoring Season

Ground-level ozone (O3) is formed in the atmosphere (*in situ*) as a result of the reaction of sunlight and other pollutants; primarily volatile organic chemicals (VOCs) and nitrogen oxides (NOx). Maximum ground-level concentrations are typically found downwind from pollutant source areas, such as larger metropolitan areas, oil & gas wells and processing facilities, industrial parks, etc.

For example, the highest ozone concentrations measured within the Omaha MSA are often in Harrison County, IA near or in the town of Pisgah, population ~250 people.

Ground-level ozone concentrations peak in the summer months. Thus ozone monitoring is conducted in Nebraska from April thru October. The proposed ozone NAAQS public noticed by EPA on November 25, 2014 would extend the ozone monitoring "season" in Nebraska to be march thru October.

2.B. Ozone NAAQS

Table E-2 below summarizes history of the ozone NAAQS. Note that there were significant changes in the form of the standards established 1971 and 1979; and the averaging time for the NAAQS went from 1-hour in the 1979 NAAQS to 8-hours in the 1997 NAAQS.

The current NAAQS for 8-hour ozone is 0.075 ppm. Attainment with this NAAQS is determined using a Design Value (DV) that is not to be exceeded. The DV is the truncated average of the annual 4th high values monitored at any given site.

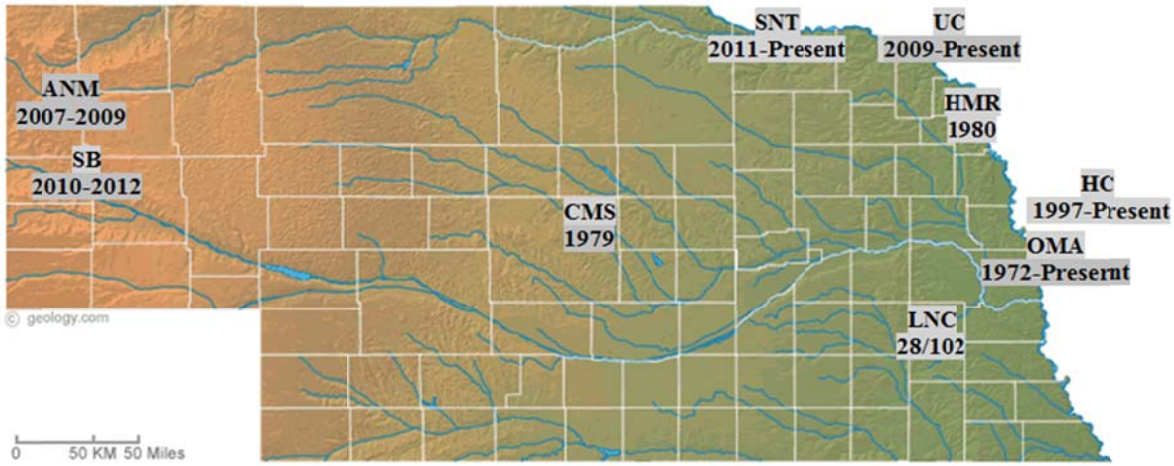
For example, if the 4th high values from the Example Site were 0.074 ppm for 2012, 0.075 ppm for 2013 and 0.078 ppm for 2014, the 3-year average would be 0.0757 ppm, which truncates to 0.075 ppm. Thus, the Example Site would be in attainment with the NAAQS.

USEPA has proposed lowering the ozone NAAQS to be in the range of 0.065 ppm to 0.070 ppm, and also solicited comments about lower levels down to 0.060 ppm. EPA is under court order to finalize the ozone NAAQS regulation by October 1, 2015.

Table E-2: History of Ozone NAAQS

Status / Date	Pollutant Indicator	Averaging Time	NAAQS Level	NAAQS Evaluation Criteria
Final Apr 30, 1971	Total Photochemical Oxidants	1-hour	0.08 ppm	Not to be exceeded more than 1 hour per year
Final Feb 8, 1979	Ozone	1-hour	0.12 ppm	Expected number of days when 1-hr ozone exceeds 0.12 ppm ≤ 1
Final Jul 18, 1997	Ozone	8-hour	0.08 ppm	Truncated 3-year average of annual 4th high values ≤ 0.08 ppm
Final Mar 27, 2008	Ozone	8-hour	0.075 ppm	Truncated 3-year average of annual 4th high values ≤ 0.075 ppm
Final Oct 1, 2015	Ozone	8-hour	0.070 ppm	Truncated 3-year average of annual 4th high values ≤ 0.070 ppm

Figure E-5: Summary of Ozone Monitoring Activities in Nebraska



Legend: The legend table below explains the 2-3 letter abbreviations shown on the map. Shown below the abbreviations are the years sites were operated at these locations.

Abbr.	Location	Operator (a)	Years Sampled	# of Years	Annual 4th High Range (ppb) (b)
ANM	Agate Fossil Bed National Monument	NPS	2007-2009	3	59 - 67
CMS	Custer County near Comstock	NDEQ	1979	1	70
SB	Scottsbluff National Monument	NPS	2010-2012	10	59 - 67
SNT	Santee Sioux Reservation	EPA	2011-present	4+	63 - 75
Omaha MSA Sites					
HC	Harrison County, IA	IA DNR	1997 - present	18+	59 - 80
	Pisgah, IA	IA DNR	2009-present	6+	63 - 75
OMA	30th & Fort Sts., Omaha	DCHD	1972-1977	5	56 - 96
			1981-2014(b)	24	47 - 80
	11414 N 72nd St., Omaha	DCHD	1979-2010	32	49 - 120
	24th & O Sts., Omaha	DCHD	1975-present	40+	37 - 96
	42nd & Woolworth Sts,. Omaha	DCHD	1972	1	38
			2011-present	4+	63 - 71
	16th & Whitmore Sts., Omaha	DCHD	2015(c)	(c)	(b)
Lincoln MSA Sites					
LNC	14th & Superior Sts., Lincoln	LLCHD	1979-1984	6	53 - 69
	1st & Maple Sts., Davey	LLCHD	1985-present	30+	49 - 69
Sioux City MSA					
HMR	Dakota County near Homer	NDEQ	1980	1	66
UC	31102 471st Ave Union Co, SD	SD DENR	2009-2012	4	60 - 68
	31986 475th Ave, Union Co, SD	SD DENR	2013-present	2+	62 - 63

Footnotes:

(a) Agency abbreviations: DCHD – Douglas County Health Department EPA – US Environmental Protection Agency IA DNR – Iowa Dept. of Natural Resources LLCHD – Lincoln Lancaster County Health Dept. NDEQ – NE Dept. of Environmental Quality SD DENR – SD Dept. of Environment & Natural Resources NPS – National Park Service

(b) The range of annual 4th high values was determined from historical data thru 2014. Data from 2015 was not included in the range.

(c) The Omaha 30th & Fort site was temporarily closed for 2015 due to construction activity at the site and re-located to 16th & Whitmore (existing SO_2 site). A decision to retain the site at 16th & Whitmore or move it back to 30th & Fort will be made following the 2015 monitoring year.

2.C. Ozone Monitoring in Nebraska

Figure E-5 and its accompanying legend table (above) provide an overview of ozone monitoring in Nebraska, and in adjacent state areas within the Omaha and Sioux City MSAs. Currently ozone monitoring is being conducted at 3 locations in Nebraska:

- the Omaha MSA (3 sites in Nebraska and two sites in Iowa),
- the Lincoln MSA (SLAMS site in Davey and temporary investigative site in Waverly), and
- the Santee Sioux Reservation (a CASTNET site operated by EPA).

Also there is a site within the Sioux City MSA. It is in Union County, SD and is operated by South Dakota.

The subsections below provide more detail about ozone levels and trends in and around Nebraska

Omaha MSA: Ozone monitoring was initiated in Nebraska in Omaha in 1972 and continues through the current time. The sites have changed over the years. Currently there are 3 sites operated by DCHD in Omaha , NE.

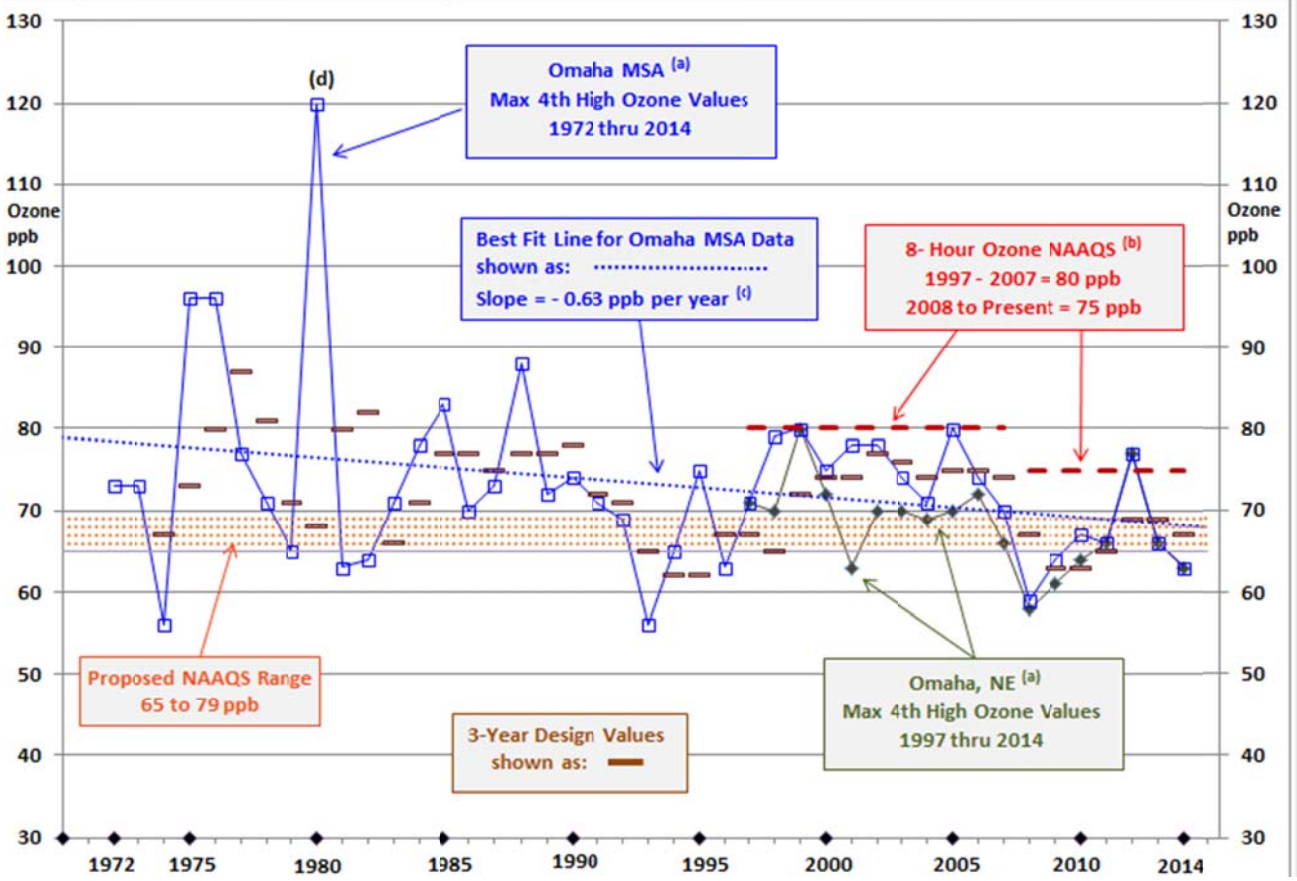
- A year-round site at the NCore site at 4201 Woolworth Ave., which began operation in April 2010.
- A seasonal site at 24th and O St that has operated in 1975, 1978 thru 1982, and 1985 to present day.
- A seasonal site at 19th & Whitmore that began operation in April 2015 as a temporary replacement for the 30th and Fort site due to construction activity. The 30th & Fort Street site operated from 1981 thru 2014. A decision as to whether to move back to 30th & Fort or remain at 19th & Whitmore will be made after the completion of the 2015 monitoring season.

There are also 2 sites in Harrison County, IA, which is in the Omaha MSA:

- The Hwy 183 site approximately 4 miles S-SW of Pisgah, IA (~30 north of the urbanized edge of the Omaha-Council Bluffs urbanized area), which began operation in 1997; and
- The Forest Service Office site in Pisgah, IA, which began operation in 2009.

Figure E-6 (below) provides a historical view of the maximum ozone levels found in Omaha, NE and the Omaha MSA. The trend line for the complete data set shows ozone levels to be decreasing from 1972 thru 2014 at a rate of 0.25 ppb per year. However, visual examination of the plot appears to indicate that this downward trend may have ended in the 1990's. This is in part related to the initiation of monitoring in Harrison County, IA in 1997, as this site has been the highest concentration site for the Omaha MSA.

Figure E-6: Maximum 4th High 8-Hour Ozone Levels in the Omaha MSA: 1972 thru 2014



Footnotes:

(a) The maximum values shown for the Omaha MSA from 1972 thru 1996 are from monitoring sites in Omaha, NE. In 1997, was initiated in Harrison County, IA. The maximum values recorded by Harrison County sites have at or above the maximum values recorded at Omaha, NE sites.

(b) The first ozone NAAQS was established in 1971 as a 1-hour standard of 80 ppb for *Total Photochemical Oxidants*. This was changed in 1979 to be a 1-hour standard of 120 ppb for ozone. These earlier NAAQS are not shown in the plot because they were based on a different averaging time and cannot be compared to the 8-hour values in this figure.

(c) Historical trend line influenced by high values in 1970s and 1980s. See Figure E-6 for trend analysis of more recent 2006 thru 2014 data.

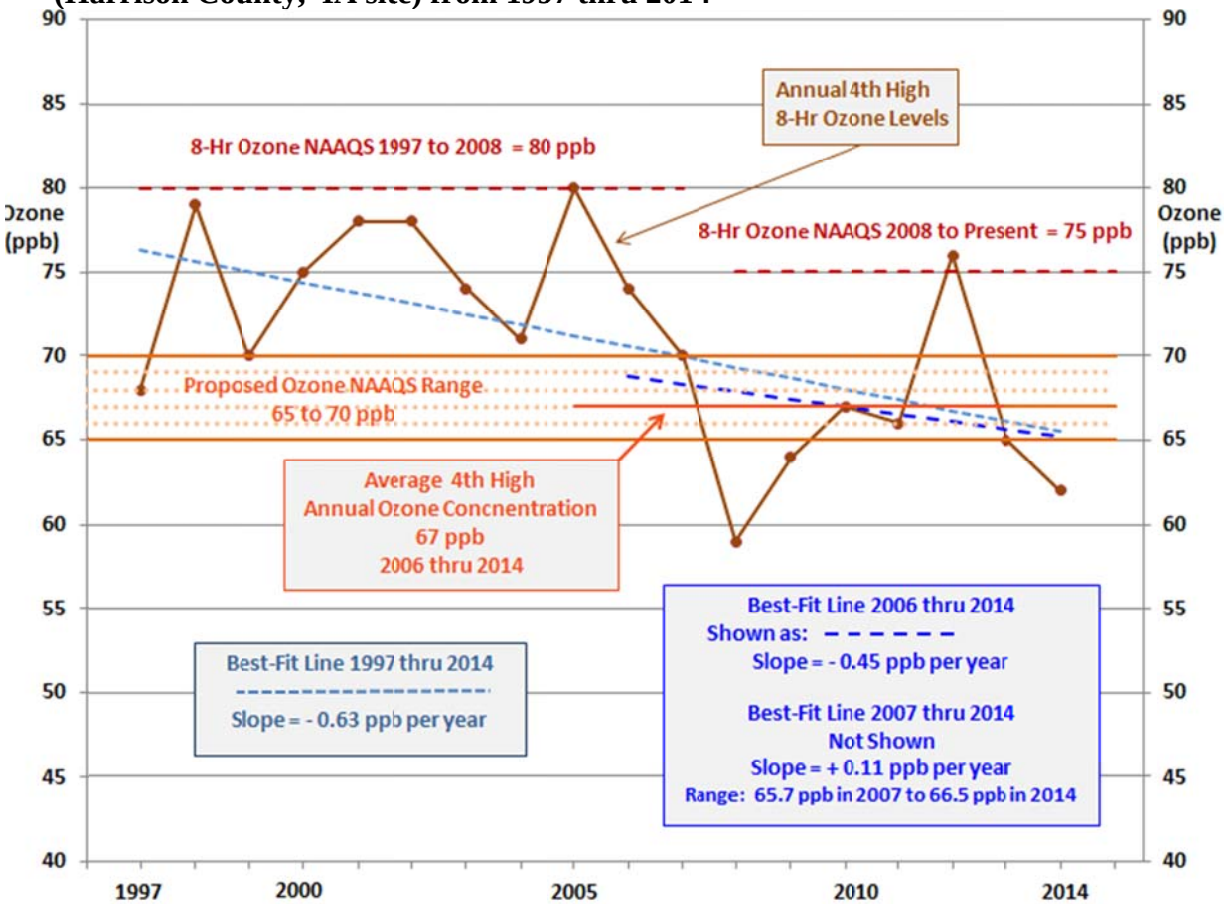
(d) The highest 4th high ozone value ever detected in Nebraska was 120 ppb at the North 72nd St. site in 1980. There was not a 1978-80 DV for this site because monitoring was initiated in 1979.

Figure E-7 (below) contains trend analyses of Harrison, IA ozone levels from 1997 to 2014 (i.e., data from the highest reporting site in the Omaha MSA). The 1997 thru 2014 data indicates a downward trend of -0.63 ppb year. However, visual examination indicates that this downward trend may not have continued after 2006 or 2007. The 2006 thru 2014 data shows a downward trend of -0.45 ppb per year with an average of 67 ppb and a range of 69 ppb in 2006 to 65 ppb in 2014. While the 2007 thru 2014 data shows a slight upward trend of +0.11 ppb per year with an average of 66 ppb and a range of 65.7 ppb in 2007 to 66.5 ppb in 2014.

Although the 2015 ozone monitoring season is not complete, the results through August are finding 4th high values in the low 60s with only one day above 65 ppb. Thus, there is a good possibility that:

1) the 4th high value within the Omaha MSA will be near or possibly below the levels seen in 2013 and 2014, and
2) the 2013-2015 DV will not exceed 65 ppb.

Figure E-7: Trend Analysis of Maximum 8-Hour Ozone Levels in the Omaha MSA (Harrison County, IA site) from 1997 thru 2014



Trend Analysis Observations:

(a) From 1997 thru 2014 there is an overall downward trend of - 0.63 ppb per year.
(b) From 2006 thru 2014, the downward trend lessons to - 0.45 ppb per year with an average concentration of 67 ppb and a range of 69 ppb in 2006 to 65 ppb in 2014.
(c) From 2007 thru 2014, the data indicates a slight upward trend of + 0.11 ppb per year with an average concentration of 66 ppb and a range of 65.7 ppb in 2007 to 66.5 ppb in 2014.
(d) The 2006 thru 2014 and the 2007 thru 2014 average 4th high ozone values are very similar; 67 ppb and 66 ppb, respectively.

Regardless, due to the variability of 4th high ozone data, the uncertainty of any continued downward trend, and the 8 year and 9 year average ozone concentrations of 66 to 67 ppb, there is significant uncertainty as to whether ozone DVs will remain in attainment with a lower ozone NAAQS in the

proposed 65 to 70 ppb range. The uncertainty obviously increases if the NAAQS is set at the lower end of this range.

Lincoln MSA: Monitoring was initiated at 14th & Superior in Lincoln in 1979. After the 1984 ozone monitoring season, the 14th & Superior site was closed. Monitoring at Davey, NE was initiated in 1985 and conducted there to the present. Davey is approximately 7 miles north of the urbanized edge of Lincoln. It is in Lancaster County and within the Lincoln MSA.

In 2015 a temporary investigative site was established in Waverly to compare with the results from Davey. Following the 2015 monitoring season, the results from the 2 sites will be compared to determine which site has the higher ozone concentrations.

Figure E-8: Maximum 4th High 8-Hour Ozone Levels in the Omaha MSA: 1979 thru 2014

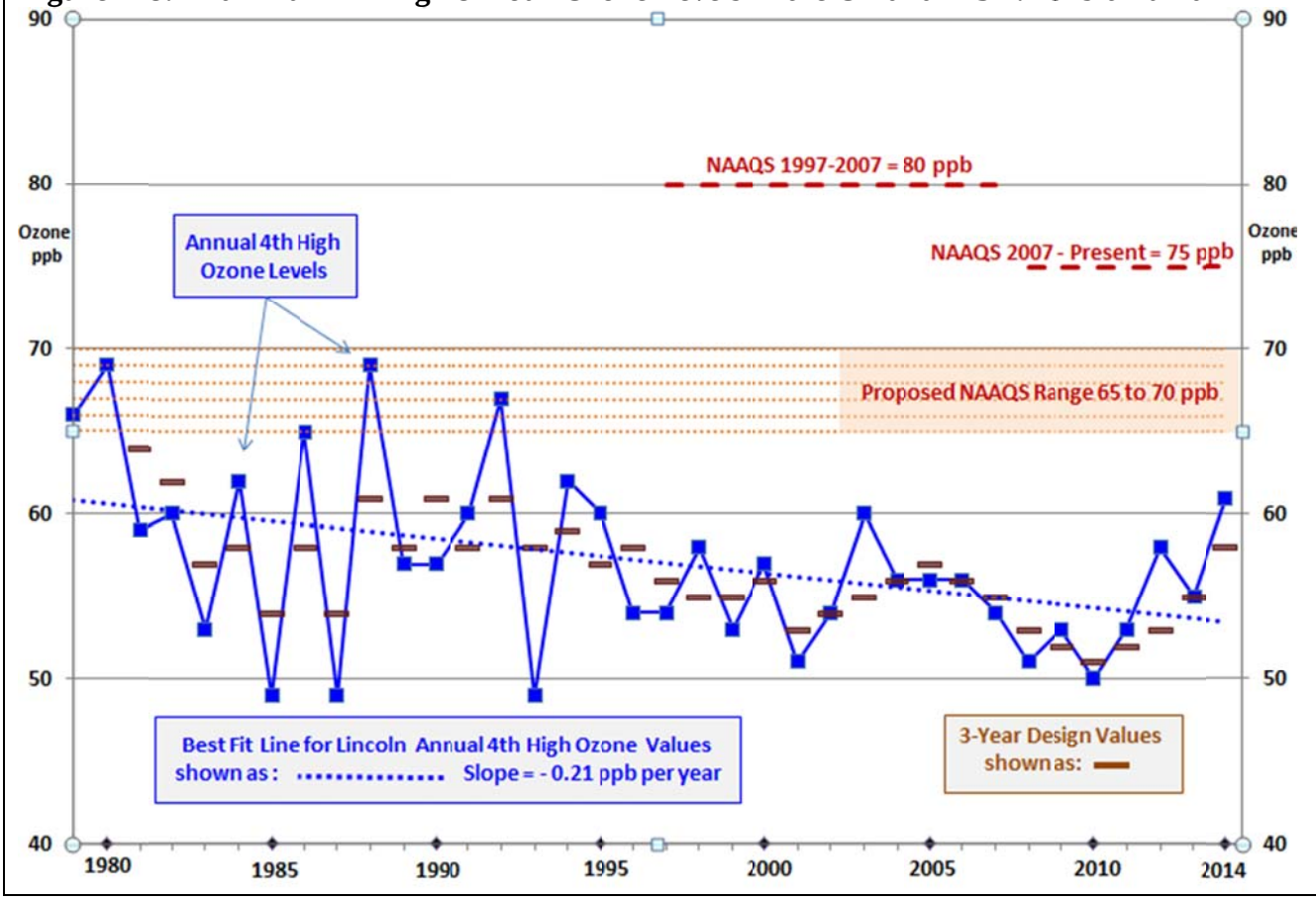


Figure E-8 (above) is a plot of historical 4th high ozone levels in the Lincoln MSA. Overall, the data demonstrates a downward of -0.21 ppb per year. On the other hand, since 2010 the data indicates an upward trend of + 2.4 ppb per year.

Figure E-9 (below) is a plot of 4th high ozone levels from 2009 thru 2014 at four locations: Omaha MSA, Lincoln MSA, Sioux City MSA and Santee Sioux Reservation. Note four things in this figure with respect to ozone in the Lincoln MSA.

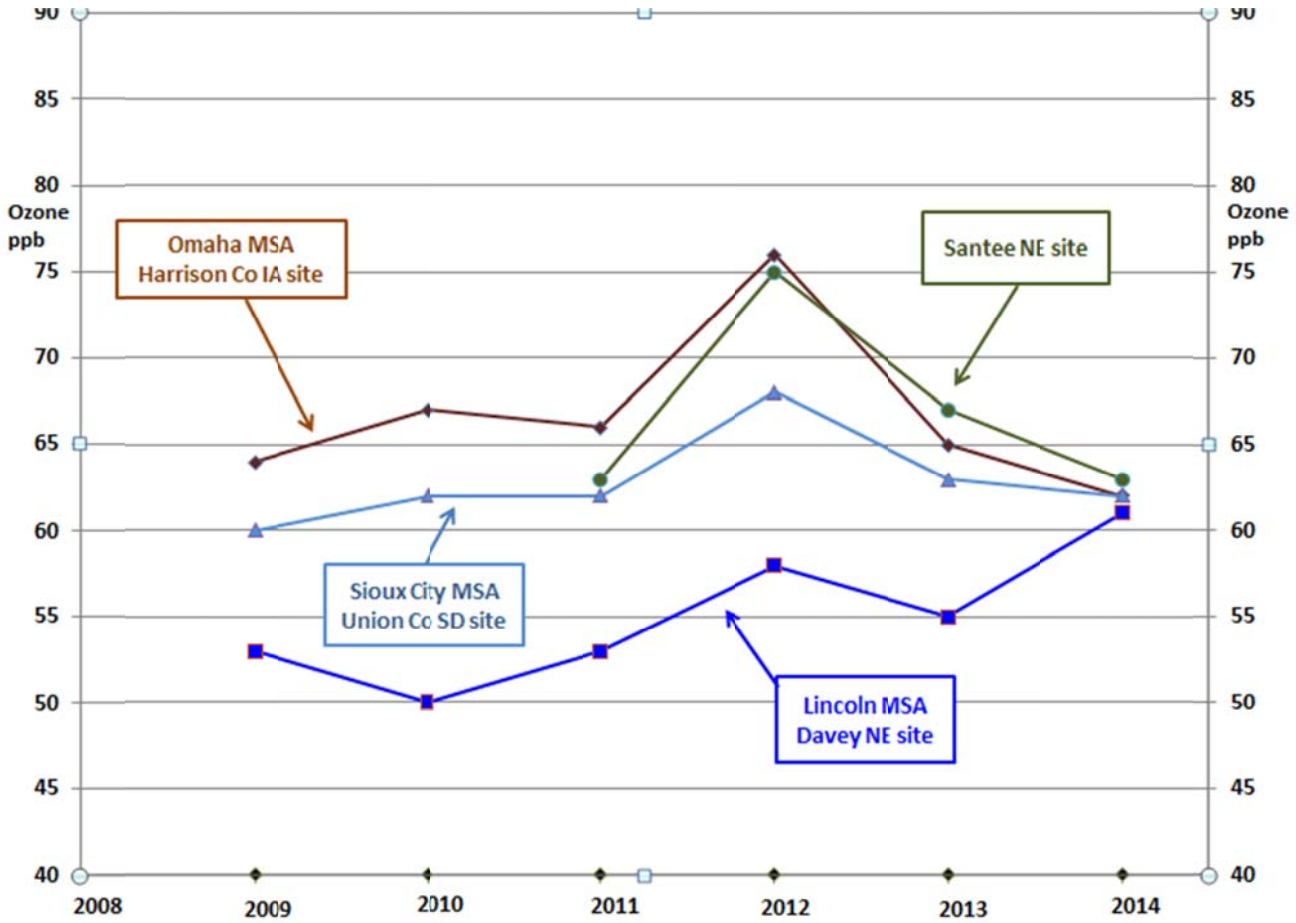
1) Ozone levels at Davey (Lincoln MSA) are lower than the other 3 sites;

2) The basic pattern or trend in year-to-year ozone concentrations is the same for all 4 sites, except the 2010 and 2014 ozone levels at the Lincoln MSA, Davey NE site;
3) Ozone concentrations increased from 2013 to 2014 at Lincoln, but decreased at the other 3 sites; and
4) All four sites had very similar 4th high values in 2014.

At this time, it is not apparent whether the 2014 4th high value found at Davey is related to an upward trend in ozone levels at that site, or some other factor. There are no known significant new sources of NOx or VOCs that might account for the increase. New monitoring equipment was installed at the Davey site (i.e., analyzer and transfer standards). However, biweekly zero/span checks and audits indicated proper operation in the years preceding 2014.

A review of the historical data shown in Figure E-7 shows that the last time the DV at Davey exceeded 60 ppb was in 1992. The 2015 maximum and 4th high values thru July were 64 ppb and 61 ppb, respectively. At this point, it does not appear that a DV above 65 ppb is likely thru 2015.

Figure E-9: Ozone Levels at Monitoring Locations in or near Nebraska: 2009 – 2014



Sioux City MSA (Union County SD sites)

The South Dakota Department of Environment and Natural Resources began operating monitoring sites in rural Union County, SD in 2009. Union County is in the Sioux City MSA. Ozone monitoring was conducted at 31102 471st Avenue (~26 mi NW of North Sioux City)from 2009 thru 2012, and at 31986 475th Avenue (~17 mi NW of North Sioux City) from 2013 thru present. The data from these sites is shown in Figure E-9 (above). Ozone concentrations at the Union County site were lower than those found in the Omaha MSA and at Santee, but followed a similar year-to-year pattern.

Santee, NE:

EPA operates a Clean Air Status and Trends Network (CASTNET) site near Santee, NE. The site is located in the Santee Sioux Reservation in Knox County. It is not part of the monitoring network operated or overseen by the State of Nebraska.

In 2011, EPA began operating an ozone monitor at this site. The annual 4th high values found at the Santee site ranged from 63 to 75 ppb from 2011 thru 2014, as shown in Figure E-9. The ozone levels

found at the Santee site were very similar to those found in the highest sites in the Omaha MSA. The 2012-14 Design Value (DV) was 68 ppb, which was the highest ozone DV found in Nebraska. The levels of ozone detected at Santee were somewhat surprising, although as discussed in the next 2 subsections they may not be that unique.

Nebraska Panhandle

The National Park Service (NPS) conducted monitoring in the Nebraska panhandle:

- From 2007 thru 2009, at the Agate Fossil Beds in Sioux County, NE; and
- From 2010 thru 2012, at the Scotts Bluff National Monument in Scotts Bluff County, NE.

In response to NDEQ inquiry in 2008, the NPS communicated that the monitoring was being conducted to follow-up on modeling conducted by the NPS that indicated possible elevated ozone concentrations originating from metropolitan areas in Colorado. Also the NPS was not using an EPA FRM/FEM monitor, although they had conducted studies to verify its accuracy.

Figures E-10 and E-11 show how ozone levels at these 2 sites compare with other sites in Nebraska from 2007 to 2012. As can be seen, ozone levels in the panhandle were similar to those in the Omaha MSA.

Figure E-10: Ozone Levels at Sites in and near Nebraska: 2007 - 2009

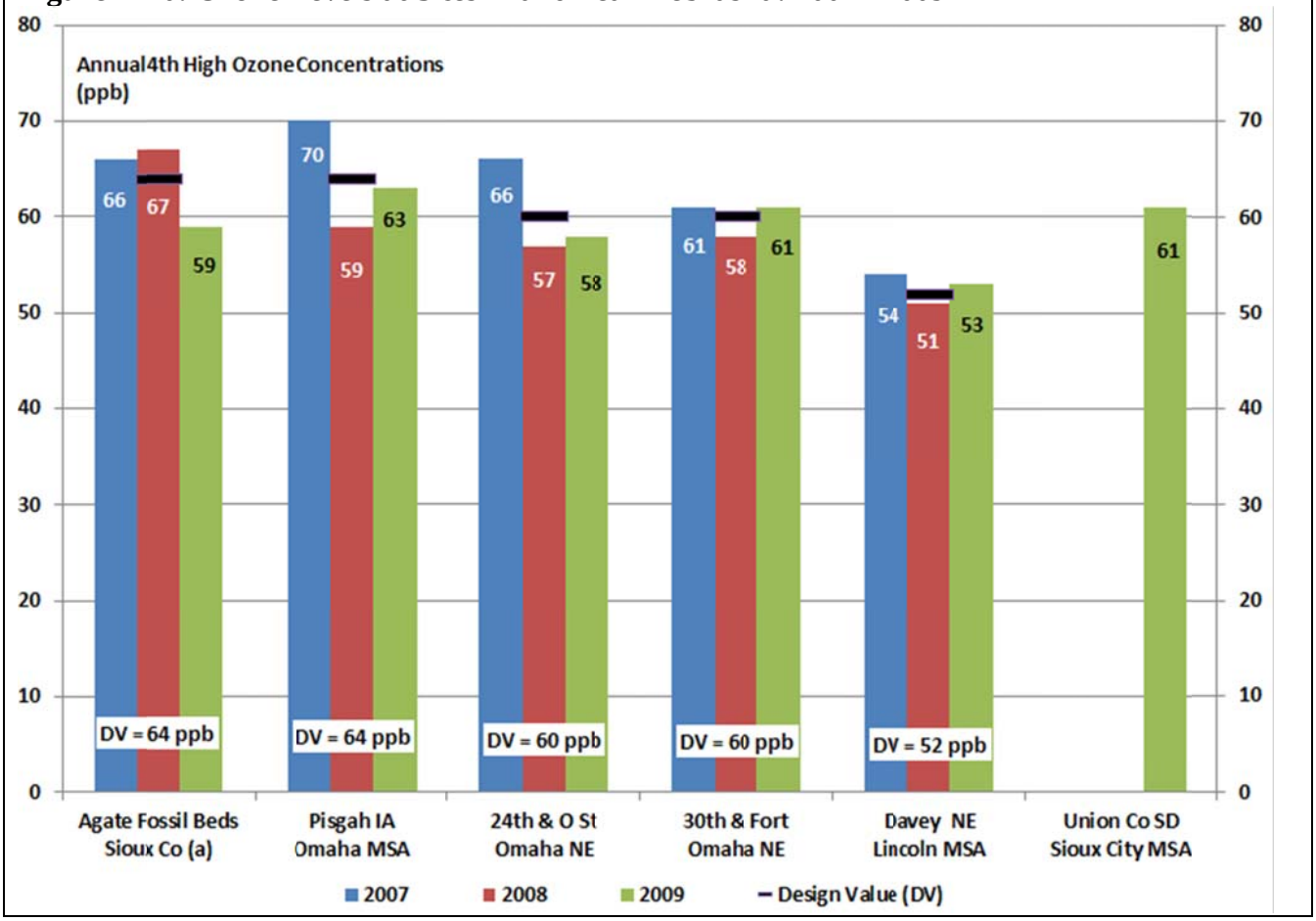


Figure E-11: Ozone Levels at Sites in and near Nebraska: 2010-2012

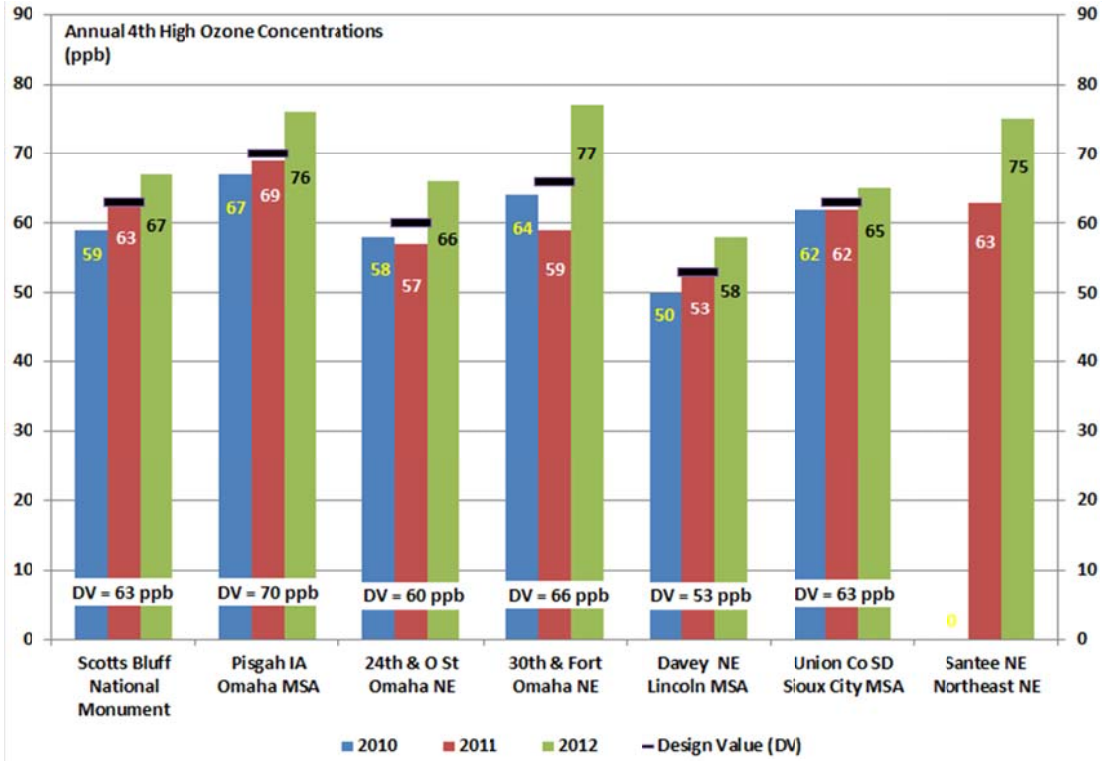
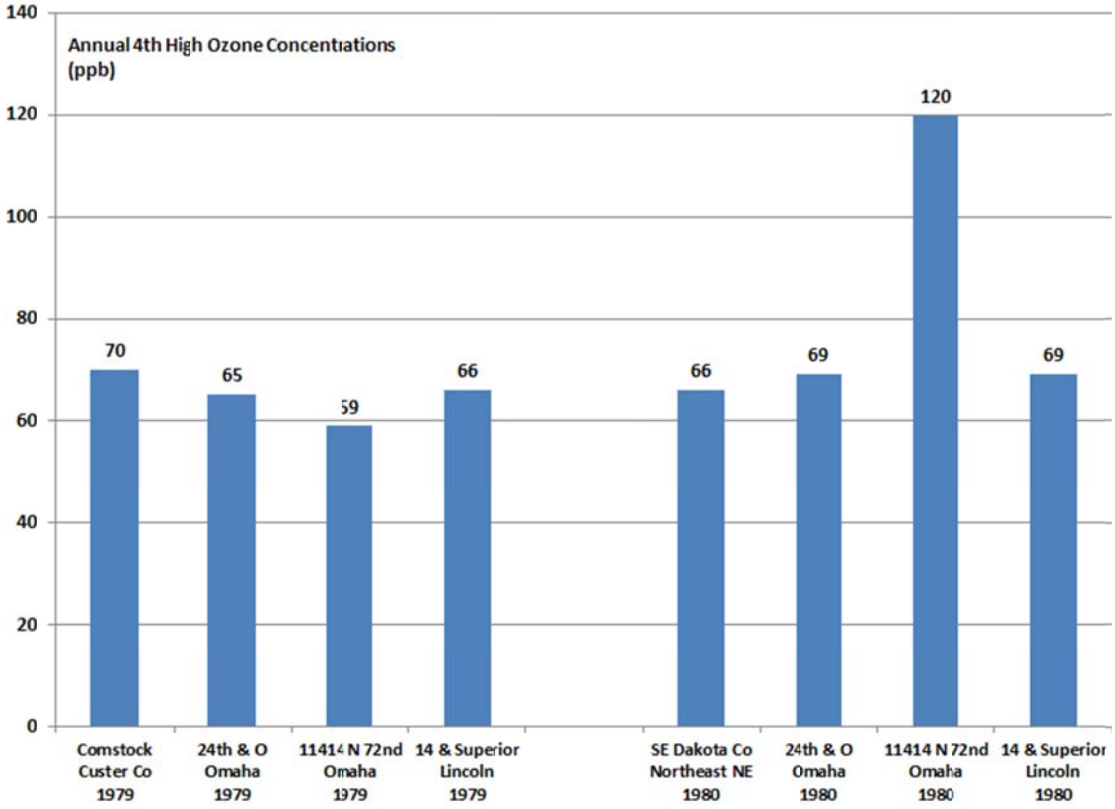


Figure E-12: Ozone Levels in Nebraska 1979 & 1980



Other Areas of the Nebraska:

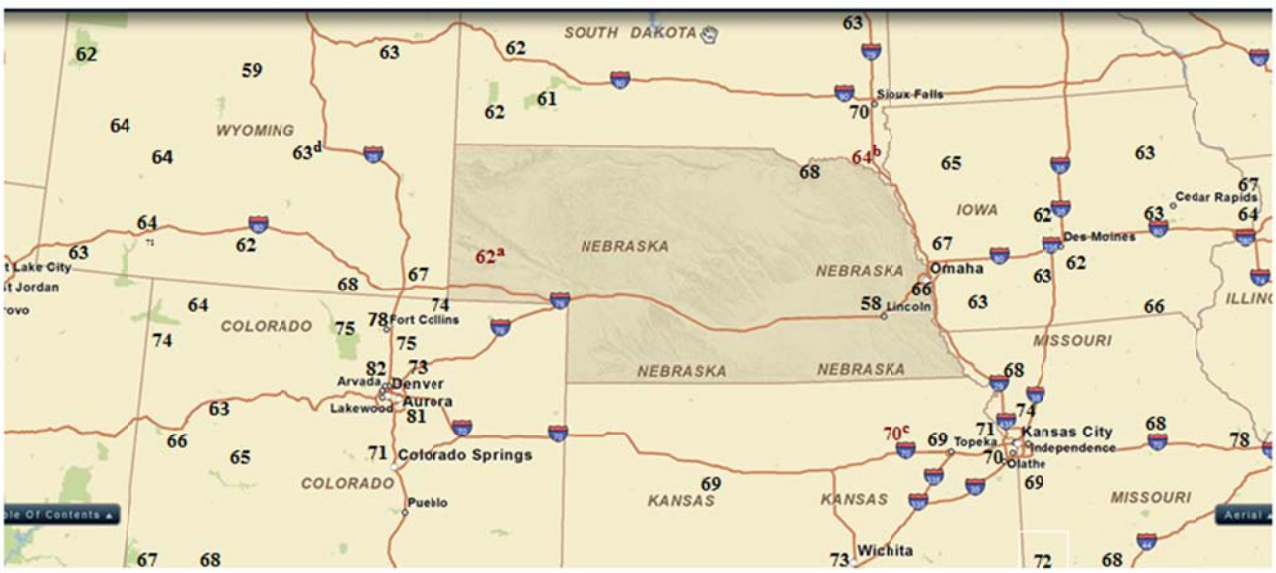
Background monitoring was conducted for 1 year at a rural site near Comstock, NE in Custer County in 1979, and at another rural site in southeast Dakota County in 1980. Dakota County is part of the Sioux City MSA, but the site location was in a rural location and upwind (SW) of the urbanized area of the MSA.

Figure E-12 shows the 4th high ozone levels found at these sites and Omaha and Lincoln sites for the same year. As can be seen, ozone levels at these two sites were similar to the ozone levels in Lincoln and Omaha, with the exception of the North 72nd St site in Omaha in 1980.

The 120 ppb 4th high value at the North 72nd Street site was the all-time highest ozone value ever detected in Nebraska.

A review of the Omaha data in Figure E-6 and Lincoln data in Figure E-8, shows that ozone levels detected at the Comstock and Dakota County sites were similar to those found in Lincoln at the time. They were also similar to the lower values found in Omaha at the time, although Omaha also had higher values. However, basing comparisons on 1-year of data from the rural sites does not provide for a definitive analysis or conclusion.

Figure E-13: Ozone 2012-14 Design Values for Areas in and Around Nebraska



Footnotes

a - Scottsbluff, NE: Only 2012 data available. 2012-2014 DV estimated by extrapolation using 2012 annual 4th high from Scottsbluff & Greeley, CO, and the 2012-14 DV from Greeley, CO ($eDV_{SB} = DV_{GR} \times Oz12_{SB} / Oz12_{Gr}$, where DV_{SB} is the estimated 2012-14 DV for Scottsbluff, DV_{GR} is the 2012-14 DV for Greeley CO, $Oz12_{SB}$ is the 2012 4th high ozone concentration at Scottsbluff, and $OZ12_{GR}$ is the 2012 4th high ozone concentration at Greeley CO)

b - Union Co SD (Sioux City MSA): The DV was calculated using the combined data from 2 rural sites in Union Co SD: 2012 & 13 data from 31986 475th Ave and 2014 data from 31102 471st Ave. These 2 sites are ~ 10 miles apart near Junction City, SD.

c – Konza Prairie south of Manhattan, KS: Only 2012 data available. 2012-2014 DV estimated by extrapolation using 2012 annual 4th-high from Konza Prairie & Peck, KS (Max. Conc. Wichita MSA site), and the 2012-14 DV from Peck ($eDV_{KP} = DV_W \times Oz12_{KP} / Oz12_W$, where eDV_{KP} is the estimated 2012-14 DV for Konza Prairie, DV_W is the 2012-14 DV for Peck, $Oz12_{KP}$ is the 2012 4th High ozone concentration at Konza Prairie, and $OZ12_W$ is the 2012 4th high ozone concentration at Peck)

d – Casper, WY: DV based on 2013 & 2014 data only from the 2800 Pleasant Drive site.

2.D. Geographical Distribution of Ozone in and around Nebraska: 2012- 2014 Design Values

Figure E-13 above shows the 2012-2014 Design Values for areas in Nebraska and in near-by states. The figure shows that areas with DVs in the 65 to 70 ppb range are ubiquitously distributed in and around Nebraska.

3) Nitrogen Dioxide (NO_2)

Nitrogen dioxide (NO_2) and other nitrogen oxide gases (NOx) are formed when fuel is burned at high temperatures, and come principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. Vehicle emission standards and stationary source controls have resulted in significant reductions in the emission of NO2/NOx gases since air monitoring was initiated in the 1970's.

Monitoring for NO_2 was initially conducted in Nebraska from 1972 thru 1984. This early monitoring primarily generated 24-hour average data, but 1-hour data was collected from some sites. In 2011 monitoring for NOy and NO was initiated at the Omaha NCore site and continues to the current time with 1-hour data being collected.

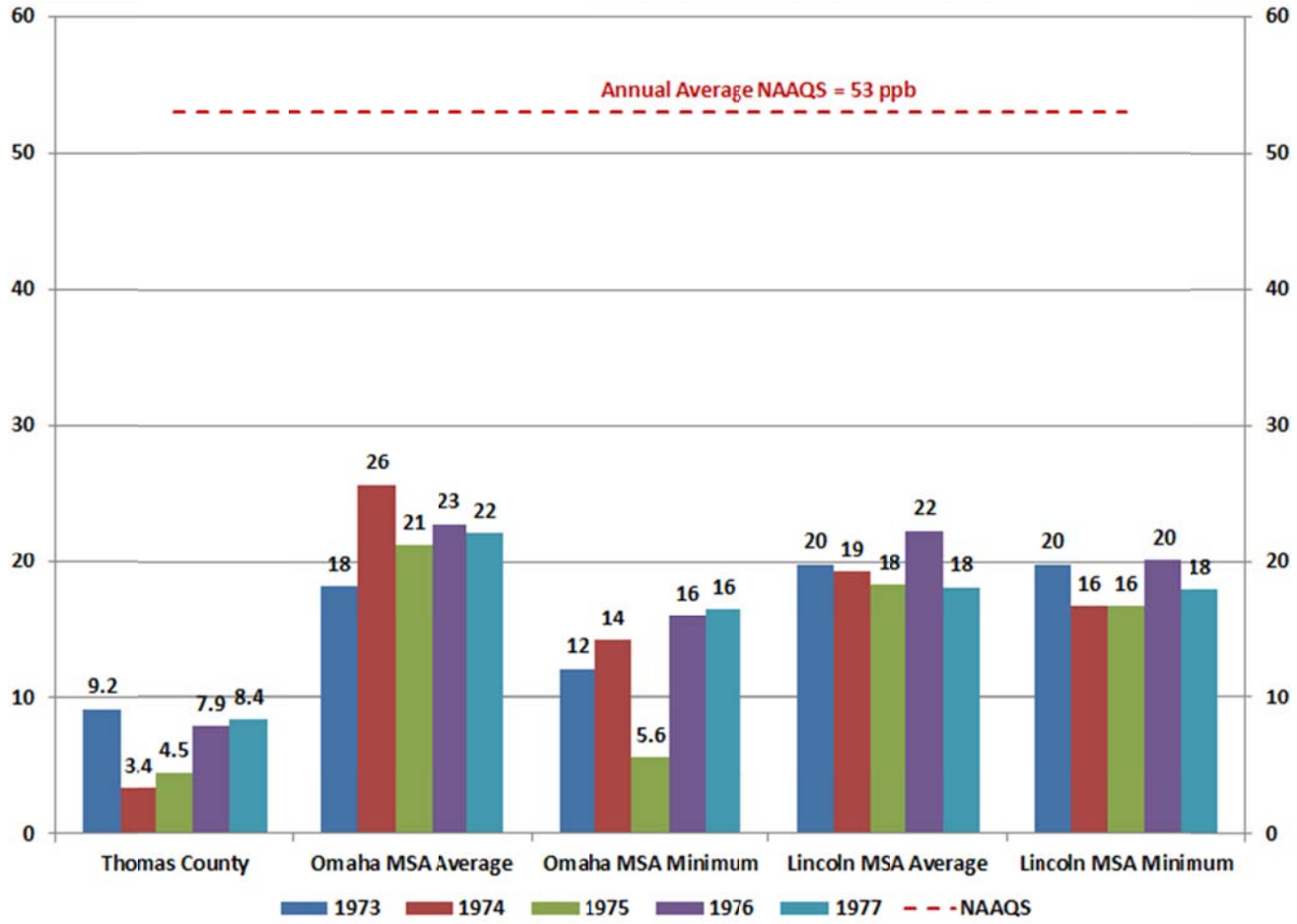
The NOy-NO parameter provides a good approximation of NO_2 concentrations, although NOx compounds other than NO_2 can contribute to NOy-NO. Thus, the NOy-NO parameter may over-estimate the NO2 concentration. Therefore, if the NOy-NO parameter is below the NAAQS, then NO_2 should be too.

Figures E-14 and E-15 contain summaries of annual average NO_2 data collected in the 1970s and early 1980s from sites located in the Omaha, Lincoln and Sioux City MSA's as well as 2 rural sites in central Nebraska. The results indicate two things:

1) NO_2 levels were well below the annual average NAAQS of 53 ppb that was promulgated in 1971 and remains in effect today; and
2) NO_2 levels were higher in the Omaha and Lincoln MSAs than at the other sites.

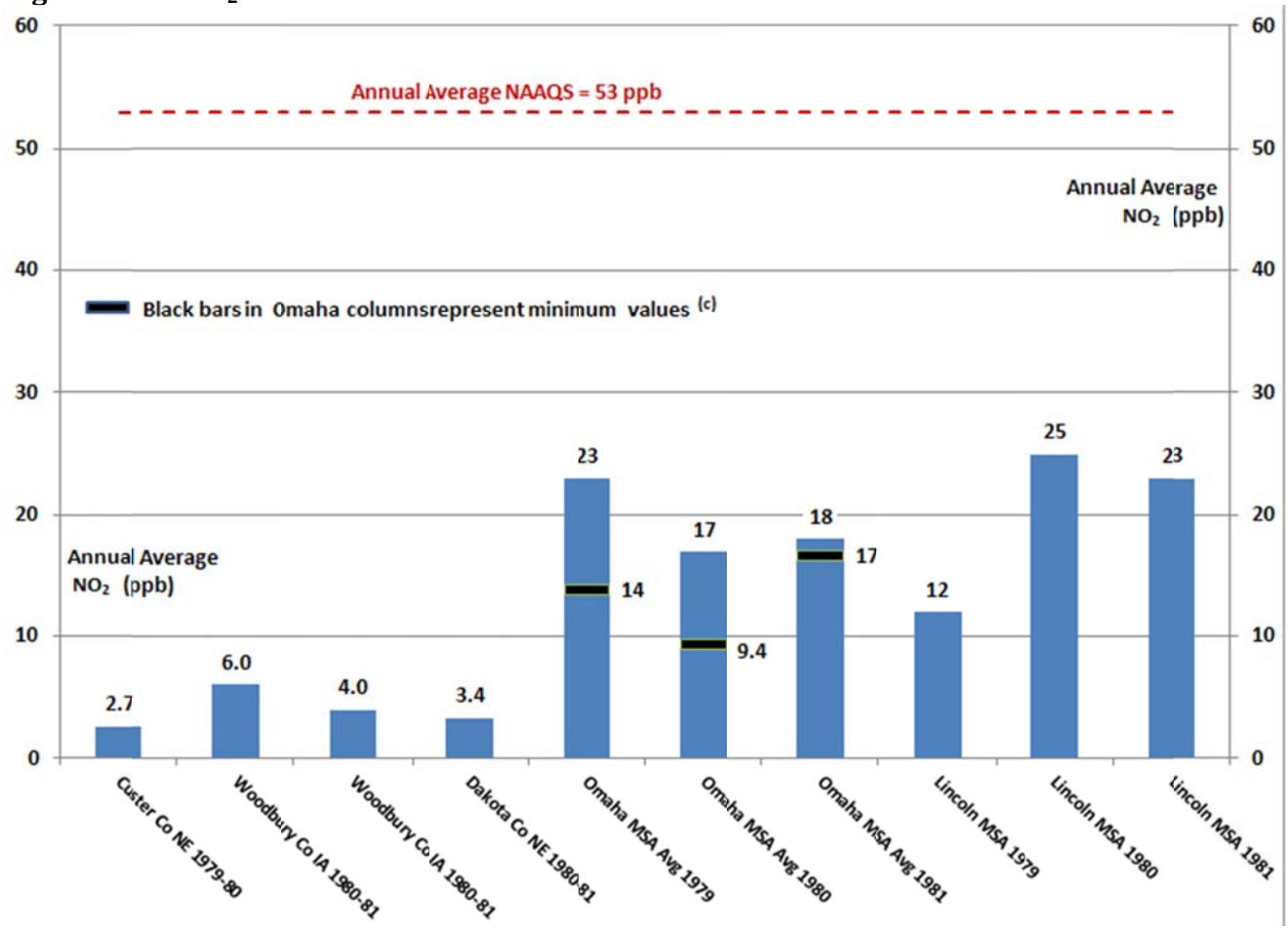
It is noteworthy that the sites in the Sioux City MSA were in rural locations surrounding the George Neal power Stations at least 6 miles south of the main urbanized areas of the MSA. This may explain why the NO_2 levels in the Sioux City MSA more closely approximated those in Custer and Thomas Counties (rural central Nebraska), than those in the Omaha and Lincoln MSAs.

Figure E-14: Annual Average NO_2 Levels in Thomas County, Omaha and Lincoln [(a) (b) (c)] 1973-1977



Footnotes:
(a) Thomas County: A background site operated in the Nebraska National Forest from 1973 thru 1977.
(b) Omaha MSA: Average and minimum statistical values from varying sites each year: 4 sites in 1973 and 10 sites in 1975 thru 1977.
(c) Lincoln MSA: Average and minimum statistical values from varying sites each year: 1 site in 1973 and 2 sites in 1975 thru 1977.

Figure E-15: NO_2 Levels at Rural and Urban Sites in & near Nebraska: 1979-1981 [(a)(b)(c) & (d)]



Footnotes:

(a) Custer Co. NE: This was a rural background site in northeast Custer County near Comstock.

(b) Sioux City MSA: The Woodbury Co., IA and Dakota Co., NE sites were located south of the urbanized areas of the Sioux City MSA and within a 3 mile radius of the George Neal Power Plants. These sites operated from May 1980 thru April 1981, during the first year the George Neal South Station operated.

(c) Omaha MSA: There were 6 sites operating in the MSA in 1979 and 1980, and 3 sites in 1981. The blue columns ▮ represent the average NO_2 level of all the sites operating in that year. The black bars ▬ represent the lowest annual average NO_2 level reported by sites operating in that year.

(d) Lincoln MSA: NO_2 was monitored at 9th & J in 1979 and 10th & M in 1980 &1981.

Observation: Monitoring sites in the Lincoln and Omaha MSA's recorded significantly higher NO_2 levels than the sites in the Sioux City MSA or Custer County.

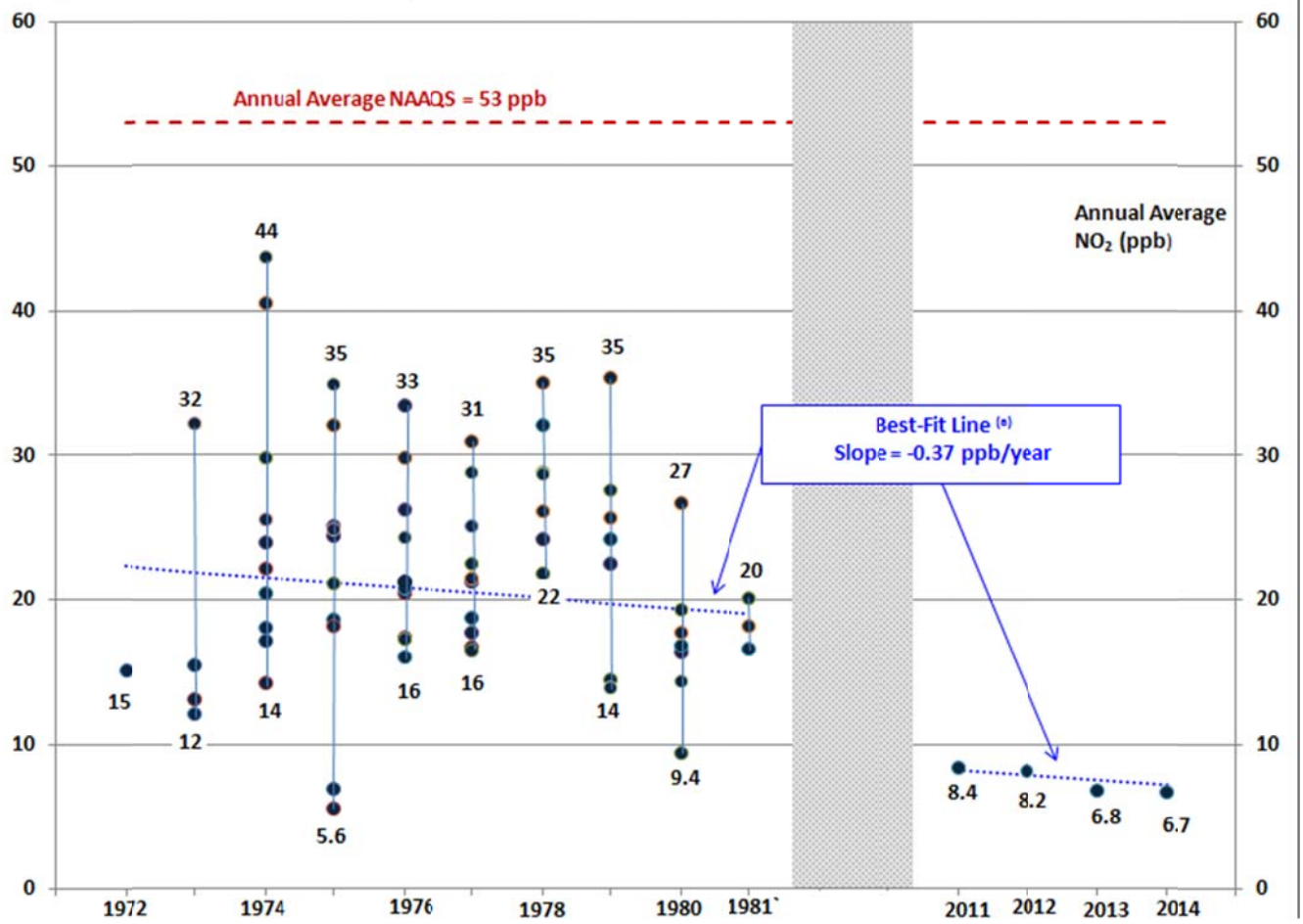
Figure E-16 below is a plot of annual average NO_2 concentrations in the Omaha MSA in two time periods: 1972 thru 1981 and 2011 thru 2014. The results indicate two things:

1) Historical and current NO2 levels are well below the annual NAAQS; and
2) NO2 levels are lower now than they were in the 1972 thru 1981 time frame.

Although the figure contains a trend–line for the declining NO2 concentrations, the data is not sufficient to indicate whether there was a gradual and continuing decline; or whether there was a more step-like decline between 1981 and 2011.

The Lincoln data in Figure E-17 indicates that NO_2 levels demonstrated neither an upward nor a downward trend from 1973 thru 1984, and were well below the annual average NAAQS.

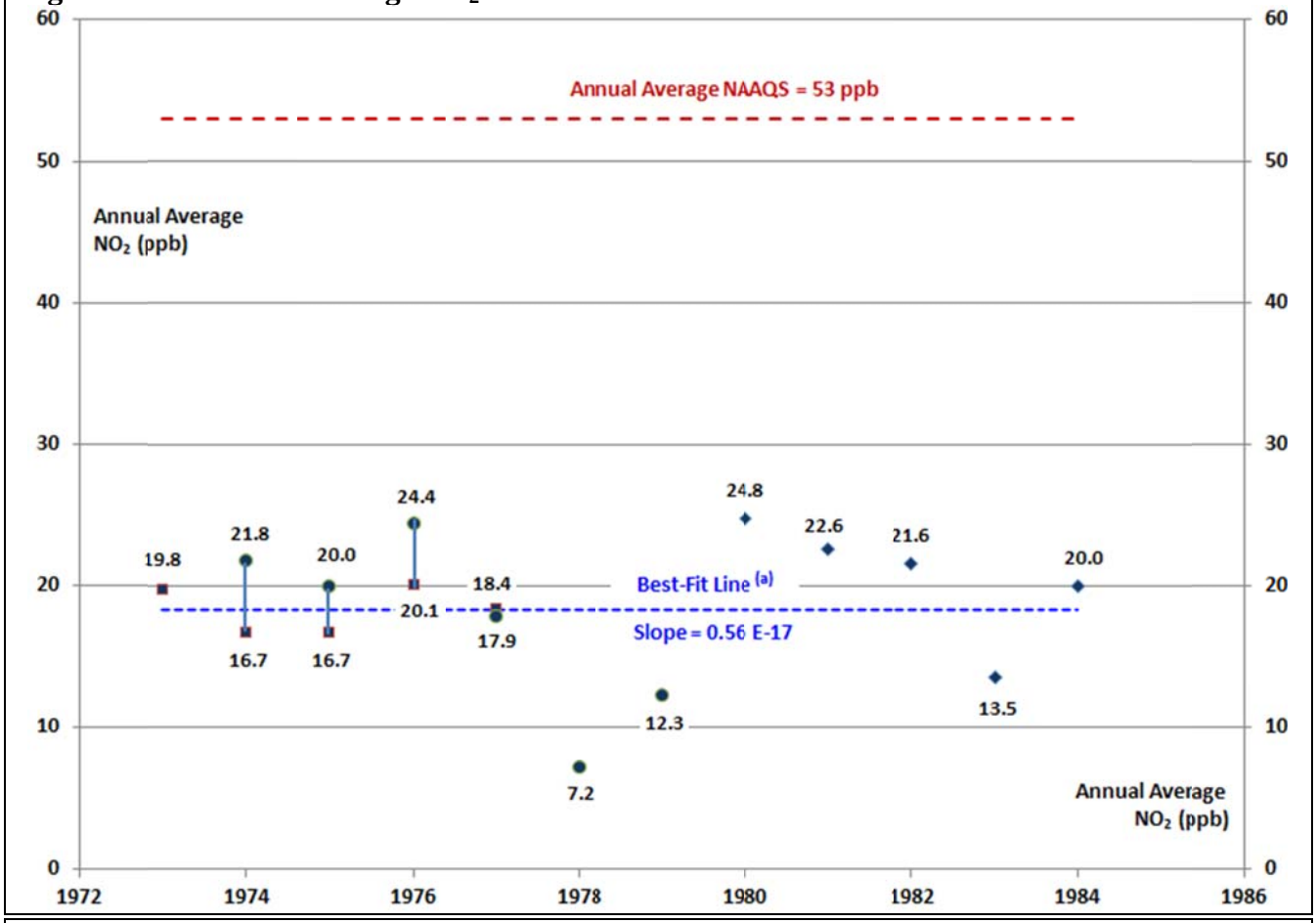
Figure E-16: Annual Average NO_2 Concentrations in Omaha MSA: 1972–1981 & 2011-2014



Location	Address	Site #	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	2011	2012	2013	2014
Carter Lake, IA	626 E Locust	19-155-0001		15.5	17.2	6.9										
Council Bluffs, IA	40th St & 1st Av	19-155-0017		13.1	14.2	5.6	17.4	16.7								
Council Bluffs, IA	915 20th Av	19-155-0023						16.5	21.8	14.5	9.4					
Omaha, NE	28th & Greebe	31-055-0005			23.9	24.4	33.4	17.7	24.2	22.5	16.4					
Omaha, NE	42nd & Woolworth	31-055-0019			20.4	18.7	16	18.8	32.1	24.2	16.8	16.6	8.4	8.2	6.8	6.7
Omaha, NE	11th & Dodge	31-055-0024			40.5	32.1	29.8	31	35	35.4	26.7					
Omaha, NE	30th & Fort	31-055-0025	15.1	12.1	18.1											
Omaha, NE	9th & Forest	31-055-0027			22.2	18.2	20.5									
Omaha, NE	24th & O	31-055-0028			29.8	21.1	17.3	22.5	28.8	27.6	19.3	20.1				
Omaha, NE	1723 Harney	31-055-0030				25.1	26.2	21.2								
Omaha, NE	11414 N 72nd	31-055-0032					20.8									
Omaha, NE	10th & Marcy	31-055-0033					21.2	21.5	26.1	25.7	17.7	18.2				
Omaha, NE	19th & Howard	31-055-0034						25.1								
Omaha, NE	18th & Dodge	31-055-1001		32.2	25.5	24.9										
Bellevue, NE	22nd & Washington	31-153-0002			43.7	34.9	24.3	28.8	28.7	13.9	14.4					
		Average of all sites	15.1	18.2	25.6	21.2	22.7	22.0	28.1	23.4	17.2	18.3	8.4	8.2	6.8	6.7

Footnote (a): The best-fit line was created using the averaged data from all sites in any given year.

Figure E-17: Annual Average NO_2 Concentrations in Lincoln MSA: 1973–1984



Footnote (a): The best-fit line was created using the averaged data from all sites in any given year.

Legend: ■ - 555 S 10th St (1973-77) ● - 9th & J Sts (1974-79) ♦ - 10th & M Sts (1980-84)

Figure E-18 below shows Omaha 1-hour NO_2 data from 30th and Fort in 1972-1973 and again in 1975; and 1-hour NOy-NO data from the the Omaha NCore site (42nd & Woolworth) from 2011 thru 2014. The 98th percentile levels from the 1970's were 60% to 125% of the current 1-hour NAAQS (promulgated in 2010), while the 2011-2014 98th percentiles were 35% to 43% of the NAAQS. Although the data is limited, it is consistent with the annual average data discussed above, in that 1-hour NO_2 levels are lower now than in the 1970's and 1980's.

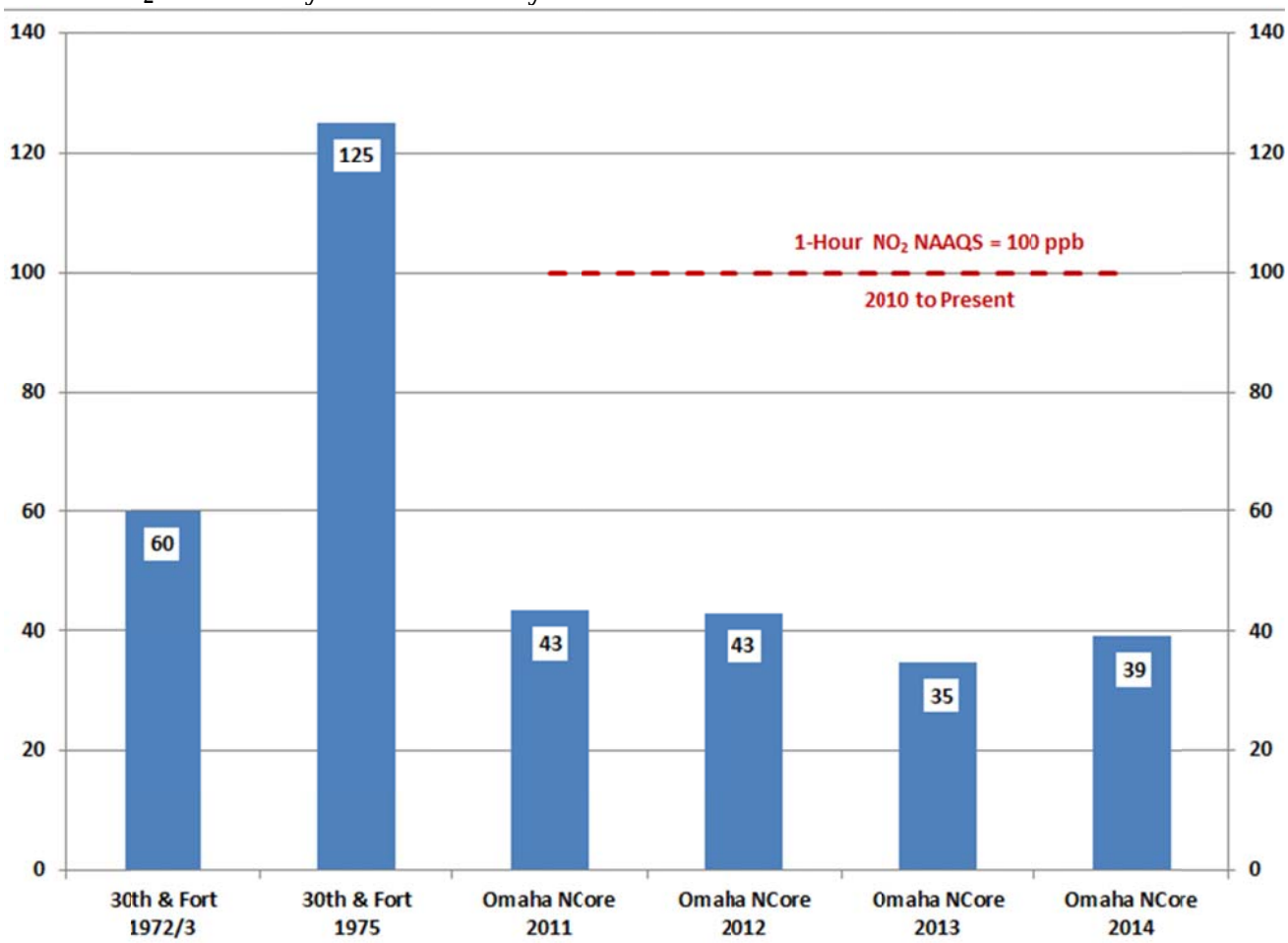
To summarize, monitoring in the 1970s and early 1980s demonstrated attainment with the 53 ppb annual average NAAQS with a significant safety factor.. Monitoring at the Omaha NCore site conducted from 2011 to present is demonstrating attainment with the 2010 100 ppb 1-hour NAAQS with a significant safety factor.

However, the NCore site is not a highest concentration site. Near-road, high-traffic areas are highest concentration sites for 1-hour NO_2. Current EPA regulations require a near-road, high-traffic area monitor to be operational in the Omaha MSA by January 1, 2017.

DCHD has proposed the current CO site at 78th and Dodge as the site for monitoring near-road NO_2. The DCHD proposal and the NDEQ review comments on it are included in Attachment G of this network review; while attachment H is NDEQ's review and concurrence with the DCHD proposal.

In the past, EPA has indicated that they may delay or rescind the need for near-road monitoring in metropolitan areas, like Omaha, with populations less than 1 million. This is because near-road monitoring in the larger metro-areas is finding attainment. This can be seen from the data in Table E-3: NO_2 levels at near-road sites in Denver, Minneapolis and St. Louis are at 72%, 47% and 50% of the NAAQS, respectively. These metro areas have 3 to 4 times the population of the Omaha MSA.

Figure E-18: One-Hour 98th Percentile Levels for NO_2 & NOy-NO [(a)] in the Omaha MSA: NO_2 in the Early 1970's and NOy-NO from 2011 thru 2014



Footnote (a): The NOy-NO concentration will be equal to or greater than the NO_2 concentration.

Table E-3: One-Hour NOx Levels at Monitoring Sites in Nebraska and at Selected Sites in Near-By States for Comparison to the Primary NAAQS (1)(2)(3)

Site	Site #	98th Percentiles (ppb)			DV (ppb)	% NAAQS	Pollutant
		2012	2013	2014			
Omaha NE NCore	31-055-0019	45.0	35.3	39.0	39.8	40%	NOy-NO
Des Moines IA	19-153-0030	39.6	36.8	35.3	37.2	37%	NO_2
Davenport IA	19-163-0015	34.1	38.8	35.0	36.0	36%	NO_2
Blaine MN Minneapolis MSA	27-003-1002	41.0	43.0	50.0	44.7	45%	NO_2
Rosemount MN Minneapolis MSA	27-037-0020	36.0	38.0	35.0	36.3	36%	NO_2
Minneapolis MN Near-road site	27-053-0962	nd	45.0	48.0	46.5	47%	NO_2
Sioux Falls SD	46-099-0008	36.6	33.8	33.3	34.6	35%	NO_2
Union Co. SD Sioux City MSA	46-127-0001	15.9	17.6	20.7	18.1	18%	NO_2
Rapid City SD	46-103-0020	42.2	38.6	33.8	38.2	38%	NO_2
Campbell Co WY	56-005-0011	46.0(4)	52.0	55.0	53.5	54%	NO_2
Brookhurst WY Casper MSA	56-025-2601	27.3	35.9	33.6	32.3	32%	NO_2
Cheyenne WY	56-021-0100	35.8	37.1	33.6	35.5	36%	NO_2
Wamsutter WY	56-037-0200	36.3	37.7	31.9	35.3	35%	NO_2
Denver CO	08-031-0002	72.0	67.6	76.6	72.1	72%	NO_2
Wichita KS	20-173-0010	85.1	39.6	40.1	54.9	55%	NO_2
Kansas City KS	20-209-0021	51.5	47.4	51.1	50.0	50%	NO_2
Kansas City MO	29-095-0034	52.8	48.1	52.7	51.2	51%	NO_2
St. Louis MO	29-510-0086	52.4	50.5	43.3	48.7	49%	NO_2
St. Louis MO Near-road site	29-510-0094	nd	50.4	50.1	50.3	50%	NO_2

Footnotes:

(1) The Omaha NCore site is the only NOx monitoring site in Nebraska. This site monitors for NO and NOy. The NOy-NO parameter includes NO_2 as well as other reactive forms of NOx. The NOy-NO parameter can be used demonstrate attainment with the NOx NAAQS, but not non-attainment.

(2) Sites from the near-by states of IA, MN, SD, WY, CO, KS and MO were selected in part on their proximity to NE. Urban sites and highest concentration sites also received priority. In areas where there was more than one NOx monitoring site, data from the site that had the highest NOx values is shown. The levels shown in this table include the highest found in each state.

(3) The NOx 1-hour primary NAAQS is 100 ppb. Attainment with the NAAQS is evaluated using the 3-year average of the annual 98th percentile values for NO_2. The NOy-NO value is equal to or greater than the NO2 value.

(4) There were only 3 quarters of 2012 data from the Campbell Co WY site.

Current and Historical NO_2/NOx Monitoring Sites in Nebraska

Figure E-19 shows the locations of historical and current NO_2 monitoring sites in Nebraska. As discussed above, historical NO_2 monitoring conducted in Nebraska found NO_2 levels well below the NAAQS applicable at the time and the current NAAQS.

Figure E-19: Location of Current ● and Historical ○ NO_2/NOx Monitoring Sites in Nebraska and within Adjacent Counties in MSA's

4) Sulfur Dioxide

Sulfur dioxide (SO_2) is emitted as a pollutant from combustion sources burning fossil fuels containing sulfur. Historically coal-fired boilers and diesel engines were significant sources of SO_2. Diesel fuel contained significant amounts of sulfur prior to 2007, but low sulfur diesel fuel requirements implemented in a phased manner beginning in 2007 have greatly reduced this source of SO_2. Emission control requirements associated with the implementation of the 2010 1-hour SO_2 NAAQS of 75 ppb are anticipated to lead to further reductions in SO_2 emissions from coal-fired boilers over the next few years.

SO_2 monitoring was initiated in Omaha in 1967 and continues today. In other areas of Nebraska, monitoring was initiated in 1970 and discontinued by 1982, although monitoring in Iowa and South Dakota is being conducted within the Sioux City MSA. SO_2 monitoring conducted within Nebraska has consistently demonstrated attainment with the NAAQS.

The initial SO_2 NAAQS were implemented in 1971: primary 24 hour NAAQS = 0.14 ppm and primary annual average NAAQS = 0.03 ppm. These were revoked in 2010 when the 1-hour primary NAAQS of 75 ppb was established. SO_2 monitoring conducted within Nebraska has consistently demonstrated attainment with the primary NAAQS.

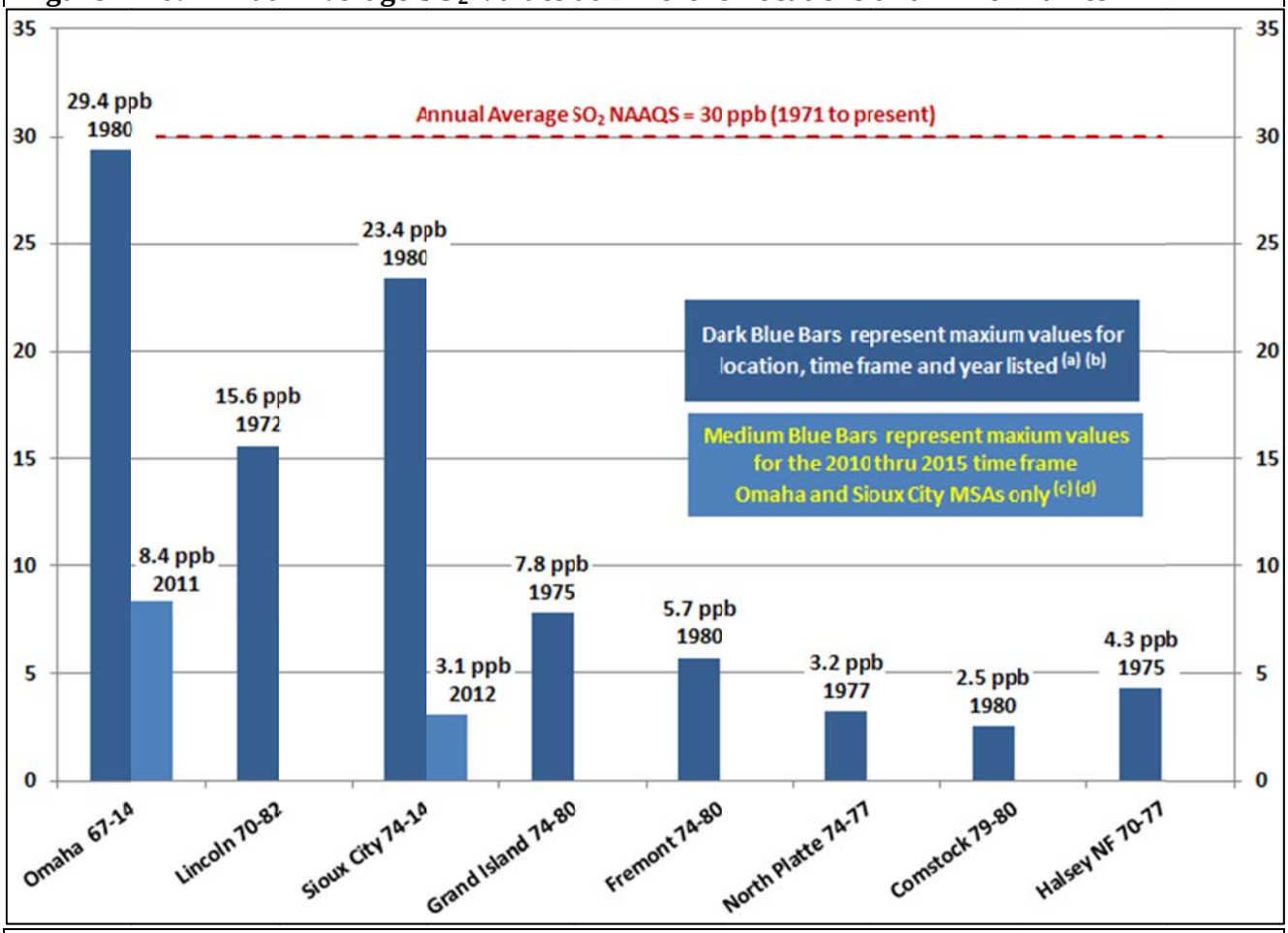
Figure E-20 provides a summary of maximum annual average SO_2 levels in Nebraska from 1967 thru 2014. Note that in the initial monitoring period, 1967 thru 1982, SO2 levels were higher in the Omaha, Lincoln and Sioux City MSAs than other monitoring locations. Also note that the SO_2 levels in the Omaha and Sioux City MSAs are much lower now than in the initial monitoring period; the two areas in Nebraska where both historical and contemporary monitoring has been conducted.

Figure E-21 provides a historical view of maximum annual average SO_2 levels in the Omaha, Lincoln and Sioux City MSAs. This provides a better picture of SO_2 levels over time, especially in the Omaha MSA. The maximum levels found in the Omaha MSA were in the north Omaha at source-oriented sites located south of the OPPD North Omaha Power Station.

The earliest monitoring used bubbler scrubber methods that yielded 24 hour average values, but not 1–hour average data. Beginning in 1974 continuous monitoring systems came into use at some sites in the Omaha and Sioux City MSAs. Figures E-22 and E-23 contain the maximum annual 99th percentile 1-hour SO_2 values for the Omaha and Sioux City MSAs from 1974 thru 2014. As can be seen from the figures, there has been continuous monitoring within the Omaha MSA for hourly SO_2 since 1974, but only periodic monitoring within the Sioux City MSA except for more recently with continuous monitoring from 2009 thru 2014.

Note that since the 2010 1-hour NAAQS of 75 ppb was implemented, maximum SO_2 levels in Omaha MSA have ranged from 81% to 88% of the NAAQS, while in the Sioux City MSA have been in the range of 9% to 15% of the NAAQS.

Figure E-20: Annual Average SO_2 Values at Different Locations and Time Frames



Location & Time Frame Legend

Omaha 67-14: Monitoring conducted at various locations in the Omaha MSA from 1967 to present
Lincoln 70-82: Monitoring conducted in Lincoln and Lancaster County at various locations from 1970 to 1982
Sioux City 74-14: Monitoring conducted at various locations in the Sioux City MSA from 1974-82, 2001-2 & 2009-present
Grand Island 74-80: Monitoring conducted at 2nd & Pine in Grand Island from 1974 to 1980
Fremont 74-80: Monitoring conducted at two locations in Fremont from 1974 to 1980
North Platte 74-77: Monitoring conducted at 211 N 3rd Street in North Platte from 1974 to 1977
Comstock 79-80: Monitoring conducted in rural Custer County near Comstock in 1979 & 1980
Halsey NF 70-77: Monitoring conducted in the Nebraska National Forest near Halsey from 1970 to 1977

Footnotes:

(a) See Location and Time Frame Legend above for an explanation of the areas and time periods when SO_2 monitoring was conducted. Both continuous instrumental methods and 24 hour gas bubbler methods were used in the early years, with only continuous UV fluorescent methods being used after 1980.
(b) The date below the concentration label is the year in which the maximum value was found.
(c) From 2010 to 2014 the only locations within Nebraska where SO_2 monitoring was conducted were in Omaha. The maximum annual average value of 8.4 ppb was obtained at the 16th & Whitmore site in 2011.
(d) From 2010 thru 2014, SO_2 monitoring in the Sioux City MSA was conducted near Sargeant Bluff, IA and in rural Union County, SD. The maximum annual average value of 3.1 was found at the Sargeant Bluff, IA site in 2012

Figure E-21: Maximum Annual Average SO_2 in Omaha, Lincoln & Sioux City MSAs: 1967 to 2014

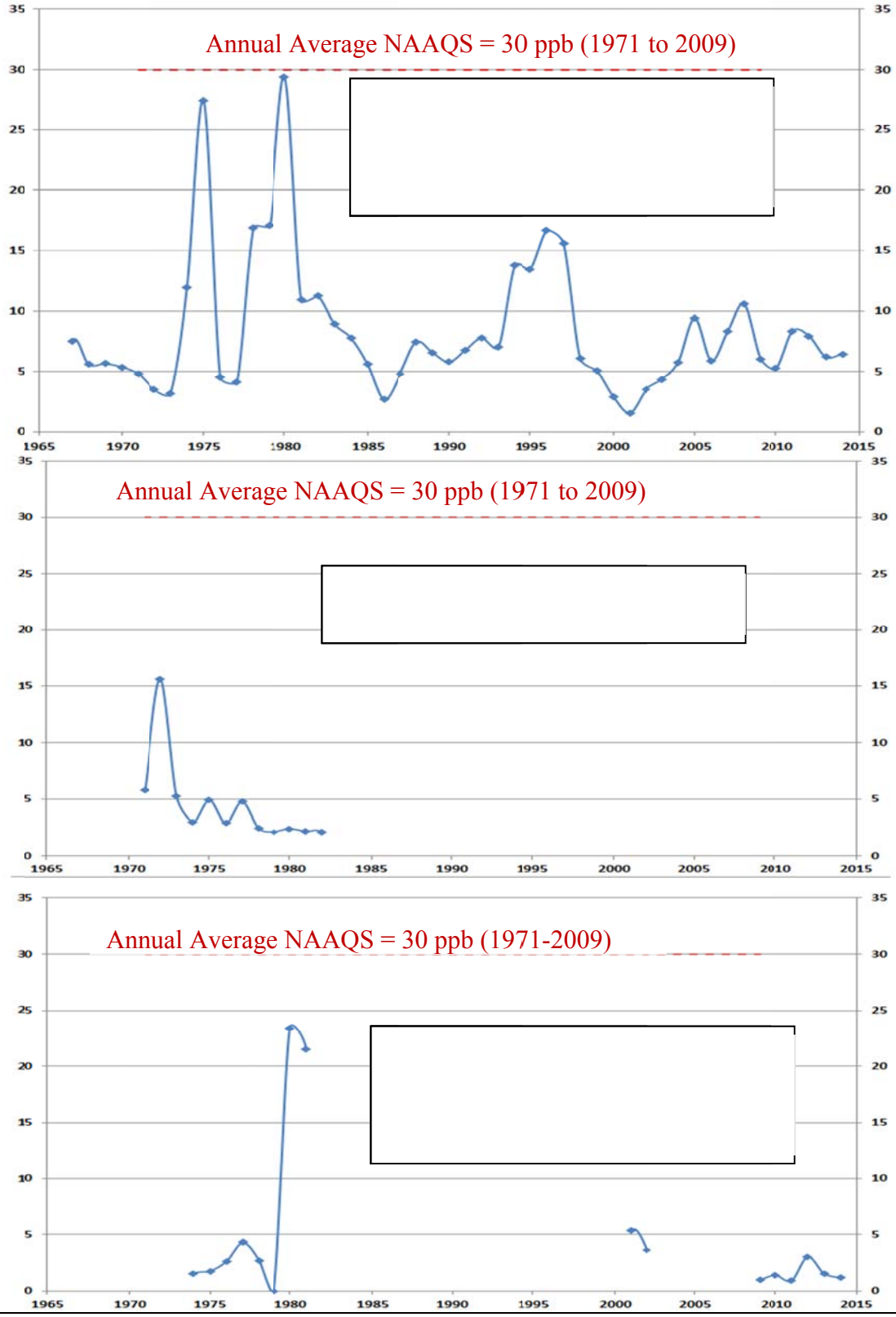


Figure E-22: Maximum Annual 99th Percentile 1-Hour SO_2 Levels in the Omaha MSA: 1974 to 2014

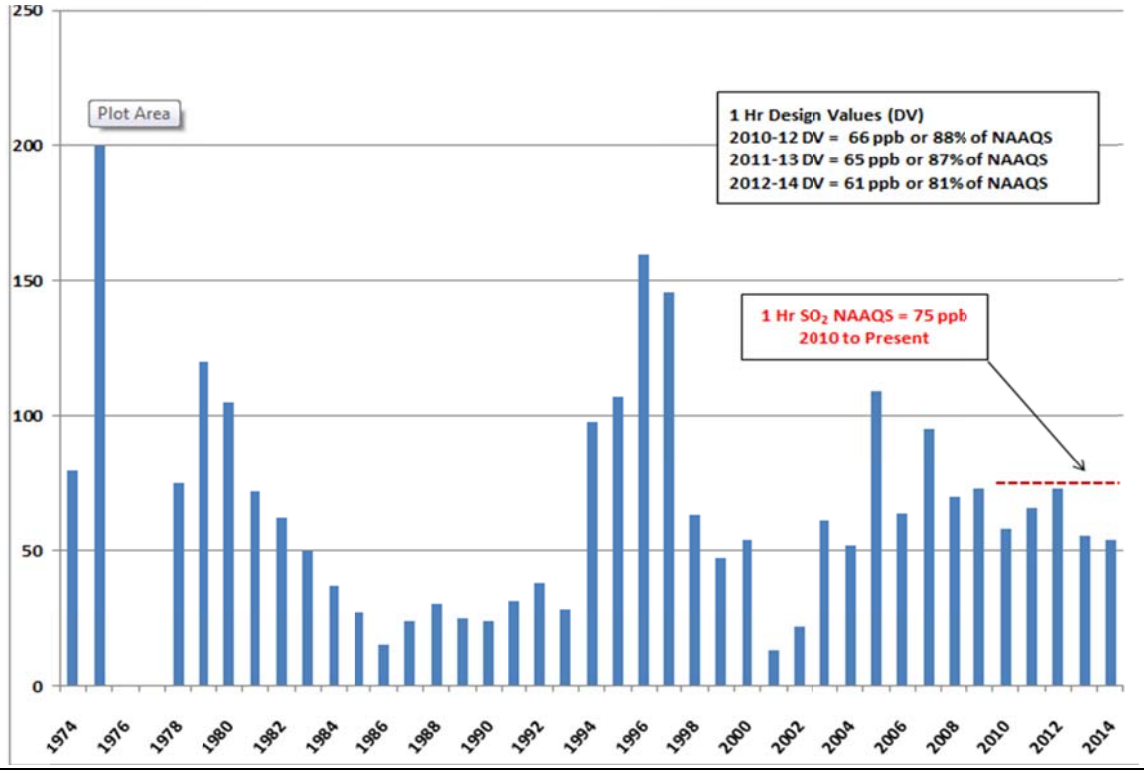
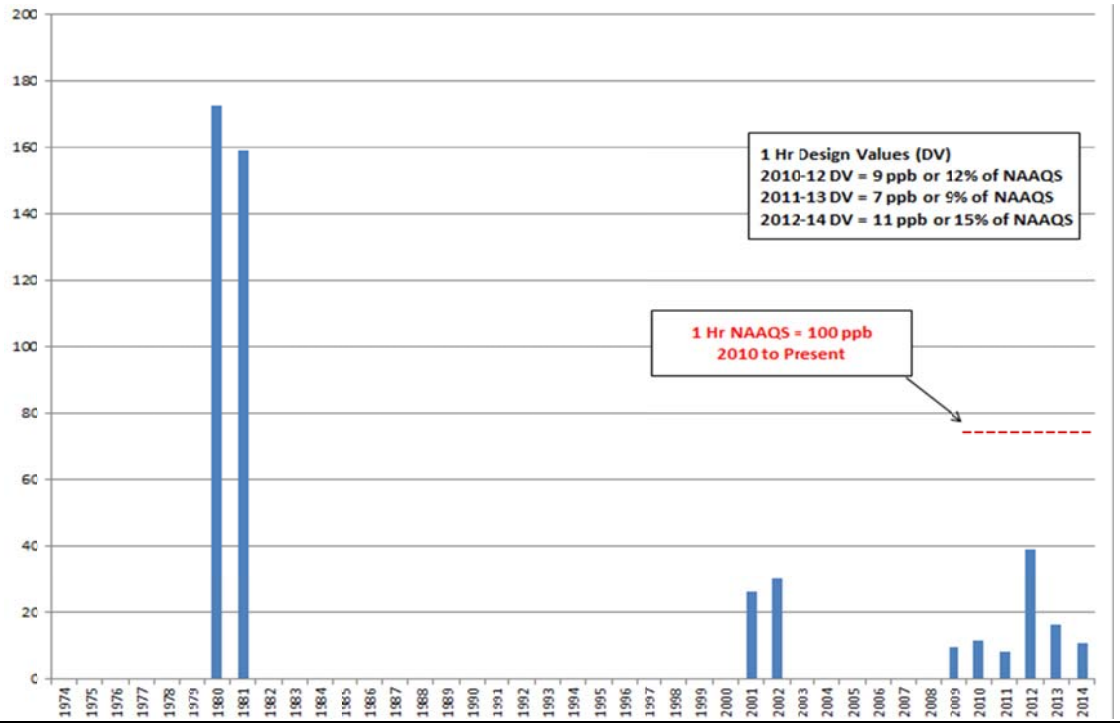


Figure E-23: Maximum Annual 99th Percentile1-Hour SO_2 Levels in the Sioux City MSA: 1974 to 2014



Current and Historical SO_2 Monitoring Sites in Nebraska

Figure E-24 shows the locations of historical and current SO_2 monitoring sites in Nebraska.

Figure E-24: Location of Current ● and Historical ○ SO_2 Monitoring Sites in Nebraska and within Adjacent State Areas of the Omaha & Sioux City in MSAs

5) Particulate Matter: TSP, PM_{10} and $PM_{2.5}$

Particilate matter regulations, monitoring and environmental/public health concerns have evuolved over time. Intitially monitoring efforts concentrated on total suspended particulate matter (TSP), then moved to PM_{10} in the late 1980s, and then $PM_{2.5}$ was added in the late 1990's. The driving force being that finer particulates more easily penetrate into the lungs and thus present more potential for health impacts.

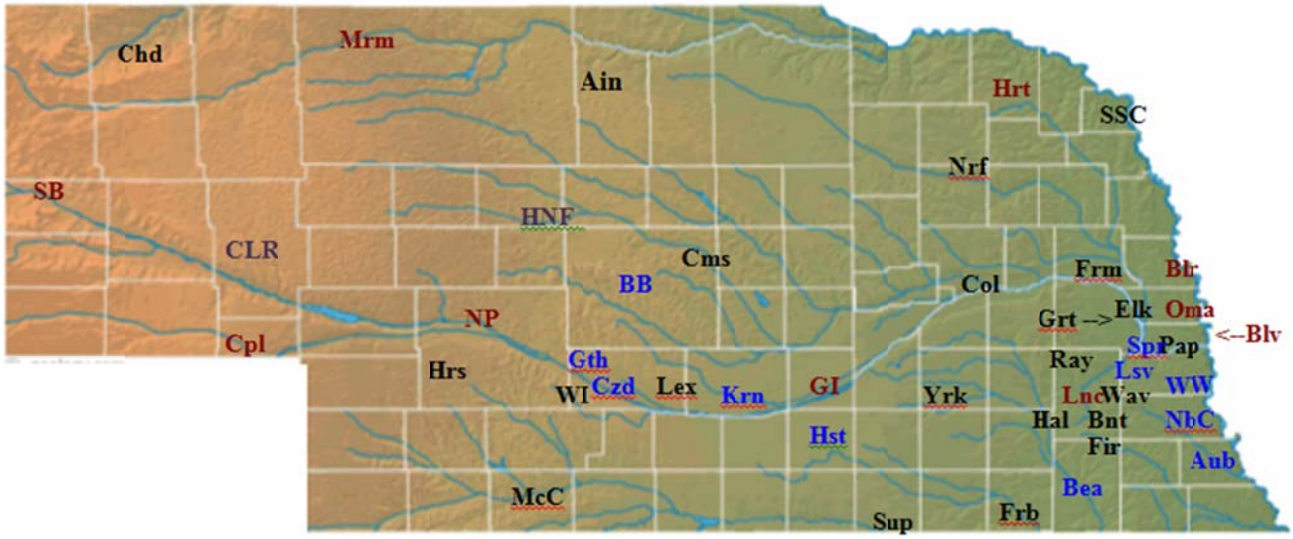
Defintions:
PM - refers collectively to TSP, PM_{10} & $PM_{2.5}$
TSP - total suspended atmospheric particulate matter
PM_{10} - particulate matter with an aerodynamic diameter of 10 microns or less.
$PM_{2.5}$ - particulate matter with an aerodynamic diameter of 2.5 microns or less.

Table E-4 below shows the history of the particulate NAAQS. It also lists the years monitoring was initiated for TSP, PM_{10} and $PM_{2.5}$, and ended for TSP. Table E-5 lists the locations in Nebraska where TSP, PM_{10} and $PM_{2.5}$ has been and is being conducted, and the time periods when the monitoring was conducted. Figure E-25 is a Nebraska map showing the location of all of the PM monitoring sites; both current and historical. Figure E-26 is a Nebraska map showing the location of all of the current PM_{10} ansd $PM_{2.5}$ monitoring sites.

Table E-4: Summary History of Particualte Matter NAAQS and Monitoring in Nebraska

Particulate Type	NAAQS Implementation	NAAQS History	Monitoring Started	Monitoring Ended
TSP	1971	Primary 24-hour of 260 *u*g/m^3 Annual Average of 75 *u*g/m^3 Secondary 24-hour of 150 *u*g/m^3 Annual Average of 75 *u*g/m^3	1957	1987
	1987	TSP NAAQS rescinded		
PM_{10}	1987	Primary & Secondary 24-hour of 150 *u*g/m^3 Annual Average of 75 *u*g/m^3	1987	Present
	2006	Annual Average NAAQS rescinded 24-hour NAAQS retained at 150 *u*g/m^3		
$PM_{2.5}$	1997	Primary & Secondary 24-hour of 65 *u*g/m^3 Annual Average of 15 *u*g/m^3		
	2006	Primary & Secondary 24-hour of 35 *u*g/m^3 Annual Average of 15 *u*g/m^3		
	2012	Primary & Secondary 24-hour of 35 *u*g/m^3 Primary Annual Average of 12 *u*g/m^3 Secondary Annual Average of 15 *u*g/m^3		

Figure E-25: Historical and Current Particulate Monitoring Site Locations: 1957 – 2014 (see Table E-5 for site abbreviation legend)



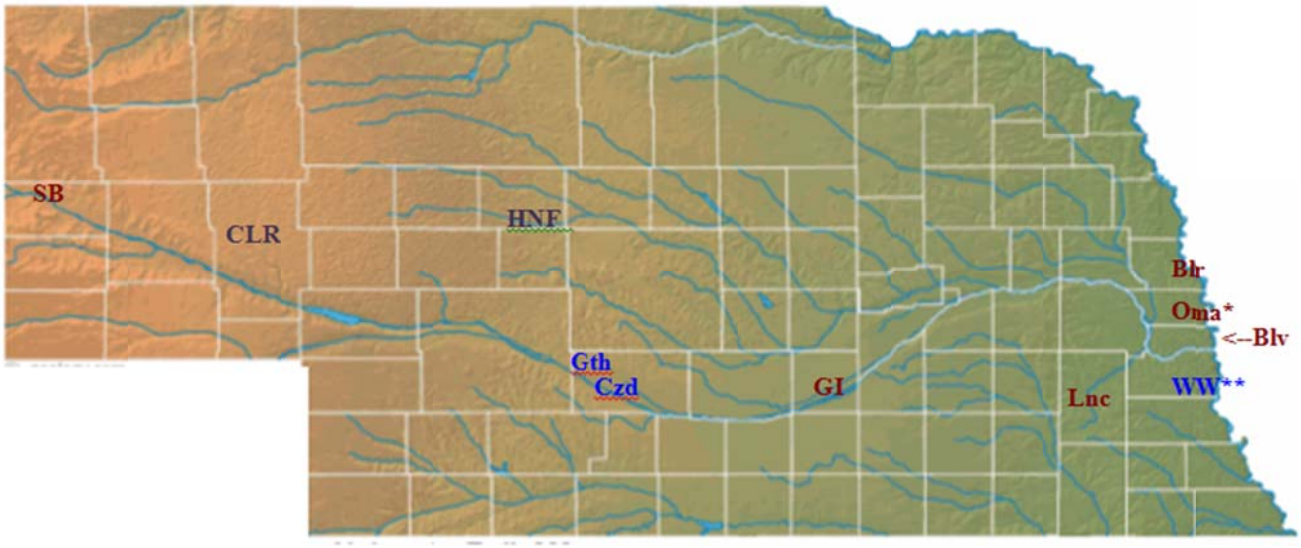
Black font depicts locations that had TSP monitoring, and no PM_{10} or $PM_{2.5}$ monitoring.

Blue font depicts locations that have had PM_{10} monitoring. Seven (7) of these have also had TSP monitoring Aub, Bea, Czd, Gth, Hst, Krn & NbC.

Red font depicts locations that have had $PM_{2.5}$ monitoring, except that WW was listed only as a PM_{10} location because $PM_{2.5}$ monitoring was discontinued in 2005. TSP monitoring was also conducted at the Blv (Bellevue) & NP (North Platte) locations. TSP, PM_{10} and $PM_{2.5}$ monitoring: GI (Grand Island), Lnc (Lincoln), Oma (Omaha), SB (Scottsbluff) and WW (Weeping Water).

Violet font is used to show IMPROVE sites at HNF (Halsey National Forest) and CLR (Crescent Lake Wildlife Refuge). IMPROVE sites monitor $PM_{2.5}$ constituents as part of a regional haze study.

Figure E-26: Current Particulate Monitoring Site Locations (see Table E-5 for site abbreviation legend)



* There are 5 PM_{10} sites and 2 $PM_{2.5}$ sites in Omaha.

** There are 3 PM_{10} sites in the Weeping Water area.

Violet font is used to depict IMPROVE sites: CLR & HNF.

Red font is used to depict $PM_{2.5}$ sites: SB, GI Lnc, Blr, Oma & Blv.

Blue font is used to depict PM_{10} sites: Gth, Czd & WW. Note that Oma has both $PM_{2.5}$ and PM_{10} sites.

Table E-5: Particulate Monitoring Sites Operated In Nebraska from 1957 thru 2015

Site	Abbr.	TSP	PM_{10}	$PM_{2.5}$
Ainsworth	**Ain**	1974-1977		
Auburn	**Aub**	1976-1992	1994-1995	
Beatrice	**Bea**	1971–1995	1994-1995	
Bellevue	**Blv**	1971-1992		1999-Present
Bennett	**Bnt**	1973-1977		
Blair	**Blr**			1999-Present
Broken Bow	**BB**		1999-2002	
Chadron	**Chd**	1971-1977		
Chappell	**Cpl**			1999-2002
Columbus	**Col**	1972-1993		
Comstock	**Cms**	1979-1980		
Cozad	**Czd**	1974-81 & 94	1994-Present	
Crescent Lake NWR*	**CLR**			2002-Present*
Elkhorn	**Elk**	1982-1989		
Fairbury	**Frb**	1971-1978		
Firth	**Fir**	1972-1982		
Fremont	**Frm**	1972-1995		
Gothenburg	**Gth**	1990-1992	1991-Present	
Grand Island	**GI**	1971-1995	1994-1995	1999-Present
Gretna	**Grt**	1985-1992		
Hallam	**Hal**	1973-1979		
Halsey National Forest *	**HNF**	1958 – 1977		2002-Present*
Hartington	**Hrt**			1999-2002
Hastings	**Hst**	1972-1992	1987-1996	
Hershey (17 mi south)	**Hrs**	1973-1985		
Kearney	**Krn**	1972-1992	1988-1998	
Lexington	**Lex**	1971-1993		
Lincoln	**Lnc**	1957,60,62,69-87	1988-1998	1999-present

Table continued on next page

Table E-5: Particulate Monitoring Sites Operated Between 1957 and 2015 - continued

Site	Abbr.	TSP	PM_{10}	$PM_{2.5}$
Louisville	**Lsv**	1971-1984	1987-1999	
Merriman	**Mrm**			1999-2002
McCook	**MCk**	1971-1973		
Nebraska City	**NbC**	1975-1992	1987-1998	
Norfolk	**Nrf**	1971-1992		
North Platte	**NP**	1971-1993		1999-2005
Omaha	**Oma**	1957-2000	1987-Present	1999-Present
Papillion	**Pap**	1971-1992		
Raymond	**Ray**	1973-1977		
Scottsbluff	**ScB**	1971-1992	1988-1998	1999-Present
South Sioux City	**SSC**	1977-1994		
Springfield (4 mi SSW)	**Spr**		1995	
Superior	**Sup**	1973-1993		
Waverly	**Wav**	1973-1987		
Weeping Water	**WW**	1972-1992	1987-Present	1999-2005
Willow Island	**WI**	1972-1973		
York	**Yrk**	1976-1992		

* The Halsey National Forest and Crescent Lake National Wildlife Refuge have Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring sites. For more information on these sites see Appendix A or the US EPA website: http://www.epa.gov/ttnamti1/visdata.html.

V.A. Total Suspended Particulates (TSP)

Monitoring for Total Suspended Particulates (TSP) was initiated in Lincoln and Omaha in 1957. TSP NAAQS were established in 1971 and then rescinded in 1987, when they were replaced by the PM_{10} NAAQS (see Table E-4 above).

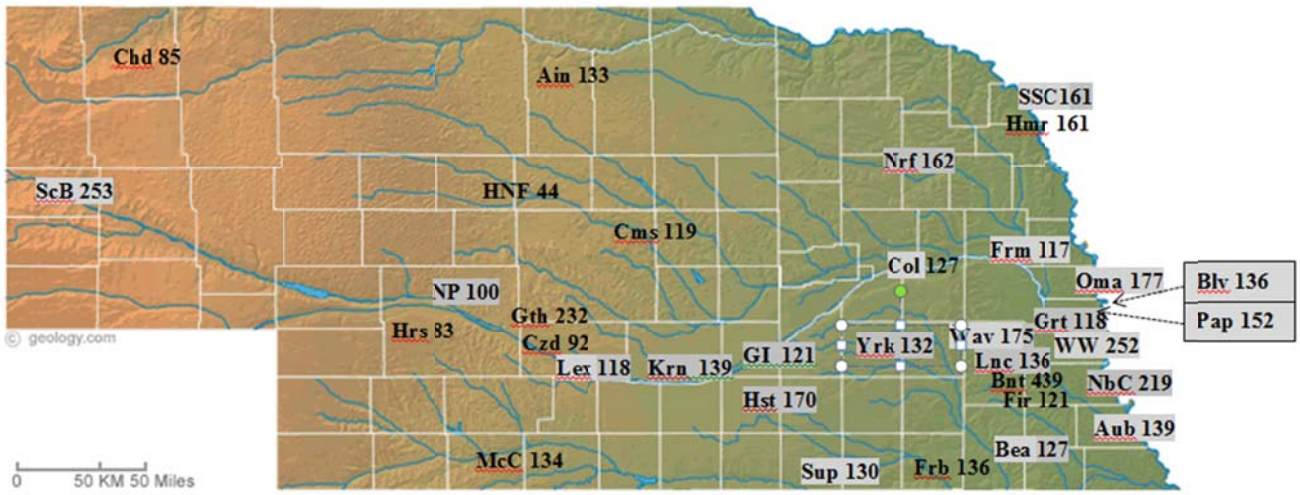
At various times between 1971 and 1987, TSP monitoring was performed at 90 sites in 35 Nebraska communities and four rural sites. Some of these sites continued operating into the 1990s, and one Omaha TSP site (at the Public Works building at 11th and Nicholas Sts) operated until 2000. A list of the communities where TSP monitoring was performed can be found in Table E-5. Figure E-25 shows the location of historical and current particulate monitoring sites in Nebraska, including the historical TSP sites.

See TSP data in Figure E-27, Figures E-28 and Table E-6 below. These provide a reasonable picture of TSP levels in Nebraska in the latter part of the 1980's. From 1971, when the TSP NAAQS was

first promulgated, thru 1987 when the TSP NAAQS was first promulgated, significant particulate emission controls were implemented including restrictions on stack opacity, fugitive dust and open burning, as well as other source-specific limits. An examination of ambient monitoring data prior to 1988 demonstrates that these control measures were effective in reducing ambient TSP levels.

There were 3 areas where TSP levels exceeded the primary TSP NAAQS: Omaha, Louisville and Weeping Water. Particulate emission control measures were established in the Title 129 Nebraska Air Pollution Rules and Regulations in 1975, and many additional controls have been added in the years and decades since. TSP levels in these 3 sites dropped below the primary TSP NAAQS by 1984. TSP levels at all 3 sites remained above the secondary NAAQS until it was rescinded in 1987 and replaced with the PM_{10} NAAQS.

Figure E-27: Pre-1988 Total Suspended Particulate Matter (TSP): 4th High 24-Hour Values Over 3-Years [(a) (b) (c) (d) (e) (f)]



Footnotes:

(a) The primary 24-Hour NAAQS was 260 ug/m^3 and secondary NAAQS was 150 ug/m^3. Neither value was to be exceeded more than once per year. The values shown in this figure are the 4th high value over a 3 year time frame, or if only 2 years of data was available, the 3rd high value. See Table E-6 for time frame information.

(b) See Table E-6 to explain the abbreviations and the PM values shown.

(c) Site abbreviations and values in gray highlight are for the 1985 to 1987 three year period, the last 3 years the TSP NAAQS was in effect.

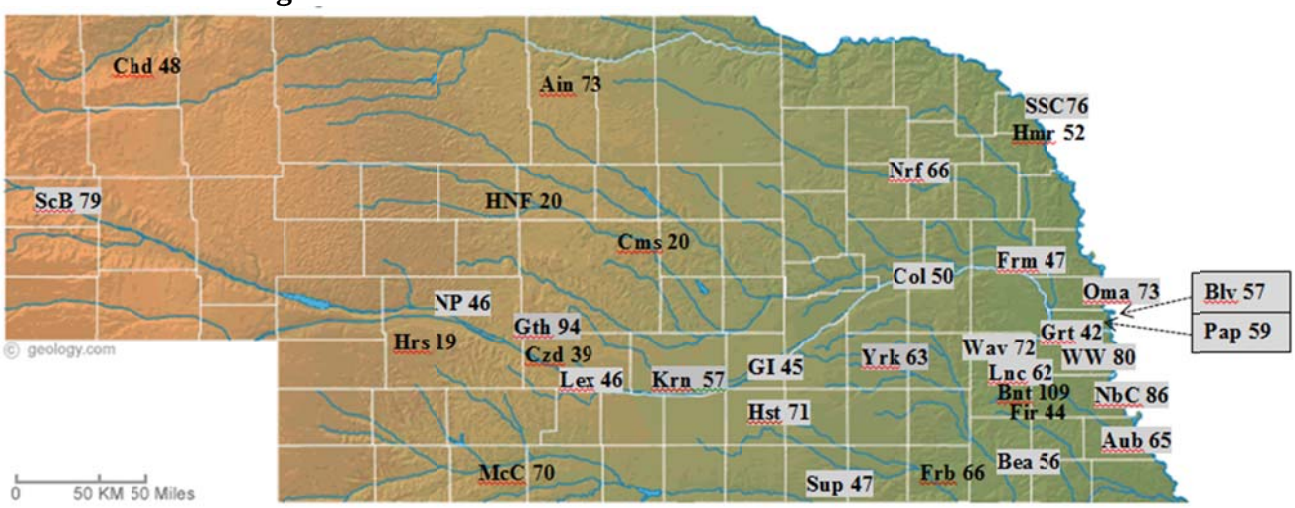
(d) Site abbreviations and values not highlighted have average values from a 3-year period other than 1985 to 1987. See Table E-6 for additional information.

(e) Lincoln and Omaha had multiple sites. The value shown is the highest average value for the 1985 to 1987 time frame.

(f) One location on the map had values above the primary 260 ug/m3 annual average NAAQS:

Bennett (Lancaster Co): 1975-1977, 3-year average = 439 ug/m^3. Subsequent monitoring in Lincoln/Lancaster Co. for TSP, PM_{10} and $PM_{2.5}$ has demonstrated attainment.

Figure E-28: Pre-1988 Total Suspended Particulate Matter (TSP): 3–Year Average of Annual Average Values [(a) (b) (c) (d) (e) (f)]



Footnotes:

(a) The primary annual average NAAQS = 75 ug/m^3 and secondary NAAQS was 60 ug/m^3 to be compared to the geometric mean for any given year. The values shown in this figure are 3-year average values (see Table E-6 for time frame information).

(b) See Table E-6 to explain abbreviations and the PM values associated with them.

(c) Site abbreviations and values in gray highlight are the averages for the 1985 to 1987 three year period, the last 3 years the TSP NAAQS was in effect.

(d) Site abbreviations and values not highlighted have average values from a 3-year period other than 1985 to 1987. See Table E-6 for additional information.

(e) Lincoln and Omaha had multiple sites. The value shown is the highest average value for the 1985 to 1987 time frame.

(f) Six locations on the map had values above the primary 75 $ug/^{m3}$ annual average NAAQS:

Bennet (Lancaster Co): 1975-1977, 3-year average = 109 ug/m^3. Subsequent monitoring in Lincoln/Lancaster Co. for TSP, PM_{10} and $PM_{2.5}$ has demonstrated attainment.

Gothenburg (Dawson Co):): 1985-1987, 3-year average = 94 ug/m^3. TSP replaced with PM_{10} monitor that is currently operating and finding attainment.

Nebraska City (Otoe Co): 1985-1987, 3-year average = 86 ug/m^3. TSP monitoring continued until 1992 when the 3-year average of the 1990 to 1992 annual averages was 51 ug/m^3.

Scottsbluff (Scottsbluff Co): 1985-1987, 3-year average = 79 ug/m^3. TSP monitoring continued until 1994 when the 3-year average of the 1992 to 1994 annual averages was 56 ug/m^3.

South Souix City (Dakota Co): 1985-1987, 3-yr average = 76 ug/m^3. TSP monitoring continued until 1992 when the 3-year average of the 1990 to 1992 annual averages was 72 ug/m^3.

Weeping Water (Cass Co): 1985-1987, 3-year average = 80 ug/m^3. TSP monitoring continued until 1994 when the 3-year average of the 1992 to 1994 annual averages was 56 ug/m^3. The TSP sampler was replaced with PM_{10} monitor that is currently operating and finding attainment.

Table E-6: Historical TSP Values: Summary Table [(a) (b) (c) & (d)] Page 1 of 3

Site	Abbr.	County	Service Years	Design Years	3-Year Annual Average (*ug*/m^3)	3-Year 4th High (*ug*/m^3)
Ainsworth	**Ain**	Brown	1974-1977	1975-77	73	133
Auburn	**Aub**	Nemaha	1976-1992	1985-87	65	139
Beatrice	**Bea**	Gage	1971–1995	1985-87	56	127
Bellevue	**Blv**	Sarpy	1971-1992	1985-87	57	136
Bennett	**Btn**	Lancaster	1972-1977	1975-77	109	439
Chadron	**Chd**	Dawes	1971-1977	1975-77	48	85
Columbus	**Col**	Platte	1972-1993	1985-87	50	127
Comstock	**Cms**	Custer	1979-1980	1979-80	20	119
Cozad	**Czd**	Dawson	1974-1994	1979-81	39	92
Elkhorn	not shown	Douglas	1982-1989	1985-87	35	86
Fairbury	**Frb**	Jefferson	1971-1978	1976-78	66	136
Firth	**Fir**	Lancaster	1972-1982	1980-82	44	121
Fremont	**Frm**	Dodge	1972-1995	1985-87	47	117
Gothenburg	**Gth**	Dawson	1990-1992	1990-92	94	232
Grand Island	**GI**	Hall	1971-1995	1985-87	52	121
Gretna	not shown	Sarpy	1985-1992	1985-87	42	118
Hallam	**Hal**	Lancaster	1973-1979	1977-79	49	133
Halsey National Forest	**HNF**	Thomas	1958-1977	1975-77	20	44
Hastings	**Hst**	Adams	1972-1992	1985-87	71	170
Hershey (17 mi south)	**Hrs**	Lincoln	1973-1985	1983-85	28	83
Homer	**Hmr**	Dakota	1980-1981	1980-81	52	161
Kearney	**Krn**	Kearney	1972-1992	1985-87	57	139
Lexington	**Lex**	Dawson	1971-1993	1985-87	46	118
Lincoln [(e)]	**Lnc**	Lancaster	1957-1987	1985-87	64	136
Louisville	not shown	Cass	1971-1984	1982-84	73	166
McCook	**McC**	Red Willow	1971-1973	1971-73	70	134
Nebraska City	**NbC**	Otoe	1975-1992	1985-87	86	219
Norfolk	**Nrf**	Madison	1971-1993	1985-87	66	162
North Platte	**NP**	Cass	1971-1993	1985-87	46	100

Table continued on next page

Table E-6: Historical TSP Values: Summary Table [(a) (b) (c) & (d)] Page 2 of 3

Site	Abbr.	County	Service Years	Design Years	3-Year Annual Average (*ug*/m^3)	3-Year 4th High (*ug*/m^3)
Omaha – Eppley Airport	not shown	Douglas	1971-1983	1981-83	60	143
Omaha – 11th & Nicholas	**Oma**	Douglas	1971-2000	1985-87	73	177
Omaha – 15th & Read	not shown	Douglas	1990-1992	1990-92	50	120
Omaha – 17th & Harney	not shown	Douglas	1975-1977	1975-77	72	125
Omaha – 18th & Dodge	not shown	Douglas	1957-1975	1973-75	92	163
Omaha – 19th & Howard	not shown	Douglas	1978-1992	1985-87	63	149
Omaha – 2211 Paul St	not shown	Douglas	1983-1990	1985-87	58	141
Omaha – 24th & O	not shown	Douglas	1976-1988	1985-87	58	126
Omaha – 25th & L	not shown	Douglas	1971-1976	1974-76	119	268
Omaha – 30th & Hanover	not shown	Douglas	1971-1981	1979-81	68	149
Omaha – 4105 Woolworth	not shown	Douglas	1971-1993	1985-87	45	97
Omaha – 46th & Farnam	not shown	Douglas	1990-1992	1990-92	69	180
Omaha – 63rd & Frederick	not shown	Douglas	1971-1989	1985-87	60	135
Omaha – 72nd & Hartman	not shown	Douglas	1971-1972	1971-72	59	103
Omaha – 72nd & Hwy 36	not shown	Douglas	1971-1976	1974-76	49	126
Omaha – 11414 N 72nd	not shown	Douglas	1976-1989	1985-87	33	89
Omaha – 77th & Dodge	not shown	Douglas	1982-1997	1985-87	70	147
Omaha 8801 Fort St	not shown	Douglas	1975-1987	1985-87	42	97
Omaha – 140th & Dodge	not shown	Douglas	1971-1981	1979-81	55	125
Papillion	**Pap**	Douglas	1971-1992	1985-87	59	152
Scottsbluff	**ScB**	Scotts Bluff	1971-1992	1985-87	79	253
South Sioux City	**SSC**	Dakota	1971-1994	1985-87	76	161
Superior	**Sup**	Nuchols	1973-1993	1985-87	55	130
Waverly	**Wav**	Lancaster	1973-1987	1985-87	72	175
Weeping Water	**WW**	Cass	1972-1992	1985-87	80	252
Willow Island	not shown	Dawson	1972-1973	1972-73	113	342
York	**Yrk**	York	1976-1992	1975-77	63	132

Table continued on next page

Table E-6: Historical TSP Values: Summary Table [(a) (b) (c) & (d)] Page 3 of 3

Footnotes:

(a) The primary annual average NAAQS = 75 ug/m^3 and secondary NAAQS was 60 ug/m^3 to be compared to the geometric mean for any given year. The values shown in this figure are 3-year average values for the time frame shown in the "Design Years" column.

(b) The primary 24-Hour NAAQS was 260 ug/m3 and secondary NAAQS was 150 ug/m3. Neither value was to be exceeded more than once per year. The values shown in this figure are the 4th high value over a 3 year time frame , or if only 2 years of data was available, the 3rd high value.

(c) Data from 1985 to 1987, when available, was preferentially used because this was the last 3 years when the TSP NAAQS was in effect. Gray highlight in the "Design Value" column was used to identify sites where 1985-87 data was used.

(d) Yellow highlight was used to identify values above the NAAQS.

(e) There were 14 different TSP monitoring sites at various times in Lincoln. The data shown for Lincoln was from the 10th & M Street site, which operated from 1980 to 1987. It was the only site operated after 1985 and was the highest concentration site in the 1980's.

V.B. PM_{10}

NAAQS for PM_{10} were established in 1987 with identical primary and secondary standards set at150 ug/m^3 averaged over 24 hours (i.e., a daily average concentration) not to be exceeded more than once per year, and a 50 ug/m^3 annual average. These NAAQS were evaluated over a three-year period such that the 150 ug/m^3 level cannot be exceeded more than three times in any 3 consecutive calendar years, and the three-year average of the annual averages cannot exceed 50 ug/m^3. In 2006, the 50 ug/m^3 annual standard was rescinded. The subsequent review completed in 2012 left the PM_{10} NAAQS unchanged. See Table E-4 above.

Monitoring for PM_{10} was initiated in Nebraska in 1987 and 1988 in eight (8) communities (Hastings, Kearney, Lincoln, Louisville, Nebraska City, Omaha, Scottsbluff, and Weeping Water) and continues today in four (4) communities (Cozad, Gothenburg, Omaha and Weeping Water). Over the last 23 years, PM_{10} monitoring has been conducted in or near 15 Nebraska communities (Auburn, Beatrice, Broken Bow, Cozad, Gothenburg, Grand Island, Springfield, Hastings, Kearney, Lincoln, Louisville, Nebraska City, Omaha, Scottsbluff, and Weeping Water). Table E-6 summarizes PM_{10} monitoring results from 1987 to 1999, which demonstrate attainment with the NAAQS (after 1999 there were only 4 monitoring sites and their monitoring history is examined in detail below).

There have been two areas in Nebraska where PM_{10} levels have exceeded the NAAQS as defined in 40 CFR Part 58 Appendix K: Weeping Water and the 46th & Farnam site in Omaha. Appendix K allows 3 24-hr PM_{10} values to exceed 150 ug/m^3 in any 3-year time frame, with the 4th excursion indicating the NAAQS is not being met.

Weeping Water: This area has several limestone mining and processing areas. NDEQ Title 129 Chapter 21 has Cass County specific controls for rock processing activities that were promulgated in 1975 to reduce particulate emissions in the Weeping Water and Louisville areas.

The sampler that found the high PM_{10} values is located 2 miles west of the Weeping Water and within a ½ mile of limestone processing facilities. In October thru November 2010 there were four 24-hour values that exceeded 150 ug/m^3: 176 on 10/20, 249 on 10/26, 306 on 10/27 & 209 on 11/26. There was also one 24-hour exceedence in 2012: 179 on 1/5. There were no other exceedences in the 2008 to 2014 time frame.

After the sources in the area were made aware of the 2010 exceedences, PM_{10} levels dropped, such that the highest 24-hour value for 2011 was 108 ug/m^3, and other than the 179 ug/m^3 value found on January 5th, the 2nd high value for 2012 was 129 ug/m^3. Thus increased awareness on the part of the sources was effective in reducing PM_{10} levels and no further action was needed.

46th & Farnam Omaha: This site was source-oriented with respect to the Omaha Steel Company foundry. Between September 2011 and June 2012, there were 4 excursions above 150 ug/m^3: 172 on 9/28/11, 159 on 1/5/12, 199 on 5/14/12 and 181 on 6/5/12. The Omaha Steel facility was in the process of moving to a new location. Their move was completed in 2014. The highest values since 2012 have been 94 ug/m^3 in 2013 and 115 ug/m^3 in 2014.

Dawson County: The maximum 24-hr values at Cozad and Gothenburg have been below 150 ug/m^3 as detailed below:

- Cozad: The highest maximum value = 146 ug/m^3 and the 2nd high maximum = 106 ug/m^3; both occurred in 2002 (monitoring conducted from 1994 to 2014).
- Gothenburg: The highest maximum value = 143 ug/m^3 in 2004 and 2nd high maximum = 125 ug/m^3 in 2000 (monitoring conducted from 1991 to 2014).

Figures E-29 thru E-32 show the annual average PM_{10} monitoring results from 4 locations: Omaha (all sites), Weeping Water (all sites), Cozad, and Gothenburg. The annual average values have decreased in all 4 areas: 0.040 ug/m^3/year in Omaha, 0.046 ug/m^3/year in Weeping Water, 0.25 ug/m^3/year at Cozad and 0.48 ug/m^3/year at Gothenburg. Annual average values were plotted because it was felt they would better represent trends than annual highest values.

Table E- 7: PM_{10} Monitoring Result Summary: 1987 to 1999 [(a)(b)]

Abbr.	City	Years Sampled	# of Years	Annual Average Range (ug/m^3)	Annual Maximum Range (ug/m^3)
ABN	Auburn	1994 – 1995	2	25 – 28	63 - 133
BTC	Beatrice	1994 – 1995	2	16 – 33	25 - 109
CZD	Cozad [(a)(b)]	1994 – 1999	6	21 - 34	51 - 99
GI	Grand Island	1994 – 1995	2	19 – 26	24 - 48
GTH	Gothenburg [(a)(b)]	1991 – 1999	9	29 – 41	78 - 141
HST	Hastings	1987 - 1996	10	19 - 39	48 - 138
KN	Kearney	1988 – 1998	11	17 – 40	28 - 127
LNC	Lincoln	1988 – 1998	11	24 - 34	48 - 102
LSV	Louisville (not shown)	1985 - 1999	15	25 - 46	55 - 137
NC	Nebraska City	1985 – 1998	14	22 – 58	31 - 114
OMA	Omaha (7 sites) [(a)(b)]	1985 – 1999	15	27 - 47	55 - 290
SB	Scotts Bluff	1988 – 1998	11	21 – 58	32 - 131
SPR	Springfield (not shown)	1995	1	23	78
WW	Weeping Water [(a)(b)]	1985 – 1999	15	26 - 49	88 - 187

Footnotes:
(a) The 1987 to 1999 time frame was chosen because from 2000 to present PM_{10} was conducted at 4 locations: Cozad, Gothenburg, Omaha and Weeping Water. Thus this table compares the early year monitoring results from all 14 locations where PM_{10} monitoring was conducted.
(b) A more detailed analysis of PM10 trends at Cozad, Gothenburg, Omaha and Weeping Water can be found below.

Figure E-29: Annual Average PM_{10} Levels in Omaha, NE (All sites): 1985 thru 2014

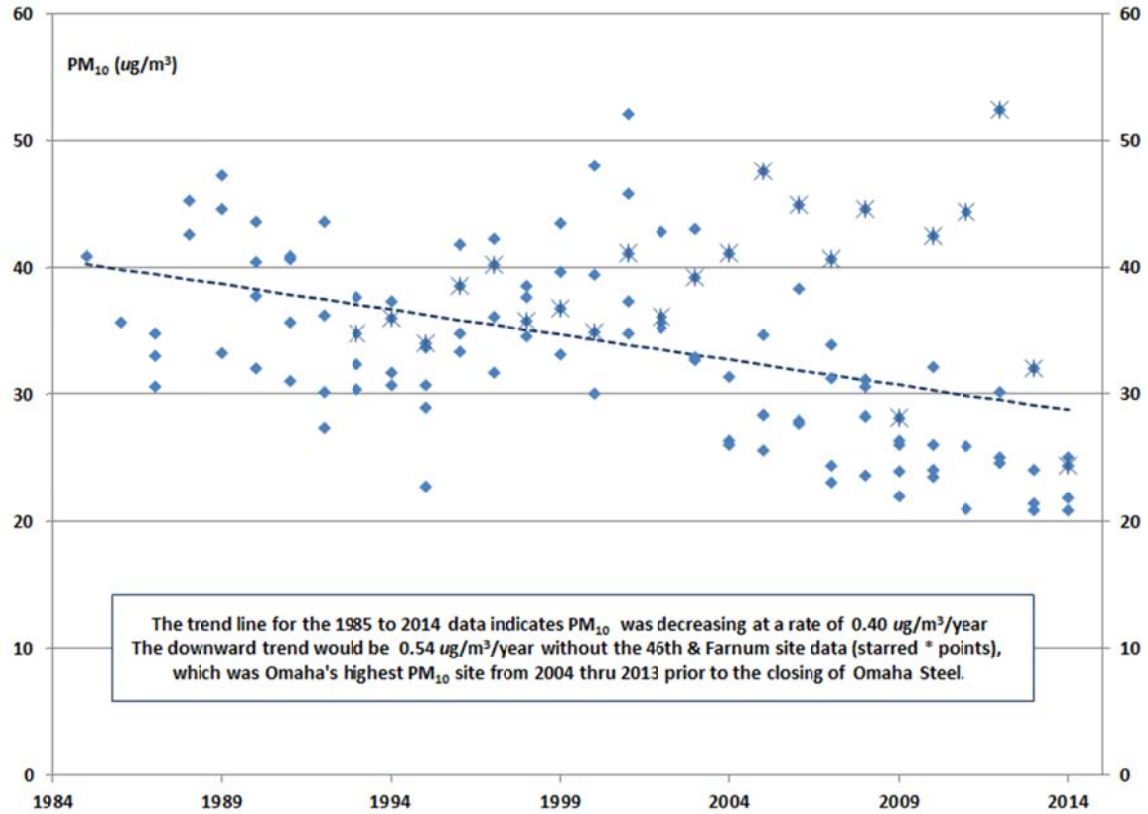


Figure E-30: Annual Average PM_{10} Levels at Weeping Water Area Sites: 1988 thru 2014

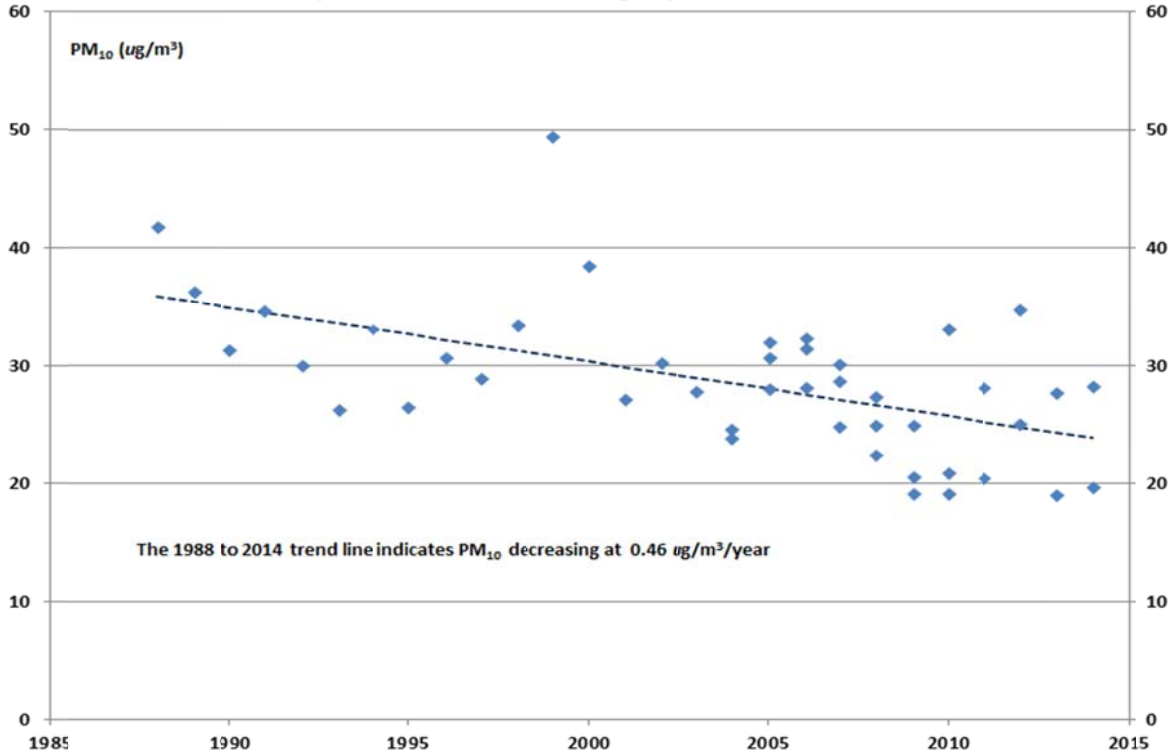


Figure E-31: Annual Average PM_{10} Levels at Cozad: 1994 thru 2014

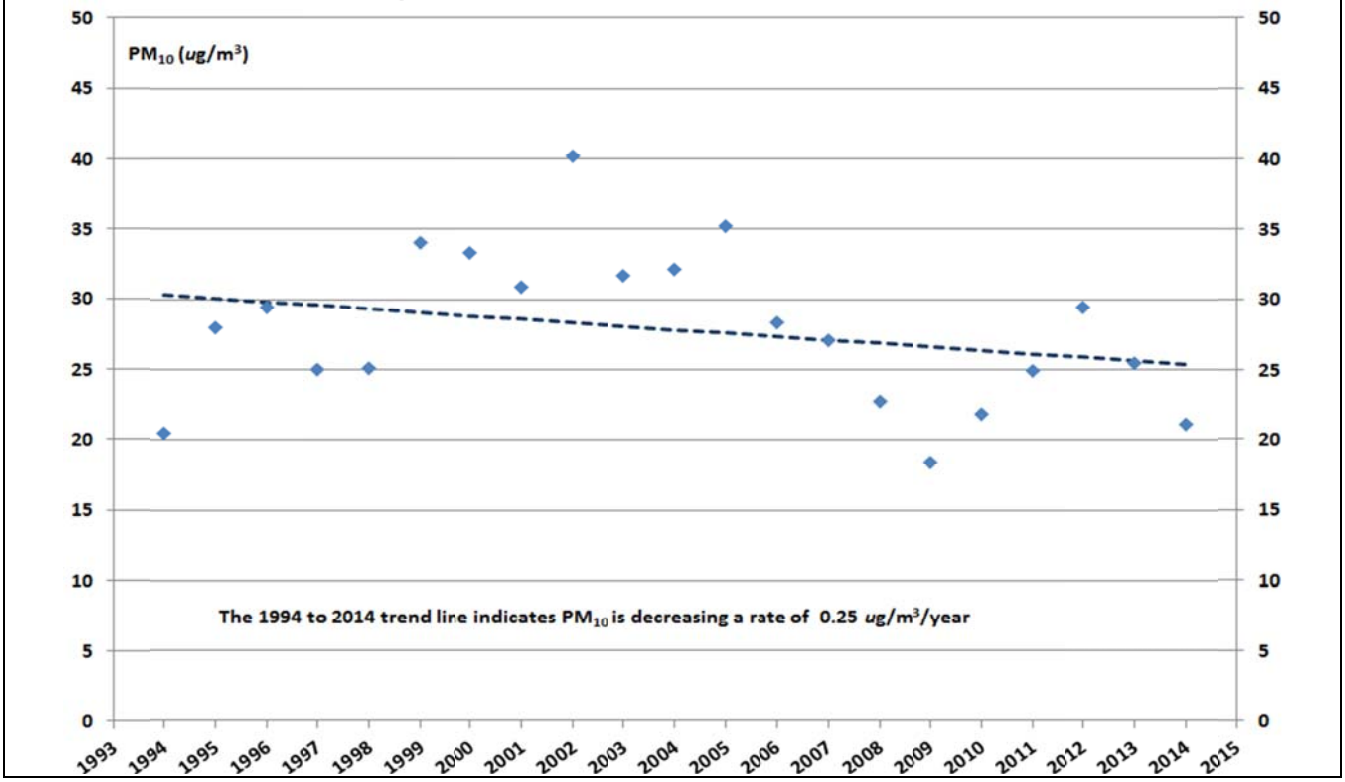
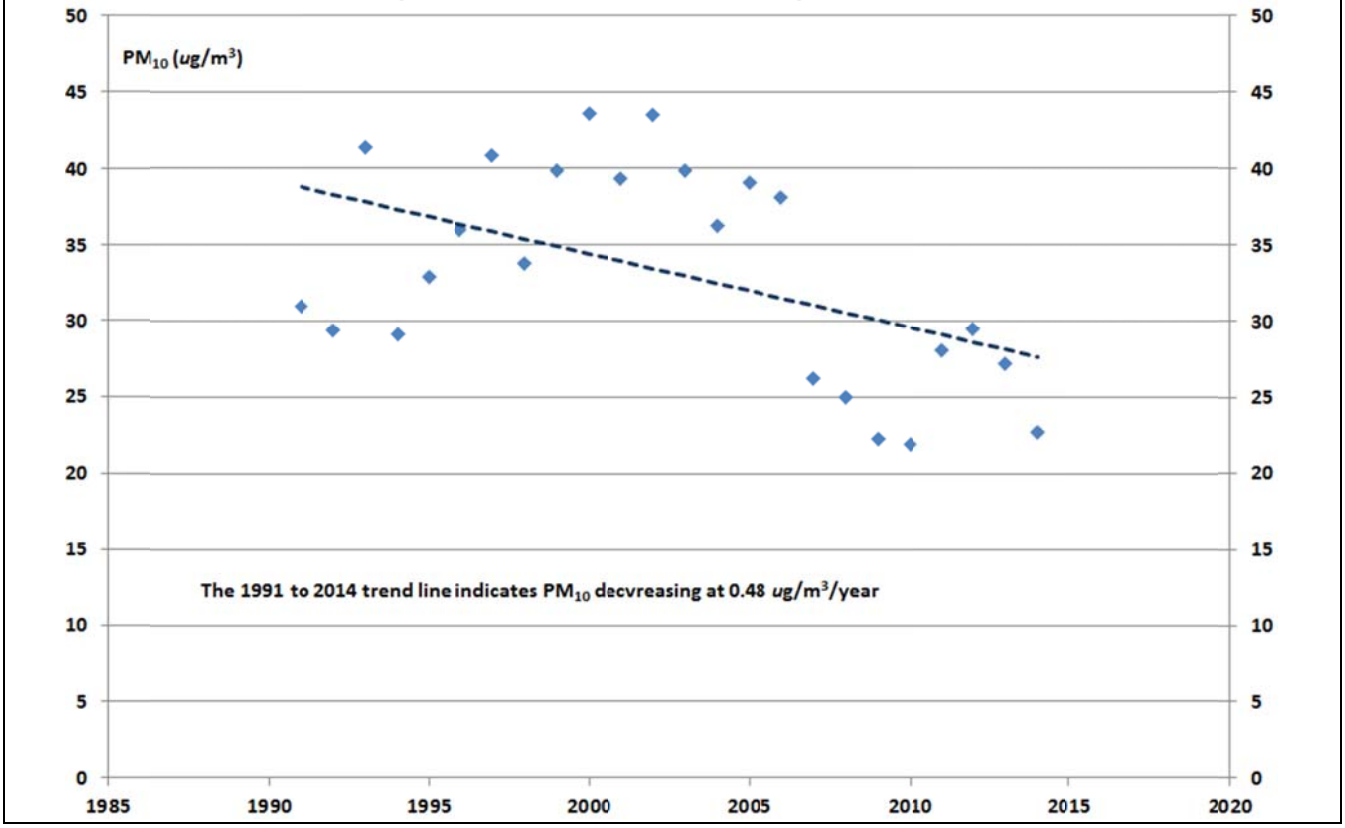


Figure E-32: Annual Average PM_{10} Levels in Gothenburg: 1991 thru 2014



V.C. $PM_{2.5}$

$PM_{2.5}$ forms in situ (in the atmosphere) from pollutant precursors such as ammonia in combination with NO_2 or SO_2, and it can also be an emission pollutant from stationary and mobile sources. Thus, $PM_{2.5}$ is not nearly as source-oriented as TSP and PM_{10}.

As stated at the start of this PM subsection, the finer $PM_{2.5}$ can more easily penetrate the lungs than larger diameter PM_{10} and TSP particles. For this reason, the $PM_{2.5}$ NAAQS are set lower than the PM_{10} NAAQS.

$PM_{2.5}$ NAAQS were established in 1997. A 65 ug/m^3 24-hour standard and a 15 ug/m^3 annual average were established. In 2006, the 24-hour standard was lowered to 35 ug/m^3. The $PM_{2.5}$ standard is currently under review, and EPA is expected to propose revisions in early 2011. The Clean Air Scientific Advisory Committee (CASAC) has recommended that the annual standard be lowered to be within the range of 11 to 13 ug/m^3, and has requested EPA consider lowering the 24-hour standard to 30 ug/m^3.

In 1999, $PM_{2.5}$ monitoring was initiated at 13 sites at or near 11 Nebraska communities (Bellevue, Blair, Chappell, Grand Island, Hartington, Lincoln, Merriman, North Platte, Omaha (3 sites), Scottsbluff and Weeping Water). Three sites were shutdown in 2002 after attainment had been demonstrated: Chappell, Hartington and Merriman. Three more sites were shut-down in 2004 thru 2005: North Platte, Weeping Water, and one site in Omaha. Currently there are 7 sites running in 6 communities: Bellevue, Blair, Grand Island, Lincoln, Omaha (2 sites) and Scottsbluff.

40 CFR Part 58 Appendix D Section 4.7.3 requires each state to operate a regional transport and background site. The Grand Island site is Nebraska's transport site and the Scottsbluff site is the background site.

There were also 2 sites established by Iowa in 1999 in the Omaha and Sioux City MSAs; both of these sites continue to operate. In 2009, South Dakota established 2 sites in Union County, which is in the Sioux City MSA; one was closed after 2013, the other remains operating.

Figure E-33 shows actual and estimated 2012 thru 2014 $PM_{2.5}$ design values (3-year average values) for all of the current and historical $PM_{2.5}$ monitoring sites in Nebraska and in the Omaha and Sioux City MSAs. As can be seen in Figure E-33, the 2012 thru 2014 design values (DVs) are in attainment with the NAAQS.

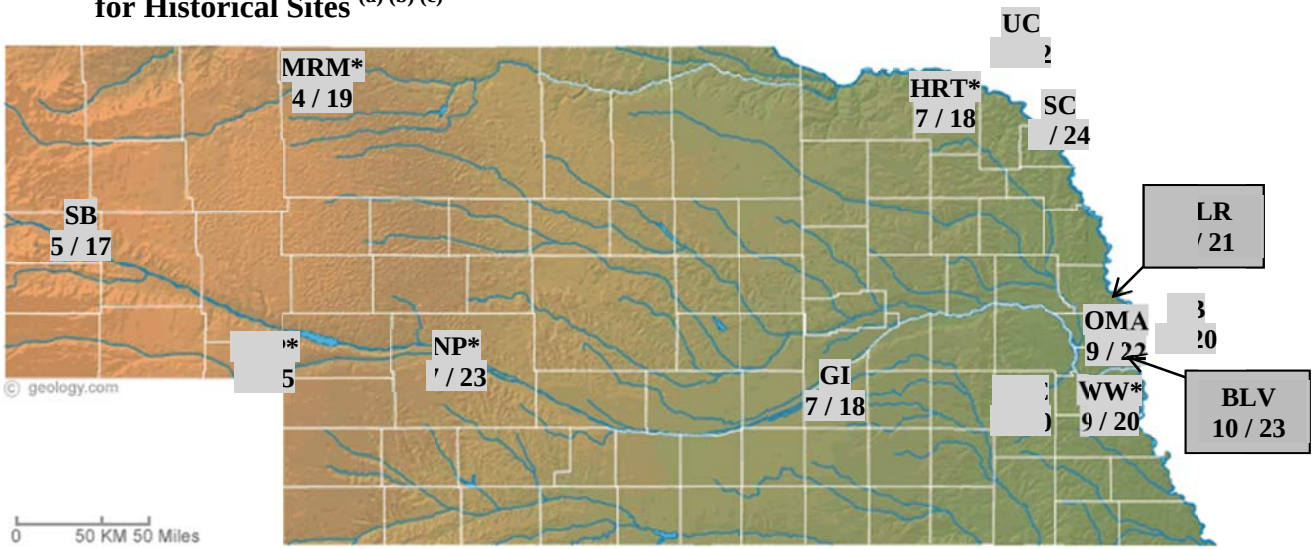
Figures E-34 thru E-38 show the complete history of $PM_{2.5}$ monitoring results in the following 5 locations: Omaha MSA (NE & IA sites, includes Bellevue and Blair), Lincoln, Sioux City MSA (IA & SD sites), Grand Island and Scottsbluff. Two significant things the $PM_{2.5}$ monitoring results from these 5 locations have in common:

- All the results indicate attainment with the NAAQS since monitoring was initiated in 1999; and
- Both annual average and 99th percentile values have trended downward from 1999 to 2014.

The downward trend in 99th percentile values at Scottsbluff is minimal, but the 2012-14 DV is slightly less than 50% of the NAAQS.

It is also noted that the Bellevue and Council Bluffs sites in the Omaha MSA had annual average values above 12 ug/m^3 in 2010. NAAQS attainment is evaluated using a 3-year average, and the 2010-12 DVs at these sites were 11.5 ug/m^3 and 11.1 ug/m^3 respectively. These sites remain the two highest concentration sites at 82% to 83% of the NAAQS.

Figure E-33: Annual Average & 24-Hour $PM_{2.5}$ Design Values & Extrapolated Design Values for Historical Sites [(a) (b) (c)]



Footnotes:

(a) The site letter designation is explained in the legend below. The first number is the 2012-14 annual average design value (DV), which is the 3-year average of the 2012-14 annual averages. The second number is the 2012-14 99th percentile DV, which is the 3-year average of the 2012-14 99th percentile values.

(b) Sites marked with a * were not operating in 2014. The 2014 DV for these sites were estimated using the data trends from nearby sites:

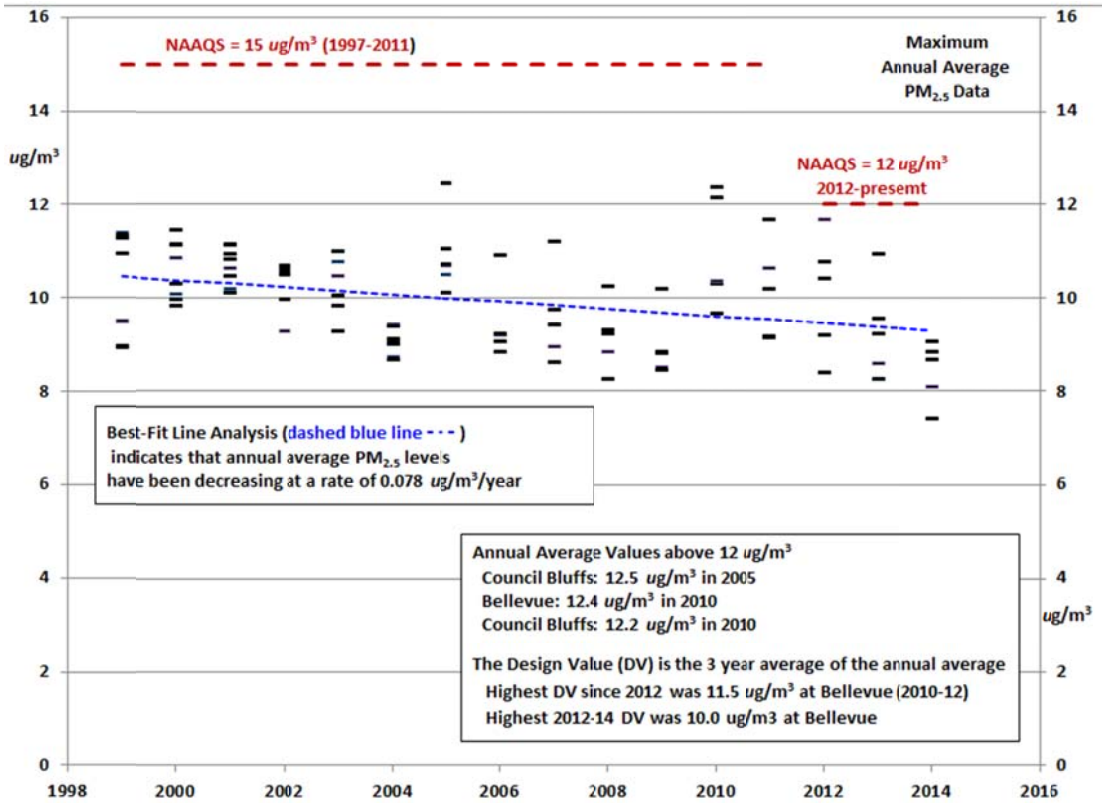
- Chappell (CHP) DV estimated using Scottsbluff (SB) data
- Hartington (HRT) DV estimated using Blair (BLR), Grand Island (GI) & Sioux City IA (SC) data
- Merriman (MRM) DV estimated using Scottsbluff (SB) data
- North Platte (NP) DV estimated using Grand Island (GI) and Scottsbluff (SB)

(c) Annual Average NAAQS = 12 ug/m^3 & 99th Percentile NAAQS = 35 ug/m^3

Legend: Abbreviations followed by an * indicate that 2012-2014 DVs were estimated from historical data using data from currently operating near-by sites.

Abbr.	City	Years Sampled	# of Years	Annual Average Range (ug/m^3)	98th Percentile Range (ug/m^3)
BLR	Blair	1999-2014	16	7.4 to 10.1	17 to 27
BLV	Bellevue	1999-2014	16	8.3 to 12.6	18 to 33
CB	Council Bluffs, IA	1999-2014	16	9.0 to 12.5	20 to 33
CHP	Chappell	2000-2002	3	5.5 to 5.9	13 to 14
GI	Grand Island	1999-2014	16	6.5 to 10.2	14 to 29
HRT	Hartington	2000-2002	3	7.5 to 9.3	20 to 25
LNC	Lincoln	1999-2014	16	7.7 to 10.6	16 to 29
MRM	Merriman	2000-2002	3	4.0 to 4.8	12 to 25
NP	North Platte	1999-2005	7	6.7 to 7.9	16 to 32
OMA	42nd & Woolworth, Omaha	1999-2014	16	8.4 to 11.5	20 to 30
	9225 Berry St., Omaha	1999-2014	16	8.1 to 11.7	19 to 31
	4606 Terrace St., Omaha	1999-2004	6	8.9 to 11.2	23 to 27
SB	Scottsbluff	1999-2014	16	4.5 to 8.2	12 to 23
SC	Sioux City, IA	1999-2014	16	8.4 to 10.8	22 to 34
WW	Weeping Water	1999-2005	7	8.7 to 11.4	23 to 31
UC	Union County, SD	2009-2014	6	7.4 to 10.5	20 to 29

Figure E-34: $PM_{2.5}$ Levels in Omaha MSA: 1999 to 2014



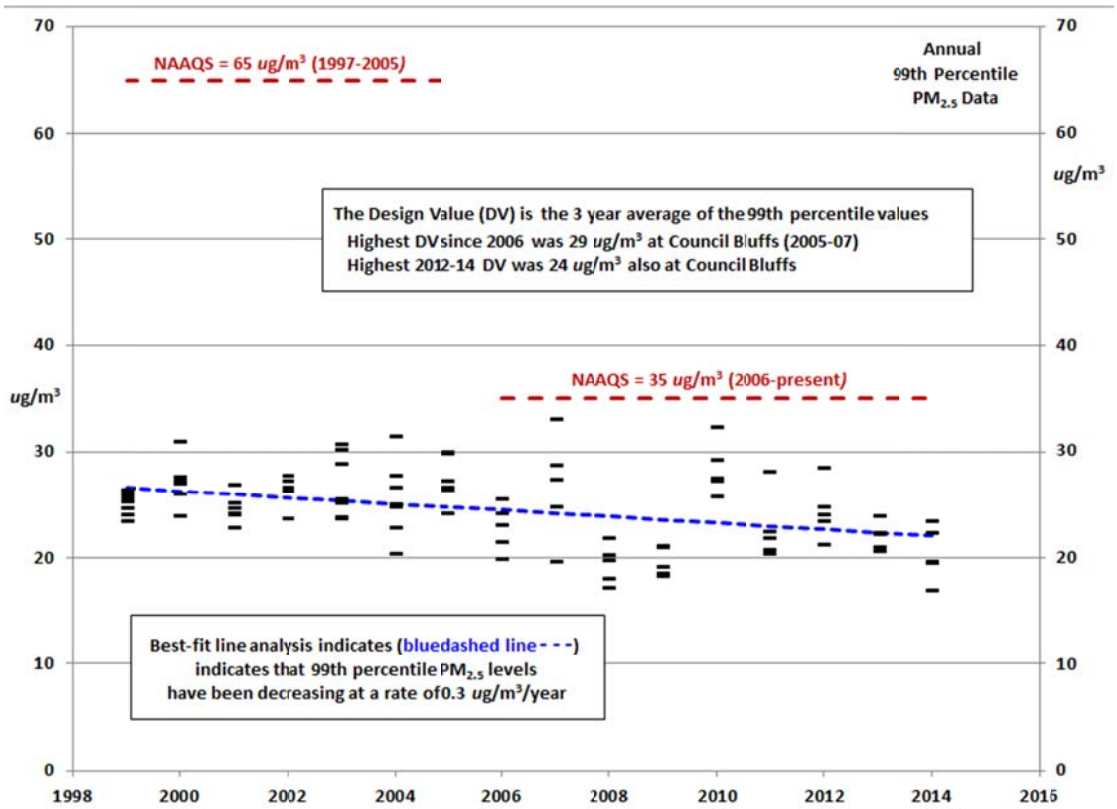
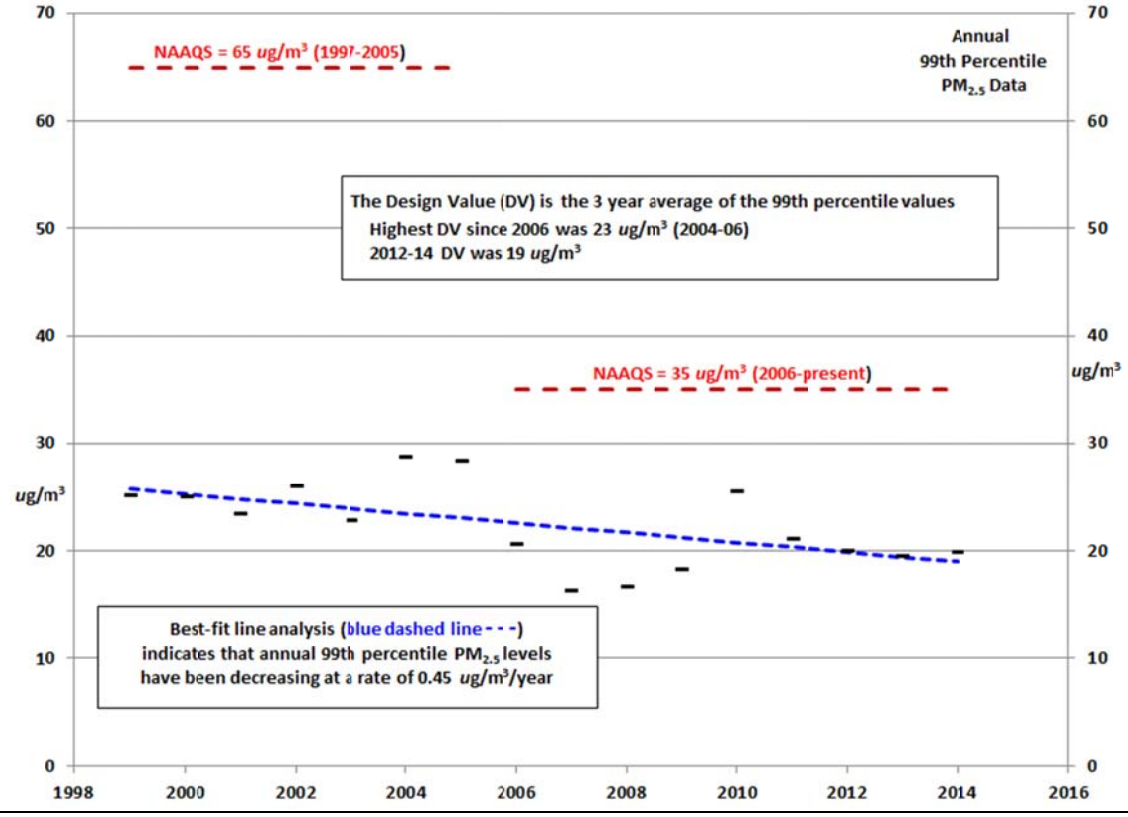


Figure E-35: $PM_{2.5}$ Levels in Lincoln: 1999 to 2014



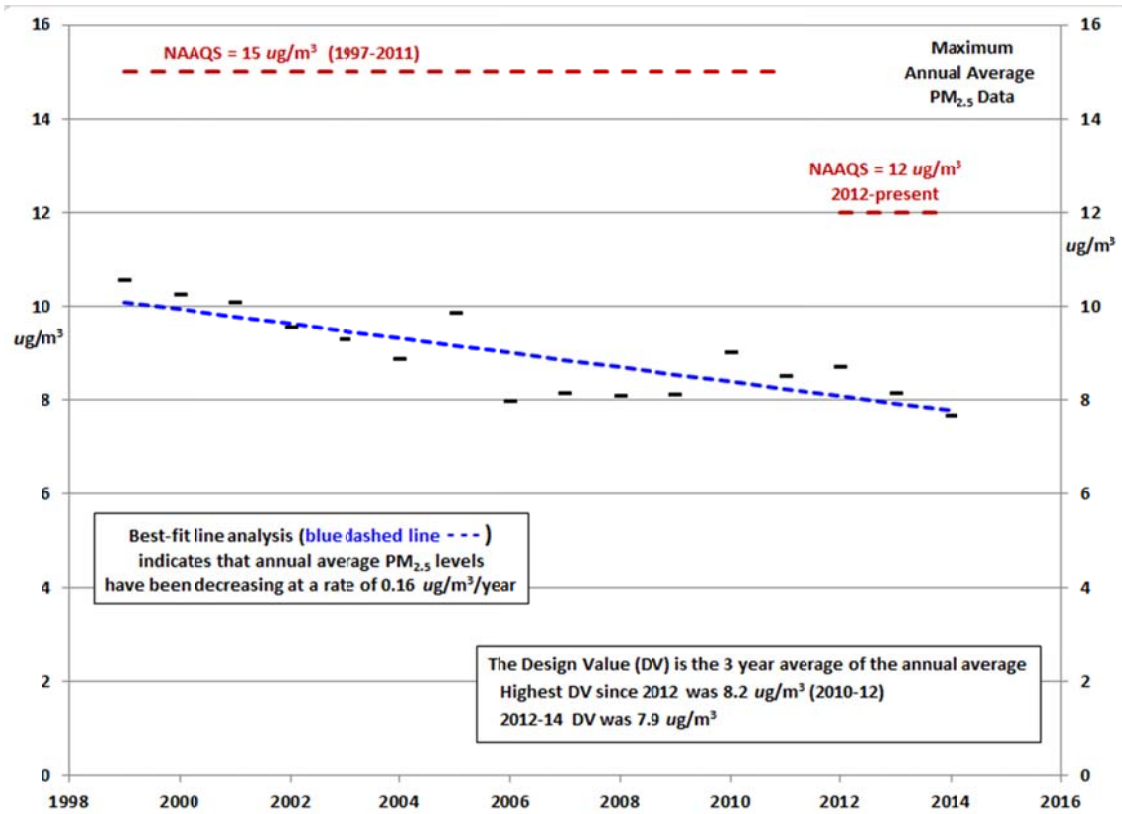


Figure E-36: $PM_{2.5}$ Levels in the Sioux City MSA: 1999 to 2014

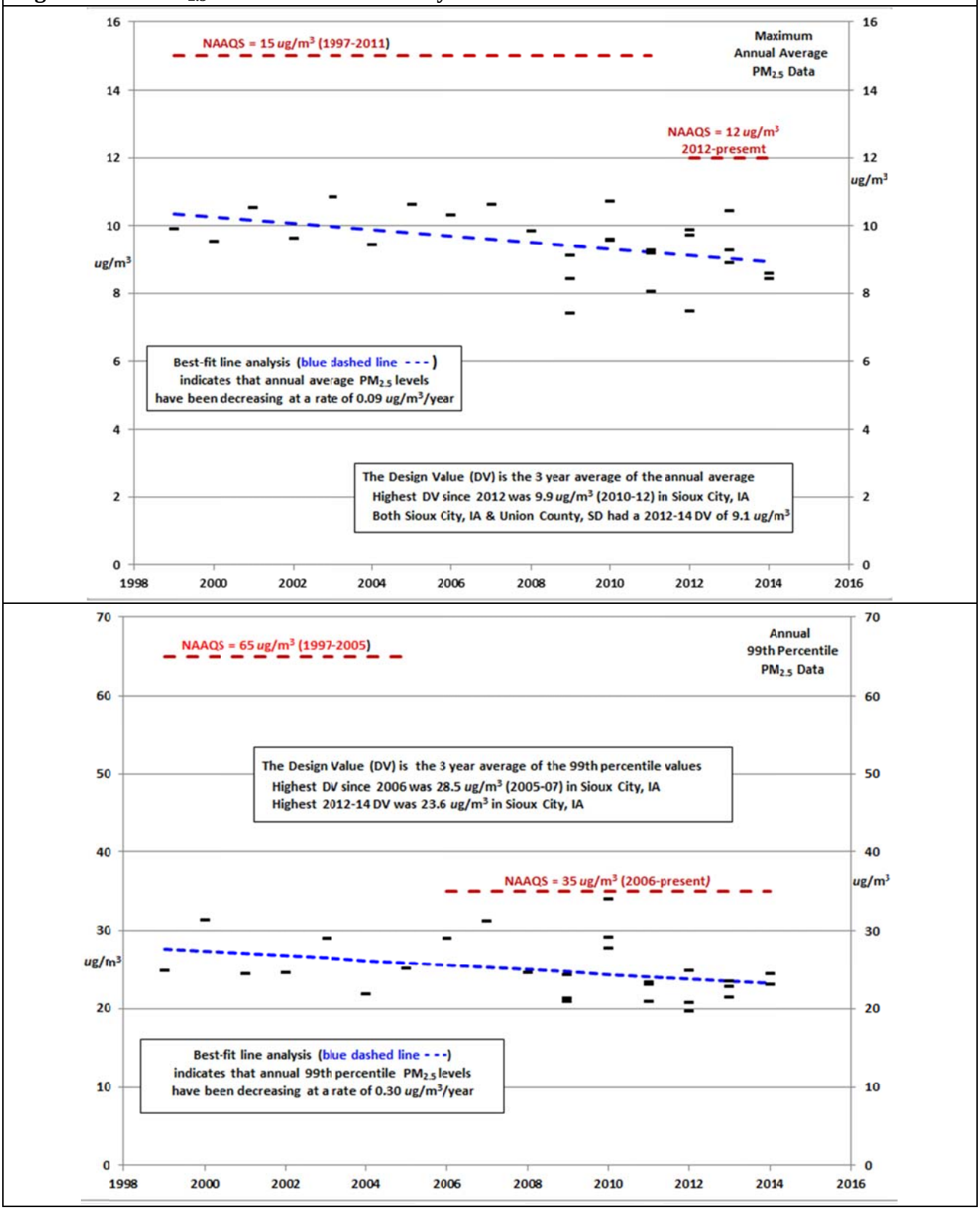


Figure E-37: $PM_{2.5}$ Levels in the Grand Island: 1999 to 2014

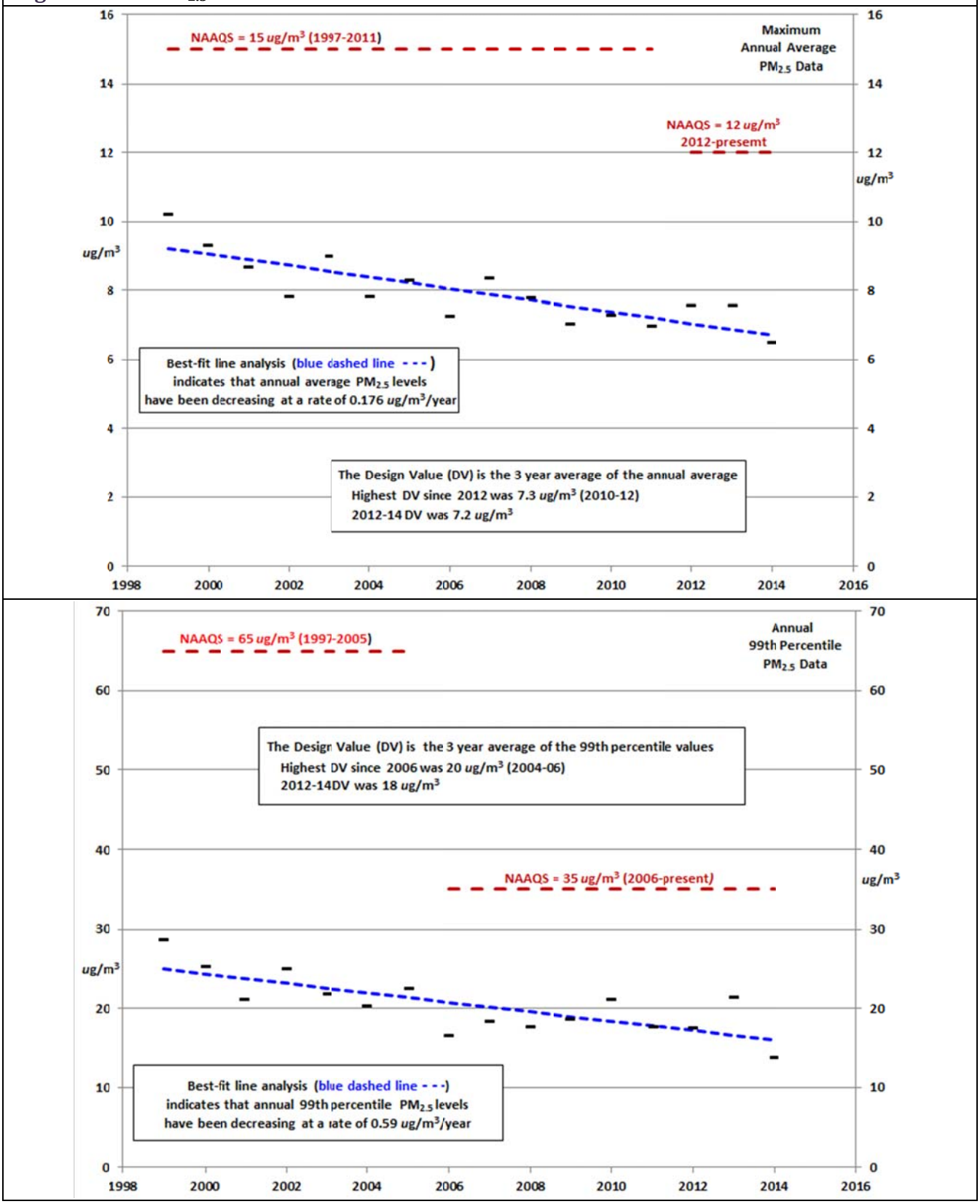
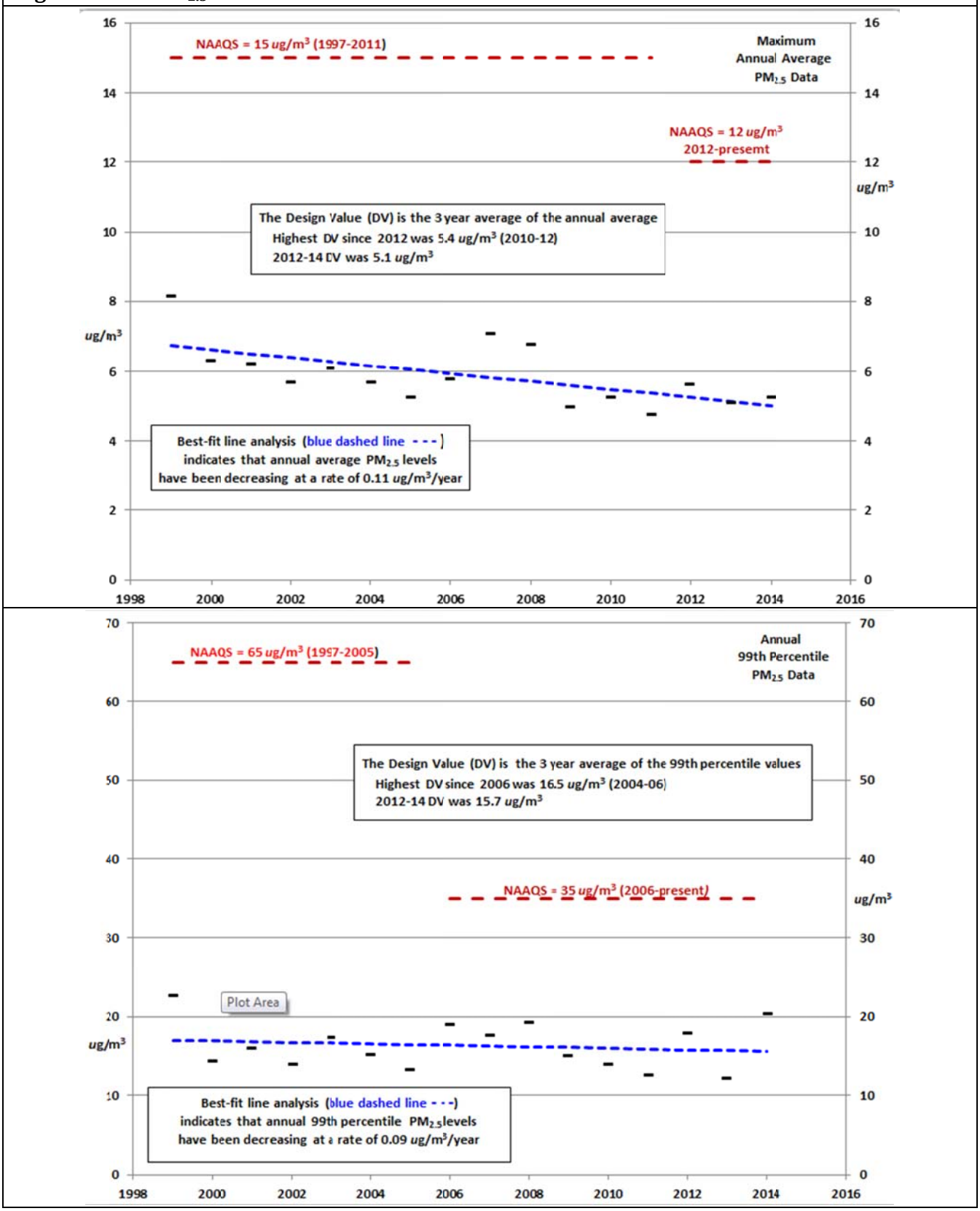


Figure E-38: $PM_{2.5}$ Levels in the Scottsbluff: 1999 to 2014



VI. Lead

Lead sources in Nebraska include certain process industries (e.g., foundries, lead smelters, battery recyclers), coal-fired boilers, leaded gasoline (currently only available for aircraft), and natural sources (minimal). Control measures have significantly decreased lead emissions and atmospheric lead levels. Significance sources of lead emissions include:

1) Particulate emission controls placed on coal-fired boilers, foundries, and other process industry sources;
2) The phasing out of leaded gasoline from 1975 thru 1986, with the complete elimination of leaded gasoline for on-road vehicles in 1996; and
3) In Omaha, the closing of the ASARCO lead factory in 1997.

The lead NAAQS was first promulgated in 1978 and modified in 2008. See Table E-8 below.

Table E-8: History of the Lead NAAQS

Effective Date	Primary and Secondary NAAQS	Compliance Evaluation
October 5, 1978	1.5 ug/m3 STP [(a)]	Quarterly averages are not to exceed NAAQS
November 12, 2008	0.15 ug/m3 LC [(b)]	Rolling 3-month averages are not to exceed NAAQS

Footnote:
(a) STP - Sampling volume expressed in standard conditions of 20º C and 760 mm Hg.
(b) LC - Sampling volume expressed at local atmospheric conditions without adjustment for temperature and pressure.

Monitoring was first conducted for lead in Omaha in 1959, and in Lincoln and Louisville in 1962. Table E-9 provides a summary of lead monitoring locations, time frames and levels. Figures E-39 thru E-41 are plots of lead monitoring results from various times and locations in Nebraska. These figures show both historical monitoring conducted to evaluate attainment with the 1.5 ug/m^3 NAAQS, which was in place from 1978 thru 2008; and newer data from 2010 thru 2014 that conducted to evaluate attainment with the current 0.15 ug/m^3 NAAQS, which became effective in 2008. These figures contain explanatory narratives relative to trends and factors the trends.

Figure E-42 specifically shows 3-month average data from the 3 lead monitoring sites currently operating in Nebraska: Auburn, Fremont and Omaha. As can be seen in the figure, the current monitoring is demonstrating attainment, although 2010 thru 2012 data completeness was an issue, as explained in the footnotes of the figure.

The three current monitoring sites are sited in accordance with regulations that require source-oriented lead monitoring around sources with lead emissions of 0.5 tons per year (tpy) or more (i.e., the Auburn and Fremont sites); and a non-source-oriented site at the Omaha NCore site.

With respect to source-oriented sites, the 2011 National Emission Inventory lists three facilities in Nebraska with lead emissions of 0.5 tpy or more:

- Magnolia Metal Corp, a bronze casting foundry in Auburn, at 2.17 tpy,
- Magnus Division of LV Ventures, a brass/bronze casting and lead babbitt bearing manufacturer in Fremont, at 0.72 tpy, and
- Nucor Steel a steel foundry in Norfolk, at 0.5 tpy.

Nucor Steel submitted modeling demonstrating ambient lead concentrations will not exceed 50% of the NAAQS. This modeling was reviewed and accepted by NDEQ and EPA. Thus monitoring near Nucor was not required (see 40 CFR Part 58 Appendix D Section 4.5.a.ii).

Magnolia Metals in Auburn has installed additional monitoring equipment such that lead emissions are now below the 0.5 tpy threshold for requiring monitoring. Attachment F contains a detailed analysis of monitoring results at Auburn to support a request to discontinue monitoring near Magnolia Metals.

Table E-9: Historical Lead Monitoring Summary [(a)]

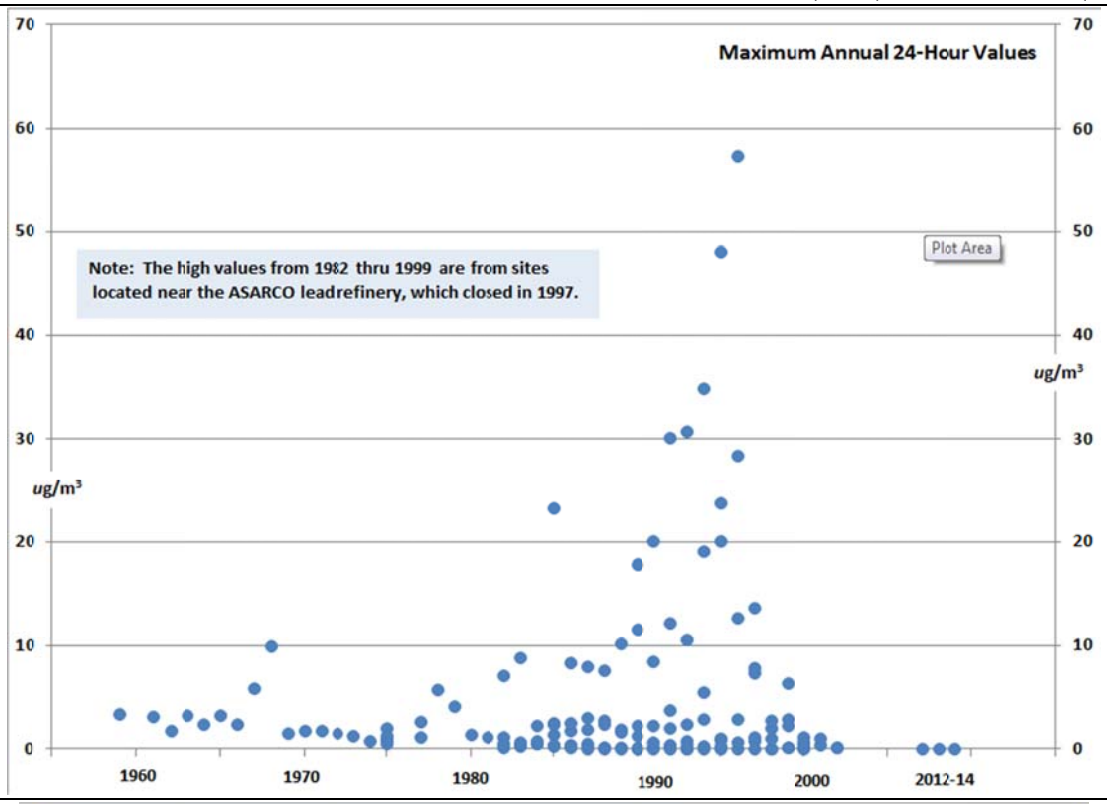
Location	Years Monitored	24-Hour Annual Maximum Range (ug/m^3)	Annual Average Range (ug/m^3)
Omaha	1959 - 2002	0.03 to 57.5	0.01 to 5.9
	2012 - 2014	0.013 to 0.021	0.0037 to 0.0048
Lincoln	1962	0.3	0.1
	1970 - 1975	0.34 to 0.95	0.19 to 0.37
	1977 - 1986	0.12 to 0.95	0.06 to 0.57
Louisville	1962	0.006	0.275
Halsey National Forest (b)	1965 – 1977	0.00 to 0.23	0.00 to 0.058
Bellevue	1982 – 1986	0.25 to 0.52	0.06 to 0.15
Fremont	1990 – 1995	0.13 to 2.1	0.06 to 0.18
	2010 - 2014	0.56 to 0.64	0.037 to 0.06
Auburn	2010 - 2014	0.04 to 0.57	0.005 to 0.040

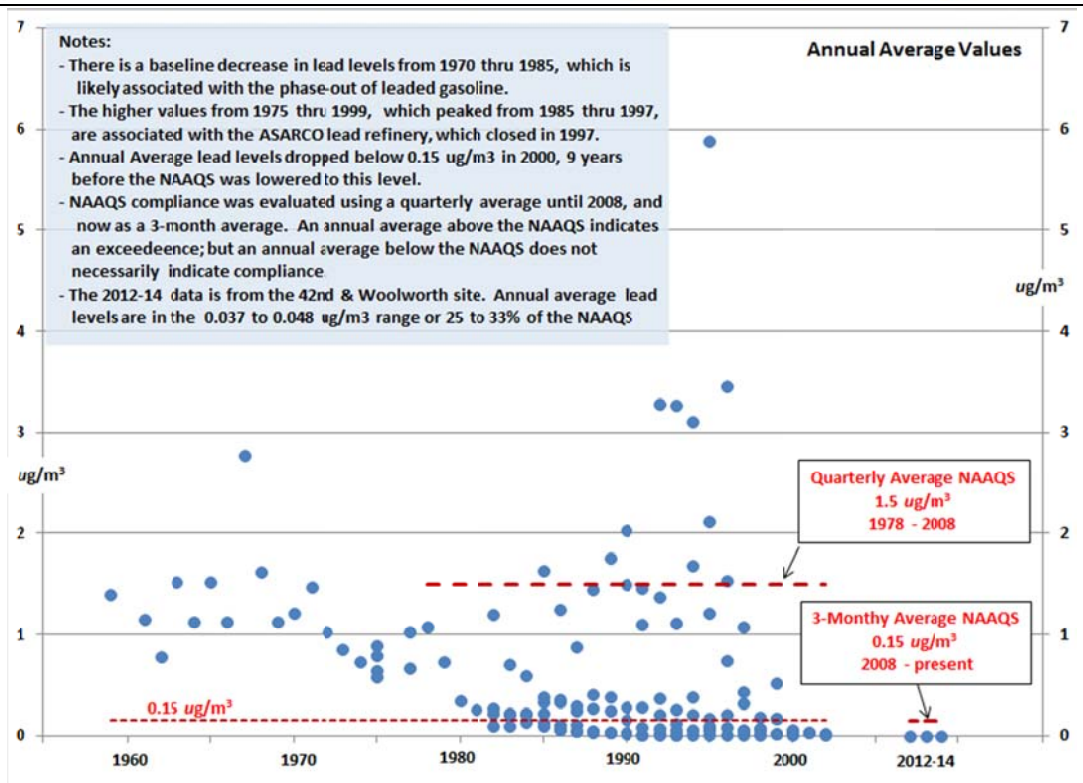
Footnotes:

(a) For Monitoring conducted prior to 2010, the results are in STP units, while results for 2010 and after are in LC units. STP units are adjusted for standard conditions of 20º C and 760 mm Hg. LC units are expressed at local atmospheric conditions.

(b) Halsey National Forest was not sampled in 1971 and 1976. Also sampling was less than 1/6 days: 2 events in 1974, 4 events in 1965-67, 1969-70 & 1973, 8 events in 1977, 20 events in 1975 & 24 events in 1968.

Figure E-39: Ambient Lead Concentrations in Omaha: 1958-2002 (STP) & 2012-2014 (LC) [(a)]





Footnote (a) For monitoring conducted prior to 2010, the results are in STP units, while results for 2010 and after are in LC units. STP units are adjusted for standard conditions of 20º C and 760 mm Hg. LC units are expressed at local atmospheric conditions.

Figure E-40: Ambient Lead Concentrations in Bellevue, Lincoln, Louisville & Halsey National Forest: 1962 to 1986

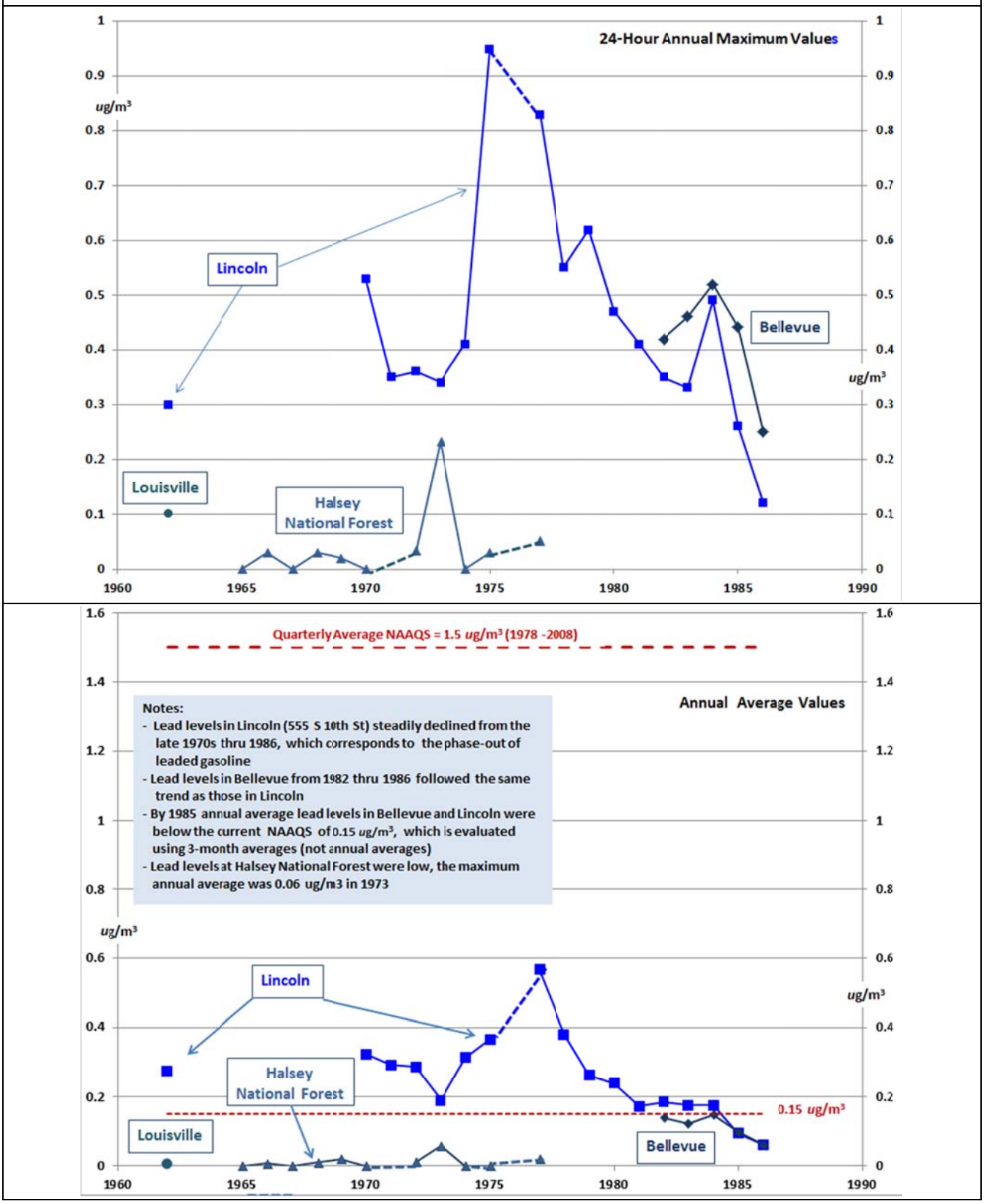


Figure E-41: Ambient Lead Concentrations in Fremont: 1990-1995 & 2010-2014

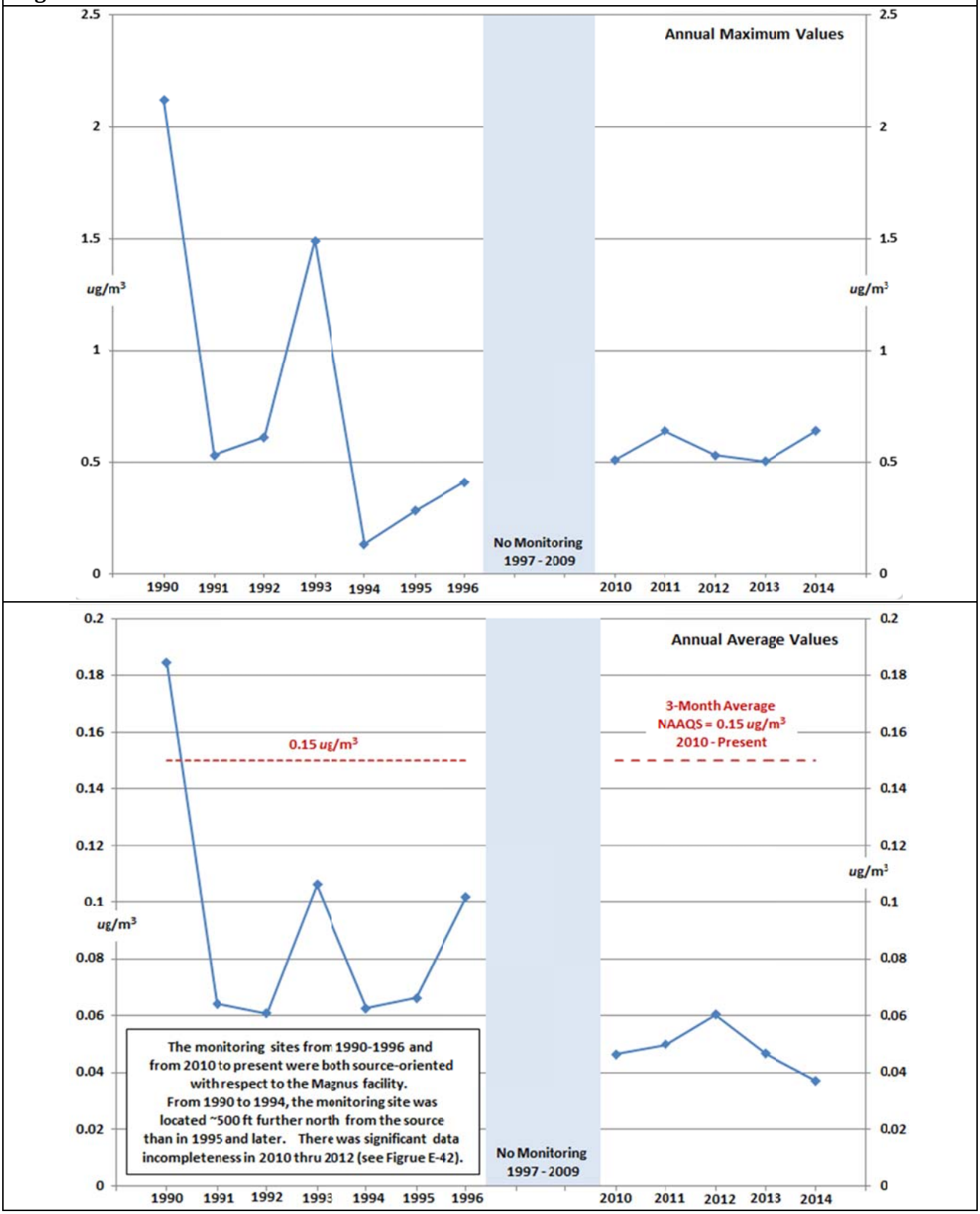
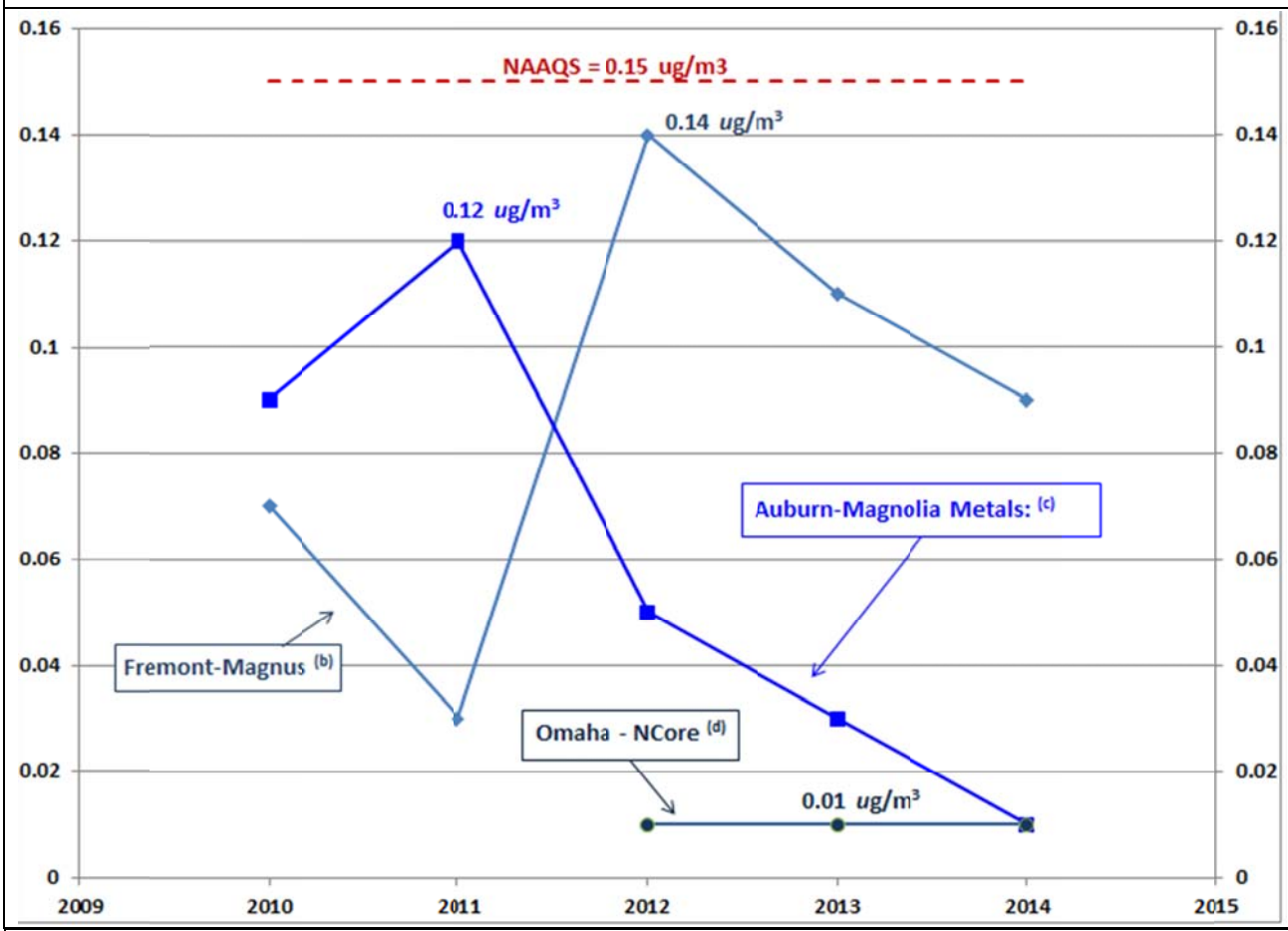


Figure E-42: Maximum Annual 3-Month Average Lead Concentrations at Auburn, Fremont and Omaha: 2010 to Present [(a)]



Footnotes:

(a) Incomplete data from the Auburn and Fremont sites, due to sampler problems, was an issue in 2010 and 2011 as shown below.

(b) The Fremont site is source-oriented with respect to the Magnus Division of LV Ventures, a brass/bronze casting and lead babbitt bearing manufacturing facility. Data incompleteness was high in 2011.

(c) The Auburn site is source-oriented with respect the Magnolia Metals Corp., a/bronze casting facility.

(d) The Omaha site is at the NCore site. It is not source-oriented. It began operation in 2012.

Months with 75% complete data

Year	Auburn Magnolia Metals	Fremont Magnus	Omaha NCore
2010	7	6	Not Applicable
2011	2	9	Not Applicable
2012	11	8	10
2013	12	12	12
2014	9	12	12

VII. Total Reduced Sulfur (TRS)

Nebraska promulgated ambient air quality standards for Total Reduced Sulfur (TRS) in 1997 with a 1-hour standard of 10 ppm and a 30-minute standard of 0.1 ppm. Compliance with the 30-minute average standard ensures compliance with the 1 minute standard (i.e., 10/30 =0.33).

The TRS standards were developed in response to hydrogen-sulfur-like odors (rotten egg odor) in the South Sioux City/Dakota City and Lexington areas. Also, preliminary monitoring with portable devices in these two areas indicated that hydrogen sulfur (H_2S)levels were such that a public health concern could exist.

Each of these communities had anaerobic lagoons associated with and operated by IBP beef processing facilities. In the Sioux City MSA there were other potential sources including the Sioux City wastewater treatment facility and a rending facility, both in Iowa. IBP's anaerobic lagoons were somewhat unique from other packing plant lagoons in that they had little or no grease cover, a consequence of their efficiency in capturing non-edible by-products.

The Dakota City facility had two additional features which contributed to H_2S production.

1) There is a tannery at the facility that uses acidic sulfate salts and produces H_2S emissions. The sulfate salts used in tanning are converted to H_2S during the process and the acidic environment facilitates the release of H_2S to the atmosphere.
2) Water supplies in the South Sioux City/Dakota City area have a high sulfate concentration, and in anaerobic lagoons the sulfate is converted to H_2S.

In the late 1990's IBP agreed to cover their Dakota City and Lexington lagoons with the captured off-gas being scrubbed to remove hydrogen sulfide and then flared. The lagoon cover and gas capture systems were completed in 2000. Air emission controls were also applied to the tannery in the form of scrubbers on the building and on certain process units. Process pH controls were also implemented in some tannery processes to reduce H_2S emissions (i.e., acidic conditions increase H2S release).

The off-gas is a combination of methane, carbon dioxide and H_2S. The mixture is flammable and H_2S scrubbing was required to reduce SO_2 emissions.

The Dakota City and Lexington facilities are now owned and operated by Tyson Foods. Further up-grades in the lagoon gas handling procedures have been made and both facilities now have the capability of using lagoon off-gas in production boilers.

From 2000-2002 TRS monitoring was also conducted in Broken Bow in response to hydrogen-sulfide-like odors. The primary potential source being a cattle feedlot approximately 2 miles S-SE of Broken Bow. The monitoring did not find H_2S levels above the Nebraska standards, with the highest 30-minute value found being 0.085 ppm in 2001.

Figures E-43 and E-44 are plots of annual maximum 30-minute values. Figure E-43 contains summarized data from South Sioux City and Dakota City. Figure E-44 shows summarized data from Lexington and Broken Bow. The data is summarized in that it only shows annual maximum values (i.e., worst case) for the communities listed (i.e., the data is not site-specific). There were 2 sites in South Sioux City thru 2002, and 2 sites in Lexington from 1999-2002.

The figures conclusively show the positive air quality impacts that occurred following the covering of the IBP lagoons in 2000 at Dakota City and Lexington. Since 2002, all of the sites, but one, the Pine Street site in Dakota City, have been in continuous compliance with the H_2S standard, and the

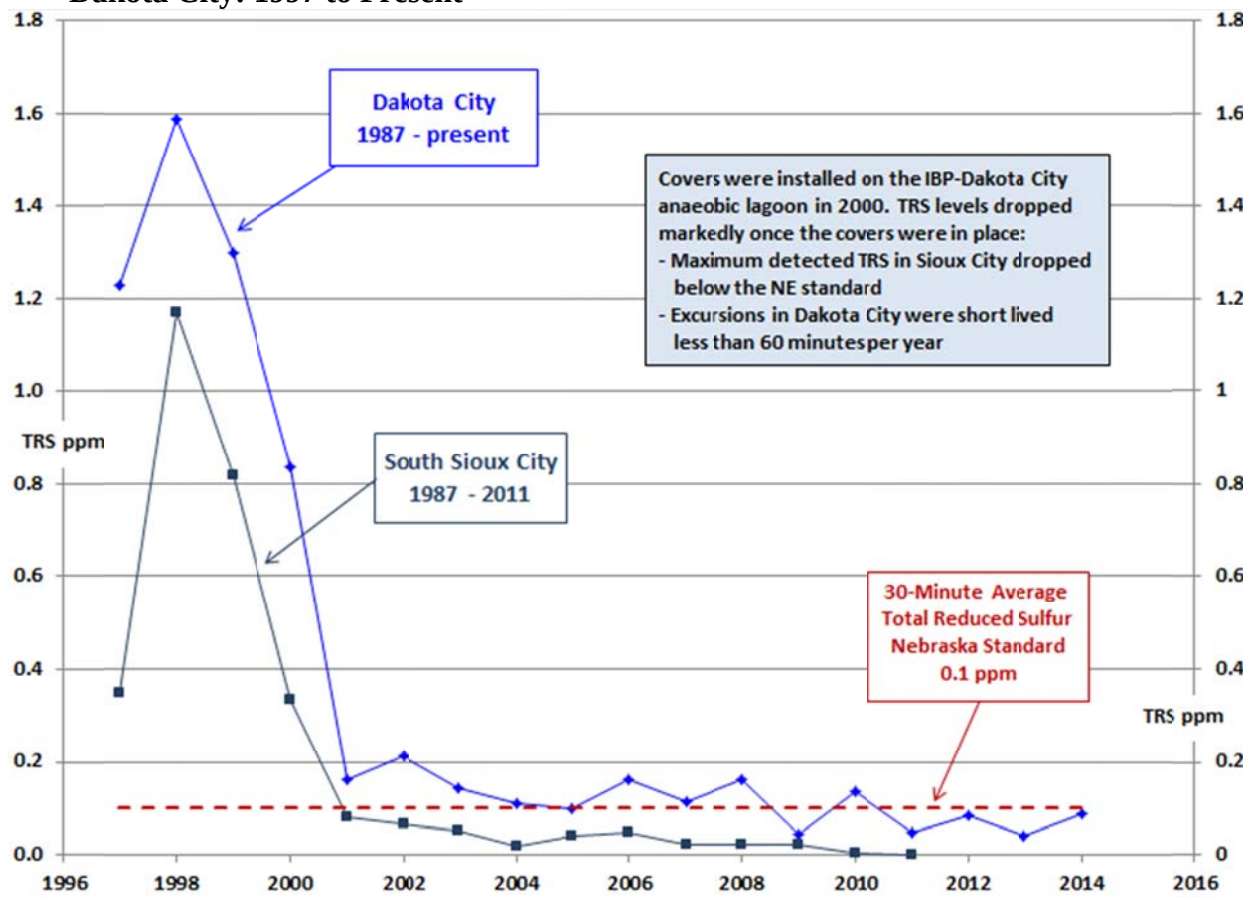
excursions at the Dakota City site have been brief and intermittent (i.e., since 2004 annual excursions have never exceeded 1 hour per year, and they occurred in the spring from March thru May).

Only 30-minute data is plotted in Figures E-43 and E-44 because compliance with the 30-minute standard ensures compliance with the 1-minute standard. The highest 1-minute H_2S level ever detected was 4.6 ppm at Lexington in 1998.

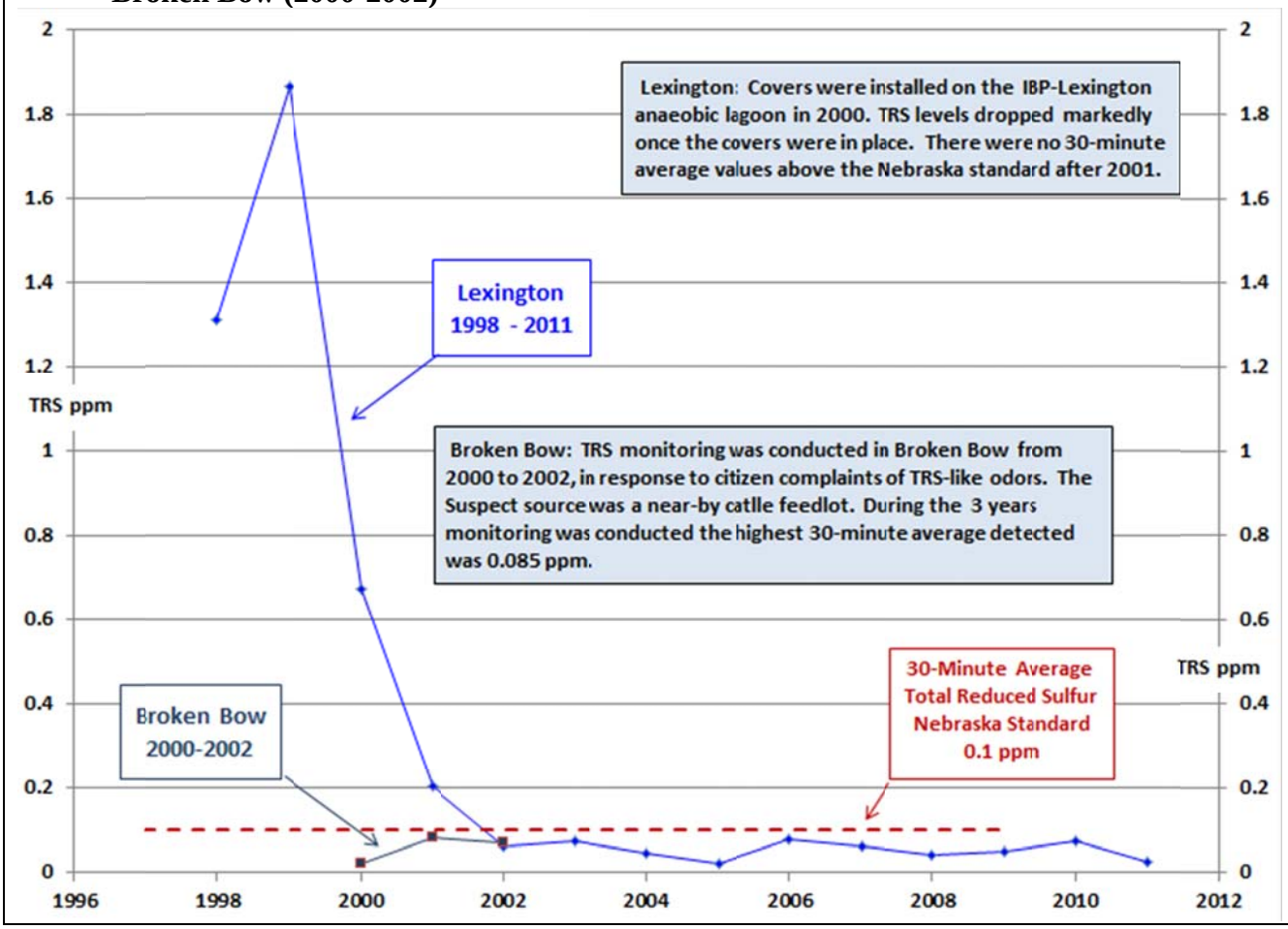
The federal NAAQS are associated with regulatory procedures for evaluating attainment (e.g., attainment with the 1-hour 0.075 ppm SO_2 NAAQS is evaluated using the 3-year average of the annual 99th percentile values from the most recent 3 years). The Nebraska standard does not include such criteria for evaluating attainment. The NDEQ response to the short-term excursions that have occurred at the Dakota City since the lagoon was covered, has been to contact IBP/Tyson to inform them of the excursion and to investigate potential causes at their facility. This approach improves source awareness and encourages voluntary action.

There are other TRS sources in the Sioux City MSA. Local efforts to identify and mitigate odor issues in the MSA pre-date NDEQ TRS monitoring efforts and continue to this day. Sioux City IA and South Sioux City, NE have odor response programs. Sioux City. IA strengthened their odor ordinances in 2013 with an emphasis to reduce odors from their wastewater treatment facility. Lance Hedquist, the South Sioux City Administrator, said that they had not " received any odor complaints in years."

Figures E-43: Annual Maximum 30-Minute Average TRS Levels in South Sioux City and Dakota City: 1997 to Present



Figures E-44: Annual Maximum 30-Minute Average TRS Levels in Lexington (1998-2011) and Broken Bow (2000-2002)



Background:

In October 2008, the 24-hour average NAAQS for lead (abbr. Pb) was lowered from1.5 *u*g/m^3 to 0.15*u*g/m^3. Concurrent with the NAAQS revision was a requirement in 40 CFR Part 58 Appendix D Section 4.5 to perform monitoring near Pb sources with emissions of 1 ton per year or more of Pb. There were 2 facilities in Nebraska that met this emission threshold: Magnolia Metals in Auburn and Magnus Farley in Fremont. Monitoring was initiated near both of these facilities in 2010. The 1 tpy threshold was lowered to 0.5 tpy beginning in 2011.

There is a waiver provision in 40 CFR Part 58 Appendix D Section 4.5.a (ii): *The Regional Administrator may waive the requirement in paragraph 4.5(a) for monitoring near Pb sources if the State or, where appropriate, local agency can demonstrate the Pb source will not contribute to a maximum Pb concentration in ambient air in excess of 50 percent of the NAAQS (based on historical monitoring data, modeling, or other means). The waiver must be renewed once every 5 years as part of the network assessment required under §58.10(d).*

Lead (Pb) Emission Reductions at Magnolia Metals in Auburn

Beginning in 2012, Magnolia Metals began a series of upgrades to production and pollution control facilities that significantly reduced Pb emissions. The continuous casting line (CCL) in the secondary bronze casting facility was upgraded to allow larger parts to be produced, and two high performance dust collectors were installed. Enforceable limits related to these modifications were included in a construction permit issued in August 2012. The permit review indicated that the upgrades would reduce potential lead emissions nearly 5 fold.

The Pb emission reduction activities undertaken in 2012 and 2013 are summarized below.

- March 2012: Installation of new dust collection technology was initiated on the continuous casting line (CCL).
- December 2012: Modifications to CCL dust collection system were completed.
- May 2013: An on-site soil remediation project was completed.
- December 2013: A new bag-house was installed on the permanent mold exhaust and the CCL bag-house was further upgraded with the installation of an additional filter bank.

Emission testing conducted in May 2014 confirmed that Pb emission limits set forth in the construction permit issued in August 2012 were being met.

Emission inventory (EI) data from 2008 thru 2014 is shown in the Table Pb-1 below. The EI data shows Pb emissions falling below 0.5 tpy in 2013 and a further reduction to 0.1 tpy in 2014. The EI data is based in part on the emission testing data (i.e., stack test data) from May 2014. Overall, the EI data shows more than a 20-fold reduction in Pb emissions from 2011 to 2014.

Table F-1: Lead (Pb) Emissions from Magnolia Metals in Auburn as Reported on State and National Emission Inventory (EI) Submittals

Source [(a)]	Year	Lead (tpy)
National EI	2008	1.98
National EI	2011	2.17
Nebraska EI	2012	0.93
Nebraska EI	2013	0.45
Nebraska EI	2014	0.1

Footnotes
(a) Nebraska sources submit Emission Inventory data to the NDEQ annually. Once every three years this data is also submitted to USEPA to be included in the National Emission Inventory.

Ambient monitoring data also indicates that Pb emissions from this facility have been dramatically decreased as shown in Figure Pb-1 and Table Pb-2 below. Average ambient Pb concentrations have decreased 90% and the maximum 3-month average values have decreased 93%.

From January 1, 2014 thru July 31, 2015, the maximum 3-month average value was 0.008 ug/m3 or 5% of the NAAQS; and the average 3-month value was 0.005 ug/m3 or 3% of the NAAQS. Thus the NAAQS is being attained with a very significant safety factor. Magnolia Metals emission control efforts had dramatic and commendable results.

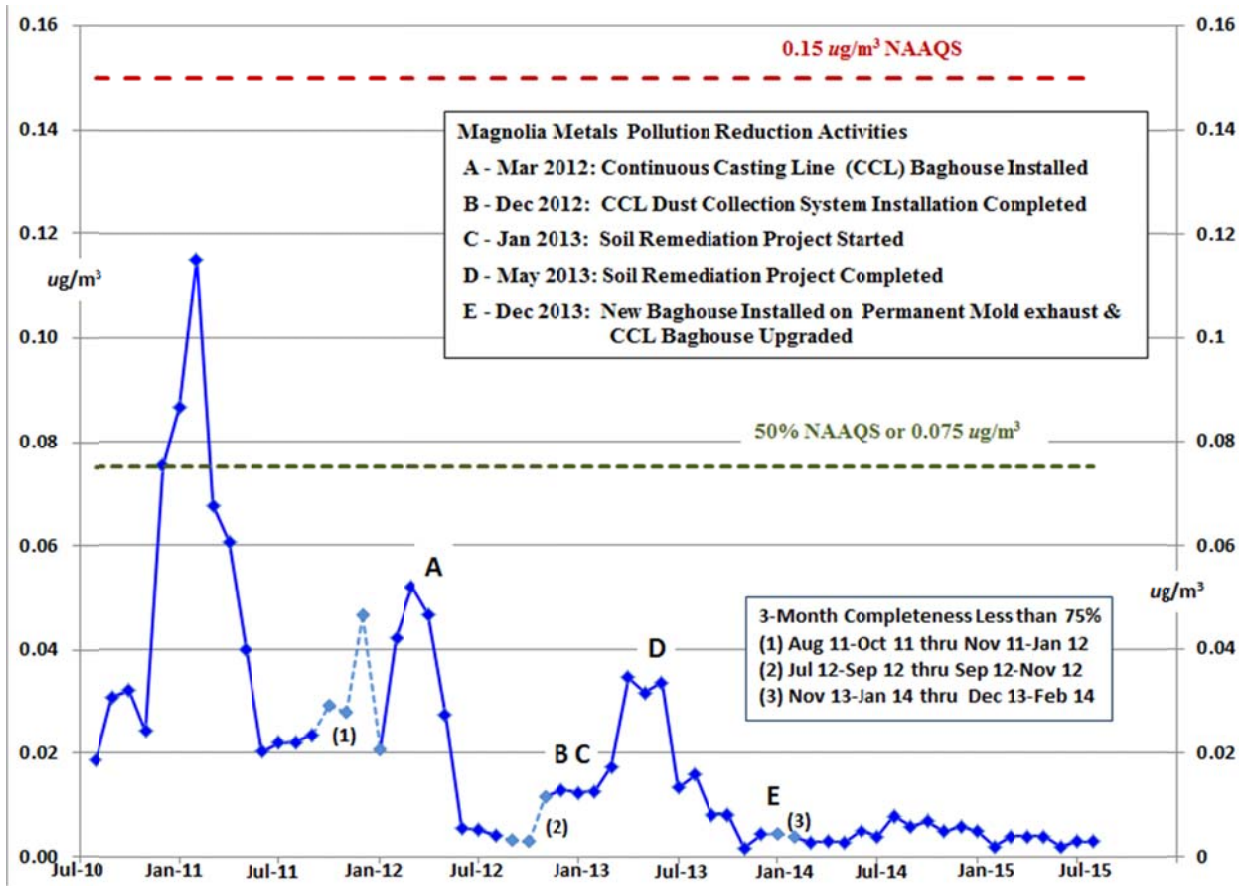
Request to Discontinue Lead (Pb) Monitoring at Auburn, NE

The NDEQ requests that EPA approve the closure of the Auburn Pb monitoring site on the basis that the emissions from this facility are now well below the 0.5 tpy threshold for requiring monitoring. The reduction in Pb emissions was the result of pollution controls installed at the Magnolia Metals facility and enforceable controls in the construction permit issued in August 2012 require those controls to operated and maintained. Emission testing (stack testing) in May 2014 verified that the emissions were meeting permit requirements.

In addition, ambient monitoring indicates that Pb levels have been at or below 5% of the NAAQS since the completion of the Pb emission reduction projects at the facility.

This is not a request for a waiver under 40 CFR Part 58 Appendix D Section 4.5.a (ii), but rather a permanent closure request. If future emission inventory submittals or on-site testing indicate that the 0.5 tpy threshold is being exceeded, then the NDEQ would re-initiate Pb monitoring in the vicinity of the facility.

Figure F-1: Ambient Lead (Pb) Concentrations in Auburn, NE near the Magnolia Metals Facility and the Time-Table for Emission reduction Activities



Dashed lines & lighter data markers identify periods when 3-month data completeness fell below 75%.

Table F-2: Ambient Lead (Pb) Concentrations in Auburn NE Before and After Emission Control Upgrades at Magnolia Metals [(a)(b)]

Time Frame	Average Ambient Pb Concentration	Maximum 3-Month Average Value
May 2010 thru February 2012	0.043 ug/m^3 (29% of NAAQS)	0.115 ug/m^3 (73 % of NAAQS)
January 2014 thru June 23, 2015	0.005 ug/m^3 (3% of NAAQS)	0.008 ug/m^3 (5% of NAAQS)
Percent Reduction in Ambient Pb Concentrations	90%	93%

Footnotes:

(a) Magnolia Metals undertook a series of emission control upgrades between March 2012 and December 2013. See Figure Pb-1 for summary and time-table of improvements.

(b) The Pb NAAQS is a 3-month average value of 0.15 ug/m^3 not to be exceeded within the last 3 years..

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Attachment G: Douglas County Health Department's Near-Road NO_2 siting Proposal

The U.S. Environmental Protection Agency (U.S. EPA) requires the establishment of a near-road NO2 monitoring site. Federal regulations specify that there must be one microscale near-road NO2 monitoring station in each CBSA with a population of 500,000 or more. The CBSA of Omaha would fall into the range requiring a NO2 site location.

According to the 2010 Census, the CBSAs in Nebraska with population of at least 500,000 are:

Omaha–Council Bluffs, NE–IA 865,000 and the 59th largest CBSA

Douglas County Health Department (DCHD) will provide and submit performance reports to the EPA and NDEQ with monitoring data, siting criteria, and equipment inventory needed for the proposed NO2 site.

Proposed Parameter Monitored at DCHD site:

DCHD has one proposed site at 7747 Dodge Street with an AIRS ID of 31-055-0056

Proposed site will measure both Near Road CO (currently in operation) and NO/NO2/NOx as the Primary pollutants of concern.

Proposed Site Location:

NDEQ and DCHD have a site currently located at 7747 Dodge Street which is 15 feet off of the Dodge street traffic roadway. Currently DCHD monitors the air quality for Near-road CO at this location. DCHD is looking for the approval of this site at this location to satisfy the requirement of a Near-road NO monitoring site per EPA regulations.

Site Selection Procedure:

DCHD used TAD guidance in determining if the current CO near-road site would meet criteria for the NO near-road guidance requirements**.** Traffic data was collected and analyzed to determine the best possible road segments for the site location. DCHD also wanted a safe environment for the field operators with eliminated many of the interstate systems in the Omaha CBSA.

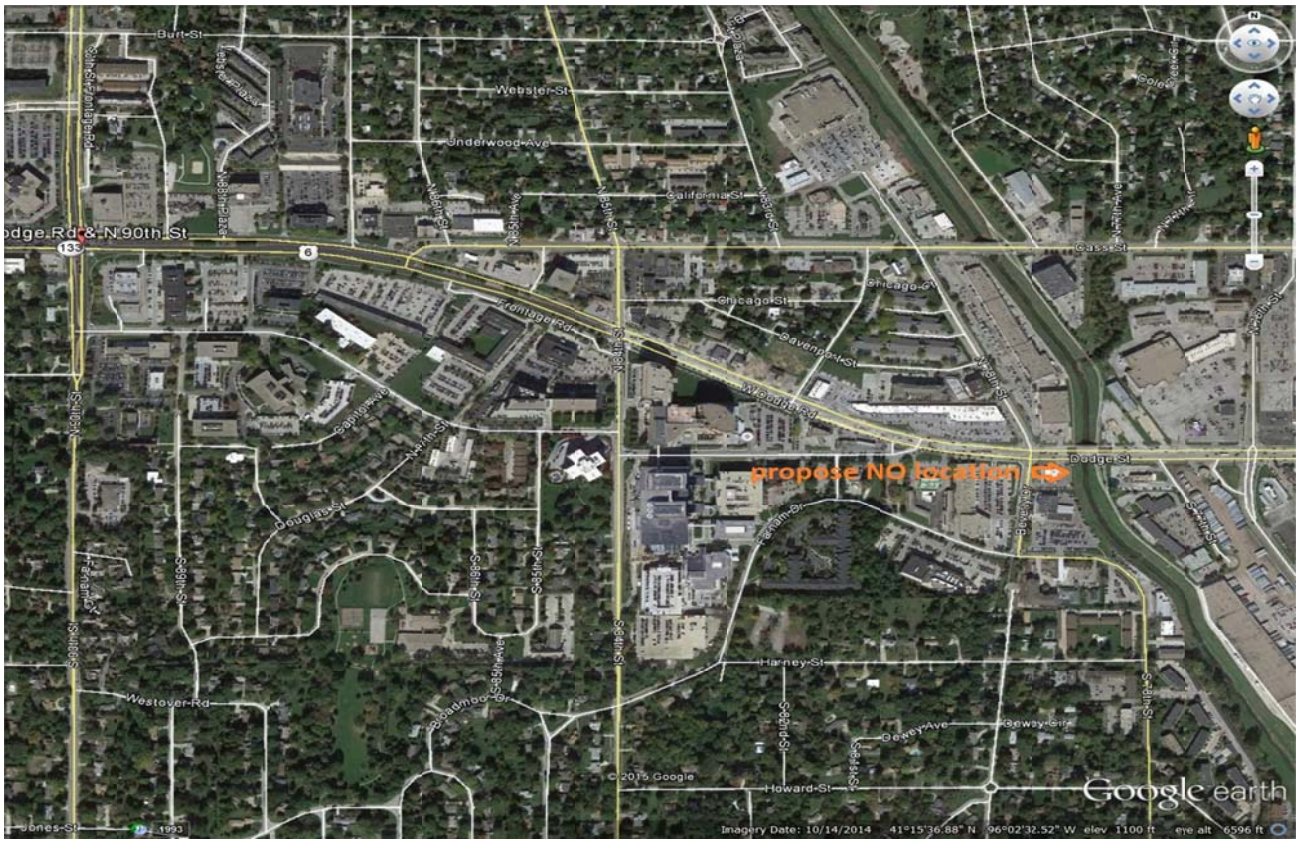
Annual Average Daily Traffic Counts (AADT)

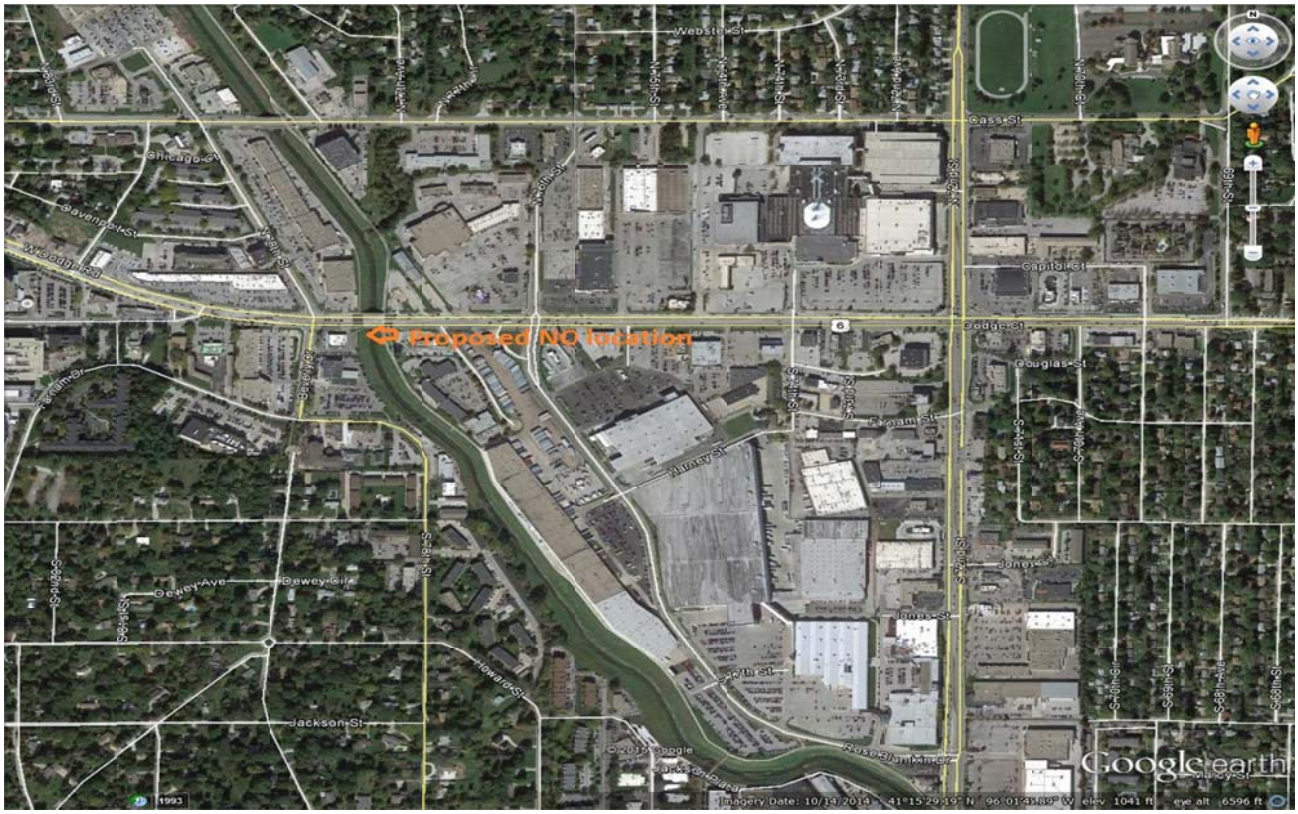
DCHD used City of Omaha Traffic Counts to determine if this location would meet or satisfy the TAD requirements for NO near-road monitoring. The stretches of Dodge Street from 90th and Dodge to 72nd and Dodge Street have the most traffic per segment. Even though there are areas in the Omaha CBSA with slightly higher traffic counts, Dodge Street has a much higher congestion rate due to the number of traffic lights from 90th and Dodge to 72nd and Dodge. Federal guidance recommends that, to evaluate traffic volume AADT needs to account for higher pollution emissions. DCHD considers Dodge Street to possess such higher emissions due to vehicle idling and congestion patterns along this stretch of roadway.

	EADT
90th and Dodge	**107,596**
78th/Beverly Dr. & Dodge	**71,968**
76th/Rose Blumkin & Dodge	**73,768**
72nd and Dodge	**93,524**

DCHD Near-Road NO_2 Site Proposal

DCHD recommends based on cost for building structure (structure already built and sited), EADT traffic counts, technician safety, and traffic congestion/higher emissions, the site proposed for NO Near-road monitoring should be located at 7747 Dodge Street (EPA site id 31-055-0056).


propose NO location
Burt St
Webster St
Underwood Ave
California St
Chicago St
Cass St
Frontage Rd
Davenport St
W Dodge Rd
Dodge St
Capitol Ave
Douglas St
Farnam St
Harney St
Westover Rd
Broadmoor Cir
Dewey Ave
Howard St
Jones St
© 2015 Google
Google earth
Imagery Date: 10/14/2014 41°15'36.88" N 96°02'32.52" W elev 1100 ft eye alt 6596 ft


Proposed NO location
Webster St
Cass St
Chicago St
Davenport St
W Dodge Rd
Capitol Ct
Dodge St
Douglas St
Farnam St
Harney St
Dewey Ave
Howard St
Jones St
Jackson St
© 2014 Google
Google earth
Imagery Date: 10/14/2014 41°15'29.19" N 96°01'43.89" W elev 1041 ft eye alt 6596 ft

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DCHD Proposal

The Douglas County Health Department has proposed using the current CO monitoring site at 78th Street and West Dodge Street. as the near-road NOx monitoring site. The DCHC analysis cited:

- High traffic counts on Dodge St from 72nd St. to 90th St.;
- Significant traffic congestion at 78th & Dodge St;
- The site is immediately adjacent to Little Papillion Creek in a valley area; and

Also there is an existing highest-concentration, microscale CO site at this location. The criteria for siting the CO site are essentially the same as the near-road NO_2 site: high traffic, traffic congestion and road-canyon areas being highest concentration areas for both CO and NO_2.

NDEQ Review

Non-interstate traffic count data from the City of Omaha for 9/30/15 was reviewed. The top 11 intersections and through-traffic road sections with respect to traffic counts are shown in Tables G-1 thru G-2, respectively. An examination of this data shows that the highest traffic count road segments, in order of highest to lowest, are:
1). West Dodge Road from 90th. to 96th Streets;
2). L Street from I-80 to 132nd; and
3). West Dodge Street from 69th to 90th Streets.
The location of these 3 road segments along with the highest EADT segment of I-80 are shown in Figure H-1.

DCHD proposed the 78th & Dodge site because it was a high traffic area with significant traffic congestion. The NDEQ concurs. Dodge Street from 69th to 90th has 3 lanes in both directions a 35 mph speed limit from 69th to 80th and a 40 mph speed limit from 80th to 90th. There are stop lights at 72nd, 74th, 76th, 78th and 84th (5 in a 1 mile segment). This is a bottle-neck, stop and go traffic area, in which auto emissions per vehicle will be high. Little Papillion Creek runs perpendicular to West Dodge Street and crosses it immediately east of 78th Street. Thus this is a traffic-congestion area in the bottom of the creek valley. The 78th & Dodge monitoring site is immediately adjacent to West Dodge Street and Little Papillion Creek. See aerial and street level views of the 78th and Dodge Street site area in Figures H-2 thru H-5.

In contrast, West Dodge Road from 90th to 96th has 4 lanes in each direction and a 45 mph speed limit. This is a hill-top location; not a valley or street canyon location. There are 3 stop lights in this 0.5 mile segment at 90th, 93rd (a business/commercial park entrance, north side only) and 96th Streets. These lights are timed to keep through-traffic on Dodge Road moving, with the lower-traffic, N-S Streets getting less through-time. See Figures H-6 and H-7.

Similarly, L Street from I-80 to 132nd Street has 3 lanes in both directions and a 45 mph speed limit. This is a hill-top location; not a valley or street canyon location. There are 3 stop lights at 120th, 126th (shopping mall entrance north side only) and 132nd Streets. These lights are timed to keep through- traffic on L Street moving, with the lower-traffic, N-S Streets getting less through-time. See Figures H-8 and H-9.

The Nebraska Department of Roads (NDOR) and the Metropolitan Area Planning Agency (MAPA) produce traffic count estimates for the inter-state highways in the Omaha MSA. The NDOR and MAPA data indicate that maximum traffic counts are found on I-80 between the I-380 and 42nd Street exchanges:

- NDOR: 2012 traffic count data identified I-80 at 42nd St. to be the heaviest traveled segment with ~170,000 AADT.
- MAPA: The *2010 Traffic Flow Map* identified the heaviest traveled road segment as I-80 between I-480 and 42nd St interchanges with an estimated 183,500 annual average weekday traffic (AAWT) count. The AAWT should be slightly higher than the AADT.

I-80 between I-480 and 42nd Street has a 60 mph speed limit. There are 4 west-bound lanes and 6 east-bound lanes. The inter-state right-of-way is wide, at least 275 feet, and open. This is not a street-canyon or valley location. The width and openness of the right-of-way, coupled with the speed of the mobile sources will greatly facilitate the dispersion of the pollutants emitted. See Figures H-10 and H-11.

Vehicle Residence Comparison

The NDEQ undertook an analysis to compare vehicle density on these four road segments. First rush hour traffic speeds were estimated. Then the time a vehicle would reside in a 1 mile segment was calculated:

Vehicle Residence Time (VRT) = (60 min/hr) / *x* mph = *y* min/mile

A Vehicle Density Factor (VDF) was then calculated as follows:

VDF = AADT * VRT

where AADT = Annual Average Daily Traffic

The results are shown in Table G-3. West Dodge Street @ 76th Street had the highest VDF.

This is not an exact analysis. Limitations include the lack of information on:

- Rush hour traffic counts, and
- Actual vehicle speeds during rush hour.

Also vehicle emission rates were not considered. However, it does provide a means of comparing vehicle density. The VDF analysis results are consistent with the earlier conclusion that vehicle emissions can be expected to be higher at the 78th & West Dodge location than on the other 3, higher-traffic, segments examined.

NDEQ Conclusion:

The NDEQ concurs with DCHD that the current CO site at 78th and Dodge is the best location for siting a near-road NO_2. This site should produce highest concentration data for near-road CO and NO_2 in the Nebraska portion of the Omaha MSA.

Table H-1: Inter-Section Traffic Count Estimates: Omaha's Top 11 Inter-Sections (1)(2)

	Location	EADT	North	South	East	West	Date
1	West Dodge Rd & 90th St	102,686	27,194	26,824	71,626	79,728	03/15
2	93rd & West Dodge Rd	98,630	8,826	0	90,534	97,900	08/15
3	L St/Industrial Rd & 132nd St	97,098	33,716	47,088	68,824	44,568	10/12
4	L St & 120th St	94,724	21,396	27,674	73,664	66,714	08/15
5	West Dodge St & 72nd St	93,524	37,380	39,860	56,986	52,822	04/14
6	L St & 126th Plz	81,162	12,670	0	75,220	74,434	08/15
7	72nd & Pacific	76,716	51,156	49,508	26,130	26,638	06/14
8	W Dodge & 76th/Rose/Blumkin	73,768	8,862	12,208	58,954	67,512	03/12
9	108th & West Maple Rd	72,184	25,738	22,506	55,390	40,734	08/14
10	I 680 & West Maple Rd SB Rp	71,358	14,512	12,058	55,346	60,800	09/14
11	West Dodge Rd and Cass (86th)	71,094	14,056	0	57,038	71,094	05/14

Footnotes:
(1) Estimated Annual Daily Traffic (EADT) data from the City of Omaha, released 9/30/15.
(2) Three road segments were recognized from the data in this table and Table G-2:
West Dodge from 90th to 96th (green highlight)
L Street from I-480 to 132nd St. (blue highlight)
West Dodge from 69th to 90th (orange highlight)

Table H-2: Through-Traffic Count Estimates: Omaha's Top 11 Road Segments (1)(2)

Rank	Location	EADT	Traffic-Flow Direction
1	West Dodge Road @ 93rd Street	188,434	East-West
2	West Dodge Road @ 90th Street	151,354	East-West
3	L Street @ 126th Plaza	149,654	East-West
4	L Street @ 120th Street	140,378	East-West
5	West Dodge Road @ Cass Street (86th Street)	128,132	East-West
6	West Dodge Street @ Rose/Blumkin/76th Streets	126,466	East-West
7	Dodge Street @ 69th Street	117,322	East-West
8	72nd Street @ Pine Street	15,584	North-South
9	I-680 & West Maple Road SB Ramps	116,146	East-West
10	L Street /Industrial Road @ 132nd Street	113,392	East-West
11	West Dodge Road @ 84th Street	110,374	East-West

Footnotes:
(1) Estimated Annual Daily Traffic (EADT) data from the City of Omaha traffic counts released 9/30/15.
(2) Three road segments were recognized from the data in this table and Table G-1:
West Dodge from 90th to 96th (green highlight)
L Street from I-480 to 132nd St. (blue highlight)
West Dodge from 69th to 90th (orange highlight)

Table H-3: Vehicle Density Analysis (1)

VDF Rank	Location	Estimated Rush-Hour Vehicle Speed (mph)	Vehicle Residence Time (VRT)	EADT	Vehicle Density Factor (VDF)
1	West Dodge Street @ 76th Street	20	3.0	126,466	379,398
2	West Dodge Road @ 93rd Street	35	1.7	188,434	323,030
3	L Street @ 126th Plaza	35	1.7	149,654	256,550
4	I-80 from I-480 to 42nd Street	50	1.2	183,400	220,080

Footnotes:
(1) The use of this table and the calculations performed in making it are explained in the text above.

Figure H-1: High Traffic Count Areas in Omaha, NE

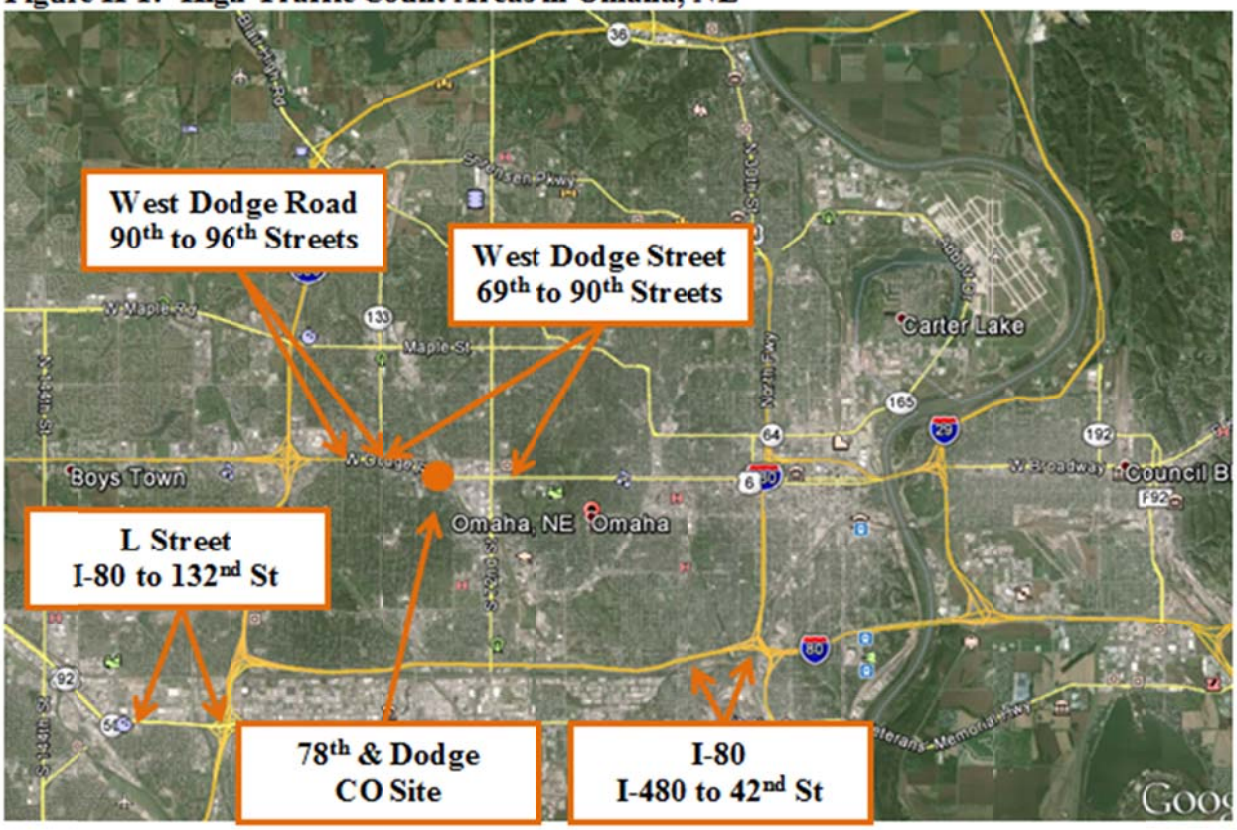
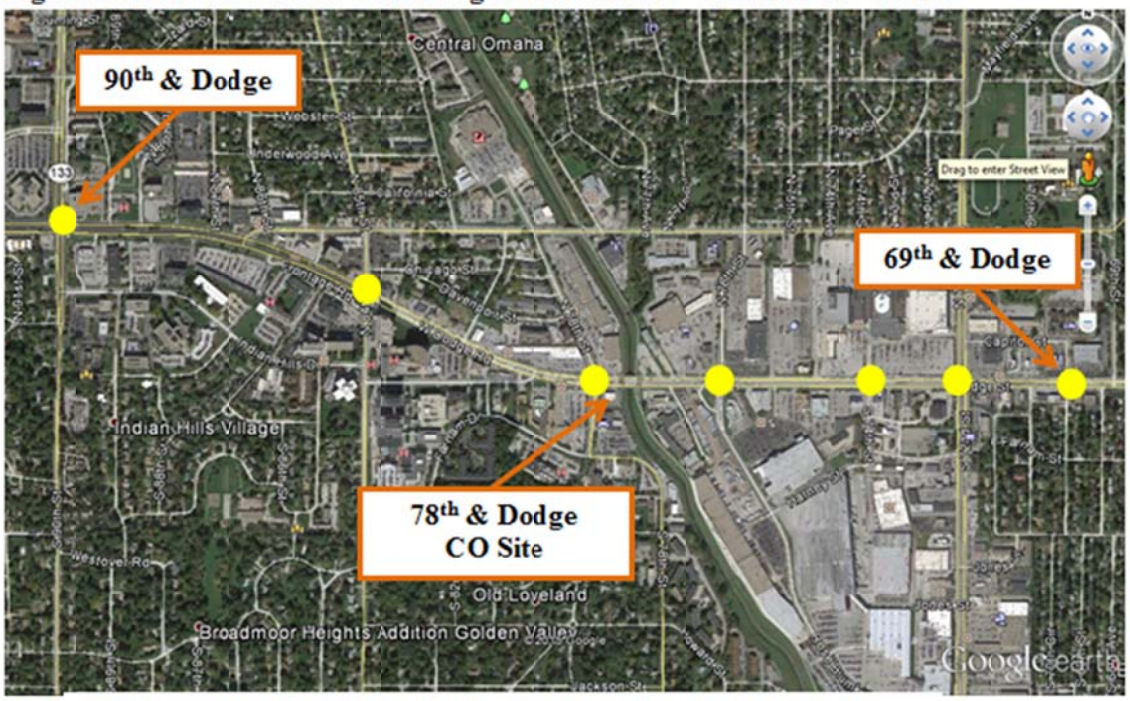


Figure H-2: Aerial View of West Dodge Street from 69th Street to 90th Street



Yellow circles indicate the location of traffic lights on Dodge Street

Figure H-3: Aerial View of 78th and Dodge CO Monitoring Site

Note the monitoring site is immediately adjacent to both West Dodge Street and Little Papillion Creek.

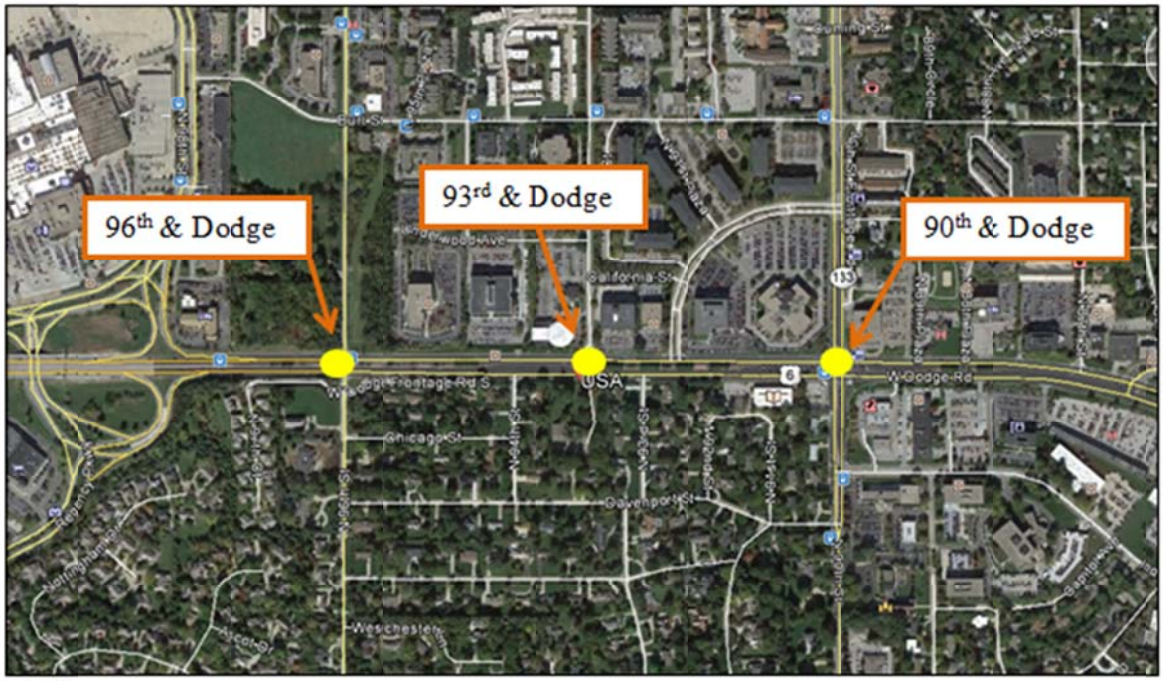
Figure H-4: East-Bound on West Dodge Street at 78th Street

West Dodge Street from 69th to 90th Street has 3-lane traffic both directions and a 35 mph speed limit.

Figure H-5: West-Bound on West Dodge Road at 76th Street

West Dodge Street from 69th to 80th has 3-lanes both directions and a 35 mph speed limit

Figure H-6: Aerial View of West Dodge Road: 90th Street to 96th Street



Yellow circles indicate the location of traffic stop lights

Figure H-7: West-Bound on West Dodge Road between 90th and 93rd Streets

Dodge Street from 90th to 96th has 4- lane traffic both ways and a 45 mph speed limit.

Figure H-8: L Street in Omaha from I-80 to 132nd Street

Figure H-9: West-Bound on L Street at the 120th Street Entrance Ramp

L Street from the I-80 Interchange to 132nd Street has 3-lanes both directions and a 45 mph speed limit.

Figure H-10: I-80 in Omaha from I-480 to 42nd Street

Figure H-11: Eastbound I-80 at 42nd Street Entrance Ramp

I-80 has 6 east-bound lines and 4 west-bound lanes from I-480 to 42nd Street and a 60 mph speed limit.

Nebraska's Highest Contribution to Annual Design Values Above 12 ug/m3				
Receptor Monitoring Site ID	**State[1,2,3]**	**County**	**2012 Base Case Annual PM2.5 Average Design Values**	**NE[4]**
10890014	Alabama	Madison	12.34	0.023
51191005	Arkansas	Pulaski	12.49	0.034
100032004	Delaware	New Castle	12.51	0.014
110010042	District Of C	District of Col	12.01	0.013
132950002	Georgia	Walker	13.77	0.020
170831001	Illinois	Jersey	12.02	0.078
180890027	Indiana	Lake	12.53	0.054
191630019	Iowa	Scott	13.27	0.095
211451004	Kentucky	McCracken	12.33	0.039
221210001	Louisiana	West Baton Rouge	12.19	0.011
240430009	Maryland	Washington	12.00	0.013
261630033	Michigan	Wayne	15.73	0.026
280670002	Mississippi	Jones	12.79	0.020
291831002	Missouri	Saint Charles	12.44	0.069
340390004	New Jersey	Union	12.57	0.011
360610062	New York	New York	12.53	0.011
370350004	North Carolina	Catawba	12.92	0.016
390230005	Ohio	Clark	13.35	0.029
401359015	Oklahoma	Sequoyah	12.09	0.049
420070014	Pennsylvania	Beaver	14.44	0.017
450450008	South Carolina	Greenville	13.54	0.015
471570047	Tennessee	Shelby	12.36	0.035
482011035	Texas	Harris	13.93	0.016
515200006	Virginia	Bristol City	12.02	0.018
540090005	West Virginia	Brooke	14.33	0.018
550790043	Wisconsin	Milwaukee	12.87	0.067

[1] EPA has designated portions of the following states as non-attainment: California, Idaho, Ohio, and Pennsylvania.
[2] EPA has designated all or portions of the following states and territories as unclassifiable due to insufficient information: Illinois, Indiana, Kentucky, US Virgin Islands and Puerto Rico.
[3] EPA has deferred designation on all or portions of the following states to allow for additional monitoring: Tennessee, Georgia & Florida.
[4] A contribution of 0.12 ug/m3 or more to an area denotes a significant contribution, per the EPA. The annual standard is 12 ug/m3. None of Nebraska's contributions are 0.12 ug/m3 or greater.

Nebraska Political Accountability and Disclosure Act
(With 2014 Amendments)

49-1401. Act, how cited. Sections 49-1401 to 49-14141 shall be known and may be cited as the Nebraska Political Accountability and Disclosure Act.

49-1402. Legislative findings. The Legislature finds: (1) That the public interest in the manner in which election campaigns are conducted has increased greatly in recent years, creating a need for additional disclosure and accountability;

(2) That there is a compelling state interest in ensuring that the state and local elections are free of corruption and the appearance of corruption and that this can only be achieved if (a) the sources of funding of campaigns are fully disclosed and (b) the use of money in campaigns is fully disclosed;

(3) That it is essential to the proper operation of democratic government that public officials and employees be independent and impartial, that governmental decisions and policy be made in the proper channels of governmental structure, and that public office or employment not be used for private gain other than the compensation provided by law; and

(4) That the attainment of one or more of these ends is impaired when there exists, or appears to exist, a substantial conflict between the private interests of a public official and his or her duties as such official; and that although the vast majority of public officials and employees are dedicated and serve with high integrity, the public interest requires that the law provide greater accountability, disclosure, and guidance with respect to the conduct of public officials and employees.

49-1403. Definitions, where found. For purposes of the Nebraska Political Accountability and Disclosure Act, unless the context otherwise requires, the definitions found in sections 49-1404 to 49-1444 shall be used.

49-1404. Administrative action, defined. Administrative action shall mean any decision on, or proposal, consideration, enactment, or defeat of any rule, regulation, or other official policy action or nonaction by any executive agency, or any policy matter which is within the official jurisdiction of an executive agency.

49-1405. Ballot question, defined. (1) Ballot question shall mean any question which is submitted or which is intended to be submitted to a popular vote at an election, including, but not limited to, a question submitted or intended to be submitted by way of initiative, referendum, recall, or judicial retention, whether or not it qualifies for the ballot.

(2) Ballot question shall also mean any question which has been submitted to a popular vote at an election as a result of legislative action or adoption of a resolution by a political subdivision to place an issue or issues on the ballot.

49-1406. Ballot question committee, defined. Ballot question committee shall mean any committee acting in support of, or in opposition to, the qualification, passage, or defeat of a ballot question but which does not receive contributions or make

expenditures or contributions for the purpose of influencing or attempting to influence the action of the voters for or against the nomination or election of a candidate.

49-1407. Business, defined. Business shall mean any corporation, partnership, limited liability company, sole proprietorship, firm, enterprise, franchise, association, organization, self-employed individual, holding company, joint-stock company, receivership, trust, activity, or entity.

49-1408. Business with which the individual is associated or business association, defined. Business with which the individual is associated or business association shall mean a business: (1) In which the individual is a partner, limited liability company member, director, or officer; or (2) in which the individual or a member of the individual's immediate family is a stockholder of closed corporation stock worth one thousand dollars or more at fair market value or which represents more than a five percent equity interest or is a stockholder of publicly traded stock worth ten thousand dollars or more at fair market value or which represents more than ten percent equity interest. An individual who occupies a confidential professional relationship protected by law shall be exempt from this section. This section shall not apply to publicly traded stock under a trading account if the filer reports the name and address of the stockbroker.

49-1409. Candidate, defined. (1) Candidate shall mean an individual: (a) Who files, or on behalf of whom is filed, a fee, affidavit, nomination papers, or nominating petition for an elective office; (b) whose nomination as a candidate for elective office by a political party caucus, committee, or convention is certified to the appropriate filing official; (c) who is an officeholder who is the subject of a recall vote; or (d) who receives a contribution, makes an expenditure, or gives consent for another person to receive a contribution or make an expenditure with a view to bringing about the individual's nomination or election to an elective office, whether or not the specific elective office for which the individual will seek nomination or election is known at the time the contribution is received or the expenditure is made. An elected officeholder shall, if eligible under law, be considered to be a candidate for reelection to that same office for the purposes of the Nebraska Political Accountability and Disclosure Act only.

(2) Candidate shall not include any individual who is a candidate within the meaning of the Federal Election Campaign Act of 1971, 2 U.S.C. 431, as such section existed on January 1, 2006.

49-1410. Candidate committee, defined. Candidate committee shall mean the committee designated in a candidate's filed statement of organization as that individual's candidate committee. A candidate committee shall be presumed to be under the control and direction of the candidate named in the same statement of organization, except that the candidate for Lieutenant Governor shall not have a separate candidate committee but shall be included in the candidate committee with the candidate for Governor of the same political party.

49-1411. Closing date, defined. Closing date shall mean the date through which a campaign statement is required to be complete.

49-1412. Commission, defined. Commission shall mean the Nebraska Accountability and Disclosure Commission created by section49-14,105.

49-1413. Committee, defined. (1) Committee shall mean (a) any combination of two or more individuals which receives contributions or makes expenditures of more than five thousand dollars in a calendar year for the purpose of influencing or attempting to influence the action of the voters for or against the nomination or election of one or more candidates or the qualification, passage, or defeat of one or more ballot questions or (b) a person whose primary purpose is to receive contributions or make expenditures and who receives or makes contributions or expenditures of more than five thousand dollars in a calendar year for the purpose of influencing or attempting to influence the action of the voters for or against the nomination or election of one or more candidates or the qualification, passage, or defeat of one or more ballot questions, except that an individual, other than a candidate, shall not constitute a committee.

(2) Except as otherwise provided in section49-1445, a committee shall be considered formed and subject to the Nebraska Political Accountability and Disclosure Act upon raising, receiving, or spending more than five thousand dollars in a calendar year as prescribed in this section.

(3) A corporation, labor organization, industry, trade, or professional association, limited liability company, or limited liability partnership is not a committee if it makes expenditures or provides personal services pursuant to sections 49-1469 to 49-1469.08.

49-1414. Compensation, defined. Compensation shall mean anything of monetary value received or to be received from a person, whether in the form of a fee, salary, forbearance, forgiveness, or any other form of recompense.

49-1415. Contribution, defined. (1) Contribution shall mean a payment, gift, subscription, assessment, expenditure, contract, payment for services, dues, advance, forbearance, loan, donation, pledge or promise of money or anything of ascertainable monetary value to a person, made for the purpose of influencing the nomination or election of a candidate, or for the qualification, passage, or defeat of a ballot question. An offer or tender of a contribution is not a contribution if expressly and unconditionally rejected or returned.

(2) Contribution shall include the purchase of tickets or payment of an attendance fee for events such as dinners, luncheons, rallies, testimonials, and similar fundraising events; an individual's own money or property other than the individual's homestead used on behalf of that individual's candidacy; and the granting of discounts or rebates by broadcast media and newspapers not extended on an equal basis to all candidates for the same office.

(3) Contribution shall not include:

(a) Volunteer personal services provided without compensation, or payments of costs incurred of less than two hundred fifty dollars in a calendar year by an individual

for personal travel expenses if the costs are voluntarily incurred without any understanding or agreement that the costs shall be, directly or indirectly, repaid;

(b) Amounts received pursuant to a pledge or promise to the extent that the amounts were previously reported as a contribution; or

(c) Food and beverages, in the amount of not more than fifty dollars in value during a calendar year, which are donated by an individual and for which reimbursement is not given.

49-1416. Election, defined. Election shall mean a primary, general, special, or other election held in this state or a convention or caucus of a political party held in this state to nominate a candidate. Election shall include a vote on a ballot question.

49-1417. Elective office, defined. Elective office shall mean a public office filled by an election, except for federal offices. A person who is appointed to fill a vacancy in a public office which is ordinarily elective holds an elective office.

49-1418. Executive agency, defined. Executive agency shall mean a board, commission, agency, or other body in the executive branch of the state government.

49-1419. Expenditure, defined. (1) Expenditure shall mean a payment, donation, loan, pledge, or promise of payment of money or anything of ascertainable monetary value for goods, materials, services, or facilities in assistance of, or in opposition to, the nomination or election of a candidate or the qualification, passage, or defeat of a ballot question. An offer or tender of an expenditure is not an expenditure if expressly and unconditionally rejected or returned.

(2) Expenditure shall include a contribution or a transfer of anything of ascertainable monetary value for purposes of influencing the nomination or election of any candidate or the qualification, passage, or defeat of a ballot question.

(3) Expenditure shall not include:

(a) An amount paid pursuant to a pledge or promise to the extent the amount was previously reported as an expenditure;

(b) An expenditure for communication by a person strictly with the person's paid members or shareholders;

(c) An expenditure for communication on a subject or issue if the communication does not support or oppose a ballot question or candidate by name or clear inference;

(d) An expenditure by a broadcasting station, newspaper, magazine, or other periodical or publication for any news story, commentary, or editorial in support of or opposition to a candidate for elective office or a ballot question in the regular course of publication or broadcasting; or

(e) An expenditure for nonpartisan voter registration activities. This subdivision shall not apply if a candidate or a group of candidates sponsors, finances, or is identified by name with the activity. This subdivision shall apply to an activity performed pursuant to the Election Act by an election commissioner or other registration official who is identified by name with the activity.

(4) Expenditure for purposes of sections 49-1480 to 49-1492.01shall mean an advance, conveyance, deposit, distribution, transfer of funds, loan, payment, pledge, or

subscription of money or anything of value and any contract, agreement, promise, or other obligation, whether or not legally enforceable, to make an expenditure. Expenditure shall not include payments for transportation by lobbyists or the cost of communicating positions from a principal to a lobbyist or from a lobbyist to a principal.

49-1420. Filed, filer, and filing official; defined. (1) Filed shall mean the receipt by the appropriate filing official of a statement or report required to be filed under the Nebraska Political Accountability and Disclosure Act.

(2) Filer shall mean each person required to file a statement or report pursuant to the act.

(3) Filing official shall mean the official designated pursuant to the act to receive required statements and reports.

49-1421. Financial transaction, defined. Financial transaction shall mean a loan, purchase, sale, or other type of transfer or exchange of money, goods, other property, or services for value.

49-1422. Fundraising event, defined. Fundraising event shall mean an event such as a dinner, reception, testimonial, rally, auction, bingo, or similar affair through which contributions are solicited or received by such means as purchase of a ticket, payment of an attendance fee, donations or chances for prizes, or through purchase of goods or services.

49-1423. Gift, defined. Gift shall mean a payment, subscription, advance, forbearance, rendering, or deposit of money, services, or anything of value, unless consideration of equal or greater value is given therefor. Gift shall not include a campaign contribution otherwise reported as required by law, a commercially reasonable loan made in the ordinary course of business, a gift received from a relative, a breakfast, luncheon, dinner, or other refreshments consisting of food and beverage provided for immediate consumption, or the occasional provision of transportation within the State of Nebraska.

49-1424. Government body, defined. Government body shall mean an authority, department, commission, committee, council, board, bureau, division, office, legislative body, or other agency in the executive, legislative, or judicial branch of state government or of one or more political subdivisions thereof or a school district, state college, state university, or other state-supported institution of higher education.

49-1425. Immediate family, defined. Immediate family shall mean a child residing in an individual's household, a spouse of an individual, or an individual claimed by that individual or that individual's spouse as a dependent for federal income tax purposes.

49-1426. Income, defined. Income shall mean any money or thing of value received, or to be received as a claim on future services, whether in the form of a fee, salary, expense, allowance, forbearance, forgiveness, interest, dividend, royalty, rent, capital gain, or any other form of recompense then constituting income under the Internal Revenue Code.

49-1427. Independent committee, defined. Independent committee shall mean a committee other than a candidate, ballot question, or political party committee.

49-1428. Independent expenditure, defined. Independent expenditure shall mean an expenditure as defined in section 49-1419 by a person if the expenditure is not made at the direction of, under the control of, or with the cooperation of another person and if the expenditure is not a contribution to a committee.

49-1429. Influencing, defined. Influencing shall mean promoting, supporting, affecting, modifying, opposing, or delaying by any means, including the providing of or use of information, statistics, studies, or analyses.

49-1430. In-kind contribution or expenditure, defined. In-kind contribution or expenditure shall mean a contribution as defined in section 49-1415 or expenditure as defined in subsections (1), (2), and (3) of section 49-1419, other than money.

49-1431. Legislative action, defined. Legislative action shall mean introduction, sponsorship, support, opposition, consideration, debate, voting, passage, defeat, approval, veto, delay, or an official action by an official in the executive branch or an official in the legislative branch on a bill, resolution, amendment, nomination, appointment, report, or any matter pending or proposed in a committee or the Legislature.

49-1432. Loan, defined. Loan shall mean a transfer of money, property, or anything of ascertainable monetary value in exchange for an obligation, conditional or not, to repay in whole or part.

49-1433. Lobbying, defined. Lobbying shall mean the practice of promoting or opposing for another person, as defined in section 49-1438 the introduction or enactment of legislation or resolutions before the Legislature or the committees or the members thereof, and shall also include the practice of promoting or opposing executive approval of legislation or resolutions.

49-1433.01. Major out-of-state contributor, defined. Major out-of-state contributor means a corporation, union, industry association, trade association, or professional association which is not organized under the laws of the State of Nebraska and which makes contributions or expenditures totaling more than ten thousand dollars in any calendar year in connection with one or more elections.

49-1434. Principal, lobbyist, defined. (1) Principal means a person who authorizes a lobbyist to lobby in behalf of that principal.

(2) Lobbyist means a person who is authorized to lobby on behalf of a principal and includes an officer, agent, attorney, or employee of the principal whose regular duties include lobbying.

(3) Principal or lobbyist does not include:

(a) A public official or employee of a branch of state government, except the University of Nebraska, or an elected official of a political subdivision who is acting in the course or scope of his or her office or employment;

(b) Any publisher, owner, or working member of the press, radio, or television while disseminating news or editorial comment to the general public in the ordinary course of business;

(c) An employee of a principal or lobbyist whose duties are confined to typing, filing, and other types of clerical office work;

(d) Any person who limits his or her activities (i) to appearances before legislative committees and who so advises the committee at the time of his or her appearance whom he or she represents or that he or she appears at the invitation of a named member of the Legislature or at the direction of the Governor or (ii) to writing letters or furnishing written material to individual members of the Legislature or to the committees thereof;

(e) Any individual who does not engage in lobbying for another person as defined in section 49-1438, or

(f) An employee of a political subdivision whose regular employment duties do not ordinarily include lobbying activities as long as such employee is not additionally compensated for such lobbying activities, other than his or her regular salary, and is not reimbursed for any lobbying expenditures except his or her travel, lodging, and meal expenses and the meal expenses for members of the Legislature.

49-1435. Nonministerial, defined. Nonministerial shall mean an action other than an action which a person performs in a prescribed manner under prescribed circumstances in obedience to the mandate of legal authority, without the exercise of personal judgment regarding whether to take the action.

49-1436. Official in the executive branch, defined. Official in the executive branch shall mean an official holding a state executive office as provided in Article IV, Constitution of Nebraska, including Governor, Lieutenant Governor, Secretary of State, Auditor of Public Accounts, State Treasurer, Attorney General, Tax Commissioner, the heads of such other executive departments as set forth in the Constitution or as may be established by law, a deputy thereto, or a member of any state board or commission. This includes an individual who is elected or appointed and has not yet taken, or an individual who is nominated for appointment to, any of the offices enumerated in this section.

49-1437. Official in the legislative branch, defined. Official in the legislative branch shall mean a member or member-elect of the Legislature, a member of an official body established by and responsible to the Legislature, or employee thereof other than an individual employed by the state in a clerical or nonpolicymaking capacity.

49-1438. Person, defined. Person shall mean a business, individual, proprietorship, firm, partnership, limited liability company, joint venture, syndicate, business trust, labor organization, company, corporation, association, committee, or other organization or group of persons acting jointly.

49-1439. Political merchandise, defined. Political merchandise shall mean goods such as bumper stickers, pins, hats, beverages, literature, or other items sold by a person at a fundraiser or to the general public for publicity or for the purpose of raising funds to be used in supporting or opposing a candidate for nomination for or election to an elective office or in supporting or opposing the qualification, passage, or defeat of a ballot question.

49-1440. Political party, defined. Political party shall mean a political party which has a right under law to have the names of its candidates listed on the ballot in a general election.

49-1441. Political party committee, defined. Political party committee shall mean a state central, district, or county committee of a political party which is a committee.

49-1442. Public employee, defined. Public employee shall mean an employee of the state or a political subdivision thereof.

49-1443. Public official, defined. Public official shall mean an official in the executive branch, an official in the legislative branch, or an elected or appointed official in the judicial branch of the state government or a political subdivision thereof; any elected or appointed member of a school board; and an elected or appointed member of a governing body of a state institution of higher education.

49-1443.01. Relative, defined. Relative shall mean any person related to another by blood or marriage to the third degree of consanguinity, including a foster parent, foster child, stepparent, stepchild, and adopted children and their adoptive parents.

49-1444. State elective office, defined. State elective office shall mean the office of Governor, Lieutenant Governor, Secretary of State, Auditor of Public Accounts, State Treasurer, Attorney General, member of a board or commission with one or more election districts of more than one county, and member of the Legislature.

49-1445. Candidate for office; candidate committee; slate or team; committee; when formed; violation; penalty. (1) A candidate shall form a candidate committee upon raising, receiving, or expending more than five thousand dollars in a calendar year.

(2) A candidate committee may consist of one member with the candidate being the member.

(3) A person who is a candidate for more than one office shall form a candidate committee for an office upon raising, receiving, or expending more than five thousand dollars in a calendar year for that office.

(4) Two or more candidates who campaign as a slate or team for public office shall form a committee upon raising, receiving, or expending jointly in any combination more than five thousand dollars in a calendar year.

(5) The fee to file for office shall not be included in determining if a candidate has raised, received, or expended more than five thousand dollars in a calendar year.

(6) Any person who violates this section shall be guilty of a Class IV misdemeanor.

49-1446. Committee; treasurer; depository account; contributions and expenditures; requirements; reports; commingling funds; violations; penalty. (1) Each committee shall have a treasurer who is a qualified elector of this state. A candidate may appoint himself or herself as the candidate committee treasurer.

(2) Each committee shall designate one account in a financial institution in this state as an official depository for the purpose of depositing all contributions which it receives in the form of or which are converted to money, checks, or other negotiable instruments and for the purpose of making all expenditures. Secondary depositories shall be used for the sole purpose of depositing contributions and promptly transferring the deposits to the committee's official depository.

(3) No contribution shall be accepted and no expenditure shall be made by a committee which has not filed a statement of organization and which does not have a treasurer. When the office of treasurer in a candidate committee is vacant, the candidate shall be the treasurer until the candidate appoints a new treasurer.

(4) No expenditure shall be made by a committee without the authorization of the treasurer or the assistant treasurer. The contributions received or expenditures made by a candidate or an agent of a candidate shall be considered received or made by the candidate committee.

(5) Contributions received by an individual acting in behalf of a committee shall be reported promptly to the committee's treasurer not later than five days before the closing date of any campaign statement required to be filed by the committee and shall be reported to the committee treasurer immediately if the contribution is received less than five days before the closing date.

(6) A contribution shall be considered received by a committee when it is received by the committee treasurer or a designated agent of the committee treasurer notwithstanding the fact that the contribution is not deposited in the official depository by the reporting deadline.

(7) Contributions received by a committee shall not be commingled with any funds of an agent of the committee or of any other person except for funds received or disbursed by a separate segregated political fund for the purpose of supporting or opposing candidates and committees in elections in states other than Nebraska and candidates for federal office, as provided in section 49-1469.06, including independent expenditures made in such elections.

(8) Any person who violates this section shall be guilty of a Class IV misdemeanor.

49-1446.01. Committee; certain expenditure of funds authorized. (1) No committee, other than a political party committee, may expend funds except to make an expenditure, as defined in subsection (1), (2), or (3) of section 49-1419 or as provided in section 49-1446.03 or 49-1469.06.

(2) A candidate committee of an officeholder may make expenditures for the payment of installation and use of telephone and telefax machines located in an officeholder's public office and used by such officeholder.

(3) Any committee, including a political party committee, may invest funds in investments authorized for the state investment officer in the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act. Nothing in this section shall prohibit a separate segregated political fund from disbursing funds as provided in section 49-1469.06.

49-1446.02. Committee; certain expenditure of funds; prohibited. Notwithstanding any other provision of the Nebraska Political Accountability and Disclosure Act, no committee shall expend funds for the purchase or payment of:

(1) Clothes or medical or dental expenses of a candidate or the members of his or her immediate family;

(2) Installment payments for an automobile owned by a candidate;

(3) Mortgage or rental payments for a permanent residence of a candidate;

(4) The satisfaction of personal debts, including installment payments on personal loans, except campaign loans subject to reporting required by subsection (2) of section 49-1456;

(5) Personal services, including the services of a lawyer or accountant, except campaign services subject to reporting pursuant to the provisions of section 49-1455; or

(6) Office supplies, staff, or furnishings for the public office for which an individual is a candidate for nomination or election except as set out in subsection (2) of section 49-1446.01.

49-1446.03. Committee; expenditure of funds; authorized. Except as otherwise provided in the Nebraska Political Accountability and Disclosure Act, any committee may, in addition to the expenditures set forth in section 49-1446.01, make expenditures for the following: (1) The necessary continued operation of the campaign office or offices of the candidate or political committee;

(2) Social events primarily for the benefit of campaign workers and volunteers or constituents;

(3) Obtaining public input and opinion;

(4) Repayment of campaign loans incurred prior to election day;

(5) Newsletters and other communications for the purpose of information, thanks, acknowledgment, or greetings or for the purpose of political organization and planning;

(6) Gifts of acknowledgment, including flowers and charitable contributions, except that gifts to any one individual shall not exceed fifty dollars in any one calendar year;

(7) Meals, lodging, and travel by an officeholder related to his or her candidacy and for members of the immediate family of the officeholder when involved in activities related to his or her candidacy;

(8) Conference fees, meals, lodging, and travel by an officeholder and his or her staff when involved in activities related to the duties of his or her public office; and

(9) In the case of the candidate committee for the Governor, conference fees, meals, lodging, and travel by the Governor, his or her staff, and his or her immediate family, when involved in activities related to the duties of the Governor.

49-1446.04. Candidate committee; loans; restrictions; civil penalty. (1) A candidate committee shall not accept more than fifteen thousand dollars in loans prior to or during the first thirty days after formation of the candidate committee.

(2) After the thirty-day period and until the end of the term of the office to which the candidate sought nomination or election, the candidate committee shall not accept loans in an aggregate amount of more than fifty percent of the contributions of money, other than the proceeds of loans, which the candidate committee has received during such period as of the date of the receipt of the proceeds of the loan. Any loans which have been repaid as of such date shall not be taken into account for purposes of the aggregate loan limit.

(3) A candidate committee shall not pay interest, fees, gratuities, or other sums in consideration of a loan, advance, or other extension of credit to the candidate committee by the candidate, a member of the candidate's immediate family, or any business with which the candidate is associated.

(4) The penalty for violation of this section shall be a civil penalty of not less than two hundred fifty dollars and not more than the amount of money received by a candidate committee in violation of this section if the candidate committee received more than two hundred fifty dollars. The commission shall assess and collect the civil penalty and shall remit the penalty to the State Treasurer for distribution in accordance with Article VII, section 5, of the Constitution of Nebraska.

49-1446.05. Repealed. Laws 2001, LB 242, § 27.

49-1446.06. Transferred to section 49-1474.02.

49-1447. Committee treasurer; statements or reports; duties; committee records; violation; penalty. (1) The committee treasurer shall keep detailed accounts, records, bills, and receipts necessary to substantiate the information contained in a statement or report filed pursuant to sections 49-1445 to 49-1479.02 or rules and regulations adopted and promulgated under the Nebraska Political Accountability and Disclosure Act.

(2)(a) For any committee other than a candidate committee, the committee treasurer shall be responsible for filing all statements and reports of the committee required to be filed under the act and shall be personally liable subject to section 49-1461.01for any late filing fees, civil penalties, and interest that may be due under the act as a result of a failure to make such filings.

(b) For candidate committees, the candidate shall be responsible for filing all statements and reports required to be filed by his or her candidate committee under the Nebraska Political Accountability and Disclosure Act. The candidate shall be personally liable for any late filing fees, civil penalties, and interest that may be due under the act as a result of a failure to make such filings and may use funds of the candidate committee to pay such fees, penalties, and interest.

(3) The committee treasurer shall record the name and address of each person from whom a contribution is received except for contributions of fifty dollars or less received pursuant to subsection (2) of section 49-1472.

(4) The records of a committee shall be preserved for five years and shall be made available for inspection as authorized by the commission.

(5) Any person violating this section shall be guilty of a Class III misdemeanor.

49-1448. Commission; rules; purpose. The commission shall promulgate rules for the withdrawal of funds from a committee account for petty cash expenditures and for keeping records of the withdrawals.

49-1449. Committee; statement of organization; filing; procedure; late filing fees. (1) Each committee shall file a statement of organization pursuant to this section and pay a registration fee pursuant to section 49-1449.01 with the commission. Except as provided in subsection (2) of this section, such statement of organization shall be filed and fee paid within ten days after a committee is formed. The commission shall maintain a statement of organization filed by a committee until notified of the committee's dissolution. Any person who fails to file with the commission a statement of organization required by this subsection shall pay to the commission a late filing fee of twenty-five dollars for each day the statement remains not filed in violation of this subsection, not to exceed seven hundred fifty dollars.

(2) If the committee is formed within thirty days prior to an election for which the committee exists, the statement of organization shall be filed and registration fee paid within two business days after the committee is formed. Any person who fails to file with the commission a statement of organization required by this subsection shall pay to the commission a late filing fee of one hundred dollars for each day the statement remains not filed in violation of this subsection, not to exceed one thousand dollars.

49-1449.01. Committee; statement of organization; registration fee; failure to perfect filing; effect. (1) At the time that each committee files its statement of organization pursuant to section 49-1449 the committee shall pay to the commission a registration fee of one hundred dollars. The filing of a statement of organization is not perfected unless accompanied by the registration fee.

(2) A committee which has not perfected its filing of a statement of organization by the date due as specified in section 49-1449 shall not make or receive contributions or expenditures until such time as the filing of the statement of organization is perfected, except that:

(a) A committee may make an expenditure to pay the registration fee; and

(b) A committee may make expenditures for thirty days after the termination of its registration if the expenditures are part of the process of dissolving the committee and the committee dissolves within thirty days after the termination of its registration.

(3) The registration fees collected pursuant to this section shall be remitted to the State Treasurer for credit to the Nebraska Accountability and Disclosure Commission Cash Fund.

49-1450. Committee; statement of organization; contents, enumerated. The statement of organization required by section 49-1449 shall include the following information: (1) The name, street address, and telephone number, if any, of the committee. The committee address may be the home address of the candidate or treasurer of the committee;

(2) The name, street address, and telephone number, if any, of each person, other than an individual, that is a member of the committee;

(3) The full name, street address, and telephone number, if any, of the treasurer and other principal officers of the committee;

(4) The name and address of the financial institution in which the official committee depository is located, and the name and address of each financial institution in which a secondary depository is or is intended to be located;

(5) The full name of and office sought by each candidate and a brief statement identifying the substance of each ballot question supported or opposed by the committee;

(6) Identification of the committee as a candidate committee, political party committee, independent committee, or ballot question committee if it is identifiable as such a committee; and

(7) Such other information as may be required by the rules and regulations of the commission.

49-1451. Statement of organization; change; late filing fee. When any of the information required in a statement of organization is changed, such change shall be reported when the next campaign statement is required to be filed. Any person who fails to report a change to the commission under this section shall pay to the commission a late filing fee of twenty-five dollars for each day the change remains not reported in violation of this section, not to exceed seven hundred fifty dollars.

49-1452. Repealed. Laws 1983, LB 230, § 4.

49-1453. Committee; dissolution; procedure. (1) A committee may be dissolved by the filing of a statement of dissolution with the commission, the payment of all fees, penalties, and interest which may be owed, and complying with the rules and regulations of the commission for dissolution of committees. Except as otherwise provided in subsection (2) of this section, no committee shall be dissolved until such statement is filed and such payments are made.

(2) A committee may be dissolved if the commission determines that fees, penalties, and interest owed by a committee are uncollectible.

49-1454. Committee; campaign statement; filing; period covered. Any committee which supports or opposes a candidate or the qualification, passage, or defeat of a ballot question shall file a legibly printed or typed campaign statement pursuant to sections 49-1459 and 49-1461. The period covered by a campaign statement is the period beginning with the day after the closing date of the most recent campaign statement filed and ending with the closing date of the campaign statement due. If the committee filing the campaign statement has not previously filed a campaign statement, the period covered shall begin on the date the person or persons forming the committee raised, received, or spent any money.

49-1455. Committee campaign statement; contents. (1) The campaign statement of a committee, other than a political party committee, shall contain the following information:

(a) The filing committee's name, address, and telephone number and the full name, residential and business addresses, and telephone numbers of its committee treasurer;

(b) Under the heading RECEIPTS, the total amount of contributions received during the period covered by the campaign statement; under the heading EXPENDITURES, the total amount of expenditures made during the period covered by the campaign statement; and the cumulative amount of those totals for the election period. If a loan was repaid during the period covered by the campaign statement, the amount of the repayment shall be subtracted from the total amount of contributions received. Forgiveness of a loan shall not be included in the totals. Payment of a loan by a third party shall be recorded and reported as a contribution by the third party but shall not be included in the totals. In-kind contributions or expenditures shall be listed at fair market value and shall be reported as both contributions and expenditures;

(c) The balance of cash and cash equivalents on hand at the beginning and the end of the period covered by the campaign statement;

(d) The full name of each individual from whom contributions totaling more than two hundred fifty dollars are received during the period covered by the report, together with the individual's street address, the amount contributed, the date on which each contribution was received, and the cumulative amount contributed by that individual for the election period;

(e) The full name of each person, except those individuals reported under subdivision (1)(d) of this section, which contributed a total of more than two hundred fifty dollars during the period covered by the report together with the person's street address, the amount contributed, the date on which each contribution was received, and the cumulative amount contributed by the person for the election period;

(f) The name of each committee which is listed as a contributor shall include the full name of the committee's treasurer;

(g) Except as otherwise provided in subsection (3) of this section: The full name and street address of each person to whom expenditures totaling more than two hundred fifty dollars were made, together with the date and amount of each separate expenditure to each such person during the period covered by the campaign statement; the purpose of the expenditure; and the full name and street address of the person providing the consideration for which any expenditure was made if different from the payee;

(h) The amount and the date of expenditures for or against a candidate or ballot question during the period covered by the campaign statement and the cumulative amount of expenditures for or against that candidate or ballot question for the election period. An expenditure made in support of more than one candidate or ballot question, or both, shall be apportioned reasonably among the candidates or ballot questions, or both; and

(i) The total amount of funds disbursed by a separate segregated political fund, by state, for the purpose of supporting or opposing candidates and committees in elections in states other than Nebraska and candidates for federal office, including independent expenditures made in such elections.

(2) For purposes of this section, election period means the calendar year of the election.

(3) A campaign statement shall include the total amount paid to individual petition circulators during the reporting period, if any, but shall not include the name, address, or telephone number of any individual petition circulator if the only payment made to such individual was for services as a petition circulator.

49-1456. Committee account; income; how treated; loans. (1) Any income received by a committee on an account consisting of funds or property belonging to the committee shall not be considered a contribution to the committee but shall be reported as income. Any interest paid by a committee shall be reported as an expenditure.

(2) A loan made or received shall be set forth in a separate schedule providing the date and amount of the loan and, if the loan is repaid, the date and manner of repayment. The committee shall provide the name and address of the lender and any person who is liable directly, indirectly, or contingently on each loan of more than two hundred fifty dollars.

49-1457. Political party committee; campaign statement; contents, enumerated; contribution and expenditure information. (1) The campaign statement filed by a political party committee shall contain the following information:

(a) The full name and street address of each person from whom contributions totaling more than two hundred fifty dollars in value are received in a calendar year, the amount, and the date or dates contributed; and if the person is a committee, the name and address of the committee and the full name and street address of the committee treasurer, together with the amount of the contribution and the date received;

(b) An itemized list of all expenditures, including in-kind contributions and expenditures and loans, made during the period covered by the campaign statement which were contributions to a candidate committee of a candidate for elective office or a ballot question committee; or independent expenditures in support of the qualification, passage, or defeat of a ballot question, or in support of the nomination or election of a candidate for elective office or the defeat of any of the candidate's opponents;

(c) The total expenditure by the committee for each candidate for elective office or ballot question in whose behalf an independent expenditure was made or a contribution was given for the election; and

(d) The filer's name, address, and telephone number, if any, and the full name, residential and business addresses, and telephone numbers of the committee treasurer.

(2) A contribution to a candidate or ballot question committee listed under subdivision (1)(b) of this section shall note the name and address of the committee, the name of the candidate and the office sought, if any, the amount contributed, and the date of the contribution.

(3) An independent expenditure listed under subdivision (1)(b) of this section shall note the name of the candidate for whose benefit the expenditure was made and the office sought by the candidate, or a brief description of the ballot question for which the expenditure was made, the amount, date, and purpose of the expenditure, and the full name and address of the person to whom the expenditure was made.

(4) An expenditure listed which was made in support of more than one candidate or ballot question, or both, shall be apportioned reasonably among the candidates or ballot questions, or both.

49-1458. Late contribution; how reported; late filing fee. (1) A committee which receives a late contribution shall report the contribution to the commission by filing a report within two days after the date of its receipt. The report may be filed by hand delivery, facsimile transmission, telegraph, express delivery service, or any other written means of communication, including electronic means approved by the commission, and need not contain an original signature.

(2) The report shall include the full name, street address, occupation, employer, and principal place of business of the contributor, the amount of the contribution, and the date of receipt.

(3) A late contribution shall be reported on subsequent campaign statements without regard to reports filed pursuant to this section.

(4) Any committee which fails to file a report of late contributions with the commission as required by this section shall pay to the commission a late filing fee of one hundred dollars for each of the first ten days the report remains not filed in violation of this section. After the tenth day, such committee shall pay, for each day the report remains not filed, an additional late filing fee of one percent of the amount of the late contribution which was required to be reported, not to exceed ten percent of the amount of the late contribution which was required to be reported.

(5) For purposes of this section, late contribution means a contribution of one thousand dollars or more received after the closing date for campaign statements as provided in subdivision (1)(b) of section 49-1459.

49-1459. Campaign statements; filing schedule; statement of exemption. (1) Except as provided in subsection (2) of this section, campaign statements as required by the Nebraska Political Accountability and Disclosure Act shall be filed according to the following schedule:

(a) A first preelection campaign statement shall be filed not later than the thirtieth day before the election. The closing date for a campaign statement filed under this subdivision shall be the thirty-fifth day before the election;

(b) A second preelection campaign statement shall be filed not later than the tenth day before the election. The closing date for a campaign statement filed under this subdivision shall be the fifteenth day before the election; and

(c) A postelection campaign statement shall be filed not later than the fortieth day following the primary election and the seventieth day following the general election. The closing date for a postelection campaign statement to be filed under this subdivision after the primary election shall be the thirty-fifth day following the election. The closing date for a postelection campaign statement to be filed under this subdivision after the general election shall be December 31 of the year in which the election is held. If all liabilities of a candidate and committee are paid before the closing date and additional contributions are not expected, the campaign statement may be filed at any time after the election, but not later than the dates provided under this subdivision.

(2) Any committee may file a statement with the commission indicating that the committee does not expect to receive contributions or make expenditures of more than one thousand dollars in the calendar year of an election. Such statement shall be signed by the committee treasurer or the assistant treasurer, and in the case of a candidate committee, it shall also be signed by the candidate. Such statement shall be filed on or before the thirtieth day before the election. A committee which files a statement pursuant to this subsection is not required to file campaign statements according to the schedule prescribed in subsection (1) of this section but shall file a sworn statement of exemption not later than the fortieth day following the primary election and the seventieth day following the general election stating only that the committee did not, in fact, receive or expend an amount in excess of one thousand dollars. If the committee receives contributions or makes expenditures of more than one thousand dollars during the election year, the committee is then subject to all campaign filing requirements under subsection (1) of this section.

49-1460. Repealed. Laws 1983, LB 230, § 4.

49-1461. Ballot question committee; campaign statement; filing dates. In addition to the campaign statements required to be filed pursuant to sections 49-1459 and 49-1462, a ballot question committee shall file a campaign statement as required by the Nebraska Political Accountability and Disclosure Act according to the following schedule:

(1) The first campaign statement shall be filed not later than the last day of the calendar month in which the petition form is filed with the Secretary of State pursuant to section 32-1405. The closing date for the campaign statement shall be five days before the deadline for filing the first campaign statement;

(2) Additional campaign statements shall be filed on the last day of each calendar month thereafter except for the calendar month during which the signed petitions must be filed with the Secretary of State as provided in section 32-1407. The closing date for such campaign statements shall be five days before the deadline for filing the statement; and

(3) A final campaign statement shall be filed not later than thirty days after the deadline for filing petitions with the Secretary of State as provided in section 32-1407. The closing date for the campaign statement shall be twenty-five days after the deadline for filing such petitions.

The campaign statements required to be filed pursuant to this section shall be filed whether or not petitions have or will be filed with the Secretary of State. Any person who fails to file a campaign statement with the commission pursuant to this section shall be subject to late filing fees as provided in section 49-1463.

49-1461.01. Ballot question committee; surety bond; requirements; violations; penalty. (1) A ballot question committee shall file with the commission a surety bond running in favor of the State of Nebraska with surety by a corporate bonding company authorized to do business in this state and conditioned upon the payment of all fees, penalties, and interest which may be imposed under the Nebraska Political Accountability and Disclosure Act.

(2) A bond in the amount of five thousand dollars shall be filed with the commission within thirty days after the committee receives contributions or makes expenditures of more than one hundred thousand dollars in a calendar year, and the amount of the bond shall be increased by five thousand dollars for each additional five hundred thousand dollars received or expended in a calendar year.

(3) Proof of any required increase in the amount of the bond shall be filed with the commission within thirty days after each additional five hundred thousand dollars is received or expended. Any failure to pay late filing fees, civil penalties, or interest due under the act shall be recovered from the proceeds of the bond prior to recovery from the treasurer of the committee.

(4) Any person violating this section shall be guilty of a Class III misdemeanor.

49-1462. Committee; campaign statement; when filed; period covered. Unless otherwise required to file an election campaign statement as required by section 49-1459, a committee shall file a campaign statement with a closing date of December 31 of such year not later than January 31 of the following year. The period covered by the campaign statement filed pursuant to this section shall begin from the day after the closing date of the previous campaign statement filed.

49-1463. Campaign statement; statement of exemption; violations; late filing fee. (1) Any person who fails to file a campaign statement with the commission under sections 49-1459 to 49-1463 shall pay to the commission a late filing fee of twenty-five dollars for each day the campaign statement remains not filed in violation of this section, not to exceed seven hundred fifty dollars.

(2) Any committee which fails to file a statement of exemption with the commission under subsection (2) of section 49-1459 shall pay to the commission a late filing fee of twenty-five dollars for each day the statement of exemption remains not filed in violation of this section, not to exceed two hundred twenty-five dollars.

49-1463.01. Late filing fee; relief; reduction or waiver; when. (1) A person required to pay a late filing fee imposed under sections 49-1449, 49-1458, 49-1463, 49-1467, 49-1469.08, 49-1478.01, or 49-1479.01 may apply to the commission for relief. The commission by order may reduce the amount of a late filing fee imposed and waive any or all of the interest due on the fee upon a showing by such person that (a) the circumstances indicate no intent to file late, (b) the person has not been required to pay late filing fees for two years prior to the time the filing was due, (c) the late filing shows that less than five thousand dollars was raised, received, or expended during the reporting period, and (d) a reduction of the late fees and waiver of interest would not frustrate the purposes of the Nebraska Political Accountability and Disclosure Act.

(2) A person required to pay a late filing fee imposed for failure to file a statement of exemption under subsection (2) of section 49-1459 may apply to the commission for relief. The commission by order may reduce or waive the late filing fee and waive any or all of the interest due on the fee, and the person shall not be required to make a showing as provided by subsection (1) of this section.

49-1463.02. Late filing fees and civil penalties; interest. Interest shall accrue on all late filing fees and civil penalties imposed under the Nebraska Political Accountability and Disclosure Act at the rate specified in section 45-14.02 as such rate may from time to time be adjusted. The interest shall begin to accrue thirty days after the commission sends notice to the person of the assessment of the late filing fee or civil penalty. A written request filed with the commission for relief from late filing fees shall stay the accrual of interest on a late filing fee until such time as the commission grants or denies the request. The commission may waive the payment of accrued interest in the amount of twenty-five dollars or less.

49-1464. Campaign statements of committees; where filed. The campaign statement of any committee, including a candidate committee, a ballot question committee, or a political party committee, shall be filed with the commission.

49-1465. Campaign statement; verification statement; signature; requirements. (1) A campaign statement filed by a committee shall:

(a) Be signed by the committee treasurer; and

(b) Contain a verification statement which states that the treasurer used all reasonable diligence in its preparation, that to the treasurer's knowledge it is true and complete, and if the committee is a candidate committee, that to the best of the candidate's knowledge the statement is true and complete.

(2) The verification statement shall be signed by the treasurer and, in the case of a candidate committee, by the candidate.

(3) The verification statement shall be required to perfect the filing of the campaign statement. A campaign statement shall cover the period beginning the day after the closing date of the last campaign statement and end on the closing date as specified in the Nebraska Political Accountability and Disclosure Act.

49-1466. Dissolved candidate committee; unexpended funds; how treated. Any person, who after being a candidate for office dissolves the candidate committee as provided in section 49-1453 may transfer any unexpended funds from such committee to another candidate committee, a political party committee, or a tax-exempt charitable institution or may return such unexpended funds to the contributors of the funds upon dissolution of the candidate committee.

49-1467. Person; independent expenditure report; when filed; contents; late filing fee; violation; penalty. (1) Any person, other than a committee, who makes an independent expenditure advocating the election of a candidate or the defeat of a candidate's opponents or the qualification, passage, or defeat of a ballot question, which is in an amount of more than two hundred fifty dollars, shall file a report of the independent expenditure, within ten days, with the commission.

(2) The report shall be made on an independent expenditure report form provided by the commission and shall include the date of the expenditure, a brief description of the nature of the expenditure, the amount of the expenditure, the name and address of the person to whom it was paid, the name and address of the person filing the report, and

the name, address, occupation, employer, and principal place of business of each person who contributed more than two hundred fifty dollars to the expenditure.

(3) Any person who fails to file a report of an independent expenditure with the commission shall pay to the commission a late filing fee of twenty-five dollars for each day the statement remains not filed in violation of this section, not to exceed seven hundred fifty dollars.

(4) Any person who violates this section shall be guilty of a Class IV misdemeanor.

49-1468. Contribution or expenditure made by a dependent minor; contribution controlled by another; how reported. (1) Any contribution or expenditure made by a dependent minor shall be reported in the name of the minor's parent or guardian.

(2) Any contribution which is controlled by, or made at the direction of, another person, including a parent organization, subsidiary, division, committee, department, branch, or local unit of a person, shall be reported by the person making the contribution and shall be regarded as a contribution attributable to both persons.

49-1469. Businesses and organizations; contributions, expenditures, or services; report; contents; separate segregated political fund; when required. (1) A corporation, labor organization, industry, trade, or professional association, limited liability company, or limited liability partnership, which is organized under the laws of the State of Nebraska or doing business in this state and which is not a committee, may:

(a) Make an expenditure;

(b) Make a contribution; and

(c) Provide personal services.

(2) Any such entity shall not be required to file reports of independent expenditures pursuant to section 49-1467, but if it makes a contribution or expenditure, or provides personal services, with a value of more than two hundred fifty dollars, it shall file a report with the commission within ten days after the end of the calendar month in which the contribution or expenditure is made or the personal services are provided. The report shall include:

(a) The nature, date, and value of the contribution or expenditure and the name of the candidate or committee or a description of the ballot question to or for which the contribution or expenditure was made; and

(b) A description of any personal services provided, the date the services were provided, and the name of the candidate or committee or a description of the ballot question to or for which the personal services were provided.

(3) Any entity specified in subsection (1) of this section may not receive contributions unless it establishes and administers a separate segregated political fund which shall be utilized only in the manner set forth in sections 49-1469.05 and 49-1469.06.

49-1469.01. Transferred to section 49-1476.

49-1469.02. Transferred to section 49-1476.01.

49-1469.03. Transferred to section 49-1476.02.

49-1469.04. Transferred to section 49-1476.02.

49-1469.05. Businesses and organizations; separate segregated political fund; restrictions. (1) An entity specified in subsection (1) of section 49-1469 which establishes and administers a separate segregated political fund:

(a) Shall not make an expenditure to such fund, except that it may make expenditures and provide personal services for the establishment and administration of such separate segregated political fund; and

(b) Shall file the reports required by subsection (2) of section 49-1469 with respect to the expenditures made or personal services provided for the establishment and administration of such fund but need not file such reports for the expenditures made from such fund.

(2) If a corporation makes an expenditure to a separate segregated political fund which is established and administered by an industry, trade, or professional association, limited liability company, or limited liability partnership of which such corporation is a member, such corporation shall not be required to file the reports required by subsection (2) of section 49-1469.

49-1469.06. Businesses and organizations; separate segregated political fund; contributions and expenditures; limitations. (1) All contributions to and expenditures from a separate segregated political fund shall be limited to money or anything of ascertainable value obtained through the voluntary contributions of the employees, officers, directors, stockholders, or members of the corporation, including a nonprofit corporation, labor organization, industry, trade, or professional association, limited liability company, or limited liability partnership, and the affiliates thereof, under which such fund was established.

(2) No contribution or expenditure shall be received or made from such fund if obtained or made by using or threatening to use job discrimination or financial reprisals.

(3) Only expenditures to candidates and committees and independent expenditures may be made from a fund established by an entity specified in subsection (1) of section 49-1469. Such separate segregated political fund may receive and disburse funds for the purpose of supporting or opposing candidates and committees in elections in states other than Nebraska and candidates for federal office and making independent expenditures in such elections if such receipts and disbursements are made in conformity with the solicitation provisions of this section and the entity which establishes and administers such fund complies with the laws of the jurisdiction in which such receipts or disbursements are made.

(4) The expenses for establishment and administration of a separate segregated political fund of any such entity may be paid from the separate segregated political fund of such entity.

49-1469.07. Businesses and organizations; separate segregated political fund; status. A separate segregated political fund is hereby declared to be an independent committee and subject to all of the provisions of the Nebraska Political Accountability and Disclosure Act applicable to independent committees, and the entity which

establishes and administers such fund shall make the reports and filings required therefor.

49-1469.08. Businesses and organizations; late filing fee; violation; penalty. (1) Any entity specified in subsection (1) of section 49-1469 which fails to file a report with the commission required by section 49-1469 or 49-1469.07 shall pay to the commission a late filing fee of twenty-five dollars for each day the statement remains not filed in violation of such sections, not to exceed seven hundred fifty dollars.

(2) Any person who knowingly violates this section, section 49-1469, 49-1469.05, 49-1469.06, or 49-1469.07 shall be guilty of a Class III misdemeanor.

49-1470. Campaign statements; public information; copies, cost; duration kept. (1) Campaign statements shall be open for public inspection and reproduction, commencing as soon as practicable, but not later than the fifth business day following the day on which they were received, during regular business hours.

(2) Copies of statements or parts of statements shall be provided by the officials with whom they are filed at a cost of not to exceed fifty cents per page.

(3) Campaign statements shall be preserved for a period of not less than eighteen months by the officials other than the commission with whom they are filed, and not less than five years by the commission.

(4) No fee or charge shall be collected by any official for the filing of any campaign statement, or for the forms upon which statements are to be prepared, except as otherwise provided by law.

49-1471. Contribution or expenditure in excess of fifty dollars; not to be made in cash; violation; penalty. A contribution or expenditure of more than fifty dollars shall not be made or accepted in cash. Contributions and expenditures of more than fifty dollars, other than an in-kind contribution or expenditure, shall be made by written instrument containing the names of the payor and the payee. Any person who knowingly violates this section shall be guilty of a Class III misdemeanor.

49-1472. Anonymous contribution; restrictions on use; other contributions; how treated; violation; penalty. (1) A person shall not accept or expend an anonymous contribution. An anonymous contribution received by a person shall not knowingly be deposited but shall be given to a tax-exempt charitable organization. The charitable organization receiving the contribution shall provide the person with a receipt. The person shall give a copy of the receipt to the commission.

(2) A contribution received as the result of a fundraising event, or from the sale of political merchandise, or from membership fees, dues, or subscriptions for political purposes to an independent committee that is fifty dollars or less shall not be considered an anonymous contribution.

(3) A person making a contribution pursuant to subsection (2) of this section which is fifty dollars or more shall furnish the recipient with the donor's name, address, and the total amount contributed.

(4) Any person violating the provisions of this section shall be guilty of a Class III misdemeanor.

49-1473. Contributions; legal name of contributor; violation; penalty. A contribution shall not be made, directly or indirectly, by any person in a name other than the name by which that person is identified for legal purposes. Any person violating the provisions of this section shall be guilty of a Class III misdemeanor.

49-1474. Political newsletter or mass mailing; not to be sent at public expense; violation; penalty. No political newsletter or other campaign mass mailing shall be sent at public expense by or on behalf of any elected official after that person has announced his or her candidacy for any office. An elected official violating the provisions of this section shall be guilty of a Class III misdemeanor.

49-1474.01. Political material; disclaimer requirements; violation; penalty. (1) The person, except an individual or individuals acting independently utilizing their own personal resources, who pays for the production, distribution, or posting of a billboard, placard, poster, pamphlet, or other printed matter relating to a candidate or ballot question shall cause a disclaimer containing the name and street address of the person to appear on such matter. The person who pays for a radio or television advertisement relating to a candidate or ballot question shall cause a disclaimer containing the name of such person to be included in the advertisement, and the radio or television station shall, for a period of at least six months, keep the street address of such person on file and divulge it to any person upon request.

(2) The size and placement of the disclaimer shall be determined by rules and regulations adopted and promulgated by the commission. The rules and regulations shall exempt from the disclaimer required by this section windshield stickers, yard signs, bumper stickers, campaign buttons, and balloons and may also exempt other items relating to a candidate or committee which are printed or reproduced at the request of such candidate or committee.

(3) Any person who knowingly violates the provisions of this section shall be guilty of a Class IV misdemeanor.

49-1474.02. Dissemination of message by telecommunication or electronic means; requirements. (1) Any person who makes an expenditure reportable under the Nebraska Political Accountability and Disclosure Act to disseminate by any means of telecommunication a prerecorded message or a recorded message relating to a candidate or ballot question shall include, immediately preceding the message, the name of the person making the expenditure. Such messages shall be disseminated only between the hours of 8 a.m. and 9 p.m. at the location of the person receiving the messages.

(2) Any person who makes an expenditure reportable under the act to disseminate by any means of telecommunication a message relating to a candidate or ballot question which is not a recorded message or a prerecorded message shall, immediately upon the request of the recipient of the message, disclose the name of the person making the expenditure. If the message is disseminated through an employee or agent of the person making the expenditure, the employee or agent shall, immediately upon

the request of the recipient of the message, disclose the name of the person making the expenditure.

(3) Any person who makes an expenditure reportable under the act to disseminate by any electronic means, including the Internet or email, a message relating to a candidate or ballot question shall include in the message the name of the person making the expenditure.

49-1475. Contribution; intermediary or agent of contributor; disclosure; violation; penalty. Any person who accepts a contribution, other than by written instrument, on behalf of another and acts as the intermediary or agent of the person from whom the contribution was accepted shall disclose to the recipient of the contribution the intermediary's own name and address and the name and address of the actual source of the contribution. Any person violating the provisions of this section shall be guilty of a Class III misdemeanor.

49-1476. Lottery contractor; legislative findings. The Legislature finds that in sponsoring a lottery, the state undertakes a unique enterprise which can succeed only if the public has confidence in the integrity of the lottery and the process by which government decisions relating to the lottery are made. The Legislature finds that there is a compelling state interest in ensuring the integrity and the appearance of integrity of elections for state elective office and of the state-sponsored lottery. The Legislature further finds that the practice of contributions being given to candidates for state elective offices by individuals or entities holding contracts with the state to supply goods or services in connection with the state-sponsored lottery for significant monetary prizes contributes to actual corruption or the appearance of corruption and diminishes public confidence in government and in the state-sponsored lottery. The Legislature finds that section 49-1476.01 and 49-1476.02 are consistent with these findings.

49-1476.01. Lottery contractor; contributions and expenditures prohibited; penalty. (1) A person who is awarded a contract by the Director of the Lottery Division as a lottery contractor for a major procurement as defined in section 9-803 may not make a contribution to or an independent expenditure for a candidate for a state elective office during the term of the contract or for three years following the most recent award or renewal of the contract.

(2) A person shall be considered to have made a contribution or independent expenditure if the contribution or independent expenditure is made by the person, by an officer of the person, by a separate segregated political fund established and administered by the person as provided in sections 49-1469 to 49-1469.08 or by anyone acting on behalf of the person, officer, or fund.

(3) A person who knowingly or intentionally violates this section shall be guilty of a Class IV felony.

49-1476.02. Lottery contractor contribution; receipt prohibited; penalty. (1) No person, including a candidate or candidate committee, shall accept or receive any contribution prohibited by section 49-1476.01. A person who knowingly or intentionally accepts any such contribution shall be guilty of a Class III misdemeanor.

(2) Any person, including a candidate or candidate committee, who receives a contribution prohibited by section 49-1476.01 shall, upon being notified of the violation by the commission, transfer a sum equal to the amount of such contribution to a tax-exempt charitable institution.

49-1477. Contributions from persons other than committee; information required; violation; penalty. No person shall receive a contribution from a person other than a committee unless, for purposes of the recipient person's record-keeping and reporting requirements, the contribution is accompanied by the name and address of each person who contributed more than one hundred dollars to the contribution. Any person violating the provisions of this section shall be guilty of a Class III misdemeanor.

49-1478. Expenditure; limitations; reports required; violations; penalty. (1) An expenditure shall not be made, other than for overhead or normal operating expenses, by an agent or an independent contractor, including an advertising agency, on behalf of or for the benefit of a person unless the expenditure is reported by the committee as if the expenditure were made directly by the committee, or unless the agent or independent contractor files an agent's expenditure report as provided in subsection (3) of this section. The agent or independent contractor shall make known to the committee all information required to be reported by the committee. Any person violating this subsection shall be guilty of a Class III misdemeanor.

(2) An expenditure shall not be made, other than for overhead or normal operating expenses, by a person gathering petition signatures on behalf of or for the benefit of a person, including a ballot question committee, unless the expenditure is reported by the ballot question committee as if the expenditure were made directly by the committee, or unless the person gathering petition signatures files an agent's expenditure report as provided in subsection (3) of this section. The person gathering petition signatures shall make known to the committee all information required to be reported by the committee. For purposes of this section, petition signature means a signature affixed to a petition for the purpose of qualifying a ballot question to appear on a ballot. Any person violating this subsection shall be guilty of a Class III misdemeanor.

(3) A person gathering petition signatures, an agent, or an independent contractor who is required to file an agent's report shall file a separate agent's report for each person on whose behalf an expenditure is made. An agent's report shall be filed with the commission within ten days after the end of the calendar month in which the expenditure is made. An agent's report shall include:

(a) The name, permanent address, temporary address, permanent telephone number, and temporary telephone number of the person making expenditures for the purpose of gathering signatures, the agent, or the independent contractor;

(b) The name, address, and telephone number of the person on whose behalf the expenditure is made;

(c) The name, permanent address, and temporary address of the person to whom the expenditure is made, except that if the expenditure is solely for the services of an individual circulating petitions, such individual's name and address shall not be included;

(d) The date and amount of each expenditure; and

(e) A description of the goods or services purchased and the purpose of the goods or services.

(4) A person required to report under subsection (3) of this section shall include in the report the total amount paid to individual petition circulators during the reporting period but shall not include the name, address, or telephone number of any individual petition circulator if the only payment made to such individual was for services as a petition circulator.

49-1478.01. Late independent expenditure; reports required; late filing fee. (1) An independent committee, including a separate segregated political fund, which makes a late independent expenditure shall report the expenditure to the commission by filing within two days after the date of the expenditure the committee's full name and street address, the amount of the expenditure, and the date of the expenditure. The report shall include (a) the full name and street address of the recipient of the expenditure, (b) the name and office sought of the candidate whose nomination or election is supported or opposed by the expenditure, and (c) the identification of the ballot question, the qualification, passage, or defeat of which is supported or opposed. Filing of a report of a late independent expenditure may be by any written means of communication, including electronic means approved by the commission, and need not contain an original signature. A late independent expenditure shall be reported on subsequent campaign statements without regard to reports filed pursuant to this section.

(2) A committee which fails to file a report of a late independent expenditure with the commission as required by this section shall pay to the commission a late filing fee of one hundred dollars for each of the first ten days the report remains not filed in violation of this section. After the tenth day, such committee shall pay, for each day the report remains not filed, an additional late filing fee of one percent of the amount of the late independent expenditure which was required to be reported, not to exceed ten percent of the amount of the late independent expenditure which was required to be reported.

(3) For purposes of this section, late independent expenditure means an independent expenditure as defined in section 49-1428 of one thousand dollars or more made after the closing date for campaign statements as provided in subdivision (1)(b) of section 49-1459.

49-1479. Contributions made for transfer or in behalf of a committee; unlawful; exceptions; penalty. (1) Except as provided by subsections (3) and (4) of section 49-1479.01, a contribution shall not be made by a person to another person with the agreement or arrangement that the person receiving the contribution will then transfer that contribution to a particular candidate committee.

(2) A candidate committee shall not make a contribution to or an independent expenditure in behalf of another candidate committee, except that a candidate committee may make a contribution to another candidate committee for a fundraising event of such other candidate committee.

(3) Any person violating the provisions of subsection (1) or (2) of this section shall be guilty of a Class III misdemeanor.

49-1479.01. Earmarked contribution; requirements; report; late filing fee; violation; penalty. (1) Any contribution by a person made on behalf of or to a candidate or committee, including contributions which are in any way earmarked or otherwise directed to the candidate or committee through an intermediary or agent, shall be considered to be a contribution from the person to the candidate or committee.

(2) For purposes of this section, earmarked shall mean a designation, instruction, or encumbrance, including those which are direct or indirect, express or implied, or oral or written, which results in any part of a contribution or expenditure, including any in-kind expenditure made in exchange for a contribution, being made to or expended on behalf of a candidate or a committee.

(3) Any intermediary or agent, other than a committee, which receives an earmarked contribution shall forward the earmarked contribution to the recipient candidate or committee within ten days after receipt of such contribution.

(4) An intermediary or agent which is not a committee shall file a report of the earmarked contribution with the commission within ten days after receipt of the contribution. Any committee which is an intermediary or agent shall file a report of the earmarked contribution with the commission by the date the next campaign statement is required to be filed. The report of the earmarked contribution filed pursuant to this section shall be on a form prescribed by the commission.

(5) Any intermediary or agent making an earmarked contribution shall disclose to the recipient of the earmarked contribution the name and address of the intermediary or agent and the actual source of the contribution by providing the recipient with a copy of the report of the earmarked contribution at the time that the earmarked contribution is made.

(6) Any person or committee which fails to file a report of an earmarked contribution with the commission as required by this section shall pay to the commission a late filing fee of twenty-five dollars for each day the statement remains not filed in violation of this section not to exceed seven hundred fifty dollars.

(7) Any person who knowingly violates this section shall be guilty of a Class III misdemeanor.

49-1479.02. Major out-of-state contributor; report; contents; applicability; late filing fee. (1) A major out-of-state contributor shall file with the commission an out-of-state contribution report. An out-of-state contribution report shall be filed on a form prescribed by the commission within ten days after the end of the calendar month in which a person becomes a major out-of-state contributor. For the remainder of the calendar year, a major out-of-state contributor shall file an out-of-state contribution report with the commission within ten days after the end of each calendar month in which the contributor makes a contribution or expenditure.

(2) An out-of-state contribution report shall disclose as to each contribution or expenditure not previously reported (a) the amount, nature, value, and date of the contribution or expenditure, (b) the name and address of the committee, candidate, or person who received the contribution or expenditure, (c) the name and address of the person filing the report, and (d) the name, address, occupation, and employer of each person making a contribution of more than two hundred dollars in the calendar year to the person filing the report.

(3) This section shall not apply to (a) a person who files a report of a contribution or an expenditure pursuant to subsection (2) of section 49-1469, (b) a person required to file a report or campaign statement pursuant to section 49-1469.07, (c) a committee having a statement of organization on file with the commission, or (d) a person or committee registered with the Federal Election Commission.

(4) Any person who fails to file an out-of-state contribution report with the commission as required by this section shall pay to the commission a late filing fee of one hundred dollars for each of the first ten days the report remains not filed in violation of this section. After the tenth day, such person shall pay, for each day the report remains not filed, an additional late filing fee of one percent of the amount of the contributions or expenditures which were required to be reported, not to exceed ten percent of the amount of the contributions or expenditures which were required to be reported.

49-1480. Lobbyist; registration; application; contents. Every person employed, retained, or authorized as a lobbyist shall, before commencing any lobbying activity, file an application with the Clerk of the Legislature for registration as a lobbyist, and if the clerk is satisfied that the application has been properly prepared the registration shall be deemed to be complete. The application shall be on a form prescribed by the clerk and approved by the Executive Board of the Legislative Council, and shall include as a minimum the following:

(1) The name, permanent residence address, and office address of the lobbyist;

(2) The name and address of the principal of such lobbyist;

(3) The nature of the business of such principal and the amounts or sums given or to be given the lobbyist as compensation or reimbursement for lobbying. A lobbyist who is salaried or retained by a principal need only report that portion of compensation or reimbursement reasonably attributable to lobbying;

(4) A description of the business activity of the lobbyist;

(5) An identification of the matters on which the principal or lobbyist expects to lobby;

(6) If the principal is an industry, trade, or professional association, a specific description of the industry, trade, or profession represented by the principal and the names and addresses of its officers;

(7) If the principal is not an industry, trade, or professional association, a specific description of the interests and groups represented by the principal and the names and addresses of its officers; and

(8) The name and address of any official in the legislative or executive branch, and of any members of any such official's staff or immediate family, who are employed by the lobbyist or any person acting on behalf of such lobbyist if such information is known or reasonably should have been known to the lobbyist.

49-1480.01. Application for registration; fee; collection; registration renewal. (1) The Clerk of the Legislature shall collect a fee of two hundred dollars for an application for registration by a lobbyist for each principal if the lobbyist receives or will receive compensation for such lobbying. Except as provided by section 49-1434, a lobbyist who receives compensation shall include an individual who is an employee or member of a

principal whose duties of employment, office, or membership include engaging in lobbying activities.

(2) A fee of fifteen dollars shall be collected for an application by a lobbyist for each principal if the lobbyist is not receiving and will not be receiving compensation for such lobbying. Any lobbyist who receives compensation who did not anticipate receiving such compensation at the time of application for registration shall, within five days of the receipt of any compensation, file an amended registration form which shall be accompanied by an additional fee of one hundred eighty-five dollars for such year.

(3) The registration of a lobbyist for each of his or her principals may be renewed by the payment of a fee as provided by subsections (1) and (2) of this section. Such fee shall be paid to the Clerk of the Legislature on or before December 31 of each calendar year. The registration of a lobbyist for each of his or her principals shall terminate as of the end of the calendar year for which the lobbyist registered unless the registration is renewed as provided in this section.

49-1481. List of registered lobbyists and principals; print in Legislative Journal; additional information; when. (1) On the fourth legislative day of each legislative session, the Clerk of the Legislature shall insert the following in the Legislative Journal:

(a) A list of the names of all lobbyists whose registration is then in effect;

(b) The name of the principal in whose behalf the lobbyist is registered; and

(c) Any additional information as directed by the Legislature.

(2) On the last legislative day of each week after the fourth legislative day, the clerk shall cause to be inserted in the Legislative Journal the names of any additional lobbyists and principals who have registered or who have changed their registration.

49-1482. Lobbyists and principals; registration fees; disbursement. The Clerk of the Legislature shall charge a fee pursuant to section 49-1480.01 for each application for registration by a lobbyist for each principal. Such fees when collected shall be remitted to the State Treasurer. Three-fourths of such fees shall be credited to the Nebraska Accountability and Disclosure Commission Cash Fund and one-fourth to the Clerk of the Legislature Cash Fund.

49-1483. Lobbyist and principal; file separate statements; when; contents. (1) Every lobbyist who is registered or required to be registered shall, for each of his or her principals, file electronically a separate statement for each calendar quarter with the Clerk of the Legislature within thirty days after the end of each calendar quarter. Every principal employing a lobbyist who is registered or required to be registered shall file electronically a separate statement for each calendar quarter with the Clerk of the Legislature within thirty days after the end of each calendar quarter.

(2) Each statement shall show the following:

(a) The total amount received or expended directly or indirectly for the purpose of carrying on lobbying activities, with the following categories of expenses each being separately itemized: (i) Miscellaneous expenses; (ii) entertainment, including expenses for food and drink as provided in subdivision (3)(a) of this section; (iii) lodging expenses; (iv) travel expenses; (v) lobbyist compensation, except that when a principal retains the services of a person who has only part-time lobbying duties, only the compensation paid

which is reasonably attributable to influencing legislative action need be reported; (vi) lobbyist expense reimbursement; (vii) admissions to a state-owned facility or a state-sponsored industry or event as provided in subdivision (3)(a) of this section; and (viii) extraordinary office expenses directly related to the practice of lobbying;

(b) A detailed statement of any money which is loaned, promised, or paid by a lobbyist, a principal, or anyone acting on behalf of either to an official in the executive or legislative branch or member of such official's staff. The detailed statement shall identify the recipient and the amount and the terms of the loan, promise, or payment; and

(c) The total amount expended for gifts, other than admissions to a state-owned facility or a state-sponsored industry or event, as provided in subdivision (3)(a) of this section.

(3)(a) Each statement shall disclose the aggregate expenses for entertainment, admissions, and gifts for each of the following categories of elected officials: Members of the Legislature; and officials in the executive branch of the state. Such disclosures shall be in addition to the entertainment expenses reported under subdivision (2)(a)(ii) of this section, admissions reported under subdivision (2)(a)(vii) of this section, and gifts reported under subdivision (2)(c) of this section.

(b) For purposes of reporting aggregate expenses for entertainment for members of the Legislature and officials in the executive branch of the state as required by subdivision (3)(a) of this section, the reported amount shall include the actual amounts attributable to entertaining members of the Legislature and officials in the executive branch of the state. When the nature of an event at which members of the Legislature are entertained makes it impractical to determine the actual cost, the cost of entertainment shall be the average cost per person multiplied by the number of members of the Legislature in attendance. When the nature of an event at which officials in the executive branch of the state are entertained makes it impractical to determine the actual cost, the cost of entertainment shall be the average cost per person multiplied by the number of officials in the executive branch of the state in attendance. For purposes of this subdivision, the average cost per person means the cost of the event divided by the number of persons expected to attend the event.

(4) The lobbyist shall also file any changes or corrections to the information set forth in the registration required pursuant to section 49-1480 so as to reflect the correctness of such information as of the end of each calendar quarter for which such statement is required by this section.

(5) If a lobbyist does not expect to receive lobbying receipts from or does not expect to make lobbying expenditures for a principal, the quarterly statements required by this section as to such principal need not be filed by the lobbyist if the principal and lobbyist both certify such facts electronically to the Clerk of the Legislature. A lobbyist exempt from filing quarterly statements pursuant to this section shall (a) file a statement of activity pursuant to section 49-1488 and (b) resume or commence filing quarterly statements with regard to such principal starting with the quarterly period the lobbyist receives lobbying receipts or makes lobbying expenditures for such principal.

(6) If a principal does not expect to receive lobbying receipts or does not expect to make lobbying expenditures, the quarterly statements required pursuant to this section need not be filed by the principal if the principal and lobbyist both certify such facts electronically to the Clerk of the Legislature. A principal exempt from filing quarterly

statements pursuant to this section shall commence or resume filing quarterly statements starting with the quarterly period the principal receives lobbying receipts or makes lobbying expenditures.

(7) A principal shall report electronically the name and address of every person from whom it has received more than one hundred dollars in any one month for lobbying purposes.

(8) For purposes of sections 49-1480 to 49-1492.01, calendar quarter means the first day of January through the thirty-first day of March, the first day of April through the thirtieth day of June, the first day of July through the thirtieth day of September, and the first day of October through the thirty-first day of December.

49-1483.01. Repealed. Laws 2005, LB 242, § 70.

49-1483.02. Statement; exemption from filing. By rule and regulation, the commission may provide for other criteria for an exemption from the filing of the quarterly statement by lobbyists and principals, pursuant to section 49-1483, if the commission finds all of the following: (1) That strict adherence to the Nebraska Political Accountability and Disclosure Act would result in duplicative reporting; (2) that the exemption would not result in information on lobbyists' or principals' receipts or expenditures being withheld from the public; and (3) that the exemption will not frustrate the purposes of the act.

49-1483.03. Lobbyist or principal; special report required; when; late filing fee. (1) Any lobbyist or principal who receives or expends more than five thousand dollars for lobbying purposes during any calendar month in which the Legislature is in session shall, within fifteen days after the end of such calendar month, file electronically a special report disclosing for that calendar month all information required by section 49-1483. All information disclosed in a special report shall also be disclosed in the next quarterly report required to be filed. The requirement to file a special report shall not apply to a receipt or expenditure for lobbyist fees for lobbying services which have otherwise been disclosed in the lobbyist's application for registration.

(2) Any lobbyist who fails to file a special report required by this section with the Clerk of the Legislature or the commission shall pay to the commission a late filing fee of one hundred dollars for each of the first ten days the report remains not filed in violation of this section. After the tenth day, such lobbyist shall pay, for each day the report remains not filed, an additional late filing fee of one percent of the amount of the receipts and expenditures which were required to be reported, not to exceed ten percent of the amount of the receipts and expenditures which were required to be reported.

49-1483.04. Repealed. Laws 1999, LB 7, § 1.

49-1484. Clerk of the Legislature; refer statements to commission; additional details. The Clerk of the Legislature shall promptly refer all such statements to the commission which may require the lobbyist or the principal to furnish additional details

with respect to the matters which are or should be included in such statements. The Legislature itself may at any time require the furnishing of such additional details.

49-1485. Clerk of the Legislature; furnish summary of lobbyist and principal statements to Legislature and press; public records. The Clerk of the Legislature shall prepare a summary of the statements filed pursuant to section 49-1483 and, upon request, furnish any member of the Legislature and any member of the press registered with the Legislature a copy of any summary. Each statement shall be public information. The clerk shall furnish a copy of any statement, upon request, to any member of the Legislature and to any member of the press registered with the Legislature.

49-1486. Registration of lobbyists; period valid. The registration of a lobbyist shall be valid for a period commencing with the filing of any registration as required by section 49-1480 and ending at the end of the calendar year for which the lobbyist registered unless the registration is renewed as provided by section 49-1480.01or the registration is terminated prior to the end of the calendar year in the manner prescribed by rules and regulations adopted and promulgated by the commission.

49-1487. Repealed. Laws 1979, LB 162, § 8.

49-1488. Registered lobbyist; statement of activity during regular or special session; when filed. Within forty-five days after the completion of every regular or special session of the Legislature, each registered lobbyist shall submit electronically to the Clerk of the Legislature a statement listing the legislation upon which the lobbyist acted, including identification by number of any bill or resolution and the position taken by the lobbyist.

49-1488.01. Statements; late filing fee; reduction or waiver; when. (1) Every lobbyist who fails to file a quarterly statement or a statement of activity with the Clerk of the Legislature, pursuant to sections 49-1483 and 49-1488 shall pay to the commission a late filing fee of twenty-five dollars for each day any of such statements are not filed in violation of such sections, but not to exceed seven hundred fifty dollars per statement.

(2) A lobbyist required to pay a late filing fee pursuant to subsection (1) of this section may apply to the commission for relief. The commission by order may reduce the amount of the late filing fee imposed upon such lobbyist if he or she shows the commission that (a) the circumstances indicate no intent to file late, (b) the lobbyist has not been required to pay a late filing fee for two years prior to the time the filing of the statement was due, (c) the late filing of the statement shows that less than five thousand dollars was raised, received, or expended during the reporting period, and (d) a reduction of the late fee would not frustrate the purposes of the Nebraska Political Accountability and Disclosure Act.

(3) A lobbyist required to pay a late filing fee pursuant to subsection (1) of this section who qualifies for an exemption to the filing of quarterly statements pursuant to subsection (5) of section 49-1483 may apply to the commission for relief. The commission by order may reduce or waive the late filing fee and the person shall not be required to make a showing as provided by subsection (2) of this section.

49-1489. Lobbyist; records and documents; preservation required; available to commission; exception. Each lobbyist shall obtain and preserve all accounts, bills, receipts, books, papers, and documents necessary to substantiate the statements required to be made pursuant to section 49-1483 for three years after the report containing those items is filed. These records shall be made available for inspection upon request by the commission after reasonable notice. Nothing in this section shall require that a receipt for any food and drink expenditure be kept if such expenditure is in an amount of less than twenty-five dollars.

49-1490. Principal or lobbyist; prohibited acts relating to gifts; penalty. (1) No principal, lobbyist, or person acting on behalf of either shall within one calendar month give any gifts with an aggregate value of more than fifty dollars to the following:

(a) An official or a member of the official's staff in the executive branch of state government;

(b) An official or a member of the official's staff in the legislative branch of state government; or

(c) A member of the immediate family of an official in the executive or legislative branch of state government.

(2) No official or member of the official's staff in the executive or legislative branch of state government or member of the official's immediate family shall within one calendar month accept from a principal, lobbyist, or person acting on behalf of either any gifts with an aggregate value of more than fifty dollars.

(3) An admission to a state-owned facility or a state-sponsored industry or event may be given by any sponsoring agency, political subdivision, or publicly funded postsecondary educational institution and accepted regardless of value.

(4) Any person who knowingly and intentionally violates this section shall be guilty of a Class III misdemeanor.

49-1491. Principal, lobbyist, or person acting on behalf of either; false or misleading statements to public officials; prohibited. A principal, lobbyist, or anyone acting on behalf of either, shall not knowingly or willfully make any false or misleading statement or misrepresentation of fact to any public official in the executive or legislative branch of state government.

49-1492. Lobbying; prohibited practices; violation; penalty. (1) No person shall be employed as a lobbyist for compensation contingent in any manner upon the outcome of an administrative or legislative action.

(2) No person shall instigate the introduction of legislation for the purpose of obtaining employment in opposition thereto.

(3) No person shall attempt to influence the vote of the legislators on any matters pending or to be proposed by the promise of financial support or the financing of opposition to his candidacy at any future election.

(4) No person shall engage in practices which reflect discredit on the practice of lobbying or on the Legislature.

(5) Any person violating the provisions of this section shall be guilty of a Class III misdemeanor.

49-1492.01. Agency, political subdivision, or publicly funded postsecondary educational institution; gifts; reporting requirements; violations; penalty. (1) Any agency, political subdivision, or publicly funded postsecondary educational institution which gives a gift of an admission to a state-owned facility or a state-sponsored industry or event to a public official, a member of a public official's staff, or a member of the immediate family of a public official shall report the gift on a form prescribed by the commission.

(2) The report shall be filed electronically with the Clerk of the Legislature within fifteen days after the end of the calendar quarter in which the gift is given. The report shall include the following:

(a) The identity of the agency, political subdivision, or publicly funded postsecondary educational institution;

(b) A description of the gift;

(c) The value of the gift; and

(d) The name of the recipient of the gift and the following:

(i) If the recipient is an official in the executive or legislative branch of state government, the office held by the official and the branch he or she serves;

(ii) If the recipient is a member of an official's staff in the executive or legislative branch of state government, his or her job title and the name of the official; or

(iii) If the recipient is a member of the immediate family of an official in the executive or legislative branch of state government, his or her relationship to the official and the name of the official.

(3) For purposes of this section, public official does not include an elected or appointed official of a political subdivision or school board.

(4) Any person who knowingly and intentionally violates this section shall be guilty of a Class III misdemeanor.

49-1493. Individuals required to file a statement of financial interests. The individuals listed in subdivisions (1) through (13) of this section shall file with the commission a statement of financial interests as provided in sections 49-1496 and 49-1497 for the preceding calendar year on or before April 1 of each year in which such individual holds such a position. An individual who leaves office shall, within thirty days after leaving office, file a statement covering the period since the previous statement was filed. Disclosure of the interest named in sections 49-1496 to 49-1498 shall be made by:

(1) An individual holding a state executive office as provided in Article IV of the Constitution of Nebraska, including the Governor, Lieutenant Governor, Secretary of State, Auditor of Public Accounts, State Treasurer, Attorney General, Tax Commissioner, and heads of such other executive departments as set forth in the Constitution or as may be established by law;

(2) An individual holding the office of Commissioner of Education, member of the State Board of Education, member of the Board of Regents of the University of

Nebraska with the exception of student members, or member of the Coordinating Commission for Postsecondary Education;

(3) A member of the Board of Parole;

(4) A member of the Public Service Commission;

(5) A member of the Legislature;

(6) A member of the board of directors or an officer of a district organized under the provisions of Chapter 70;

(7) A member of any board or commission of the state or any county which examines or licenses a business or which determines rates for or otherwise regulates a business;

(8) A member of a land-use planning commission, zoning commission, or authority of the state or any county with a population of more than one hundred thousand inhabitants;

(9) An elected official of a city of the primary or metropolitan class;

(10) An elected county official;

(11) A member of the Nebraska Environmental Trust Board;

(12) An individual employed at the University of Nebraska-Lincoln in the position of Head Football Coach, Men's Basketball Coach, or Women's Basketball Coach; and

(13) An official or employee of the state designated by rules and regulations of the commission who is responsible for taking or recommending official action of a nonministerial nature with regard to:

(a) Contracting or procurement;

(b) Administering or monitoring grants or subsidies;

(c) Land-use planning or zoning;

(d) Inspecting, licensing, regulating, or auditing any person; or

(e) Any similar action.

49-1494. Candidates for elective office; statement of financial interest; filing; time; where; effect; supplementary statements. (1) An individual who files to appear on the ballot for election to an elective office specified in section 49-1493 shall:

(a) File a statement of financial interests for the preceding calendar year at the same time and with the same official with whom the individual files for office; and

(b) File a copy of the statement with the commission within five days after filing for office.

(2) Candidates for the elective offices specified in section 49-1493 who qualify other than by filing shall file a statement for the preceding calendar year with the commission within fifteen days after becoming a candidate or being appointed to that elective office.

(3) A filing to appear on the ballot shall not be accepted by a filing official unless a statement is properly filed.

(4) A statement of financial interests shall be preserved for a period of not less than five years by the commission and not less than eighteen months by the officials other than the commission with whom it is filed.

(5) This section does not apply to a person who has already filed a statement for the preceding calendar year.

(6) If the candidate for an elective office specified in section 49-1493 files to appear on the ballot for election prior to January 1 of the year in which the election is held, the

TITLE 4 - NEBRASKA ACCOUNTABILITY AND DISCLOSURE COMMISSION

CHAPTER 2 - DESIGNATION OF INDIVIDUALS REQUIRED TO FILE STATEMENTS OF FINANCIAL INTERESTS (Adopted October 29, 1999; Amended October 12, 2007)

STATUTORY AUTHORITY

This rule is adopted pursuant to the provisions of sections 49-14,123(1) and 49-1493(13), Revised Statutes of Nebraska.

001 **SCOPE AND APPLICATION:** This rule designates the public officials and employees required to file Statements of Financial Interests with the Commission pursuant to subdivision (13) of section 49-1493 and includes, but is not limited to, public officials and employees required to file such statements by reason of statutory designation pursuant to the provisions of subdivisions (1) to (12) of said section. See sections 49-1493 to 49-1495, Revised Statutes of Nebraska, for additional requirements as to with whom such Statements of Financial Interests must be filed and when such filings are required. See sections 49-1496 to 49-1497 and NADC Form C-1 for the form and contents of such Statements of Financial Interests.

002 **DESIGNATION:** Under the following subdivisions (1) to (13) of section 49-1493, Statements of Financial Interests shall be filed by individuals holding the office of, filing for election to, or appointed to the following:

002.01 State Executive Officers and executive department heads, including: Governor, Lieutenant Governor, Secretary of State, Auditor of Public Accounts, State Treasurer, Attorney General, Tax Commissioner, Director of Agriculture, Commissioner of Labor, Members of the State Board of Health, Director-State Engineer for the Department of Roads, Director of Department of Natural Resources, Director of Banking and Finance, Director of Insurance, Director of Motor Vehicles, Director of Administrative Services, Director of Correctional Services, Director of Economic Development, Superintendent of the Nebraska State Patrol, Chief Executive Officer of Health and Human Services.

002.02 Commissioner of Education, State Board of Education: Members, Board of Regents of the University of Nebraska except student members, Coordinating Commission for Postsecondary Education: Members.

002.03 Board of Parole: Members.

002.04 Public Service Commission: Commissioners.

002.05 Members of the Legislature

002.06 Members of the board of directors and officers of districts organized under Chapter 70, including: Public Power Districts, Public Irrigation Districts, Public Power and Irrigation Districts, Rural Power Districts.

002.07 A member of any board or commission of the state or any county which examines or licenses a business or which determines rates for or otherwise regulates a business, including: Nebraska Brand Committee, Motor Vehicle Licensing board, Oil and Gas Conservation Commission, Nebraska State Racing Commission.

002.08 A member of a land-use planning commission, zoning commission, or authority of the

state or any county with a population of more than one hundred thousand inhabitants, including: county planning commissions and city-county (joint) planning commissions with a population of more than one hundred thousand inhabitants, Natural Resources Commission, Environmental Quality Council, county boards of adjustment in counties with a population of more than one hundred thousand inhabitants.

002.09 Elected county officials, including: commissioners, supervisors, attorney, sheriff, register of deeds, clerk, clerk of the district court, superintendent of schools, engineer, assessor, public defender, treasurer, surveyor, and members of weed control authority boards.

002.10 A member of the Environmental Trust Board.

002.11 An individual employed at the University of Nebraska-Lincoln in the position of Head Football Coach, Men s Basketball Coach, or Women s Basketball Coach.

002.12 Elected officials of a city of the primary or metropolitan class.

002.13 The officials or employees of the state hereafter designated (includes state officials listed in 002.01 through 002.12 above):

1. Accountability and Disclosure Commission: Commission members, executive director, deputy director, general counsel, auditors.

2. Administrative Services: director, deputy director, controller, NIS administrator, division administrators and directors, personnel administrator. Materiel Division: print shop manager, central mail/supply services manager, state recycling coordinator, procurement manager, buyers, state surplus property manager. Personnel Division: personnel administrator classification and compensation, personnel administrator recruitment, affirmative action administrator, personnel administrator organizational development. chief negotiator division of employee relations, personnel administrator employee benefits, personnel administrator NIS Capitol Administrator, Risk Manager/Risk Management Division, Task Force for Building Renewal Architects and Consultants. chief information officer, CIO IT administrators, Building Division: Architects & Engineers.

3. Aeronautics: director, deputy director, division manager operations, division manager project management, division manager planning and programming, division manager navigational aids.

4. Agriculture: director, assistant director, state veterinarian, deputy state veterinarian, administrative manager, division heads, legal counsel, budget and fiscal officer, agricultural trade representative.

5. Nebraska Arts Council: members, executive director, associate directors.

6. Athletic Commission: commissioner.

7. Attorney General: attorney general, deputy attorneys general.

8. Auditor of Public Accounts: auditor of public accounts, deputy auditor, assistant deputy auditors, audit managers, Finance Manager, Legal Counsel.

9. Banking and Finance: director, deputy director, assistant director-securities, general counsel, Information Technology Manager, business manager.

10. Board of Barber Examiners: director.

11. Nebraska Brand Committee: committee members, executive director/chief inspector.

12. Collection Agency Licensing Board: members

13. Colleges--Board of Trustees: members of the board of trustees, chancellor, vice chancellor for finance and administration, general counsel and vice chancellor for employee relations, state college presidents, vice-presidents for administration and finance, vice-presidents for academic affairs, vice chancellor for academic and student affairs, purchasing agents, directors of administrative services, business manager Peru State College, business office manager Chadron State College, business services director Wayne State College.

14. Corn Development, Utilization, and Marketing Board: administrator, board members.

15. Correctional Services: director, deputy directors, wardens, deputy and associate wardens of Nebraska State Penitentiary, Nebraska Center for Women and Lincoln Correctional Center, Omaha Correctional Center, warden and corrections assistant superintendent of the Community Corrections Center Lincoln, facility engineering manager, agency legal counsel, corrections materiel administrator, agency controller, corrections accreditation and planning manager, agency medical director, administrator adult parole, superintendent Cornhusker State Industries, manager federal surplus property, warden and corrections assistant superintendent of the Community Correction Center-Omaha, warden of Nebraska Correctional Youth Facility, corrections superintendent/adult of the Work Ethic Camp, health program manager, agency grants administrator, hospital administrator, accounting and finance manger.

16. Commission on Law Enforcement and Criminal Justice: commission members, executive director, federal aid administrator, division and center directors, division chiefs, members, Jail Standards Board.

17. Dry Bean Commission: commission members, executive director.

18. Economic Development: director, deputy director.

19. Education: commissioner of education, members of the State Board of Education, deputy commissioner, members of the department's leadership council appointed by the commissioner, agency legal counsel.

20. Educational Lands and Funds: board members, executive secretary, General Counsel/Minerals Director, members of the Board of Appraisers.

21. Educational Television Commission: commission members, secretary/general manager.

22. Electrical Board: members, executive director.

23. Engineers and Architects--Board of: executive director.

24. Nebraska Department of Environmental Quality: Environmental Quality Council members, director, deputy director, assistant director, associate program director, division administrators, section supervisors, budget officer III, agency legal counsel, federal aid administrator II, low level radioactive waste program manager, integrated waste financial assurance coordinator, environmental engineer section supervisor, IT manager I, personnel manager II.

25. Nebraska Environmental Trust Board: members, executive director.

26. Equal Opportunity Commission: commission members, executive director.

27. Fire Marshal: state fire marshal, chief deputy state fire marshals, assistant state fire marshal, UST manager, business manager, legal counsel, plans examiner.

28. Game and Parks Commission: commission members, director, assistant directors, division chiefs, manager facilities engineering, administrative assistant III-budget and fiscal division, federal aid administrator III.

29. Governor's Office: Governor, chief of staff.

30. Grain Sorghum Development Utilization, and Marketing Board: board members, executive director.

31. Health and Human Services: Chief Executive Officer, Director Division of Behavioral Health, Director Division of Children & Family Services, Director Division of Developmental Disabilities, Director Division of Medicaid & Long Term Care, Director Division of Public Health, Director Division of Veterans Homes, Chief Medical Officer, Deputy Chief Medical Officer, Community Health Chief Administrator, State Board of Health Members, Rural Health Advisory Members, Licensure Administrator, Environmental Health Administrator, Chief Operating Officer, Administrator Communications & Legislative Services, Administrator Financial Services, Administrator Human Resources, Administrator Information Systems & Technology, Administrator Legal Services, Administrator Support Services, Service Area Administrators, Administrator of Each Veterans Homes, Administrator Economic & Family Support, Administrator Food Programs, Administrator Protection & Safety, Administrator of Each Regional Center, Administrator Community Based Behavioral Health Services, Administrator of Each Youth Rehabilitation &

Treatment Centers, Administrator office of Juvenile Services, Administrator Beatrice State Developmental Center, Administrator Unit of Aging, Administrator Long Term Care Programs, Administrator Acute Care Programs.

32. Commission on the Hearing Impaired: commission members, executive director.

33. Nebraska Historical Society: director, associate directors.

34. Commission on Indian Affairs: executive director.

35. Insurance Department: director, deputy director, chief financial examiner, chief of market regulation, general counsel.

36. Investment Council: council members, state investment officer, deputy investment officer.

37. Labor Department: commissioner of labor, deputy commissioner, division directors.

38. Board of Examiners for Land Surveyors: secretary to the board.

39. Library Commission: commission members, director, deputy directors.

40. Lieutenant Governor's office: Lieutenant Governor.

41. Liquor Control Commission: commission members, executive director.

42. Commission on Mexican-Americans: executive director.

43. Military Department--Office of the Adjutant General: adjutant general/NE Emergency Management director, deputy adjutant general, assistant director/NE Emergency Management, controller.

44. Motor Vehicles: director, deputy director, account & finance manager, motor carrier services administrator, highway safety administrator, driver & vehicle records administrator, legal counsel, driver licensing examining administrator, information systems manager, and auditor III.

45. Motor Vehicle Licensing board: board members, executive director.

46. Department of Natural Resources: director, deputy director, water resources division manager, legal counsel Natural Resources Commission members, administrative officer.

47. Nebraska Dairy Industry Development Board: members.

48. Oil and Gas Conservation Commission: commission members, director, staff petroleum engineer, oil and gas inspectors, administrative assistant, information systems infrastructure support technician.

49. State Ombudsman: public counsel, deputy public counsel, deputy public counsel for corrections, deputy public counsel for welfare services.

50. Parole Board: board members. (See also Correctional Services)

51. Nebraska State Patrol: superintendent, assistant superintendent, administrative services major, material control manager, carrier enforcement commander, liquor enforcement commander, staff captains, staff lieutenants, attorney III, attorneys II, budget and fiscal officer III, federal aid administrator III, hazardous devices coordinator, investigative services major, agency legal counsel I.

52. Policy Research and Energy Office: director, deputy directors.

53. Coordinating Commission for Postsecondary Education: commission members, director.

54. Power Review Board: board members, executive director/general counsel.

55. State Probation: state probation administrator.

56. State Property Tax Division: property tax administrator.

57. Board of Public Accountancy: executive director.

58. Public Advocacy Commission: chief counsel.

59. Public Service Commission: commissioners, executive director.

60. Nebraska State Racing Commission: commission members, executive secretary, state steward, racing commission investigators, director of investigations and security.

61. Real Property Commission: director, chief deputy director.

62. Real Estate Appraisers Board: executive director.

63. Public Employees Retirement Systems: board members, director.

64. Revenue Department: tax commissioner, operations and administrative services division director, lottery and charitable gaming division director, property tax administrator, compliance division director, deputy tax commissioner.

65. Roads Department: director-state engineer, members of the State Highway Commission, members of the Highway Bond Commission, deputy directors, district engineers, division heads.

66. Secretary of State: secretary of state, chief deputy secretary of state, deputy secretary of state for elections, deputy secretary of state for business services, deputy secretary of state for records management, controller, executive director of the state records board.

67. State Surveyor: state surveyor, deputy state surveyor.

68. Tax Equalization and Review Commission: members.

69. State Treasurer: state treasurer, deputy state treasurer.

70. University of Nebraska: members of the Board of Regents (except student members), president, executive vice-president and provost, vice president and general counsel, vice president for business and finance, director of risk management, assistant vice president for business and finance and director of internal audit, corporation secretary. University of Nebraska-Lincoln: chancellor, vice chancellor for business and finance, senior vice chancellor for Academic Affairs, vice chancellor for research, vice president and vice chancellor for Agriculture and Natural Resources, director of intercollegiate athletics, assistant vice chancellor for research and director of technology transfer, assistant vice chancellor for fiscal affairs, material services administrator-purchasing department, associate vice chancellor for university services, vice chancellor for student affairs, director of facilities management and planning, director of the food processing center. University of Nebraska Medical Center: chancellor, vice chancellor for business and finance, associate vice chancellor for business and finance, vice chancellor for academic affairs, manager of purchasing, vice chancellor for research. University of Nebraska at Omaha: chancellor, vice chancellor for business and finance, assistant vice chancellor for business and finance and director of finance, director of intercollegiate athletics, manager of purchasing, senior vice chancellor for academic and student affairs, director of facilities management and planning. University of Nebraska-Kearney: chancellor, senior vice chancellor for academic affairs, vice chancellor for business and finance, director of business services, director of intercollegiate athletics, assistant vice chancellor for business and finance and director of human resources.

71. Veterans Affairs: director, deputy director.

72. Nebraska Wheat Development, Utilization, and Marketing Board: executive director, board members.

Title 115 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 7 - CONTESTED CASES

001 Commencement of a contested case.

001.01 The contested case begins with the filing of a complaint or petition and request for a hearing, if applicable.

001.02 The parties to a contested case shall be the petitioner or person by whom a contested case is brought and the respondent or person against whom a contested case is brought.

001.03 A party may appear on his or her own behalf in a contested case proceeding or may be represented by an attorney or other representative as permitted by law.

001.04 The pleadings in a contested case may include a petition, complaint, answer, reply, notice, motion, stipulation, objection or order or other formal written document filed in a proceeding before an agency. Any pleading filed in a contested case shall meet the following requirements:

001.04A The pleading shall contain a heading specifying the name of the agency and the title or nature of the pleading, state material factual allegations, and state concisely the action the agency is being requested to take, contain the name and address of the petitioner, and shall be signed by the party filing the pleading, or when represented by an attorney, the signature of the attorney. Attorneys shall include their address, telephone number and bar number. The initial petition shall also contain the name and address of the respondent.

001.04B All pleadings shall be made on white, letter-sized (8 ½ x 11 inch) paper and shall be legibly typewritten, photostatically reproduced, printed or handwritten. If handwritten, a pleading must be written in ink.

001.05 All pleadings shall be filed with the agency at its Lincoln office. Filing may be accomplished by personal delivery or mail and will be received during regular office hours of the agency. The date of filing of an initial

petition shall be the date first received during the regular business hours of the agency.

001.06 The agency shall serve a copy of any complaint on each respondent listed in the complaint personally or by certified mail. Written proof of such service shall be filed with the agency. Each respondent who chooses to file a responsive pleading must do so within 20 days from the date of service.

001.07 All pleadings subsequent to the initial complaint or petition shall be served by the party filing such pleading upon all attorneys of record or other representatives of record and upon all unrepresented parties. Service shall be made personally or by first-class or certified mail. Written proof of such service shall be filed with the agency.

001.08 Unless state law provides that a hearing is not required, a hearing date shall be set by the agency in accordance with statutory requirements. A written notice of the time and place of hearing and the name of the hearing officer, if known, shall be served by the agency upon all attorneys of record or other representatives of record and upon all unrepresented parties. The notice must include proof of such service and will be filed with the agency.

001.09 In computing time prescribed or allowed by this chapter or by any applicable statute in which the method of computing time is not specifically provided, days will be computed by excluding the day of the act or event and including the last day of the period. If the last day of the period falls on a Saturday, Sunday, or state holiday, the period shall include the next working day.

002 Hearing officer; criteria.

002.01 The agency director may conduct a contested case hearing or designate a hearing officer to conduct the hearing on his or her behalf and submit a recommended decision to the director.

002.02 A person who has served as investigator, prosecutor, or advocate in a contested case or in its prehearing stage may not serve as hearing officer or assist or advise a hearing officer in the same proceeding except as provided in subsection 002.04.

002.03 A person who is subject to the authority, direction, or discretion of one who has served as investigator, prosecutor, or advocate in a contested case or in its prehearing stage may not serve as hearing officer or advise a hearing officer in the same proceeding except as provided in subsection 002.04.

002.04 If all parties consent, a person who has served as, or who is subject to the authority, direction, or discretion of one who has served as investigator, prosecutor, or advocate in a contested case or in its prehearing stage may assist a hearing officer in the preparation of orders.

002.05 A person my serve as hearing officer at successive stages of the same contested case.

003 Prehearing Procedures.

003.01 A hearing officer may determine whether a prehearing conference will be conducted. If a prehearing conference is not held, a hearing officer for the hearing may issue a prehearing order, based on the pleadings, to regulate the conduct of the proceedings.

003.01A If a prehearing conference is conducted:

003.01A1 The hearing officer shall promptly notify the agency of the determination that a prehearing conference will be conducted. The agency may assign another hearing officer for the prehearing conference; and

003.01A2 The hearing officer for the prehearing conference shall set the time and place of the conference and give reasonable written notice to all parties and to all persons who have filed written petitions to intervene in the matter. The agency shall give notice to other persons entitled to notice.

003.01A3 The notice shall include the following:

003.01A3(a) The names and mailing addresses of all parties and other persons to whom notice is being given by the hearing officer;

003.01A3(b) The name, official title, mailing address, and telephone number of any counsel or employee who has been designated to appear for the agency;

003.01A3(c) The official file or other reference number, the name of the proceeding, and a general description of the subject matter;

003.01A3(d) A statement of the time, place, and nature of the prehearing conference;

003.01A3(e) A statement of the legal authority and jurisdiction under which the prehearing conference and the hearing are to be held;

003.01A3(f) The name, official title, mailing address, and telephone number of the hearing officer for the prehearing conference;

003.01A3(g) A statement that a party who fails to attend or participate in a prehearing conference, hearing, or other stage of a contested case or who fails to make a good faith effort to comply with a prehearing order may be held in default under the Administrative Procedure Act; and

003.01A3(h) Any other matters that the hearing officer considers desirable to expedite the proceedings.

003.01B The hearing officer shall conduct a prehearing conference, as may be appropriate, to deal with such matters as exploration of settlement possibilities, preparation of stipulations, clarification of issues, rulings on identity and limitation of the number of witnesses, objections to proffers of evidence, determination of the extent to which direct evidence, rebuttal evidence, or cross-examination will be presented in written form and the extent to which telephone, television, or other electronic means will be used as a substitute for proceedings in person, order of presentation of evidence and cross-examination, rulings regarding issuance of subpoenas, discovery orders, and protective orders, and such other matters as will promote the orderly

and prompt conduct of the hearing. The hearing officer shall issue a prehearing order incorporating the matters determined at the prehearing conference.

003.01C The hearing officer may conduct all or part of the prehearing conference by telephone, television, or other electronic means if each participant in the conference has an opportunity to participate in, to hear, and, if technically feasible, to see the entire proceeding while it is taking place.

003.02 Discovery in contested cases.

003.02A The hearing officer or a designee, at the request of any party or upon the hearing officer's own motion, may issue subpoenas, discovery orders, and protective orders in accordance with the rules of civil procedure except as may otherwise be prescribed by law. Subpoenas and orders issued under this subsection may be enforced by the district court.

003.02B Any prehearing motion to compel discovery, motion to quash, motion for protective order or other discovery-related motion shall:

003.02B1 Quote the interrogatory, request, question, or subpoena at issue, or be accompanied by a copy of the interrogatory, request, subpoena or excerpt of a deposition;

003.02B2 State the reasons supporting the motion;

003.02B3 Be accompanied by a statement setting forth the steps of efforts made by the moving party or his or her counsel to resolve by agreement the issues raised and that agreement has not been achieved; and

003.02B4 Be filed with the agency. The moving party must serve copies of all such motions to all parties to the contested case.

003.02C Other than is provided in the previous subsection, discovery materials need not be filed with the agency.

003.03 Continuances. The hearing officer may, in his or her discretion, grant extensions of time or continuances of hearings upon the hearing officer's own motion or at the timely request of any party for good cause shown. A party must file a written motion for continuance which states in detail the reasons why a continuance is necessary and serve a copy of the motion on all other parties.

003.03A Good cause. Good cause for an extension of time or continuance may include, but is not limited to, the following:

003.03A1 Illness of the party, legal counsel or witness;

003.03A2 A change in legal representation; or

003.03A3 Settlement negotiations are underway.

003.04 Amendments.

003.04A A petition may be amended at any time before an answer is filed or is due if notice is given to the respondent or his or her attorney. In all other cases, a petitioner must request permission to amend from the hearing officer.

003.04B A hearing officer may, in his or her discretion, also allow the filing of supplemental pleadings alleging facts material to the case occurring after the original pleadings were filed. A hearing officer may also permit amendment of pleadings where a mistake appears or where amendment does not materially change a claim or defense.

003.05 Informal disposition. Unless otherwise precluded by law, informal disposition may be made of any contested case by stipulation, agreed settlement, consent order, or default.

004 Conducting a contested case hearing.

004.01 Order. At the discretion of the hearing officer, the hearing may be conducted in the following order:

004.01A The hearing is called to order by the hearing officer. Any preliminary motions, stipulations or agreed orders are entertained.

004.01B Each party may be permitted to make an opening statement. Opening statements take place in the same order as the presentation of evidence.

004.01C Presentation of evidence.

004.01C1 Evidence will be received in the following order:

004.01C1(a) Evidence is presented by the petitioner;

004.01C1(b) Evidence is presented by the respondent;

004.01C1(c) Rebuttal evidence is presented by the petitioner; and

004.01C1(d) Surrebuttal evidence is presented by the respondent.

004.01C2 With regard to each witness who testifies, the following examination may be conducted:

004.01C2(a) Direct examination conducted by the party who calls the witness;

004.01C2(b) Cross-examination by the opposing party;

004.01C2(c) Redirect examination by the party who called the witness; and

004.01C2(d) Recross-examination by the opposing party.

004.01D After the evidence is presented, each party may have opportunity to make a closing argument. Closing arguments shall be made in the same order as the presentation of evidence. The hearing officer may request that the parties submit brief in lieu of closing arguments.

004.02 Evidence.

004.02A In contested cases an agency or hearing officer may admit and give probative effect to evidence which possesses probative value commonly accepted by reasonably prudent persons in the conduct of their affairs and may exclude incompetent, irrelevant, immaterial and unduly repetitious evidence.

004.02B Any party to a formal hearing before an agency, from which a decision may be appealed to the courts of this state, may request that the agency be bound by the rules of evidence applicable in district court by delivering to the agency at least three days prior to the holding of the hearing a written request therefore. Such request shall include the requesting party's agreement to be liable for the payment of costs incurred thereby and upon any appeal or review thereof, including the cost of court reporting services which the requesting party shall procure for the hearing.

004.02C Documentary evidence may be received in the form of copies of excerpts or incorporated by reference.

004.02D All evidence including records and documents in the possession of the agency of which it desires to avail itself shall be offered and made a part of the record in the case. No factual information or evidence other than the record shall be considered in the determination of the case.

004.02E A hearing officer or designee may administer oaths and issue subpoenas in accordance with the rules of civil procedure except as may otherwise be prescribed by law. Subpoenas and orders issued under this subsection may be enforced by the district court.

004.02F An agency shall give effect to the rules of privilege recognized by law.

004.02G An agency may take official notice of cognizable facts and in addition may take official notice of general, technical, or scientific

facts within its specialized knowledge and the rules and regulations adopted and promulgated by the agency.

004.02G1 Parties shall be notified either before or during the hearing or by reference in preliminary reports or otherwise of materials so noticed.

004.02G2 Parties shall be afforded an opportunity to contest facts so noticed.

004.02G3 The record shall contain a written record of everything officially noticed.

004.02H An agency may utilize its experience, technical competence and specialized knowledge in the evaluation of the evidence presented to it.

004.03 Conducting the hearing by electronic means. The hearing officer may conduct all or part of the hearing by telephone, television, or other electronic means if each participant in the hearing has an opportunity to participate in, to hear, and, if technically feasible, to see the entire proceeding while it is taking place.

004.04 Official record.

004.04A The agency shall prepare an official record, which shall include testimony and exhibits, in each contested case, but it shall not be necessary to transcribe the record of the proceedings unless requested for purpose of rehearing or appeal, in which event the transcript and record shall be furnished by the agency upon request and tender of the cost of preparation.

004.04B An agency shall maintain an official record of each contested case under the Administrative Procedure Act for at least four years following the date of the final order.

004.04C The agency record shall consist only of the following:

004.04C1 Notices of all proceedings;

004.04C2 Any pleadings, motions, requests, preliminary or intermediate rulings and orders, and similar correspondence to or from the agency pertaining to the contested case;

004.04C3 The record of the hearing before the agency, including all exhibits and evidence introduced during such hearing, a statement of matters officially noticed by the agency during the proceeding, and all proffers of proof and objections and rulings thereon; and

004.04C4 The final order.

004.04D As provided in Chapter 9, the hearing officer or agency head, or employee who is or may reasonably be expected to be involved in the decision making process of the contested case who receives or who makes or knowingly causes to be made an ex parte communication shall make the appropriate filings which shall be included in the official record of the contested case.

004.04E Except to the extent that the Administrative Procedure Act or another statute provides otherwise, the agency record shall constitute the exclusive basis for agency action in contested cases under the act and for judicial review thereof.

004.05 Costs. All the costs of a formal hearing shall be paid by the party or parties against whom a final decision is rendered.

005 Decision and order in a contested case.

005.01 Every decision and order adverse to a party to the proceeding, rendered by an agency in a contested case, shall be in writing or stated in the record and shall be accompanied by findings of fact and conclusions of law.

005.02 The decision and order should include:

005.02A The name of the agency and name of the proceeding;

005.02B The time and place of the hearing;

005.02C The names of all the parties or their attorneys who entered an appearance at the hearing;

005.02D The findings of fact consisting of a concise statement of the conclusions upon each contested issue of fact;

005.02E The conclusions of law consisting of the applications of the controlling law to the facts found and the legal results arising therefrom; and

005.02F The order consisting of the action taken by the agency as a result of the facts found and the legal conclusions arising therefrom.

005.03 Parties to the proceeding shall be notified of the decision and order in person or by mail. A copy of the decision and order and accompanying findings and conclusions shall be delivered or mailed upon request to each party or his or her attorney of record.

006 Appeals.

006.01 Any person aggrieved by a final decision in a contested case is entitled to judicial review under the Administrative Procedure Act or to resort to such other means of review as may be provided by law.

006.02 Parties desiring to appeal an agency decision must file a petition for review in the district court of the county where the agency action is taken within thirty days after the service of the final decision by the agency. The thirty day period for appeal commences to run from the date of mailing of the notice of order and decision to the parties or their attorneys of record. Service of the petition and summons must be made in accordance with Nebraska law.

006.03 Unless otherwise provided by statute, the procedures of Neb. Rev. Stat. §84-917 govern the procedure for taking an appeal.

007 Form of Petition for Contested Case

BEFORE THE NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

THE CASE OF_____	)	Case No._____
[Insert name of the Petitioner(s)]	)	(assigned by the agency)
	)	
	)	PETITION FOR
	)	CONTESTED CASE
	)	(or other appropriate designation) of pleading)

Substance of pleading, including:

Petitioner's name and address;

All material facts and specific circumstances;

All rules of law which apply;

Petitioner's request for a hearing and demand for relief.

Submitted by,

_____

Signature of pleader
Name of pleader
Address of pleader
Telephone number of pleader

Enabling Legislation: Neb. Rev. Stat. §84-909; §§84-913- 84-919; §81-1507.

Legal Citation: Title 115, Ch. 7, Nebraska Department of Environmental Quality

Nebraska Department of Environmental Quality

Annual Report to the Legislature 2014

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Visit our web site at **http://deq.ne.us** to view the agency's:

- News Releases
- Calendar of Events
- Job Listings
- Topics of Interest
- Newsletters
- Report a Problem
- Rules and Regulations
- Fact Sheets and other Publications
- Program Information
- Public Notices
- Enforcement Resolutions

Front cover photo by Jim Bunstock

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CHAPTER 1:
Agency Overview

The Nebraska Department of Environmental Quality was created pursuant to passage of the Nebraska Environmental Protection Act in 1971. Although the Department has grown and been given additional responsibilities over the years, its ongoing mission has remained the same — the protection of Nebraska's air, land and water resources. Presently, the Agency is authorized a staffing level of 216.75 full-time employees.

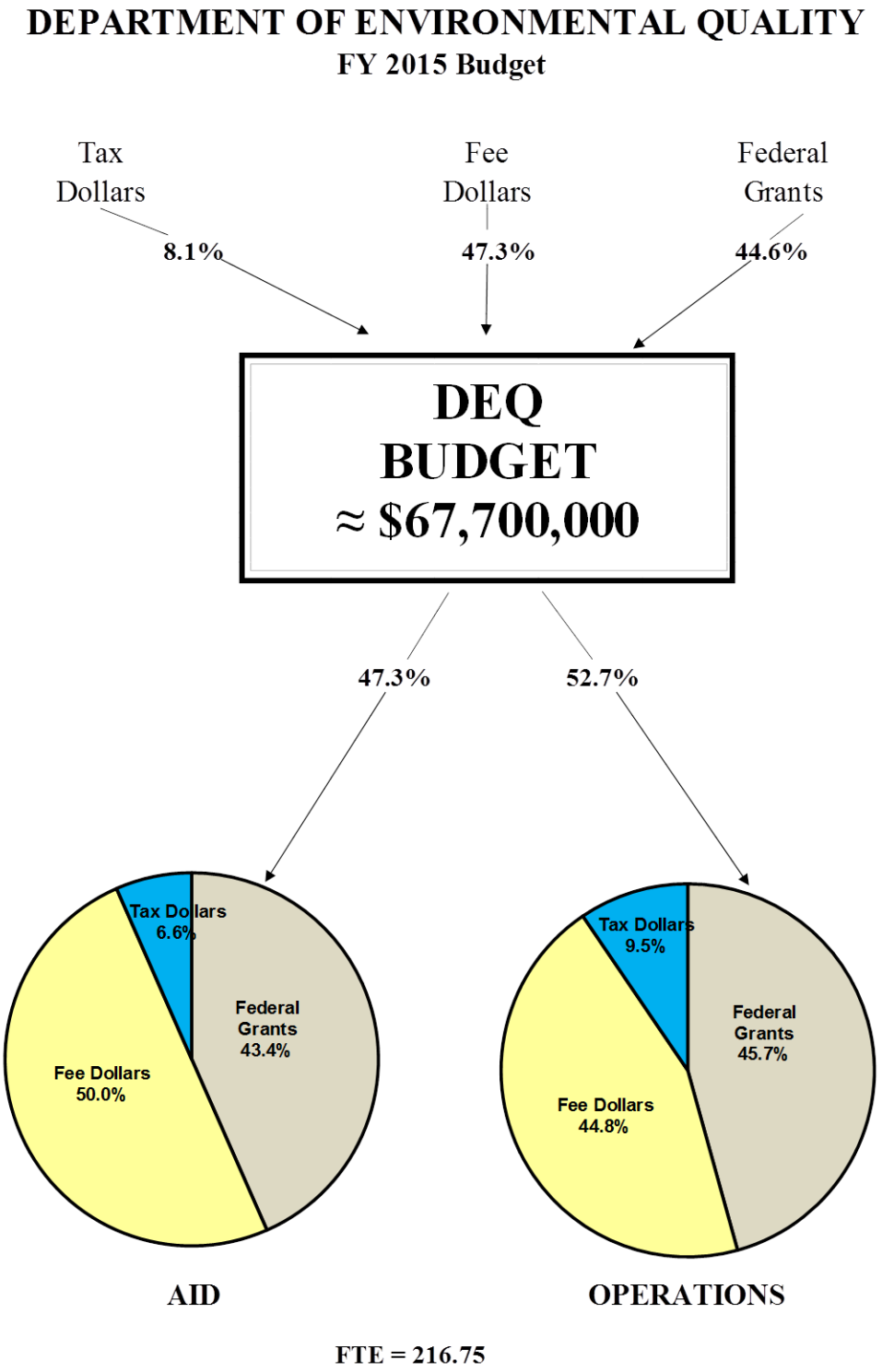
The Department has a total annual budget for FY15 of approximately $67.7 million. This includes money collected from state taxes, fees and federal grants. Of that amount, approximately $32 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans).

In the table below, the columns listed as aid represent the amount of the agency's budget that is redistributed to other entities as grants and loans. The operations columns represent the amounts used for the operation of the agency. However, the operations categories also include contracts where money is used on behalf of others, such as when the agency assigns a private contractor to investigate and clean up a petroleum remediation site.

This funding is derived from several sources. A major source of funding is the federal government. The state also contributes significant funding through fee revenue and tax dollars for Department activities, and certain programs are funded partially or totally by fees. A breakdown of funding by fund type is shown on the following table:

Funding Type	**Operations: $ Amount**	**Percent of Operations Budget**	**Aid: $ Amount**	**Percent of Aid Budget**
Federal Funds (Grants)	$16.3 million	45.7%	$13.9 million	43.4%
State General Funds (Tax $)	$3.4 million	9.5%	$2.1 million	6.6%
Cash Funds (Fees)	$16.0 million	44.8%	$16.0 million	50.0%
Total	$35.7 million		$32.0 million	

The following graphic depicts the department's FY15 budget by funding source and percent anticipated to be expended by fund type and activity (aid or operations).



Several chapters of this report give the reader a more in-depth look at Department responsibilities. Other chapters address financial issues, staffing issues, aid programs, and financial responsibility requirements. Additionally, Chapter 3 lists actions of the Environmental Quality Council during FY2014.

This chapter provides: I) a brief description of agency goals; II) significant issues in 2014; III) significant legislation in 2014 and IV) a table that identifies initiatives over the past ten years that have impacted Agency resources.

I. Agency Goals and Related Activities

In recent years, NDEQ Administration has established a list of agency goals. Staff from all programs were asked to identify goals consistent with the agency goals. Through a series of staff meetings, goals were discussed and specific program goals and activities to be reached and reported were identified. These goals meetings have been conducted periodically since the goals were established, to evaluate our progress and develop strategies for the future. These efforts provide greater accountability regarding work that is being accomplished and help programs and management monitor whether we are achieving the identified goals.

The main goals established by the Agency are:

1) **Effective work force.** The agency needs to structure and train its employees to be as effective as possible to offset declining resources.
2) **Timely permitting process.** Permit review and issuance needs to be streamlined and simplified to meet the needs of both the agency (effective work force) and those in need of a permit.
3) **Balanced enforcement.** Enforcement means compliance with the law and a balanced approach between compliance assistance and traditional enforcement tools needs to be reached.
4) **Simplify regulations.** Persons and entities affected or protected by our regulations need to be able to understand the requirements with as little difficulty as possible.
5) **Community presence and relations.** NDEQ needs to be present in the community that it serves - Nebraska. The agency also needs to open communications and relationships with citizens, those we regulate, and other governmental entities.
6) **"Back to the Basics."** We must excel at the fundamental things that the Legislature intends for us to do -- issue permits, inspect, assure compliance, and require remediation where necessary.
7) **Assistance.** We need to assist those who we regulate so they can meet or exceed minimum standards. We must make such concepts as pollution prevention and compliance assistance a natural way of doing our job.
8) **Measure Environmental Quality.** We need to collect information that enables us to do our job and to measure Nebraska's environmental quality. Information collected by NDEQ must measure any changes in the quality of Nebraska's environment over time and provide the information we need to make sound regulatory decisions.
9) **Meaningful Reporting.** NDEQ has a responsibility to the citizens of Nebraska to report our findings in an understandable and useful way.

10) **Assess Needs.** Meaningful information about the environment should be used by NDEQ to assess the needs of the citizens and environment of the State. That information, when shared with the public, will provide input opportunities on priority issues.

Through activity tracking and followup meetings with program staff, the agency continually evaluates whether goals are being achieved, and if they need to be modified.

II. Significant Issues: Regulatory Development Outreach Process

In 2014, the agency expanded and improved its public outreach process relating to the development of new and amended regulations. The effect has been a positive one. A number of stakeholders (those who may be impacted by or have an interest in the development of regulation) had expressed that they were interested in earlier and more meaningful input in the development of regulations. The department listened to those needs and responded by expanding the existing outreach process. The expanded outreach occurs prior to the proposed regulations being scheduled before a hearing of the Environmental Quality Council, the public body appointed by the governor to adopt environmental regulations. (Chapter 3 of this report provides more detailed information regarding the Council.)

The department's regulatory development process now provides informal and formal outreach opportunities to the public and regulated community. At the informal outreach phase, stakeholders are involved and can provide input during the concept stage and initial development of regulatory proposals. This phase is followed by a formal outreach process where the near-final draft of the proposed regulation is discussed and suggestions received prior to completing the final regulatory package. The outreach meetings provide statewide access to accommodate in person, telephone conferencing and webinar attendance. The final regulatory package is then placed on public notice for the Environmental Quality Council hearing, in accordance with the Administrative Procedures Act. The enhanced stakeholder outreach process promotes better rulemaking, which results in positive outcomes for everyone involved.

III. 2014 Legislative Summary

Four pieces of legislation passed in 2014 had an impact on the agency:

LB 272 – This legislation gives each Natural Resources District the authority to set chemigation permit fees to help offset the costs of administering the permit program. The bill also changes the time period that a natural resources district has to review and decide on an emergency chemigation permit from 48 hours to two working days.

LB 514 - Creates a linked deposit loan program under the Wastewater Treatment Facilities Construction Assistance Act to promote projects for water quality. The Department of Environmental Quality is authorized to create and regulate the linked deposit program and promote loans for the construction, rehabilitation, and enhancement of nonpoint source control systems. The bill authorizes the department to deposit a portion of the SRF loan funds with eligible financial institutions in low-yielding deposit accounts, certificates of deposit, or other agreed upon deposits per an agreement. The eligible financial institution can then make loans available at a rate lower than the prevailing rate for such loans.

Linked deposit program loans may be made to public or private owners by eligible financial institutions for the construction, rehabilitation, and enhancement of nonpoint source control systems including: (a) onsite wastewater and private septic systems; (b) local water protection projects,

including best management practices for nutrient controls; and (c) eligible nonpoint source activities under the Livestock Waste Management Act.

Finally, the legislation authorizes the department to refinance debt of municipalities for wastewater treatment works.

LB 683 – This legislation amends the Storm Water Management Plan Program statute with an updated citation for the 2010 U.S. Census. The Storm Water Management Program provides grant funding to cities and counties in Nebraska that have duties, under the federal Clean Water Act, to manage storm water runoff. Eligible communities who apply for the grant are awarded dollars proportionally based on population and whether the census determined they are inside or outside an urbanized area.

LB 844 - Extends the termination date of the Nebraska Litter Reduction and Recycling Act from October 30, 2015 to October 30, 2020.

IV. State and Federal Actions Affecting Agency Staffing

The following is a breakdown of legislation over the past 10 years that has affected staffing requirements at the Nebraska Department of Environmental Quality. The required programs are broken into three categories: 1) programs required by the federal government which did not require additional state legislation to adopt (Federally Mandated); 2) state legislation in response to federal requirements (State Legislation/Federally Mandated); and 3) state legislation which was not federally mandated (State Legislation/ Not Federally Mandated).

2005 (217 FTE)

State Legislation/Not Federally Mandated

- Air Emission Fees
- Petroleum Release Remedial Action Act

2006 (217 FTE)

State Legislation/Federally Mandated

- Livestock Waste Management Act
- Stormwater Grants
- Emission Trading

2007 (218 FTE)

State Legislation/Not Federally Mandated

- Drinking Water State Revolving Fund
- Livestock Waste Management Act
- Wastewater Treatment Operator Certification
- Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act

2008 (218 FTE)

State Legislation/Not Federally Mandated

- Remedial Action Plan Monitoring Act
- Wastewater Treatment Facilities Construction Act
- Petroleum Release Remedial Action Act

2009 (218 FTE)

State Legislation/Not Federally Mandated

- Livestock Waste Management Act
- Integrated Solid Waste Management Act (rebate fee schedule)
- Waste Reduction and Recycling Incentive Fund (deconstruction grants)
- Waste Reduction and Recycling Incentive Fund (scrap tire projects)

2010 (215.25 FTE)

State Legislation/Not Federally Mandated

- LB1 Special Session

2011 (215.25 FTE)

State Legislation/Not Federally Mandated

- LB28 Nebraska Chemigation Act
- LB29 Emergency Response
- LB30 Integrated Waste Management (Compost)
- LB156 Clean Air Act (Emission Fee)

2012 (216 FTE)

State Legislation/Not Federally Mandated

- Deficit Funding Bill 1 FTE

2013 (216 FTE)

State Legislation/Not Federally Mandated

- LB203 Integrated Solid Waste Management Act
- LB242 Administrative Procedures Act
- LB549 Waste Reduction and Recycling Act

2014 (216.75 FTE)

State Legislation/Not Federally Mandated

- LB514 Clean Water State Revolving Fund

CHAPTER 2:
Administration/Legal/ Management Services

The Administration, Management Services and Legal Divisions provide administrative, legal and day-to-day support services to the Agency programs essential to the effective operations of the Department.

I. Administration

The Administration of the Department provides oversight and policy direction in all areas of the Department's activities. The Administrative staff includes the Director, Deputy Directors, Legal Counsel, Assistant Director, Associate Directors, Government Relations Program Manager, Division Administrators and the Administrative support staff. The Director and Deputy Directors are responsible for the overall function and coordination of Department activities. Generally, the Director is responsible for policy and the Deputy Directors for day-to-day management and administration. The Deputy Director of Administration serves as the manager of the Management Services Division. The Deputy Director of Programs, Assistant Director, Division Administrators, Associate Directors and the Program Manager are responsible for management, policy implementation, and coordination of activities in the various sections contained within their respective divisions.

Department Administration is responsible for coordination with other local, state and federal agencies. Staff serve on various committees within the state. The administration is also responsible for coordination and negotiations with the U.S. Environmental Protection Agency. A significant amount of the agency's funding derives from the EPA, and substantial coordination is required. In addition, the agency coordinates certain activities with the U.S. Department of Defense and the Army Corps of Engineers.

The Director coordinates agency activities with the Governor's Office and the Nebraska Legislature. The Director is responsible for ensuring that the Agency effectively responds to state legislative activities and actions.

The Deputy Director of Administration is largely responsible for day-to-day administrative activities and Agency operations. The Deputy Director is also given responsibility on a case-by-case basis for coordinating special activities which cross the divisional lines of responsibility.

The Deputy Director of Programs coordinates the various agency programmatic activities.

II. Legal Division

The Legal Division provides legal support to the Director and the Agency. Legal responsibilities of attorneys in the Division include:

- Preparing legal opinions interpreting federal and state laws and regulations,
- Advising the Director and Agency staff on duties and program responsibilities,
- Preparing administrative orders and other enforcement actions for the Agency,
- Representing the Agency in administrative proceedings,
- Preparing judicial referrals to the Attorney General,

- Serving as hearing officers for public and administrative contested case hearings,
- Drafting and reviewing proposed legislation, rules and regulations,
- Drafting and reviewing contracts, leases, and other legal documents,
- Reviewing other Agency documents, and
- Representing the Director and Agency as requested by the Director.

During FY2014, the Director issued 15 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled 17 civil judicial cases and judgments were entered for a total of $280,500 in civil penalties with deferments possible in many cases for subsequent compliance. In addition, these judgments included $82,500 for supplemental environmental projects which were: $10,000 to Rushville Fire Department, $4,000 to Keep Columbus Beautiful, $8,500 to Wind for School Projects in Adams County, $30,000 to Ravenna Public Schools, $5,000 to McCool Junction Rural Fire Department, $10,000 to Sutton Fire Department, $7,500 to Holdrege Volunteer Fire Department and $7,500 to Holdrege Area Recycling Center.

III. Management Services

The Management Services Division provides administrative and technical support to Department programs. The Deputy Director of Administration heads the division. The division's staff is divided into six areas — Fiscal Services, Human Resources, Records Management, Information Technology, Public Information, and Grant and Contract Coordination.

Fiscal Services

The Fiscal Services Section provides budgeting and finance functions to the Department, and manages Department spending, purchasing, receipting, accounting and auditing responsibilities. The section offers advice and assistance to programs on financial questions and conducts financial reviews of grantees.

This Section is supervised by the agency's Budget Officer. The Budget Officer has direct contact with the State Budget Office in coordinating, compiling and submitting the agency's biennial budget to the Governor. Various reporting mechanisms are monitored throughout each year to keep the agency on track with budgeted expenditures and revenues, and to ensure there is adequate appropriations, grant and cash funding to cover agency expenses in the pursuit of its mission.

The Section provides significant staff assistance and support to the Water Division regarding the State Revolving Fund (SRF) Loan Program. Assistance includes receipting, collections, payment of loan disbursements, grant activity reconciliation and budgeting. The Fiscal Services Section also coordinates bond activity with Nebraska Investment Finance Authority (NIFA) and the Trustee – issuance, retirement and interest payments. The SRF program requires annual revenue projection reports and financial statements to be audited. The Fiscal Services Section produces these reports and coordinates the annual audit requirement.

The Fiscal Services Section serves as the financial liaison regarding grants with the EPA. A significant percentage of staff time is dedicated to meeting complex tracking requirements of the federal government. Given the substantial amount of grant funds the Department distributes, it is essential to dedicate staff time to reviewing financial activities of programs receiving grant funds.

The Fiscal Services Section also assists the Integrated Solid Waste Management and Livestock programs in collecting and reporting all applicable fees. This section is also

responsible for tracking receipt of Title V air emission fees, and all other Department fees and permits.

Human Resources

The Human Resources team assists supervisors to recruit, hire, develop, retain, and reward a high quality, diverse staff. The team supports agency efforts to provide a working environment that strengthens individual and organizational performance through:

- fiscally responsible compensation and benefits programs;
- progressive human resources policies; and
- targeted career and organizational development initiatives that support the agency's mission of protecting the environment.

Specifically, Human Resources consults with supervisors and employees to: process employee pay and benefits; coordinate hiring; conduct new employee orientation and employee exit interviews; coordinate the agency's medical monitoring program; participate in the Health & Safety Committee; manage the classification and compensation program; and coordinate employee recognition programs. In addition, Human Resources is responsible for monitoring the agency's diversity and ensuring equal employment opportunity is an integral part of the daily activities of the agency. Other activities include: providing technical assistance to supervisors concerning performance management and investigations of conduct complaints; maintaining, communicating and developing agency policies; evaluating reasonable disability accommodations; and coordinating reporting requirements of the conflicts of interest provisions of the Nebraska Political Accountability and Disclosure Act. The Human Resources Section is responsible for processing the agency's bi-weekly payroll.

Records Management/Database Administration

The Records Management Section is responsible for managing the agency's paper and electronic records. The section also operates the agency's centralized mail-handling process and other support functions for the agency. This includes, but is not limited to, ordering supplies, staffing the main reception and switchboard area, and providing assistance in special projects or requests as needed.

Incoming mail is scanned and indexed into the Enterprise Content Management (ECM) System utilizing Onbase applications from Hyland Software. Images are routed to agency staff through an electronic workflow process, eliminating the need to route paper documents. Outgoing mail documents are still provided to the Records Section in paper format and then scanned and indexed. Staff can access current facility-related documents on their desktop computer through the ECM, the agency Integrated Information System (IIS) Document Tracking System (DTS), or the Agency's webpage. Between July 1, 2013 and June 30, 2014, there were 73,813 documents captured and stored in the ECM. Storing document images in the ECM has reduced the number of file folders and file labels purchased, causing a reduction in staff time spent labeling folders and filing documents.

The Records Management Section coordinates responses to requests for information from the public, government agencies, private consultants, and regulated entities that wish to research the history of environmental activities by the agency. These records requests involve a variety of topics such as landfills, leaking underground storage tanks, ethanol plants, wastewater treatment facilities, and hazardous waste sites. The Section responded to approximately 1,300 records requests during FY2014.

All facility-related document images residing in the ECM have been made available to the public through the agency's webpage since December 2012. The change in public accessibility to agency documents means staff increasingly fulfill requests for information by providing instructions to access the images from the Internet. Public records requests have declined as documents are scanned into the ECM. The section responded to approximately 1300 requests for information in FY2013 and approximately 1,000 in FY2014. Of those 1,000 requests, approximately 25% of the requestors were directed to the agency web page to view the requested information. Staff spends less time gathering and organizing files for review, disassembling and reassembling files, photocopying documents, and preparing invoices and packages to mail. The time to respond to public records requests is expected to decline as new documents are scanned into the ECM. Requests for historical information are handled on a case-by-case basis.

In 2012, an application was developed in the ECM System to support the records management process of the Supplemental Environmental Impact Statement to the Keystone XL Pipeline project. The final count of public comments and documents captured and stored in the ECM for this project is 2,207. These items are available for public viewing on the agency web site (https://ecmp.nebraska.gov/deq-seis/). Utilizing the ECM for the storage and presentation of project documents helped keep the project transparent and provided documents to the public in a timely manner.

Database Administration manages facility data for the agency's Integrated Information System (IIS), resolving discrepancies and providing accurate descriptive and locational information for a database of over 51,000 facilities. A new Geographic Information System (GIS) map application was deployed in late 2012 and is available from the agency web site (http://deqims2.deq.state.ne.us/deqflex/DEQ.html). Viewers have the ability to find facilities and to also view facility-related documents with this application.

Information Technology

The Information Technology Section provides computer support and information management for all Agency locations. Four professional staff members offer guidance and technical support in the acquisition and maintenance of computer hardware and software. They provide support for about 250 desktop computers, about 20 printers, a midrange AS/400 computer, various network servers, about 30 mobile devices, and software. They also conduct training and oversee telecommunications for the Agency. Four professional staff design, develop, support, and provide training for computer programs in supporting the Agency's information management needs and the administration of the Agency's computerized databases. One professional staff person is responsible for managing all of the Information Technology staff, maintaining and updating the agency technology plan, and coordinating Information Technology Section activities.

The agency has developed an Integrated Information System (IIS) which is a centralized, shared data base containing descriptive, locational, program specific, and paper file information for all facilities and other items under the agency's jurisdiction. Nationally, NDEQ is among the leaders within state environmental agencies regarding information integration. Over the past 15 years, the program has implemented EPA grants to improve the network and information systems. These funds have been and continue to be used in efforts to integrate data that is shared among environmental agencies, to provide greater public access to this information, and to build additional information systems. In addition, the agency made available its first web-based reporting application at the end of 2003, to replace the more traditional paper-based reporting process.

In 2001, the agency successfully completed a pilot project with other states and EPA demonstrating the exchange of federally required information using eXtensible Markup Language

(XML). This was the first successful effort to exchange data using this process. The Agency continues to be involved in the EPA/State efforts to build a National Environmental Information Exchange Network (Exchange Network). When completed, the Exchange Network will provide a consistent method for obtaining environmental information from any participating agency or program in the country.

In 2006, NDEQ, in conjunction with the environmental agencies from Iowa, Kansas, Missouri and EPA Region VII, started work on a Homeland Emergency Response Exchange (HERE) project to share information with each of the respective state Emergency Management Agencies. This project utilizes the technology of the Exchange Network to make information available before a disaster or catastrophic event. The project was operational in November of 2007. Since going operational, the project has expanded to other states in the country and is also being utilized by local planners and emergency response staff. An improved and expanded version of the HERE application was deployed in the original four states in the fall of 2009.

Since late 2010, the agency has been participating in the Enterprise Content Management Shared Services project with Nebraska's Chief Information Officer and other state agencies. The purpose of the project is to create and store electronic images of the agency's documents, to improve management of and access to public records. A Request for Proposals (RFP) was issued, vendors evaluated, a vendor selected, and a contract has been signed. The agency was one of three partners working with the vendor during implementation to demonstrate and accept the requirements of the RFP. As part of the acceptance process, the agency incorporated the ECM into existing business processes and operations. On April 11, 2011 the agency implemented the first project. This project is covered in more detail in the Records Management portion of the report. As support for the project, about two thirds (160) of the agency's PC-based computers were replaced between April and September. Additionally, about 170 nineteen-inch monitors were installed as a second monitor so agency staff could better utilize the agency ECM application. In early 2013, the agency added the last field office to the state network, which provided staff with better access to the ECM.

The application development staff, in cooperation with the NPDES water permitting program staff, have been designing and developing a permit-writing module. When completed, the module will assist permit writers in developing quality permit documents based upon agency rules, standards, and water quality information. This application will also be integrated with the ECM for internal permit reviewing.

During the last year, the agency web page was updated to make use of new software capabilities. As part of the process, static Excel files of information were replaced with applications to query the existing data in real time, providing users with better information and eliminating the need for agency staff to create the Excel files on a regular basis.

Public Information Office

The Public Information Office serves as the Agency's initial source of communication with the public and media. The services of the Public Information Office are used by all divisions of the Agency.

A primary responsibility of this office is to handle questions from the public and media (newspaper, television and radio) regarding the Department's activities. Due to the increasing public awareness of environmental issues, the number of inquiries from both media and the general public has increased significantly in the past several years.

The Public Information Office is responsible for the writing and distribution of news releases on a wide range of environmental topics that are of importance to the public. The office is also involved in

the production of a number of other publications, including this annual report, brochures, fact sheets and guidance documents. These publications can be obtained by contacting the Public Information Office or by visiting our web site.

An increasingly important method of communicating with the public is the agency's web site: **http://deq.ne.gov.** The web site has grown considerably in recent years, and an agency-wide effort is ongoing to revise the site to make it more accessible and interactive for our customers.

The site provides a wide array of information to the public relating to the agency, including:

Environmental Alerts	NDEQ News	Contact Us/Report a Problem
Rules and Regulations	Publications	Requests for Proposals
Topics of Interest	Program Information	Public Notices
Enforcement Resolutions	Assistance	Cleanups
Compliance	Financial	Maps and Data
Permits and Authorization	Calendar of Events	

An important component of the web site is to promote two-way communication. As part of those efforts, the agency's main e-mail address is provided at numerous locations on our web site. That e-mail address is: **NDEQ.moreinfo@nebraska.gov** The Public Information Office coordinates responses to those e-mails. The site also features "Report a Problem," with a link to the e-mail address to report an environmental issue of concern at NDEQ.problem@nebraska.gov, The site also includes phone information and procedures relating to reporting a spill or complaint.

The agency is moving toward more standardized forms, including some that can be filled online or submitted electronically.

Grants/Contract Coordination

The Grant and Coordination Office assists with federal grant applications and compliance with grant conditions and requirements, particularly reporting requirements. In addition, the office assists with Requests For Proposals, contract development, tracking, management, and ensures contracts are kept current and contractors meet contract conditions. This office also provides assistance to the Fiscal Services Section.

Funding of Management Services

The Management Services Division provides essential administrative and technical support to the Department. Some activities in Management Services are program specific, but many are not. Funding for the Division is provided by two methods: 1) The majority of the staff salaries and activities are funded through an overhead charge to the Department's various programs;
2) Program-specific staff time and activities are charged to those programs.

CHAPTER 3:
Environmental Quality Council

The Environmental Quality Council was established through the Nebraska Environmental Protection Act as the body that adopts rules and regulations which set air, water and land quality standards in order to protect the public health and welfare of the state. They adopt regulations that guide the activities and responsibilities of the Nebraska Department of Environmental Quality. In addition, the Governor appoints the Director of the Department of Environmental Quality based on candidates recommended by the Council.

The Council has 17 members who are appointed by the Governor to four-year terms. Appointments require legislative approval. Council members are appointed to represent: the food manufacturing industry; conservation interests; the agricultural processing industry; the automobile or petroleum industry; the chemical industry; heavy industry; the power generating industry; crop production; labor; the livestock industry; county government; municipal government (two members, one of which represents cities not of the primary or metropolitan class); a professional engineer; a biologist; a representative of minority interests; and a doctor with knowledge about the human health aspects of air, water and land pollution.

The Council is required by statute to meet at least twice each year. The Department of Environmental Quality publishes notice of these meetings, together with an agenda and a description of proposed regulations to be considered. At these meetings, the Council holds public hearings on the proposed regulations. Any interested person may submit written comments on the proposed regulations and/or testify at the public hearing. The Council considers these comments and testimony prior to making a decision on whether to adopt, modify or deny new state environmental regulations and amendments to existing regulations. The Council can also consider rule-making petitions submitted by the public.

Although the Council is responsible for review and adoption of rules and regulations, it does not have involvement or oversight in the administrative functions or day-to-day responsibilities of the agency. The Acting Director of the Department of Environmental Quality is responsible for administration of the department and the rules and regulations adopted by the Council.

Following are two tables. The first lists the council members, the second summarizes Council actions during FY2014.

Council Members

Representing	Council member	Term expires
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2017
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2015
Automotive/Petroleum Industry	John Dilsaver Ralston	June 22, 2017
Biologist	Mark Czaplewski Grand Island	June 22, 2017
Chemical Industry	Donald E. Williams Orchard	June 22, 2015
Conservation	John C. Turnbull York	June 22, 2015
County Government	Earl McNutt McCook	June 22, 2015
Food Products Manufacturing	Michelle Bucklin Omaha	June 22, 2017
Heavy Industry	John Kinter Norfolk	June 22, 2015
Labor	Robert Hall Wahoo	June 22, 2017
Livestock Industry	Alden Zuhlke Plainview	June 22, 2017
Minority Populations	Mohamed Dahab Lincoln	June 22, 2017
Municipal Government	Vern Powers Hastings	June 22, 2015
Municipal Government	Lance Hedquist South Sioux City	June 22, 2017
Physician	Ronald Sheppard Callaway	June 22, 2015
Power Generating Industry	Joseph Citta, Jr., Columbus	June 22, 2017
Professional Engineer	John T. Baker Scottsbluff	June 22, 2015

FY 2014
Environmental Quality Council Actions

Council Meeting Date	Regulation	Action
February 6, 2014	Amendments to Title 128, Nebraska Hazardous Waste Regulations	Approved
	Amendments to Title 132, Integrated Solid Waste Management Regulations	Approved
	Amendments to Title 199, Waste Reduction and Recycling Incentive Grants Program	Approved
	Amendments to Title 197, Rules and Regulations for Certification of Wastewater Treatment Operators in Nebraska	Approved
	Amendments to Title 129, Nebraska Air Quality Regulations	Approved as Amended
	Amendments to the 2014 State Revolving Fund Intended Use Plan	Approved
June 19, 2014	2015 Intended Use Plan and Project Priority List for the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund	Approved as Amended
	Litter Reduction and Recycling Grant Program 2015 Funding Percentage Allocations	Approved
	Amendments to Title 133, Litter Reduction and Recycling Grant Program	Approved

CHAPTER 4:
Air Quality Division

The objectives of the Air Quality Division are to achieve and maintain the ambient air quality standards, to protect the quality of the air in the state, including areas that have air cleaner than the standards, and to implement federal and state air quality rules and regulations. Each year, thousands of tons of air pollutants are emitted into the air from industrial and other man-made activities. Many of these air pollutants affect human health, reduce visibility, cause property damage and harm the environment. The air pollutants of most concern are particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, ozone, lead, and 187 listed hazardous air pollutants.

The primary air quality programs which help assure healthy air quality are: the construction permit program, operating permit program, emission inventory program, ambient air quality monitoring program, inspection and compliance program, air toxics program, and planning and development program.

Three local agencies -- Lincoln/Lancaster County Health Department, Omaha Air Quality Control, and Douglas County Health Department -- have accepted, through agreement with NDEQ and direct delegation from the U.S. Environmental Protection Agency (EPA), responsibility for various facets of the air quality program. These responsibilities include air quality monitoring, permitting and enforcement within their areas of jurisdiction.

Permitting Section

During FY14, the NDEQ continued to implement the greenhouse gas permitting rules previously adopted into Title 129. However, on June 23, 2014, the U.S. Supreme Court reversed the course of part of the rules, deciding that Prevention of Significant Deterioration (PSD) construction permits and Title V operating permits are not required solely due to emissions of greenhouse gases. Therefore, greenhouse gases are only regulated under these programs if a facility triggers permitting due to emissions of other pollutants (e.g., sulfur dioxide, nitrogen oxides, particulate matter). EPA issued a memorandum soon after the decision providing guidance to permitting agencies stating that it intends to act consistent with its understanding of the Supreme Court decision. EPA is considering what final actions to take in response to the Supreme Court ruling, and NDEQ will eventually need to revise its permitting regulations accordingly.

Construction Permit Program

NDEQ has maintained a construction permit program for air contaminant sources since the 1970s. Facilities are required to obtain a construction permit before they construct, reconstruct or modify any air contaminant source or emission unit where there is a net

increase in the potential to emit above specified thresholds. The table below provides information relating to construction permit applications received, processed and pending:

Pending July 1, 2013	Applications Received	Applications Processed	Pending June 30, 2014
45	64	58	51

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). The purpose of the program is to protect areas of the state which are cleaner than the ambient air quality standards, while still allowing industrial and economic growth. The Prevention of Significant Deterioration program applies to sources that emit significant levels of certain types of emissions. If a source is regulated under the program, the NDEQ conducts additional, more rigorous reviews of their construction permit application to ensure that best available control technology will be used. Best available controls are employed to minimize impacts on the environment. Before issuing a permit, the NDEQ must also assure that the source will not cause or contribute significantly to any deterioration of air quality that could make the area potentially vulnerable to violations of the ambient air quality standards. The Prevention of Significant Deterioration program also ensures that visibility in nearby national parks and wilderness areas is protected. The NDEQ notifies federal land managers of pending PSD decisions. Lastly, the program requires that permitting authorities advise nearby States and Tribes of pending PSD decisions so they may express any concerns they have with potential downwind impacts in their areas.

As a part of its state program, the NDEQ requires significant sources of hazardous air pollutants to control emissions with the best control technology available (Toxics BACT).

During FY06-08, NDEQ received an increasing number of applications from business and industry for air quality construction permits to build new or expand current business ventures across the state, including ethanol plants, power plants, and grain processing facilities. From FY09 through FY12, a slower economy delayed or cancelled many capital projects at sources. In FY13 and FY14, more applications were received than had been received for several years.

	FY09	FY10	FY11	FY12	FY13	FY14
Number of Construction Permit Applications Received	53	55	52	54	61	64

Operating Permit Program

The operating permit program is the result of the Federal Clean Air Act Amendments of 1990 and the passage of LB1257 (1992) by the Nebraska Legislature. The operating permits are reviewed and renewed every five years. Operating permits are issued for both large and small sources of air pollution.

The Nebraska operating permit program offers an innovative alternative for sources who have taken measures to keep their emissions very low. This program is called the Low Emitter Program. NDEQ also has general permits and permits by rule available for certain source categories. The table below provides statistics relating to all applications received, processed and pending under the operating permit program:

Pending June 2013	Operating Permit Applications Received	Operating Permit Applications Processed	Pending June 2014
105	71	53	123

From 2002 through 2004, the operating program was successful in eliminating the majority of the permitting backlog created at the onset of the program. Operating permits, however, are issued for five-year terms. Consequently, that early success resulted in correspondingly wide year-to-year variations over the next five years due to the variation in the numbers of operating permits up for renewal each year. For example, the higher number of applications in FY14 was largely due to operating permit renewal applications received for operating permits from FY09.

The following table summarizes the applications received from FY08 through FY14 (applications for all application types, including applications for permit revisions, general permits, permit-by-rule, etc.).

	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Number of Operating Permit Applications Received	92	75	61	32	43	60	71

Compliance Section

Ambient Air Quality Monitoring Program

The State of Nebraska operates an ambient air-monitoring network to determine compliance with the National Ambient Air Quality Standards (NAAQS) and State Ambient Air Quality Standards (SAAQS). In addition, the Nebraska network includes two sites for

monitoring regional haze impacts that are part of a national program to help protect visibility in our National Parks and Monuments.

Three agencies are involved in the day-to-day operation of the network: NDEQ, Lincoln/Lancaster County Health Department, and Douglas County Health Department. The Omaha Air Quality Control (part of the Omaha Public Works Department) also provides technical support for network-related activities.

National standards have been established by the Environmental Protection Agency for the following six pollutants, to protect both public health and welfare:

- Particulate Matter
  - With a diameter of 10 micrometers or less (PM_{10})
  - With a diameter of 2.5 micrometers or less ($PM_{2.5}$)
- Sulfur Dioxide (SO_2)
- Nitrogen Dioxide (NO_2)
- Carbon Monoxide (CO)
- Ozone (O_3)
- Lead (Pb)

Nebraska has an additional ambient air quality standard for Total Reduced Sulfur (TRS). The TRS standard was adopted by the Environmental Quality Council in 1997 and is a public health based standard. The Department currently monitors TRS in Dakota City.

NDEQ evaluates the adequacy of its monitoring network in accordance with federal regulations each year. Changes may be made to the network due to monitoring regulation changes, updates to the ambient standards, perceived changes in pollution trends, and/or funding issues. Loss of site access is another consideration that occasionally affects the network. The Nebraska monitoring network includes sites at which air quality is monitored to evaluate attainment with the standards and other health and welfare associated priorities.

Most of the sites in the monitoring network evaluate pollutants for which standards are established (i.e., PM2.5, PM10, CO, SO2, Lead, Ozone or TRS). There are two additional types of sites in the network: Interagency Monitoring of Protected Visual Environments (IMPROVE), and National Atmospheric Deposition Program/National Trends Network (NADP/NTN) sites.

IMPROVE monitors provide information for studying regional haze that may impact the visibility in listed federal Class I National Park and Wilderness Areas. There are two IMPROVE monitoring sites in Nebraska at Halsey National Forest and Crescent Lake National Wildlife Refuge. These sites provide data on pollution trends and transport.

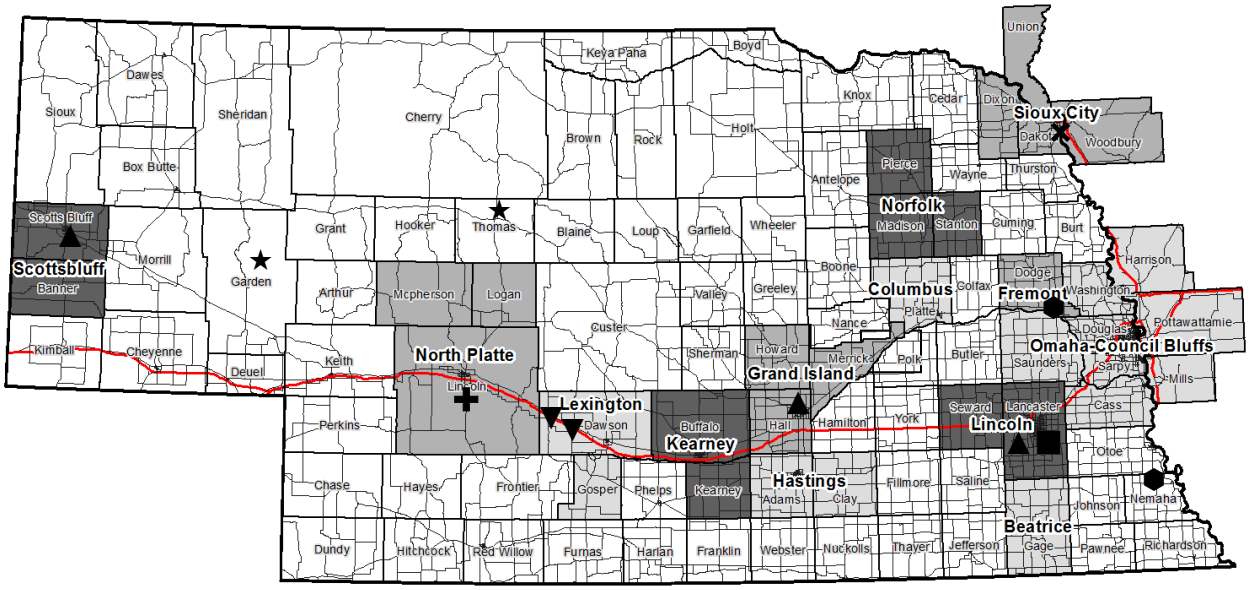
The National Trends Network (NTN) of the National Atmospheric Deposition Program (NADP) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride, and base-cations (e.g., calcium, magnesium, potassium and sodium). There are two NADP/NTN sites in Nebraska: one near Mead and one near North Platte. Both have been operational for over 20 years. These sites are operated by the University of Nebraska, with analytical and data development support from the NADP. The Mead site was upgraded to include mercury (Hg) deposition monitoring and was part of the NADP/Mercury Deposition Network (MDN). Both sites maintain the NADP monitoring. The monitoring in Mead is made possible through cooperative efforts of the NDEQ and the University of Nebraska. Additional information about the NADP/NTN can be found at: http://nadp.sws.uiuc.edu/NADP/

Monitoring Information On-Line

Ozone and continuous PM2.5 data from Lincoln and Omaha is reported hourly to the EPA AirNow system, which makes contemporaneous air quality information available to the public on web at http://www.airnow.gov/. The Douglas County Health Department also participates in the ENVIROFLASH program that allows members of the public to sign up to receive air quality alerts via email.

Both the Douglas County Health Department and the Lincoln/Lancaster County Health Department also report daily Air Quality Index (AQI) evaluations on the Omaha and Lincoln web sites. The AQI is a numeric rating of the current air quality in each city, and provides the public with a quick and simple means to evaluate current air quality in each metro area.

Nebraska Monitoring Sites Outside the Omaha Metropolitan Statistical Area

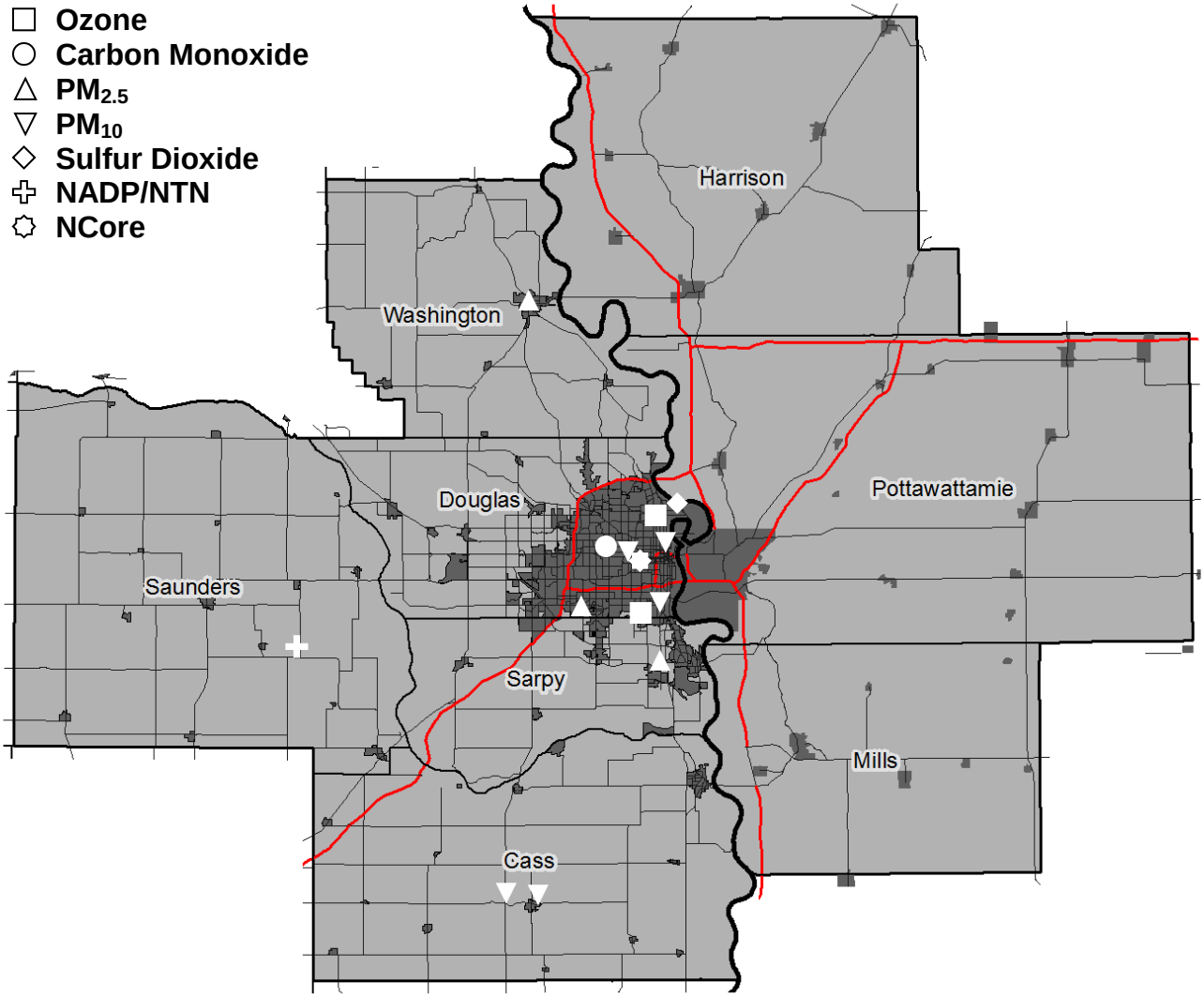


▲ **$PM_{2.5}$**	**$PM_{2.5}$**	**Lead**
▼ **PM_{10}**	Lincoln, 3140 N Street	Fremont
■ **Ozone**	Grand Island, 2124 North Lafayette Avenue	Auburn
× **TRS**	Scottsbluff, Highway 26 & 5th Avenue	**NADP/NTN**
⬢ **Lead**	**PM_{10}**	Maxwell, North Platte Agricultural Experiment Station
★ **IMPROVE**	Cozad, 215 West 8th Street	**IMPROVE**
✚ **NADP/NTN**	Gothenburg, 9th Street	Garden County, Crescent Lake Wildlife Refuge
	Ozone	Thomas County, Nebraska National Forest
	1st & Maple Street (Davey)	
	TRS	
	Dakota City, 501 Pine Street	

The state map above shows the 12 monitoring sites located outside of the Omaha Metropolitan Statistical Area. Nine of these sites are operated by the NDEQ, either directly or under contract. The two sites in Lancaster County are operated by the Lincoln-Lancaster County Health Department with NDEQ oversight. The National Atmospheric Deposition Program site near North Platte is operated by the University of Nebraska.

The Omaha Metropolitan Statistical Area map on the next page shows the location of the 14 monitoring sites located in the Nebraska portion of the Omaha Metropolitan Statistical Area. Eleven of these sites, located in Douglas, Sarpy and Washington Counties, are operated by the Douglas County Health Department with NDEQ oversight. The two PM_{10} sites near Weeping Water in Cass County are operated by the NDEQ. The National Atmospheric Deposition Program site at Mead is operated by the University of Nebraska.

Omaha-Council Bluffs Metropolitan Area Monitor Locations



○ **Carbon Monoxide**
4102 Woolworth Avenue (NCore Trace Monitor)
7747 Dodge Street, Omaha

◇ **Sulfur Dioxide**
4102 Woolworth Avenue (NCore Trace Monitor)
1616 Whitmore Street

✚ **NADP/NTN**
Mead, Saunders County

△ **$PM_{2.5}$**
4102 Woolworth Avenue (NCore)
9225 Berry Street
2912 Coffey Avenue (Bellevue)
2242 Wright Street (Blair)

□ **Ozone**
4102 Woolworth Avenue (NCore)
30th & Fort Streets
2411 O Street

▽ **PM_{10}**
4102 Woolworth Avenue (NCore)
19th & Burt Streets
46th & Farnam Streets
2411 O Street
102 P Street (Weeping Water)
5102 Highway 2 (Weeping Water)

NCore
4102 Woolworth Avenue

Renewable Powered Monitoring Sites

The NDEQ operates two sites that are powered totally through renewable energy sources: a solar-powered site near Weeping Water, and a solar/wind turbine-powered site at the Scottsbluff High School. Both sites have successfully operated on renewable energy and are examples of energy conservation. The Scottsbluff site was designed to be portable so that it could be easily set up in any location within the state where sufficient solar and/or wind resources exist. The Scottsbluff site also allows an opportunity for NDEQ to partner with the local high school to educate the students about air quality and renewable energy.

Inspections and Facility Compliance

The Compliance Program is responsible for conducting compliance inspections of air pollution sources, responding to citizen complaints, observing and evaluating emission tests, and the acid rain program.

Consistent with the Nebraska Environmental Protection Act, the Air Division attempts to obtain compliance with environmental regulations first through voluntary efforts. Voluntary compliance has helped bring about a better working relationship with the regulated community without sacrificing environmental quality. However, enforcement actions are pursued by the Agency when compliance issues are serious, chronic, or cannot otherwise be resolved. To further the Department's goals to protect and enhance public health and the environment, in certain instances, environmentally beneficial projects, or Supplemental Environmental Projects, may be part of an enforcement settlement.

Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD	OAQC
On-site Inspections	82	73	41
Facility Stack Tests Reviewed On site observations conducted	93 55	4 4	0 0
Continuous Emission Monitoring Audits Reviewed On-site observations conducted	40 18	2 1	0 0
Complaints Received	33	129*	81
Burn Permits Issued Burn Permits Denied	48 2	106 5	56 0

***-Includes LLCHD complaints re: noise, open burning, fugitive dust, and odors**

LLCHD – Lincoln Lancaster County Health Department; OACC – Omaha Air Quality Control

Grants, Planning, and Outreach Unit

The Air Quality Division's Grants, Planning, and Outreach Unit provides support and training resources to permitting and compliance staff, provides outreach and training to the regulated and general public, and provides information and analyses to the Department and other policy makers. The Unit includes the air dispersion modeling and emissions inventory functions for the Air Division. It is also responsible for maintaining state air quality regulations, updating the state implementation plan, providing expert information on National Emissions Standards for Hazardous Air Pollutants (NESHAPS, also known as Air Toxics), New Source Performance Standards (NSPS) and National Ambient Air Quality Standards (NAAQS). The Unit coordinates local agency activities, as well as negotiates work plans with the EPA. The Unit also administers the Nebraska Clean Diesel Grant Program.

The Air Toxics Notebook and the New Source Performance Standards NSPS Notebook continue to be valuable online resources for staff and regulated sources. The Grants, Planning, and Outreach Unit has also maintained the AirNews Page (http://deq.ne.gov/AirDates.nsf/AirNewsMain.xsp), which is designed to provide easy access to information about the NDEQ Air Division, including important dates and deadlines, access to the AirNews Listserv archive, and links to other important forms and documents on the NDEQ website.

Emission Inventory and Emission Fees

Each year, the Department conducts an inventory of emissions from major industrial sources and a representative sample of lower-emitting minor industrial sources. Every three years, the Department assists the EPA to prepare a comprehensive national inventory of emissions. The emissions inventory is used to support the planning efforts for national rulemaking and to assess trends in emissions. Emission inventories are due on March 31st each year. The NDEQ also uses the emission inventories to support the assessment of annual emission fees. Major sources of air pollution are required to pay emission fees for each ton of pollutant actually emitted during the calendar year. The maximum emission for which a fee is assessed is 4,000 tons per pollutant. For electrical generating facilities with a capacity of between 75 and 115 megawatts, the maximum emission for which a fee is assessed is 400 tons per pollutant. The fees generated are used to support the administration of the permitting program.

The Department attempts to set the fee rate at the minimum level needed to pay reasonable direct and indirect costs of developing and administering the air quality permit program. An analysis detailing how the Department arrived at the fee rate is made available to fee payers and is on the NDEQ's website. The rate for 2013 emissions was $67 per ton; the rate for 2012 emissions was $65 per ton.

Future Air Issues for Nebraska

Under the federal Clean Air Act, the EPA issues National Ambient Air Quality Standards (NAAQS) for "criteria pollutants." These standards are intended to protect public health and the environment. States must determine whether they are in attainment of these standards

and take corrective action if needed. The standards are reviewed and revised periodically, based on the most recent scientific information available.

Nebraska is currently considered in attainment of all the National Ambient Air Quality Standards. In December, 2012, the EPA lowered the fine particulate matter ($PM_{2.5}$) primary standard from 15 micrograms per cubic liter to 12 micrograms per cubic liter. At this time, all of Nebraska is in attainment with the new standard, but some metropolitan areas are approaching the standard.

The sulfur dioxide (SO_2) standard was changed from a 24-hour and annual primary standard to a 1-hour standard in 2010. To determine attainment with the new standard, the EPA is developing an attainment demonstration that is expected to include monitoring and modeling exercises around large SO_2 emitters. This may require modeling or monitoring around several sources in Nebraska. In addition, the EPA is under a court-ordered schedule to review the ozone standard and is expected to issue a proposed revision to the standard in early December 2014 and finalize the revision in October 2015. The current standard is 75 parts per billion. Based upon recommendations EPA has received from its science advisory board, EPA may lower the standard to a level between 60 to 70 parts per billion. Depending upon the standard and the three-year ozone design value, portions of Nebraska may exceed the standard.

In June, 2014, the EPA proposed the Clean Power Plan. The proposed regulation is designed to limit emissions of carbon dioxide (CO_2) from large existing fossil fuel power plants. Each state will be expected to develop its own plan on how it will meet the CO_2 limits specified in the regulation. As proposed, the state is expected to develop its plan utilizing four building blocks: heat rate improvements at coal plants, utilizing more natural gas units instead of coal units, utilizing more renewable energy sources, and reducing demand by implementing energy efficiency programs. The EPA is accepting public comment on the proposed rule until December 1, 2014 with the final rule expected to be issued in June, 2015. To understand the potential impact of the proposed rule, the NDEQ has held a series of discussions with affected entities. After the rule becomes final, NDEQ plans to continue those discussions and expand our outreach efforts to all interested stakeholders as we begin to develop the state plan.

For more information about the Nebraska air quality program, please refer to the annual Air Quality Reports and the Ambient Air Monitoring Network Plan, both of which are available on the agency's website at http://deq.ne.gov/ under "Air."

CHAPTER 5:
Waste Management Division

The Waste Management Division is comprised of two sections and one unit: the Waste Management Section, the Remediation Section, and the Planning and Aid Unit. Both Waste Management and Remediation sections share responsibilities for hazardous waste (RCRA), Superfund, voluntary remediation, and integrated waste management programs. Several waste-related grant programs are administered by the Planning and Aid Unit. Following is a summary of Waste Management Division programs.

Resource Conservation and Recovery Act (RCRA) Program

NDEQ was authorized in 1985 by EPA to administer portions of the Resource Conservation and Recovery Act (RCRA) program. RCRA regulations are incorporated in NDEQ Title 128 - Nebraska Hazardous Waste Regulations, which is updated as the Federal RCRA regulations change.

The purpose of the RCRA program is to ensure proper management of hazardous wastes from the point of generation until final disposal. Activities performed under the RCRA program include:

- helping hazardous waste generators maintain compliance through a Compliance Assistance Program,
- performing compliance inspections and enforcement actions,
- investigating complaints,
- reviewing groundwater contamination monitoring and remediation systems,
- reviewing permit applications and determining whether permits should be issued for proposed treatment, storage, and disposal (TSD) facilities,
- reviewing/approving closure and post-closure plans for hazardous waste storage areas and disposal sites,
- maintaining data systems to support decision-making and making information available to the public.

The Compliance Assistance Program helps Nebraska businesses, governmental entities, and private citizens comply with hazardous and solid waste regulations in a non-enforcement mode. This program works with the regulated community in a partnership promoting hazardous waste minimization and pollution prevention to help waste generators actually reduce the amount of hazardous waste being generated in the state. An additional product of these efforts is to ultimately reduce the amount of regulatory requirements on our industries by helping to bring hazardous waste generators into lower RCRA threshold levels.

Compliance and enforcement activities include investigating complaints and the inspection of hazardous waste generators and transporters, hazardous waste treatment, storage and disposal facilities, and used oil marketers and burners. Other compliance and enforcement activities include conducting comprehensive groundwater monitoring evaluations, and operation and maintenance inspections of sampling and analysis procedures at RCRA sites to ensure that useful and representative data is being collected.

The RCRA program also conducts extensive permitting and closure activities to minimize and prevent the release of hazardous material into the environment. Closure actions are required for treatment, storage or disposal facilities that are discontinuing operations or that have operated without a permit. Permits are required for operating treatment storage and disposal facilities. Post-closure

permits are required for treatment storage and disposal facilities that have gone through closure and have remaining contamination.

There is one operating hazardous waste storage and treatment facility in Nebraska: the Clean Harbors Environmental Services, Inc. incinerator near Kimball. This facility has undergone annual performance test burns to demonstrate proper operation since hazardous waste treatment began in 1994. Operational and physical changes at the Clean Harbors incinerator, made to improve the performance of the facility and ensure compliance with applicable regulations, have resulted in numerous permit modifications. In addition, Nebraska oversees two active hazardous waste storage facilities which do not treat hazardous waste.

Corrective action is an important part of the RCRA program and addresses past and present activities at RCRA facilities that resulted in hazardous waste and hazardous constituents being released into soil, groundwater, surface water, and air. Corrective action requires investigation and remediation of the release of hazardous constituents from regulated facilities. These regulations make current and former owners of a property responsible for past mismanagement of hazardous waste. EPA presently operates the corrective action program in Nebraska, and is responsible for regulating cleanups at Nebraska facilities.

Program Funding

Funding for RCRA program activities is provided by an EPA grant, which requires a 25% state match.

Additionally, the Department can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. No new facilities have been proposed in Nebraska since 1994, and that is the last time this fee was collected. There were no new facilities proposed in FY14.

The RCRA program collects a yearly fee from commercial hazardous waste treatment and disposal facilities. Currently, one facility in Nebraska performs hazardous waste treatment and disposal. The fees are based on the total yearly volume or weight of hazardous waste treated or disposed. Fees are due March 1, and are remitted to the state general fund.

Currently, the RCRA Program oversees:

98 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month) See map below.

385 Small Quantity Generators (between 220 and 2200 pounds generated per month)

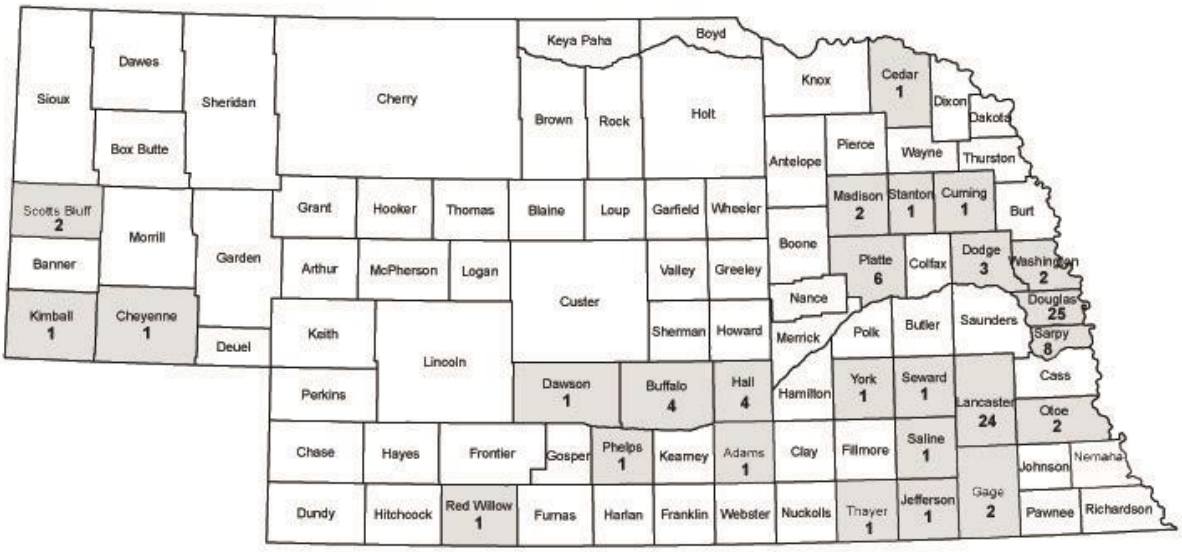
1346 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)

1 Hazardous Waste Incinerator Facility

32 Treatment, Storage or Disposal Facilities (active and inactive)

17 Hazardous Waste Transporters

Location of Large Quantity Generators in Nebraska Regulated Under RCRA



Note: The number in each county indicates the number of Large Quantity Generators located in that county

Summary of FY2014 Activities		
Activity	**State**	**EPA**
Compliance Assistance		
On-site Visits	1	0
Direct Assistance Contacts	581	*
Public Outreach Presentations (total 650 in attendance)	4	*
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	1	5
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	2	0
Facility Self-Disclosure	0	0
Large Quantity Generator	11	6
Small Quantity Generator	19	3
Conditionally Exempt Small Quantity Generators	5	4
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	1	0
Permits Issued/Renewed	0	1
Modifications	7	0
EPA Corrective Action Orders	N/A	0
RCRA Record Reviews		
Financial Assurance	25	2
*Data not available		

Superfund Program

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) became federal law in 1980. CERCLA established what has commonly become known as Superfund to deal with known or suspected contamination at inactive commercial/industrial/military facilities or so-called "uncontrolled hazardous waste or abandoned sites." The nation's most contaminated sites are listed on the National Priorities List. Nebraska currently has fifteen sites on the National Priorities List. One site, the Waverly Groundwater Contamination Site, was removed from the NPL on November 20, 2006 as the cleanup goals for the site have been achieved. Twelve of the sites are in the cleanup phase and three sites (West Highway 6 & 281 in Hastings, York PCE/TCE Northeast Contamination site, and the York PCE Southeast Contamination site) are relatively new to the National Priority List and are in the site study stage. Numerous other non-National Priorities List sites with known or suspected releases of hazardous substances exist in the state, but are not being addressed through the federal Superfund process.

The investigation and remediation of contaminated sites are the primary responsibility under CERCLA of the EPA and other federal agencies. NDEQ participates in the Superfund process by serving as a technical support agency to the EPA and as the environmental representative for the State of Nebraska. Activities in the Superfund Program include:

Site Assessment — The Superfund Site Assessment program identifies, assesses and characterizes sites where hazardous substances are known or suspected to pose a threat to public health and/or the environment. Currently, the sites investigated in Nebraska consist primarily of areas where groundwater contamination has been detected in municipal and private drinking water supply wells or where there is a significant potential for groundwater contamination.

The first site assessment step is called a pre-screening assessment. This step is a review of existing information on a potential site to determine whether a release has occurred that should be evaluated further through the Superfund process. The next site assessment step is called an abbreviated preliminary assessment. This step involves the collection of background information such as property ownership, operational history and geology/hydrogeology, and performing a site reconnaissance. The third step is called a site investigation, which involves sampling environmental media, such as soil, soil gas and groundwater, and evaluating vapor intrusion into indoor air of building structures. In some situations, the preliminary assessment step and the site investigation step are combined. For large and/or complex sites, an expanded site investigation may also be performed to collect additional soil and groundwater samples to further define the extent of contamination. In addition, some sites that have been investigated in the past may be reassessed if new information is obtained that indicates that a threat to public health and/or the environment may exist.

During the past year, the Department has performed work on five pre-screening assessments, five abbreviated preliminary assessments, two site investigations, one vapor intrusion evaluation, one expanded site investigation, and one site reassessment. The EPA Region 7 Superfund program continues to investigate the Former Northwestern Metals site at 900 T Street in Lincoln that historically operated a lead smelter at the property. A decision on whether nearby residential yard cleanup is necessary is expected near the end of 2014. The Department also performed an abbreviated preliminary assessment at the other Former Northwestern Metals site at North 27th Street in Lincoln that also historically operated a lead smelter following decommissioning of the 900 T Street facility. Sampling of residential yards near the North 27th Street site will be performed by the Department in the near future. In addition, the Department reviewed numerous site assessments conducted by EPA in the state and provided recommendations on the need for follow up action.

NPL Site Management Assistance — The Superfund Management Assistance program provides management and technical support to the EPA at priority sites in Nebraska. This assistance includes reviewing technical documents and participating in the Superfund remedy selection process. As the

most heavily contaminated sites in the nation, Superfund National Priority List sites are generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The investigation and cleanup activities at these sites are organized into several phases, including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. The Department also participates in public meetings with citizens and local officials in the development of cleanup plans.

Below is a list of the 15 active NPL sites. Below each name is an EPA web address that provides more detailed information about the site. The first 12 sites listed below are currently in the cleanup phase. The West Highway 6 & 281 site in Hastings is currently in the removal action and site studies phases. The York PCE/TCE Northeast Contamination site and the York PCE Southeast Contamination site recently became final on the Superfund National Priority List and will commence the site studies phase in the near future.

Active National Priority List Sites in Nebraska

Cornhusker Army Ammo Plant (Grand Island)
http://www.epa.gov/region07/cleanup/npl_files/ne2213820234.pdf

Hastings Groundwater Contamination (Hastings)
http://www.epa.gov/region07/cleanup/npl_files/ned980862668.pdf

Lindsay Manufacturing Co. (Lindsay)
http://www.epa.gov/region07/cleanup/npl_files/ned068645696.pdf

Nebraska Ordnance Plant (Mead)
http://www.epa.gov/region07/cleanup/npl_files/ne6211890011.pdf

10th Street Site (Columbus)
http://www.epa.gov/region07/cleanup/npl_files/ned981713837.pdf

Cleburn Street (Grand Island)
http://www.epa.gov/region07/cleanup/npl_files/ned981499312.pdf

Ogallala Groundwater Contamination Site (Ogallala)
http://www.epa.gov/region07/cleanup/npl_files/ned986369247.pdf

Bruno Coop Association (Bruno)
http://www.epa.gov/region07/cleanup/npl_files/ned981713829.pdf

Sherwood Medical (Norfolk)
http://www.epa.gov/region07/cleanup/npl_files/ned084626100.pdf

Omaha Lead Site (Omaha)
http://www.epa.gov/region07/cleanup/npl_files/nesfn0703481.pdf

Parkview Well Site (Grand Island)
http://www.epa.gov/region07/cleanup/npl_files/nen000704456.pdf

Garvey Elevator (Hastings)
http://www.epa.gov/region07/cleanup/npl_files/nen000704351.pdf

West Highway 6 & 281 (Hastings)
http://www.epa.gov/region07/cleanup/npl_files/nen000704738.pdf

York PCE/TCE Northeast Contamination
http://www.epa.gov/superfund/sites/npl/nar1887.htm

York PCE Southeast Contamination
http://www.epa.gov/superfund/sites/npl/nar1886.htm

Federal Facilities — The Superfund Federal Facilities program provides technical assistance and regulatory oversight to the U.S. Army Corps of Engineers in support of site assessment and cleanup activities and military munitions response activities at Department of Defense active facilities and formerly used sites. Active Federal installations include Offutt Air Force Base in Bellevue and Cornhusker Army Ammunition Plant in Grand Island. One hundred known formerly used defense sites exist in Nebraska that include small former defensive surface-to-air missile sites, bomber target sites, radar and communications sites and other formerly occupied Department of Defense properties. Under the current Defense-State Memorandum of Agreement, investigation and cleanup activities are being performed or planned to be performed at three active sites and 13 formerly used defense sites. Military munitions response activities are being performed at four sites. A military munitions response site is a site that may have the potential for unexploded ordnance, discarded military munitions, or munitions constituents in soil and groundwater that may pose an explosive hazard or threat to the environment.

Nebraska Voluntary Cleanup Program

The Remedial Action Plan Monitoring Act (RAPMA), initially created in 1995, established the Nebraska Voluntary Cleanup Program (VCP). The Voluntary Cleanup Program provides property owners and parties responsible for contamination with a mechanism for developing voluntary environmental cleanup plans that are reviewed and approved by the Department. The voluntary cleanup program provides an avenue for businesses to proceed with cleanup of property and an opportunity for regulatory review and oversight that may not be available at the federal level. In addition, the program serves as an alternative cleanup program to the more traditional federal cleanup programs like Superfund or RCRA.

The Department has a Memorandum of Agreement with EPA Region VII which provides federal approval of voluntary cleanup programs. Under this agreement, any site that joins the voluntary cleanup program and successfully completes the cleanup action is assured that EPA will not pursue federal enforcement under CERCLA.

To date, 44 sites have entered the voluntary cleanup program. Currently, 18 sites are active in the voluntary cleanup program. Two sites have been deferred to the EPA Superfund program. Five sites withdrew from the program. Five sites have been terminated from the program due to lack of activity in completing the investigation and/or cleanup. Fourteen sites have successfully completed cleanup requirements and have received "No Further Action" letters from the Department.

The Department has seen a significant increase in applications to the voluntary cleanup program over the last several years. New applicants include Nebraska Machine Products in Omaha, the City of Omaha and Metropolitan Utilities District on the Lynch Park former manufactured gas plant (FMGP) site, Appleton Electric in Columbus, and the Magnus Farley facility in Fremont. It should be noted that the Magnus Farley facility is addressing its federal RCRA Corrective Action obligations by participating in the voluntary cleanup program through a deferral from the EPA Region 7 RCRA program. The Department anticipates other RCRA-type facilities may utilize the program in future years. Significant cleanup activities are ongoing at the West Haymarket Redevelopment Site South in Lincoln, the former Nebraska Solvents Company site in Grand Island, the former Pfizer facility in Omaha, the Archer Daniels Midland facility in Lincoln, the Vishay Dale Electronics site in Norfolk, and Hoover Manufacturing in Beatrice. Cleanup activities are anticipated to be completed in 2015 at CVS Pharmacy in south Lincoln, the West Haymarket Redevelopment Site North in Lincoln, and the two former FMGP sites in Blair and Plattsmouth. Cleanup activities are also anticipated to commence next year at the Dettmer Lease property in Auburn and the Lynch Park FMGP site in Omaha.

The application fee to participate in the program is $2,000, and the initial deposit to pay for state oversight costs is $3,000.

Voluntary Cleanup Program Sites and Status

Site	Location	Date of Entry into RAPMA Program	Status
KN Energy	Holdrege	4/3/95	Completed 5/01/97
Garvey Elevator	Hastings-West	4/13/95	Deferred to EPA Superfund
ASARCO	Omaha-Riverfront	1/8/96	Completed 10/11/01
BNSFRR	Lincoln-N. Havelock	1/17/96	Terminated 12/4/06
Union Pacific RR	Omaha-N. Downtown	1/17/96	Withdrawn 3/7/03
Farmland Industries	Scottsbluff	2/26/96	Completed 7/2/09
Lincoln Journal Star	Lincoln-Downtown	2/26/97	Terminated 1/28/09
Farmland Industries	Hastings-East	6/25/97	Completed 9/2/03
Hastings Area wide	Hastings	12/17/97	Withdrawn 6/23/00
Lincoln Plating Co.	Lincoln	8/17/98	Completed 7/26/12
Witco Corporation	Omaha-North	1/20/99	Completed 6/29/99
BNSFRR	Lincoln-Lot 9 Havelock	4/28/99	Completed 2/20/01
Dana Corporation	Hastings-West	9/27/99	Deferred to EPA Superfund
Ballpark Complex	Lincoln-Haymarket	11/9/99	Completed 9/1/06
Progress Rail Services	Sidney-North	11/22/99	Completed 1/3/06
Brownie Manufacturing	Waverly-Highway 6	4/25/00	Withdrawn 7/19/01
BNSFRR	Lincoln-Havelock Yards	10/26/00	Terminated 12/4/06
New Holland	Grand Island-Southwest	11/9/00	Active
Owen Parkway East	Omaha-Abbott Drive	12/13/00	Withdrawn 11/26/02
Omaha Riverfront Redevelopment - 3 parcels	Omaha-Riverfront	5/18/01	Completed 6/18/03, 12/9/03, 11/9/04
Sanford & Son	Lincoln-North	1/22/02	Terminated 4/18/07
Union Pacific RR Child Development Center	Omaha-N. Downtown	3/5/04	Completed 1/13/12
Vishay Dale Electronics	Norfolk	11/13/06	Terminated 4/20/09
Union Pacific RR Nebraska Solvent Site	Grand Island	2/23/07	Active

Site	Location	Date of Entry into RAPMA Program	Status
Archer Daniels Midland	Lincoln	11/3/08	Active
Plaza North Station LLC	Omaha	7/14/09	Completed 2/11/14
Former Pfizer Facility	Omaha	7/28/09	Active
CVS Pharmacy	Lincoln	10/13/10	Active
West Haymarket Redevelopment Site North	Lincoln	10/27/10	Active
Izaak Walton Trap Range	Fremont	10/28/10	Completed 4/6/12
Magnolia Metal Corporation	Auburn	3/9/11	Completed 10/31/13
Dettmer Lease Property	Auburn	4/7/11	Active
Hoover Manufacturing	Beatrice	5/27/11	Active
Blair FMGP	Blair	6/28/11	Active
Plattsmouth FMGP	Plattsmouth	6/28/11	Active
Former USDA CCC Grain Bin Sites	Multiple Sites	3/16/12	Active
Vishay Dale Electronics	Norfolk	4/2/12	Active
Lewis and Clark Landing	Omaha	4/20/12	Active
West Haymarket Redevelopment Site South	Lincoln	6/11/12	Active
Quality Analytical Services	Omaha	8/2/12	Withdrawn 6/3/14
Nebraska Machine Products	Omaha	9/18/12	Active
Lynch Park FMGP	Omaha	11/20/12	Active
Appleton Electric	Columbus	3/1/13	Active
Magnus Farley	Fremont	8/14/14	Active

Brownfield Assessments and Cleanups — A brownfield site is a vacant or under-used industrial or commercial property where expansion or redevelopment is complicated by unresolved contamination concerns. The voluntary cleanup program performs assessments and cleanups at brownfield sites in Nebraska. These assessments and cleanups are performed by NDEQ, typically with federal funds, at no cost to interested parties in Nebraska communities. A brownfield assessment is a preliminary investigation to evaluate the environmental conditions at a property, similar to a Phase I and Phase II Environmental Site Assessment. The brownfield assessment can also include surveys of existing building structures on the property for the presence of lead-based paint or asbestos. Cleanups can involve a variety of measures that are implemented to contain and reduce contamination at a site. During the past year, the Department has performed 11 Phase I assessments, one Phase II assessment, one lead-based paint survey, and five asbestos surveys.

Solid Waste Program

Solid Waste regulations are incorporated in NDEQ *Title 132 - Integrated Solid Waste Management Regulations.* The purpose of the program is to ensure proper management of solid waste. Solid waste includes municipal solid waste typically collected and disposed in municipal landfills, and other non-hazardous waste. The regulations provide technical criteria for land disposal areas and solid waste processing facilities.

Duties assigned to this program include: 1) Permit issuance, renewal and modification; 2) Response to inquiries related to facility operations; 3) Compliance inspections and enforcement actions; 4) Investigation of citizen complaints; 5) Alternate waste management method approvals; 6) Groundwater investigations and groundwater/soil remediation projects for permitted and non-permitted facilities; 7) Gas emissions monitoring related to landfills and other permitted sites; 8) Closure inspections and monitoring of closure and post-closure activities; 9) Conducting public information sessions and hearings related to permits; 10) Financial assurance review and monitoring compliance; and 11) Assisting regulated facilities and the general public in recycling, re-use and proper management of waste-like materials.

The program regulates municipal solid waste disposal areas (landfills), construction and demolition disposal sites, fossil fuel combustion ash disposal sites, industrial and delisted hazardous waste sites, and land application sites for repeated disposal or treatment of special wastes. In addition, solid waste processing facilities, such as compost sites, material recovery facilities, and transfer stations, are regulated by this program.

Permit modification requests are regularly submitted by permitted facilities. Response to the modification requests are particularly time-critical since the facility may need to expand or construct new cells in order to meet their disposal capacity needs and continue operations.

The waste management program coordinates with other department divisions to ensure that permits issued include adequate protection of all environmental media. The requirements in solid waste permits include protection against excessive emissions of landfill gas to the atmosphere, storm water runoff controls, and restrictions on accepting hazardous waste for disposal at a landfill.

Currently, the Solid Waste Program oversees the following facilities, by type:

Total Permitted Facilities in FY 2014	
Municipal Solid Waste Disposal Areas (Landfills)	23
Solid Waste Compost Sites	8
Transfer Stations	38
Materials Recovery Facilities	5
Construction & Demolition Waste Disposal Areas	31
Delisted Waste Disposal Area	1
Processing Facility	1
Fossil Fuel Combustion Ash Disposal Areas	8
Emergency Carcass Disposal	1
Total	116

The following chart indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2014:

Summary of Activities: FY2014	
Compliance	
Facility Inspections (General)	145
Complaints Received	183
Complaints Investigated	183
Complaints Closed	145
Permitting	
New Permits Issued	2
Permit Renewals	14
Major Permit Modifications	1
Public Hearings	1
Financial Assurance Reviews	178
Facilities Closed	1

Assessment Monitoring and Remedial Measures

All solid waste landfills accepting municipal solid waste, industrial waste, delisted hazardous waste and fossil fuel combustion ash are required to conduct groundwater monitoring. The purpose of the groundwater monitoring is to detect any release of contaminants from the facility that may impact groundwater quality. A phased approach is used from the initial detection of a potential release to making decisions on cleanup actions after groundwater contamination has been fully investigated.

The first phase is detection monitoring. During this phase, a landfill will monitor for a discrete number of contaminants that would be indicative of a potential release from the facility. If one or more of the parameters being monitored exceed background levels, the facility then begins assessment monitoring. During assessment monitoring, a landfill will monitor for a more extensive list of contaminants. If during the assessment monitoring phase contaminant concentrations are detected above a groundwater protection standard, the landfill may then be required to characterize the nature and extent of the release. In FY2014, nine active municipal solid waste disposal areas and two closed municipal solid waste disposal areas conducted assessment monitoring.

Following the assessment monitoring phase, a landfill may be required to assess and conduct remedial measures. In FY2014, remedial measures were conducted at two sites.

Title 118 Groundwater Investigations and Remedial Actions

Several municipal solid waste disposal areas that closed prior to 1993 have conducted groundwater investigations and remedial actions pursuant to NDEQ *Title 118 – Groundwater Quality Standards and Use Classification*. In FY2014, groundwater investigations were conducted at three sites and remedial actions were conducted at six sites.

Financial Assurance and Fees

All permitted solid waste landfills are required to provide financial assurance for closure and post-closure maintenance and monitoring. All privately-owned permitted solid waste processing facilities are required to provide financial assurance for closure.

Program Funding

The Waste Management Section collects permit fees and annual operating fees for all solid waste management facilities. Quarterly disposal fees based on cubic yards or tonnage are collected from all municipal solid waste landfills and transfer stations moving waste for disposal out of state. Fifty percent of the quarterly disposal fees are redistributed as grants and for administration of the Waste Reduction and Recycling Incentives Grants Program and fifty percent of the quarterly disposal fees are utilized for costs of administering the solid waste program and for investigation and remediation of contamination from solid waste facilities and for other statutorily authorized activities.

Waste Tire Management Program

The Department also administers the waste tire management program. Approved beneficial uses of waste tires are outlined in Department regulations. Waste tire haulers are required to obtain individual permits annually and are required to post financial assurance. Financial assurance is designed to provide adequate funds to clean up any waste tires that are illegally disposed by the transporter.

Waste tire management facilities (except tire dealers) are allowed to accumulate up to 500 tires without further requirements, other than mosquito control and fire prevention measures. Speculative accumulation of more than 500 waste tires is prohibited.

Compliance assistance is an important aspect of this program. Program activities include responding to telephone inquiries, letters, and contacts from other states, developing guidance documents, conducting site visits and providing technical advice. The Department has developed guidance documents to explain the proper use of waste tires for blow-out and bank stabilization. Direct financial assistance is also available through the Waste Reduction and Recycling Incentives Grant program, which is described later in this chapter.

Waste Tire Permit Totals, FY2014	
Permitting	
Renewed Hauler Permits	20
New Permits Issued	1

The waste tire compliance assurance program includes facility inspections, complaint investigations and appropriate enforcement actions. Compliance activities are included in the summary of activities for the Solid Waste Program.

Planning and Aid

Waste Planning and Aid includes the following programs: the Waste Reduction and Recycling Incentive Grants Program; the Litter Reduction and Recycling Grant Program; the Illegal Dumpsite Cleanup Program; and the Landfill Disposal Fee Rebate Program.

Main responsibilities of the Planning and Aid Unit include:

- Oversight and review – The Unit reviews grants submissions; performs compliance inspections; monitors the activities, budgets and equipment purchases of grantees; and conducts quarterly performance reviews.
- Outreach – The Unit promotes the availability of grant funding, coordinates the ranking process, coordinates grant awards, provides integrated waste management information to the public, and contributes to the development of the Nebraska Recycling Resource Directory, which is located at DEQ's web site at http://deq.ne.gov, under "Assistance."

New Online Processes

A major initiative has been undertaken to convert two waste grant programs from paper-based to online paperless processes. In FY2014, the applications for the Waste Reduction and Recycling Incentive Grants Program and the Litter Reduction and Recycling Grant Program were converted to an online process. Through this new process, applications are filled out and submitted on the agency web site. The reporting and reimbursement functions for these two grant programs will be converted to an on-line process in FY2015. These changes are intended to result in time and material savings to both the Department and the grant program recipients. Online information can be found by going to DEQ's web site at http://deq.ne.gov. Select the "Land and Waste" tab, and then select the "Waste Planning and Aid Programs" tab.

Expected Service Life

The Planning and Aid Unit grant programs utilize an expected service life procedure for grant-funded equipment. The expected service life determines how long the grantee is responsible for reporting equipment status to the Department and how long the Department maintains an interest in the equipment.

An expected service life is assigned to all equipment purchased with grant funds (in whole or in part) that has a value of $1,000 or more per item. Equipment costing less than $1,000 can be assigned an expected service life on a case-by-case basis. Purchase of equipment is documented at the time of purchase. When the grant is closed out, the grantee is provided a sticker to properly identify the equipment and is notified of the length of the expected service life.

Waste Reduction and Recycling Incentive Grants Program

In 1990, the Nebraska Legislature passed Legislative Bill 163, the Waste Reduction and Recycling Act, which created the Waste Reduction and Recycling Incentive Grants Program.

There are three sources of revenue for this program:

- A business fee on sales of tangible personal property, which generates about $500,000 annually.
- A $1 per tire fee on the retail sale of new tires in Nebraska, which generates about $1.9 million annually;

- Fifty percent of the $1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately $1.2 million annually for grant awards.

The Waste Reduction and Recycling Incentive Fund provides grants to assist in financing sound integrated waste management programs and projects. These programs and projects may include but are not limited to: recycling systems; market development for recyclable materials; intermediate processing facilities and facilities using recyclable materials in new products; yard waste composting and composting with sewage sludge; waste reduction and waste exchange; household hazardous waste programs; the consolidation of solid waste disposal facilities and use of transfer stations; and incineration for energy recovery. A portion of the grants is also obligated to fund scrap tire recycling or reduction projects and a portion of the grants are available to smaller cities and counties for abandoned building deconstruction.

Fund Summary
Waste Reduction and Recycling Fund
July 1, 2013 - June 30, 2014

Fund Balance June 30, 2013	**$**	**5,145,946**
Revenues:		
New Tire Fees		2,008,237
Business Fees		471,294
Solid Waste Disposal Fee		1,312,013
Interest, Grant Returns		98,325
Net Collections for Year	**$**	**3,889,869**
Expenditures:		
Administration		349,065
Grant Funds Expended*		2,859,583
Total Expenditures FY 2014	**$**	**3,208,648**
Fund Balance June 30, 2014	**$**	**5,827,164**

* *Because grants funds are expended on a reimbursement basis, total grant funds expended in a fiscal year will differ from the amount of grants awarded in that fiscal year.*

Summary of Activities - For FY2014, the Department awarded $4,296,581 for Waste Reduction and Recycling Incentive Grants to 161 projects. This is an increase of over $700,000 granted from the previous year and an increase of 24 projects. Twenty six of these grants were awarded from the Business Fee category ($1,107,888), 15 were awarded from the Disposal Fee category ($1,012,371), and 120 received grants from the funds prioritized for scrap tire projects ($2,176,322). The following lists indicate the locations across Nebraska that received funds.

Waste Reduction & Recycling Grants for FY2014

Business Fee	$ 1,107,888	26 grants, including, 2 statewide, 4 regional
Disposal Fee	$ 1,012,371	15 grants, including, 4 regional

Business Fee

Chadron
Columbus
David City
Firth
Fremont, 1 regional grant
Gretna
Hastings
Kimball
Lexington, 1 regional grant
Lincoln, 5 grants, including 1 regional, 2 state
Norfolk
North Platte
Oakland, 2 grants
Ogallala
Omaha, 4 grants, including 1 regional
Schuyler
Scottsbluff
Seward

Disposal Fee

Broken Bow
Gering
Hastings
Imperial, 2 grants, including 1 regional
Lincoln, 4 grants, including 1 regional
McCook, 1 regional grant
Omaha, 1 regional grant
Pilger
Plattsmouth
Thedford
Wayne

Deconstruction Grants for FY2014

There were no deconstruction grants applied for or granted in FY2014.

Scrap Tire Grant Awards for FY 2014

114 local grants and 6 regional grants for an award total of $2,176,322.

Ainsworth
Albion
Alliance, 2 local, 1 regional
Alma, 1 local, 1 regional
Arlington, 1 local, 1 regional
Atkinson
Auburn
Aurora
Bassett
Beatrice, 2 local
Bellevue
Benkelman
Bennet
Broken Bow, 2 local
Cedar Bluffs
Cedar Rapids
Center
Central City, 2 local
Chadron, 2 local, 1 regional
Columbus, 2 local
Davenport, 1 local, 1 regional
David City, 2 local
Eagle
Elgin, 2 local
Elwood
Emerald
Fairbury
Falls City
Firth
Ft. Calhoun
Fremont
Geneva
Gibbon
Grand Island
Gretna, 2 local
Hartington
Hastings, 2 local
Imperial
Kearney, 3 local
Kimball
Lewiston
Lincoln, 5 regional
Loup City, 2 local
Madison
Madrid, 2 local
Minden, 2 local
NE City
Neligh
Nelson, 2 local
North Bend
North Platte
Omaha, 8 local
Ord, 1 local, 1 regional
Osmond
Pawnee City
Pender
Peru, 2 local
Petersburg
Pierce
Plattsmouth
Ponca
Ralston, 3 local
Ravenna
Red Cloud
Schuyler, 3 local
Seward
Shelby
Shelton
S Sioux City
St. Paul
Stapleton
Tecumseh, 3 local
Tekamah
Wahoo
Wayne, 3 local
Wilber, 2 local
York

Litter Reduction and Recycling Grant Program

The Litter Reduction and Recycling Grant Program has been in existence since 1979. Its purpose is to provide funds to support programs to reduce litter, provide education, and promote recycling in Nebraska.

Funds from this program are provided from an annual fee assessed to manufacturers, wholesalers, and retailers having gross receipts of at least $100,000, on products that commonly contribute to litter. For manufacturers, the annual litter fee is equal to $175 for each million dollars of products manufactured. The annual litter fee for wholesalers and retailers is equal to $175 for each million dollars of sales made in the state. Approximately $1.8 million is received annually.

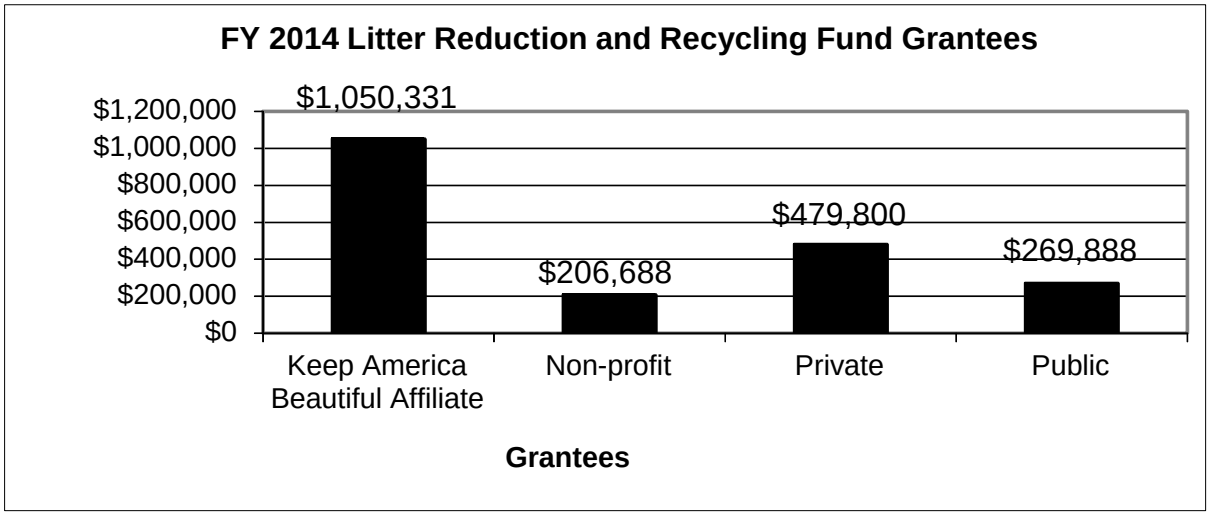
The annual litter fee is imposed on products in the following categories:

- Food for human consumption, beverages, soft drinks, carbonated water, liquor, wine, beer, and other malt beverages, unless sold by retailers solely for consumption indoors on the retailer's premises;
- Food for pet consumption;
- Cigarettes and other tobacco products;
- Household paper and household paper products;
- Cleaning agents; and
- Kitchen supplies.

Fund Summary
Litter Reduction and Recycling Fund
July 1, 2013 - June 30, 2014

Fund Balance June 30, 2013	**$765,555**
Revenues:	
Litter Taxes Collected	$2,008,388
Interest, Grant Returns	$53,968
Net Collections for Year	**$2,062,356**
Expenditures:	
Department of Environmental Quality Administration	$260,277
Grant Funds Expended	$1,898,228
Total Expenditures FY 2014	**$2,158,505**
Fund Balance June 30, 2014	**$669,406**

In FY2014, $2,006,707 was awarded from the Litter Reduction and Recycling Grant Program. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling. Below is a chart reflecting FY2014 grantees.



FY 2014 Grant Allocations

Litter Reduction and Recycling Fund

In FY2014, the Department gave 51 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

Public Education	(44%)	21 grants	$ 887,141
Cleanup	(3%)	7 grants	$ 67,164
Recycling	(53%)	23 grants	$ 1,052,402
Totals	(100%)	51 Grants	$ 2,006,707

Public Education

In FY2014, 21 grants totaling $887,141 were awarded under the category of Public Education. The Public Education programs educate citizens in the areas of litter reduction, cleanup, and recycling through a variety of individual and community activities. The citizens of Nebraska are cultivating a greater awareness of their impact on the environment through their purchasing and disposal actions. The educational programs are an excellent means of providing information on proper waste disposal, recycling, and available products that contain recycled material. Priority is given to programs that promote markets for recycled materials or purchasing products made from recycled materials. The following list indicates the locations that received funds.

FY 2014 Public Education Grant Awards

Total Awarded - $887,141	21 total grants
2 Regional Grant Awards	1 Statewide Grant Award

Alliance	Norfolk
Beatrice	North Platte
Burwell - Regional	Ogallala
Chadron	Omaha
Columbus	Plattsmouth
Fremont	Schuyler
Grand Island	Scottsbluff
Kimball	Sidney
Lexington	South Sioux City - Regional
Lincoln (2 grants)	Statewide

Cleanup

In FY2014, seven grants totaling $67,164 were awarded under the category of Cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas, and other public-use areas within the state. Not only are the public areas improved through the removal of litter and debris, but also much of the material collected during the cleanups is recycled. The recycling proceeds are often utilized to benefit the respective programs. The following list indicates the locations that received funds.

FY 2014 Cleanup Grant Awards

Total Awarded - $67,164	7 total grants

Beatrice	Omaha
Chadron	Schuyler
Lincoln	Steinauer
North Platte	

Recycling

In FY2014, 23 grants totaling $1,052,402 were awarded under the category of Recycling. The recycling programs provide an alternative to the disposal of solid waste in Nebraska's landfills. The programs recycle more than just aluminum, paper, glass, and plastic. Materials such as electronic computer components, paint, aerosol cans, fertilizer, pesticides, and household hazardous waste are collected and either reprocessed to be used again or are disposed of in an environmentally friendly manner. Recycling conserves our natural resources, landfill space, and energy. Jobs are created and revenue is generated through the opportunities that recycling provides. Recycling efforts that promote the purchase of recycled content products continue to receive priority for funding. This support helps to "close the loop" and enhance the recycling efforts in Nebraska. The following list indicates the locations that received funds.

FY 2014 Recycling Grant Awards

Total Awarded - $1,052,402
7 Regional Grant Awards

23 total grants
1 Statewide Grant Award

Alliance
Beatrice
Chadron
Columbus 2 grants (1 Regional)
Gering
Grand Island - Regional
Gretna
Kimball
Lexington
Lincoln, 3 grants (1 Statewide)
Lancaster County
North Platte
Ogallala - Regional
Omaha 2 - Regional
Schuyler
Valentine - Regional
Verdigre
York - Regional
Minatare

Illegal Dumpsite Cleanup Program

The Illegal Dumpsite Cleanup Program, established in 1997, is a cleanup program that provides funding assistance to political subdivisions for the cleanup of solid waste disposed of along public roadways or ditches. Through this program, items such as household waste, white goods, construction and demolition waste, and furniture, are removed from the illegal site and disposed in a permitted facility or recycled.

Funding for this program is limited to five percent of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. Approximately $140,000 is available annually. The Department is encouraging municipalities, counties, and other political subdivisions to submit applications for the reimbursement of cleanup efforts. The Department provided information to all of the counties in Nebraska in an effort to make the program known statewide and to utilize more of the available funds. In FY2014, the program provided 23 grants, totaling $49,792, to eight recipients. In FY2014, funds were provided to:

Adams County
Seward County
Polk County
Gage County
Omaha
Lancaster County
Harlan County
Lincoln

Landfill Disposal Fee Rebate Program

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund.

Under the program, which was created in 1994, any municipality or county may apply for a rebate if they have a written purchasing policy requiring a preference for purchasing products, materials or supplies that are manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a 10-cent rebate from the $1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

In FY2014, the program provided $94,878 to five counties and six cities participating in the program. In FY2014, the Department offered to provide letters and forms to the participants through email instead of the postal service. Eight of the eleven participants chose this option furthering our waste reduction efforts and increasing efficiency.

David City	$ 103.06	Jefferson County	$ 1,105.59
Lincoln	30,303.25	Seward County	1,512.50
Omaha	47,333.93	Saline County	2,173.78
Grant	1 12.29	Buffalo County	4,253.00
South Sioux City	502.90	Butler County	3,815.10
North Platte	3,662.39		

CHAPTER 6:
Water Quality Division

The goal of the Water Quality Division is to protect the surface and groundwater resources in Nebraska. This chapter describes the programs administered by the Water Quality Division, including: petroleum remediation programs, agriculture programs, surface water and groundwater monitoring and assessment programs, water quality planning, wastewater permitting and certification programs, and financial assistance programs.

Petroleum Remediation Program

NDEQ's activities regarding the Petroleum Remediation Program involve two interrelated program areas:

1. Overseeing the **investigation and cleanup** of petroleum contamination resulting from leaking above-ground and underground storage tanks and other sources; and
2. Administering a **financial assistance program** for persons responsible for investigation and cleanup costs due to petroleum releases from tanks.

Investigation and Cleanup

The first step in the Petroleum Remediation Program is the review of tank removal assessment reports or other documentation to determine whether potential contamination exists. After some initial indication that there may be petroleum contamination at a site, NDEQ decides whether more investigation and cleanup is required. The agency also determines whether parties who caused the contamination are available and financially capable of assuming responsibility.

In the event these reports indicate a threat to health, safety, or the environment, NDEQ requires a detailed study of the affected groundwater and soil to discover the severity of the contamination, direction of groundwater flow, and potential water supplies or points of exposure that may be impacted. Program staff review these reports to determine if cleanup requirements are needed and issue a public notice of their decision. Staff review remedial actions throughout the project and determine when sufficient cleanup has been accomplished.

The program has developed risk-based corrective action (RBCA) regulations and accompanying guidance. The RBCA process allows evaluation of all petroleum release sites based on the risk they pose to human health and the environment. Those that pose no significant risk are closed; those that pose significant risk are prioritized for further work. Since 1999, the program has been initiating many new investigations to collect information needed for Tier 1, the first step in the RBCA process. The plan is to continue investigating additional sites until eventually the information necessary for a RBCA Tier 1 evaluation has been collected at all sites. Sites that fail Tier 1 are activated for Tier 2, which is a more detailed investigation and the next step in the RBCA process. If sites fail Tier 2, they are normally scheduled for cleanup.

Financial Assistance – Petroleum Release Remedial Action Reimbursement Fund

When contamination has been found at a site, and the NDEQ has determined that more investigation and/or cleanup are required, the agency will also determine the "responsible person(s)." This term refers primarily to those who owned or operated the site when the leak

occurred. Those who are determined to be the responsible persons may be eligible for reimbursement through the Petroleum Release Remedial Action Reimbursement Fund.

This fund helps pay for investigation and cleanup costs for owners/operators of facilities that have leaking petroleum tanks. Costs for both underground and above-ground tank releases are eligible for reimbursement. The program's activities in this area include receiving and processing applications for reimbursement from the fund and subsequently initiating reimbursements for eligible costs. To assist applicants, the program developed guidelines entitled "Reasonable Rates Schedule and Reimbursement Guidance Manual."

"Orphan" Sites

In situations involving "orphan" sites (sites where the person or business that caused the contamination either cannot be identified or located or does not have the resources to pay for their share of cleanup costs), investigation and remediation costs are paid with federal and/or state funds. In FY14, 14 orphan sites were activated for investigation and/or cleanup. As of August 31, 2014, there were 519 orphan sites on the inactive list.

Pay for Performance

Some orphan sites are selected by the state to be cleaned up through a different process known as "Pay for Performance." Under the Pay for Performance program, pre-qualified contractors are invited to submit bids to clean up specific petroleum-contaminated sites. NDEQ has signed 36 Pay for Performance contracts since the program's inception. Of these projects, 10 have been successfully completed, 19 were terminated prior to completion, and 7 are still in the cleanup phase. This program saves the state time and money in getting these sites cleaned up.

Program Statistics

Since June 1999, through July 31, 2014, 2,641 Tier 1 site investigations have been initiated. Of the 2,368 Tier 1 field investigations completed, 1,461 (62%) were closed, and 907 (38%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 784 Tier 2 investigations have been completed; 557 (71%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, 316 (13%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

The revenue going into the cleanup fund in FY14 was about $11.5 million. As of June 30, 2014, a total of $191,180,415 has been disbursed since the program began. During FY14, NDEQ reimbursed $5,176,395 to responsible persons (or their designees) for work done at 233 different sites.

The 34 sites listed on the next page are all currently active sites that have received a total reimbursement of more than $600,000 each. Once the statutory limit is reached, the responsibility of funding the remainder of cleanup necessary reverts to the responsible person. Some closed sites also reached the statutory limit but are not shown.

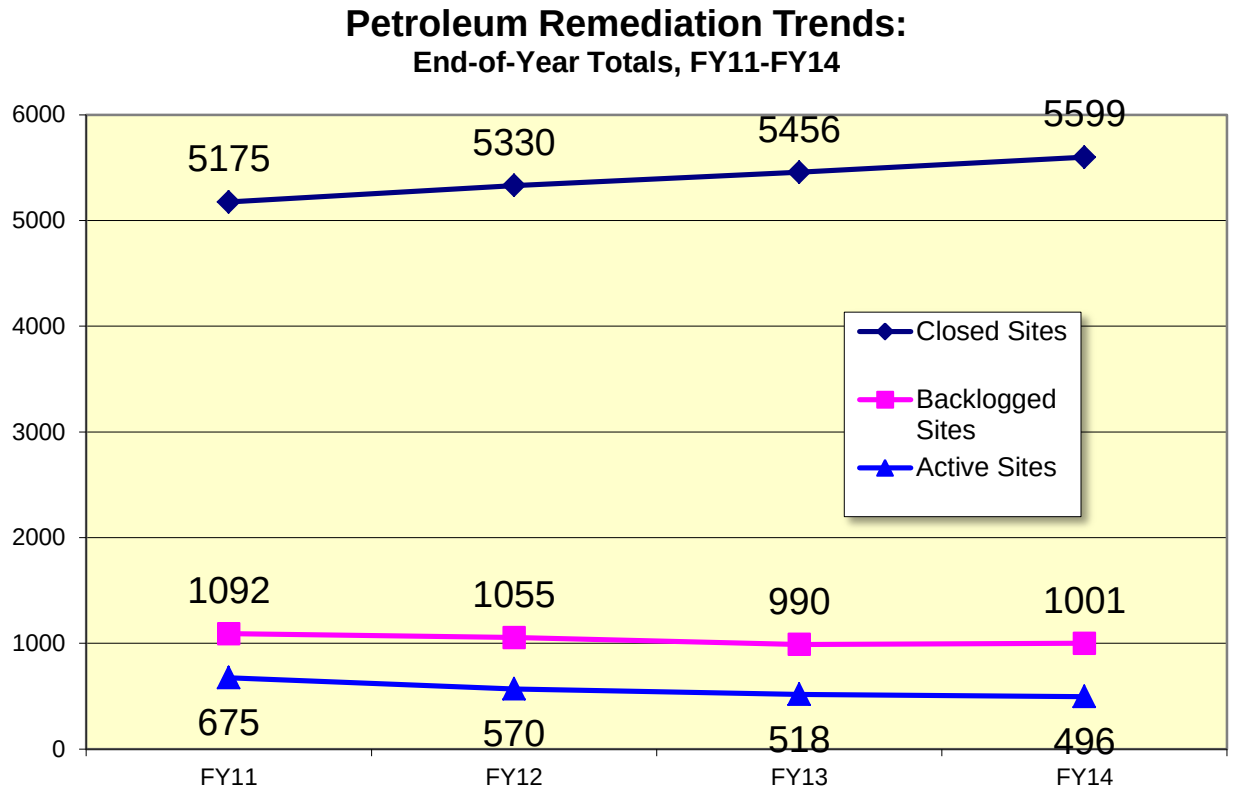
Responsible Person	City	Reimbursed amount as of June 30, 2014	Has Statutory Limit Been Reached?*
Burlington Northern & SFR	Alliance	$975,000.00	yes
Burlington Northern & SFR	Mc Cook	$975,000.00	yes
Konecky Oil	Mead	$975,000.00	yes
Burlington Northern & SFR	Lincoln	$974,300.47	yes
Conoco Phillips	Sidney	$973,919.00	yes
Burlington Northern & SFR	Alliance	$973,682.45	yes
Ag Valley Coop	Bartley	$973,381.20	no
Burlington Northern & SFR	Alliance	$973,302.50	yes
Burlington Northern & SFR	Alliance	$972,578.98	yes
Elkhorn Valley Coop	Snyder	$970,688.80	no
Western Cooperative Co.	Alliance	$969,002.35	yes
Unocal Corporation	Ogallala	$950,471.14	no
Magers Service	North Platte	$947,669.57	no
Wortman Motor Co.	Doniphan	$906,909.98	no
Neitzel Oil Co.	Springfield	$851,686.82	no
IBP ATV(at The Verticals)	Dakota City	$842,715.15	no
Coastal Refining & Market	Chester	$827,364.08	no
Flying J Inc	Gretna	$820,806.09	no
Foote Oil Company	Hastings	$806,088.05	no
Western Cooperative Co.	Alliance	$802,667.68	no
Leigh Oil Co	Leigh	$776,204.69	no
City Of Lincoln	Lincoln	$762,231.03	no
Ag Valley Coop	Curtis	$744,026.73	no
Roesener Oil Co	Cook	$743,946.93	no
Sandhill Oil	Thedford	$732,983.95	no
Lohr Petroleum Co	Columbus	$717,742.00	no
Indianola Oil Company	Indianola	$709,640.19	no
Sinclair Oil Corp.	Grand Island	$700,145.26	no
Lexington Coop Oil	Eddyville	$645,923.78	no
I-90 Truck Haven	Norfolk	$638,840.78	no
Shoemaker Truck Station	Lincoln	$630,308.64	no
Farmers Union Coop	Dannebrog	$609,703.28	no
Former Farmers Coop	Cedar Bluffs	$607,091.97	no
Burlington Northern & SFR	Columbus	$602,944.84	no

** Those with a yes indicate that the statutory limit was reached prior to June 30, 2014. The total reimbursed amount may have been reduced due to noncompliance.*

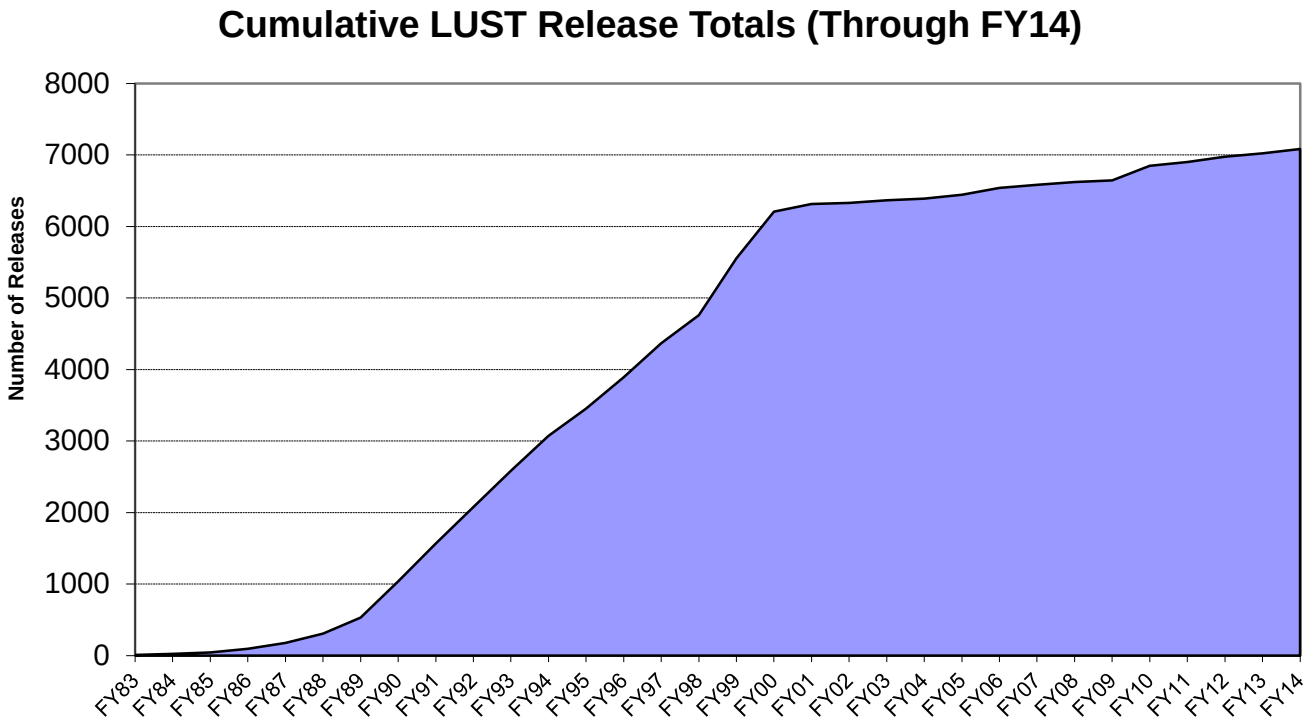
Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. To date, 223 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

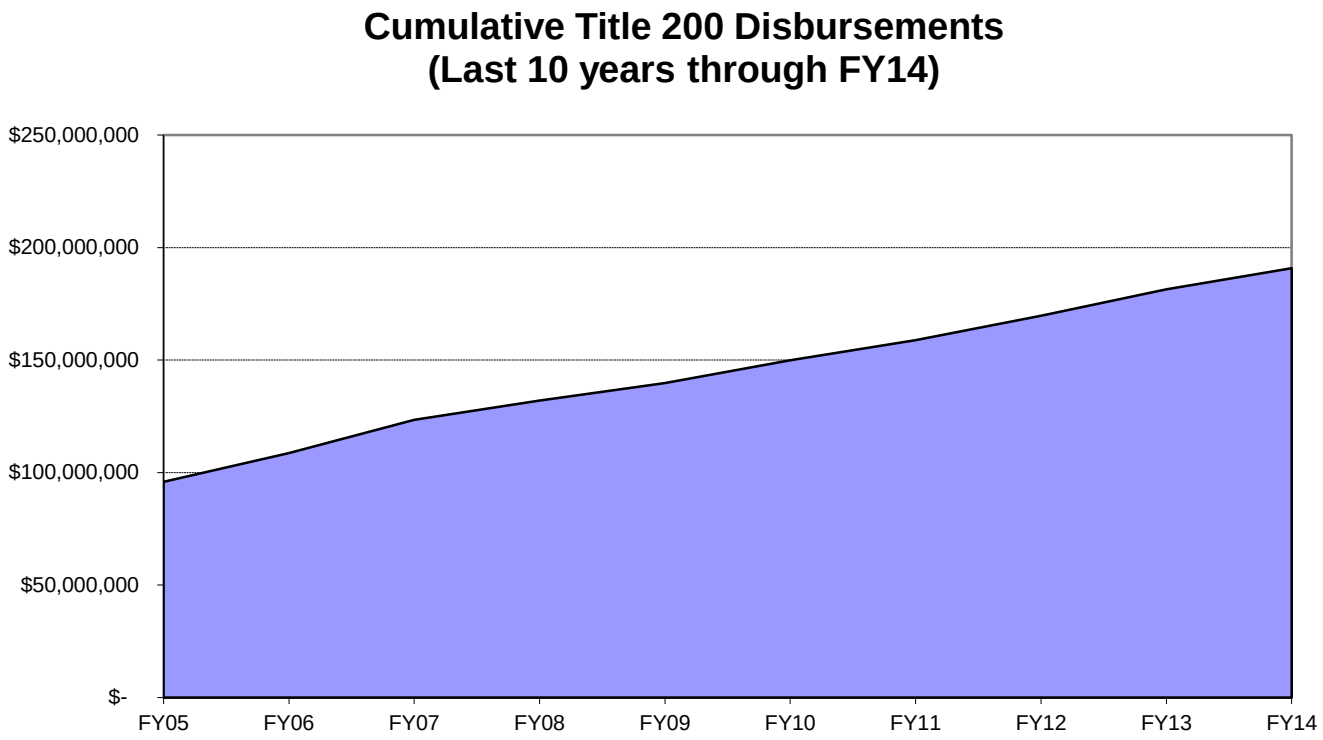
The following is a chart of end-of-year totals for the past four years relating to Petroleum Remediation sites in Nebraska. The chart provides information relating to:

- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary.
- **Backlogged Sites:** Sites identified as potentially needing cleanup, but are on a waiting list for further investigation.
- **Active Sites:** Sites that are currently being actively investigated or remediated.



The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.





Agriculture Section

The Agriculture Section programs consist of the Livestock Waste Control Program, the Chemigation Program, and the Agricultural Chemical Containment Program.

Livestock Waste Control Program

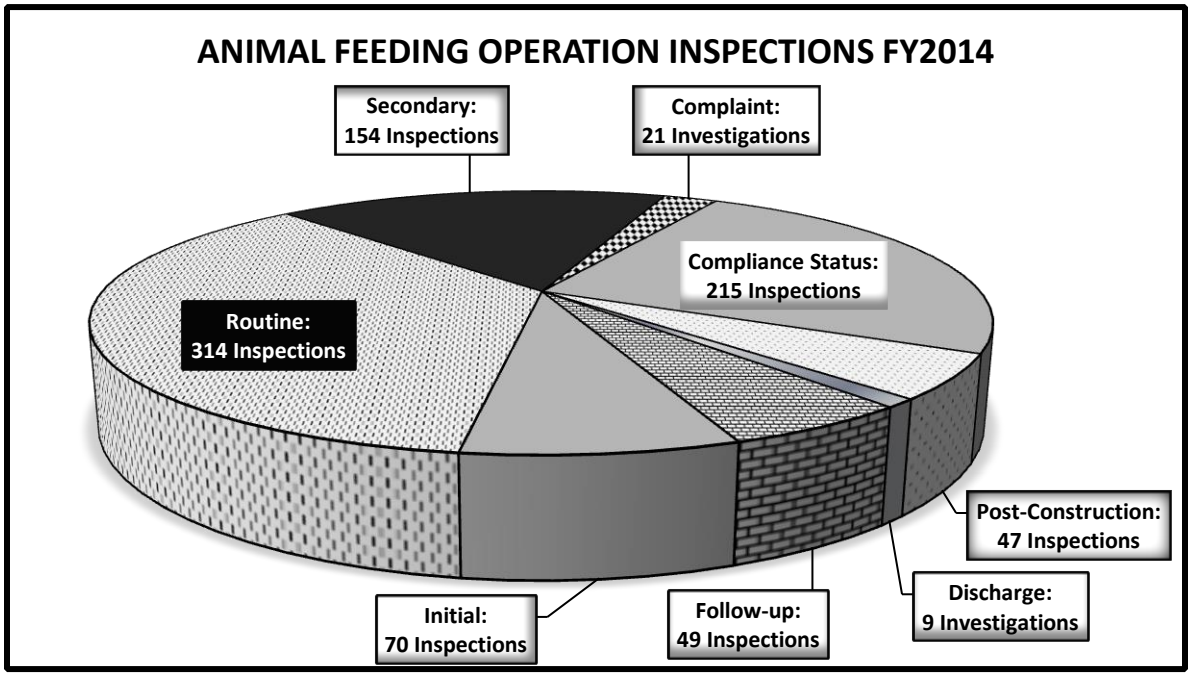
Overview

The Livestock Waste Control Program (LWC) is charged with the overall responsibility to protect Nebraska's surface water and groundwater from discharge of livestock waste from any of the thousands of Animal Feeding Operations (AFOs) in Nebraska.

To accomplish this responsibility, the program administers *Title 130 - Livestock Waste Control Regulations*. The LWC program primarily focuses on the 769 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,000 Medium AFOs. The program uses inspections, permitting, and periodic monitoring to fulfill this responsibility. The permitting includes administering the National Pollutant Discharge Elimination System (NPDES) program for CAFOs.

Amendments to Title 130 became effective October 4, 2011 to reflect changes in the U.S. Environmental Protection Agency (EPA) CAFO Rule for NPDES permitting, which primarily involved who needs to apply for NPDES permit coverage. The changes were necessary to ensure the Department would continue to administer the NPDES permit program for EPA. As a result, only CAFOs that discharge are required to apply for NPDES permit coverage.

Inspections



The LWC Program staff conducted a total of 879 livestock waste control inspections and investigations in FY2014 (including complaint and discharge investigations). The chart above illustrates the breakdown by type of inspection or investigation. A concerted effort was made

during the fiscal year to revisit many medium sized operations to ensure that they were in compliance with Title 130 and the EPA CAFO Rule.

A short description of each type of inspection and investigation follows:

Initial Inspection. Before constructing a new operation or expanding an existing operation, all medium and large AFOs – whether or not the operation currently is permitted -- must request an initial inspection by program staff. The reason for this inspection is to determine if livestock waste control facilities must be constructed, expanded, or modified to prevent a discharge and to properly manage the livestock waste generated by the operation.

Post Construction Inspection. Upon completion of any required construction of a livestock waste control facility, program staff conduct a post-construction inspection to verify the waste control facility was constructed as approved by the Department.

Routine Inspections. Once a CAFO or an AFO has received a permit, and the Department has approved operation of the livestock waste control facility, program staff will conduct periodic, routine inspections to monitor operation of the livestock waste control facilities, management of the operation's livestock waste, and the records these CAFOs and AFOs are required to maintain. Routine inspections are regularly scheduled inspections of an AFO, involving a detailed, extensive inspection of the livestock waste control facility, recordkeeping, and waste management at the operation.

Follow-up Inspections. These are conducted in response to some specific activity, situation, or request by the operation. Follow-up inspections could be prompted by an operation's request for a "second opinion" on a requirement; or to monitor the AFO's progress on completing a construction or repair project; or to follow up after a complaint inspection or enforcement action, for example.

Compliance Status Inspections. Generally conducted to verify the AFO's operating status or level of compliance with a specific requirement; these inspections are usually less urgent, non-emergency situations.

Discharge Investigations. Discharge investigations are conducted when discharges of livestock waste from livestock waste control facilities are reported. Sometimes these discharges are not recorded as complaints because the AFO does self-reporting, as required by the regulations.

Complaint Investigations. When a complaint is received, program staff will investigate the complaint and may conduct an on-site complaint investigation.

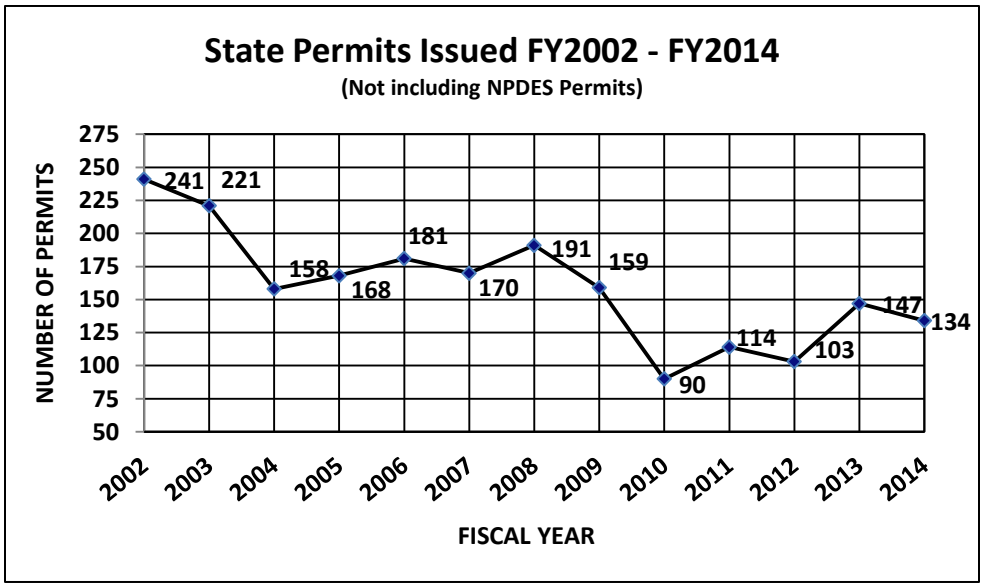
Secondary Inspections. Secondary Inspections are primarily conducted for training purposes and to assist the primary inspector in evaluating unusual or atypical AFOs.

State Permitting

After conducting an initial inspection, the Department may require the Animal Feeding Operation to submit an application for a Construction and Operating Permit – the state permitting process for livestock waste control facilities – prior to construction of livestock waste control facilities.

Construction and Operating Permits – FY2014		
Type of Application or Permit	**Applications Received**	**Permits Issued**
New permits	49	71
Modified permits	33	44
Transfer permits	17	19
TOTAL	**99**	**134**

The Department received a total of 99 permit applications and issued 134 permits during FY2014, as shown in the table to the right. The totals do not include applications received or permits issued for any NPDES permits. The chart below shows the total number of state permits issued annually for livestock waste control facilities since FY2002. There were more Construction and Operating Permits issued than applications received because the Department updated some existing Construction Permits, Construction Approvals and Operating Permits to Construction and Operating Permits if the Animal Feeding Operations updated their nutrient management plans to current Title 130 standards. The updates were mainly in conjunction with NPDES Permit renewals or transferred permits.



Once a permitted AFO has completed its construction project, the Department conducts a post-construction inspection. If the post-construction inspection shows the construction was completed as approved, the Department notifies the AFO that operation of the new livestock waste control facility is approved. In FY2014, the Department gave approval to 144 AFOs for operation of their new or expanded Livestock Waste Control facilities.

National Pollutant Discharge Elimination System (NPDES) Permit

The Livestock Waste Control Program also oversees the NPDES permitting process for livestock, issuing coverage under individual NPDES permits to CAFOs, as well as coverage under an NPDES General Permit for Open-Lot Cattle Operations. Both permits expire every five years,

and permittees are required to submit a reissuance application to continue NPDES permit coverage.

The table below summarizes the number of NPDES applications received and permits issued for livestock waste control facilities in FY2014.

NPDES PERMITS – FY2014		
Type of NPDES Application/Permit	Applications Received	Permits Issued
GENERAL PERMIT FOR OPEN LOTS		
New Coverage	39	214
Modified or Transferred	18	16
SUBTOTAL GENERAL PERMIT:	**57**	**230**
INDIVIDUAL PERMITS		
New Coverage	3	7
Modified or Transferred	3	1
Reissued	1	4
SUBTOTAL INDIVIDUAL PERMIT:	**7**	**12**
NPDES TOTALS:	**64**	**242**

Fees

An annual fee is assessed on all permitted Large CAFOs and all CAFOs covered under an NPDES permit. The fee is determined based upon the number of head of livestock for which the operation has a permit. The fees provide 20% of the Department's costs to administer the livestock waste control program, as required by statute. The Department received $231,669 in annual permit fees from 692 permitted operations. In addition, the Department received $23,981 in initial inspection fees (70 inspections), $23,600 in permit application fees (118 applications), and $249 in late payment fees (one operation), for a total of $279,499 in fees.

General information about the Livestock Waste Control Program, including application forms, fact sheets, guidance documents, copies of the NPDES General Permit and the four general permits, Title 130 regulations, and public notices of permit issuance or denial, can all be found on the Department's website at: http://deq.ne.gov.

Chemigation Program

The Chemigation program, which functions in cooperation with Nebraska's 23 Natural Resources Districts (NRDs), works to ensure that users of irrigation systems applying fertilizers and pesticides do not contaminate the sources of irrigation water. These regulations are contained in *Title 195 – Chemigation Regulations.*

The NRDs inspect irrigation systems and issue site permits for specific safety equipment that is required to be installed on systems that chemigate. Chemigation permits for chemigation sites are issued annually, and are reported to the Department on a calendar year basis. Since permitting began in 1987, the total number of annual permits issued has followed an upward trend, with NRDs issuing 23,695 chemigation permits in 2013, a six percent increase over 2012 permits issued.

A chemigation applicator initially must be certified by the Department, and re-certified every four years. To receive certification, an applicator must complete training and testing, which is provided under contract with the University of Nebraska Cooperative Extension. Applicator certifications also are reported on a calendar-year basis.

In calendar year 2014, 981 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 5,163 applicators. Information about chemigation applicator training dates and certified applicators is available after January 1 of each year on the Department's web site, http://deq.ne.gov.

On February 14, 2014, the Governor approved Legislative Bill 272, which changed provisions related to the Nebraska Chemigation Act. Specifically, LB 272 requires that the Natural Resources Districts establish permit fees in the amount to pay the reasonable costs of administering the permit program. Title 195 -- Chemigation Regulations will be amended to become consistent with the Nebraska Chemigation Act, which was amended by LB 272. The Department anticipates bringing the proposed changes to Title 195 to the Environmental Quality Council at the February 2015 meeting.

Agricultural Chemical Containment Program

The Agricultural Chemical Containment program regulates the construction and use of commercial and private facilities for the storage, loading, and rinsing activities of bulk liquid fertilizers and bulk liquid and dry pesticides. These regulations are contained in *Title 198 - Rules and Regulations Pertaining to Agricultural Chemical Containment*.

The regulations administered by this program provide specific requirements for design by a Nebraska Registered Professional Engineer, construction materials, containment capacities and maintenance. Although no permit or registration is required, the operation must have a construction plan for the facility and a management program.

The Department and the Nebraska Department of Agriculture have a cooperative agreement that outlines the procedure for coordinating inspection activities between the two agencies. The agreement enhances the communication between the agencies and provides specific protocols to be followed when investigating Agricultural Chemical Containment complaints. In FY2014, Agriculture Section staff conducted a total of eight complaint investigations of suspected releases related to agricultural chemical containment systems. Activities related to Agricultural Chemical Containment are funded from the Performance Partnership Grant.

Water Quality Monitoring and Assessment Programs

Surface Water Assessment Programs

In 2001, NDEQ completed a comprehensive study on water quality monitoring in response to LB 1234, and began implementing comprehensive, integrated surface water monitoring programs throughout the state by working with additional monitoring partners, in addition to program staff, to collect water samples. These programs use contractual and voluntary monitoring relationships to collect samples, which has significantly improved the efficiency and effectiveness of NDEQ's statewide monitoring networks. Current monitoring partners include the Natural Resources Districts, Nebraska Public Power District, U.S. Army Corps of Engineers, Nebraska Game and Parks Commission, University of Nebraska-Lincoln, Central District Health Department, National Park Service and United States Geological Survey.

The Surface Water Monitoring and Assessment programs collect physical, chemical and biological water quality samples from streams and lakes, implements surface water improvement projects, and prepares surface water quality reports. Some monitoring programs collect stream and lake samples throughout the state; however, most monitoring is focused in one to three major river basins each year in conjunction with a rotating basin monitoring strategy.

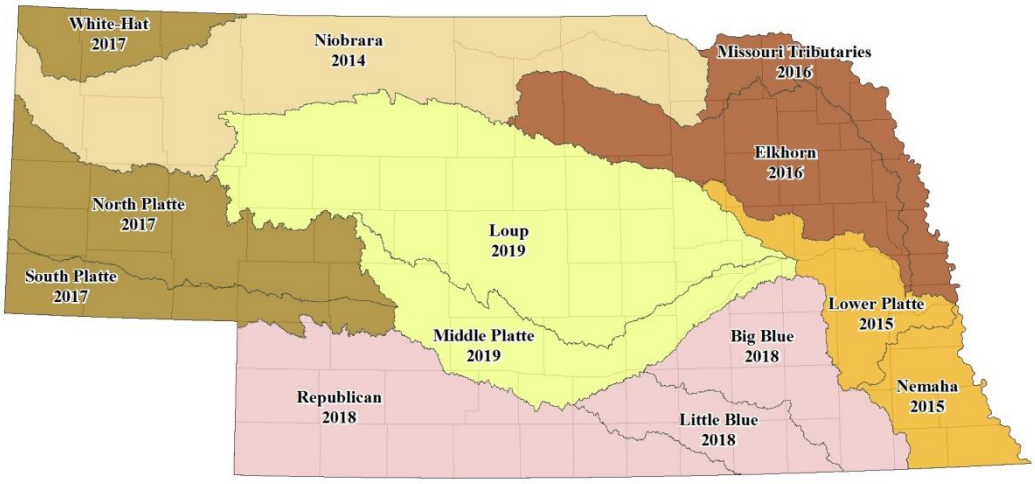
Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs are provided below. Additionally, a more detailed overview of the programs are provided in the agency's annual publication Water Quality Monitoring Report: http://deq.ne.gov/Publica.nsf/Pages/WAT212

Basin Rotation Monitoring Program — The Basin Rotation Monitoring Program targets one to three river basins each year for intensive monitoring. Targeting resources in this manner improves NDEQ's ability to identify and remediate water quality problems and allows resources to be focused where they can produce the greatest environmental results. During a six-year cycle, all 13 major river basins in the state are intensively monitored (see map on next page for details). Monitoring data are used to document existing water quality conditions, assess the support of beneficial uses (such as aquatic life, recreation, and public drinking water supply) and prioritize water quality problems. The current six-year basin rotation monitoring cycle is:

2014 -- Niobrara River basin;
2015 -- Lower Platte and Nemaha River basins;
2016 -- Elkhorn and Missouri Tributaries River basins;
2017 -- White River-Hat Creek, North Platte and South Platte River basins;
2018 -- Big Blue, Little Blue and Republican River basins; and
2019 -- Middle Platte and Loup River basins.

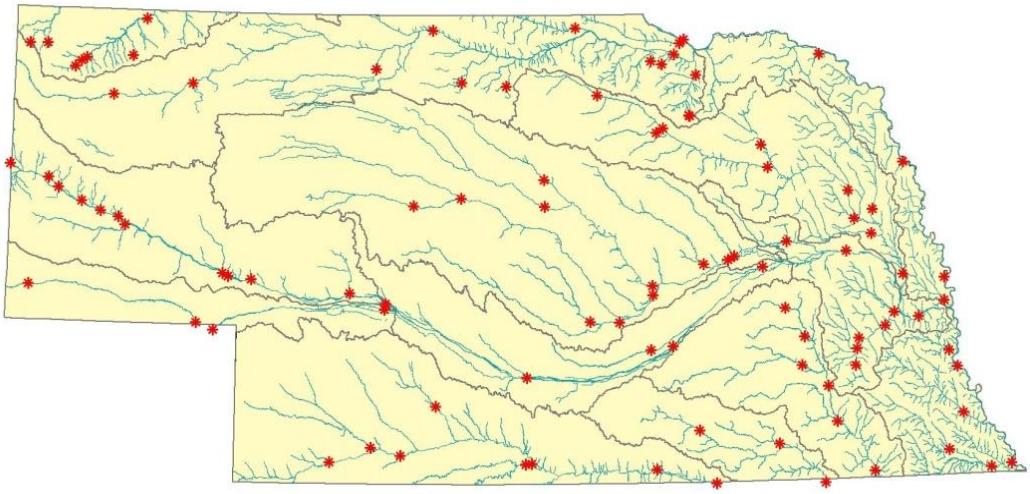
In 2014, a total of 41 stream sites in the Niobrara River Basin were sampled weekly from May through September, which resulted in 902 samples. The sites were sampled for *E. coli* bacteria, field measurements including temperature, pH, oxygen, conductivity and turbidity, and physical/chemical parameters such as nutrients, total suspended solids, chlorides and select pesticides. The data is used to document existing water quality conditions, identify water quality problems, identify pollutant(s) of concern and their sources and estimate pollutant loadings. Monitoring partners that assisted NDEQ in collecting water samples for the 2014 Basin Rotation Monitoring Program included Natural Resources Districts and the National Park Service.

Six-year basin rotation monitoring schedule



Ambient Stream Monitoring Program — This program has a network of 97 fixed stations located on main stem and tributary streams across the state (see map below for details). The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 major river basins and link assessments of status and trends with natural and human factors that affect water quality. Fifty-eight of the 97 sites are located on main stem streams. Ecoregion and land use considerations were used in selecting many of the stream locations. Samples are collected monthly and analyzed for traditional chemical and physical parameters and include select pesticides and heavy metals. During 2014, approximately 1,160 water samples were collected for this program.

Locations of NDEQ Ambient Stream Monitoring Program sites



Public Beach Monitoring Program—Since 2004, NDEQ has collected and tested water samples at public beaches statewide, for *E. coli* bacteria and the microcystin toxin. The microcystin toxin is a hepatotoxin that can be produced by blue-green algae also known as a harmful algal bloom. The risks to humans come from external exposure (prolonged contact with skin) and from swallowing the water. Symptoms from external exposure are skin rashes, lesions and blisters. Symptoms from ingestion can include headaches, nausea, muscular pains, central abdominal pain, diarrhea and vomiting. Severe cases could include seizures, liver failure and respiratory arrest. The severity of the illness is related to the amount of water ingested, and the concentrations of the toxins. Incidents in 2004 with dogs dying caused by drinking water from lakes that were undergoing a harmful algal bloom led NDEQ to begin monitoring public waters for the presence and concentration of microcystin.

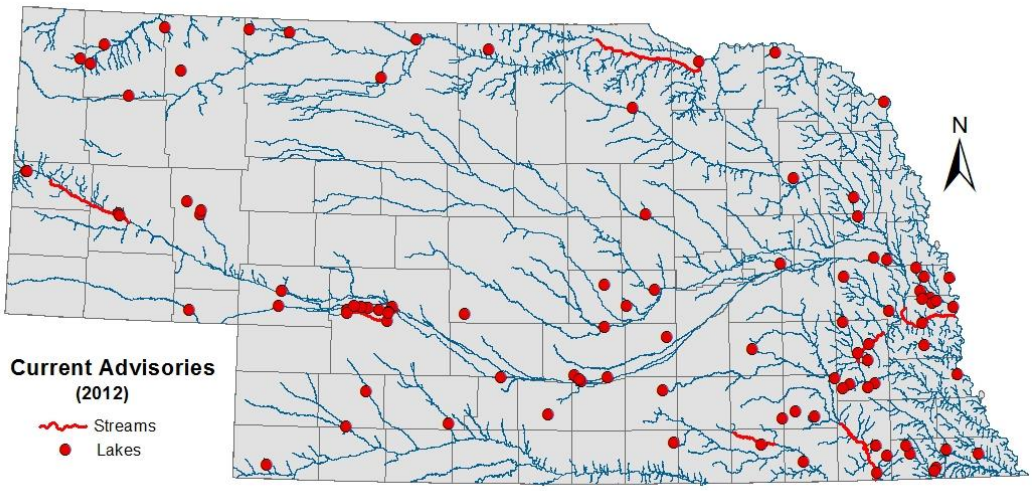
In 2014, monitoring occurred weekly at 53 beaches on 50 different lakes from May through September. Several monitoring partners assisted NDEQ in collecting these samples, including Natural Resources Districts, Nebraska Public Power District, Central District Health Department, and the U.S. Army Corps of Engineers. Over 1,200 samples were assessed for each parameter. Our collection protocols allow for samples to be collected, analyzed and reported to the public weekly before the weekend when lakes typically experience the most usage. Results are posted to the NDEQ website by Thursday afternoon with press releases on affected lakes being sent to area newspapers Friday morning.

Levels of microcystin above 20 parts per billion result in public health alerts being issued and signs are then posted recommending full body contact activities in the water be avoided. In 2014, health alerts were issued on eight different lakes and the amount of time the lakes were on alert ranged from two to eight weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site http://deq.ne.gov.

Fish Tissue Monitoring Program — The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2014, a total of 63 fish tissue samples were collected from nine streams and 26 lakes across Nebraska for analysis of pollutants. This information is used to assess pollutant trends, identify potential problem areas and to inform the public about health risk concerns identified through fish consumption advisories. Nebraska began issuing fish consumption advisories in 1990. The data is received from the EPA lab approximately one year after collections and therefore, the final report on the 2013 data is expected to be completed by the end of 2014 and the 2014 data report is anticipated in the spring of 2015.

The report “Regional Ambient Fish Tissue Program - 2012 Data Assessment Report” and current list of advisory sites can be found at NDEQ’s web site, http://deq.ne.gov. The report is located at Publications/Water Publications/Water Publications by Type/Reports. The direct URL is: http://deq.ne.gov/Publica.nsf/Pages/WAT173. A summary of fish advisory information is easily located at DEQ’s web site by entering “fish” in the box titled NDEQ Search, located on the right side of the Home page, or by selecting News and Announcements, Topics of Interest. The direct URL is: http://deq.ne.gov/SurfaceW.nsf/Pages/FCA.

Currently, Nebraska has 98 state-issued fish tissue advisories. The primary contaminants of concern in fish tissue in Nebraska and most other states are mercury and polychlorinated biphenyl compounds (PCBs). See map on the following page for current advisory locations.



The NDEQ's Policy for Issuing Fish Consumption Advisories uses an 8-oz weekly meal portion combined with a consumer body weight of 70 kg (154 lbs.), an absorption factor of 1.0 and an exposure period of 30 years for calculating health risks. Carcinogenic effects are still averaged over a lifetime of 70 years because it is assumed cancer can develop at any time during one's lifetime, even after the exposure to the carcinogen has ended. Health advisories are not intended to discourage people from eating fish in moderation. Actually, fish are a high quality protein, low in saturated fat, and high in omega-3 fatty acid. It is a primary goal of the program to ensure that the public have as much information as possible regarding the water bodies that they use for fishing. An immediate health risk is unlikely from an occasional meal of fish from waters where fish consumption advisories have been issued; however, in order to reduce health risks that may result from long-term consumption, it is recommended that eating fish from advisory waters not exceed an average of eight ounces of fish per week.

Stream Biological Monitoring Program — This program is used to evaluate the health of streams by evaluating the composition and numbers of resident aquatic macroinvertebrate and fish communities. These biological communities display varying habitat requirements and water quality tolerances making them excellent indicators of stream health. In 1997, the Department added a probabilistic monitoring design that involved the sampling of randomly selected sites in order to address statewide and regional questions about water quality. Assessments are made by comparing the biological communities of "reference condition" streams where there are no significant disturbances, to the communities collected from randomly selected stream sites. During 2014, a total of 34 stream sites were sampled in the Niobrara River basin.

Sampling is conducted in conjunction with the basin rotation monitoring strategy. Data from 2012 and 2013 are being assessed and will be used to verify the biological criteria used in evaluating the health of aquatic life populations in Nebraska streams. The current approach allows evaluations of aquatic life health to be made with greater confidence even though fewer samples are collected.

Lake Monitoring Program — Lake monitoring is currently conducted on approximately 29 lakes across the state. Monitoring involves the collection of monthly water samples from May through September. These data are used to document existing water quality conditions, evaluate long-term trends, design watershed and lake restoration/protection projects and evaluate project effectiveness. Monitoring focuses on nutrients, sediment, pesticides, heavy metals, dissolved oxygen, pH, temperature, conductivity and water clarity. In 2014, approximately 145 samples

were collected at deep water locations with additional profiles collected from mid-lake locations. In addition, some inlet streams are sampled during periods of significant precipitation to provide information on nutrient, sediment and pesticide loadings to lakes during runoff events.

Fish Kill and Citizen Complaint Investigations — The Surface Water Unit responds to reports of fish kills and other environmental concerns of citizens related to surface water. On-site investigations are conducted, as needed, to document existing water quality conditions, surface water quality standards violations and identify pollution sources and responsible parties. A total of seven fish kills were reported between July 1, 2013 and June 30, 2014. This compares to 19 during the same time period the year before. Four of the reported fish kills were attributed to low dissolved oxygen levels within the waterbody, whereas three were the result of disease.

Between July 1, 2013 and June 30, 2014 the Surface Water Unit received 43 notifications of complaints concerning surface water issues. This compares to 30 notifications during the same time period the year before. While many of these cases were referred to other agency programs that more closely relate to the problem, sometimes the Surface Water Unit would assist by providing observations or samples to help document conditions.

Integrated Report — Beginning in 2004, and every two years thereafter, states are required to prepare a biennial water quality report called the Integrated Report, which is a combination of the Section 305(b) and Section 303(d) reporting requirements of the Clean Water Act. The Integrated Report provides a comprehensive summary of the status and trends of surface water quality in Nebraska and includes a list of impaired surface waters that do not support their assigned beneficial uses. The 2014 Water Quality Integrated Report, which was approved by the EPA in April 2014, is available on NDEQ's web site http://deq.ne.gov. The report's direct URL is: http://deq.ne.gov/Publica.nsf/Pages/WAT214.

Nebraska Water Monitoring Programs Report — A report summarizing the monitoring programs performed by NDEQ called the "Nebraska Water Monitoring Programs Report" was prepared again in 2013. This report describes the numerous monitoring programs NDEQ is involved with, its partners, and several highlights of recent monitoring efforts. Future enhancements to this report will include more in-depth examinations of what our monitoring programs are telling us, how we are using them to manage and improve water quality and to inform the public of the trends observed. The 2013 Nebraska Water Monitoring Programs Report is available on the NDEQ's web site http://deq.ne.gov, by selecting Your Environment (located in the center box of Home page) and then selecting Water Quality Monitoring Report. The report's direct URL is: http://deq.ne.gov/Publica.nsf/Pages/WAT212

Groundwater Assessment Programs

Groundwater Quality Monitoring Report — Legislation passed in 2001 directed NDEQ to issue an annual report to the Legislature concerning the quality of the groundwater in Nebraska. The first of these reports was issued December 1, 2001. These reports summarize the water quality monitoring efforts of the Natural Resources Districts, NDEQ, and other state, local and federal agencies, and can be found on the agency's web site, http://deq.ne.gov. (Select Publications, then select Water Quality, then select 2013 Groundwater Quality Monitoring Report. Or, the Water Quality Division reports' index URL is: http://deq.ne.gov/Publica.nsf/pages/WAT183.) Statistics and maps showing nitrate-nitrogen groundwater monitoring results as well as four of the 241 agricultural chemicals in the state are presented. The report uses data from the Quality-Assessed Agrichemical Contaminant Database for Nebraska Groundwater, developed cooperatively by the Nebraska Department of Agriculture, University of Nebraska-Lincoln, and Nebraska Department of Environmental Quality using federal funding. These data are accessible to the public on the Nebraska Department of Natural Resources web site, http://dnr.ne.gov.

In 2002, a Statewide Groundwater Monitoring Network was developed to better evaluate the groundwater quality in the state. Data was first analyzed for trends in 2005 for this report. Approximately 1,400 water wells are in the Network, with the majority of them being irrigation wells. Utilizing irrigation wells to collect water quality information may not be as representative of the aquifer as dedicated monitoring wells due to screen lengths and other construction issues in irrigation wells. This year, the NDEQ had the opportunity to expand the Network utilizing Federal/State funds. General locations for new wells were determined utilizing a computer model to calculate the weighted averages of the locations of current Network wells, NRD dedicated monitoring wells, Wellhead Protection areas and Conservation and Survey Division (CSD) test holes. The map generated by this model was distributed to the NRDs and CSD to refine drilling/well locations. The NDEQ then contracted with CSD to drill and log a test hole at each proposed monitoring location. The information collected from each test hole was used to design the well(s) at that location. The NDEQ contracted a water well driller to construct dedicated monitoring wells at the test hole locations.

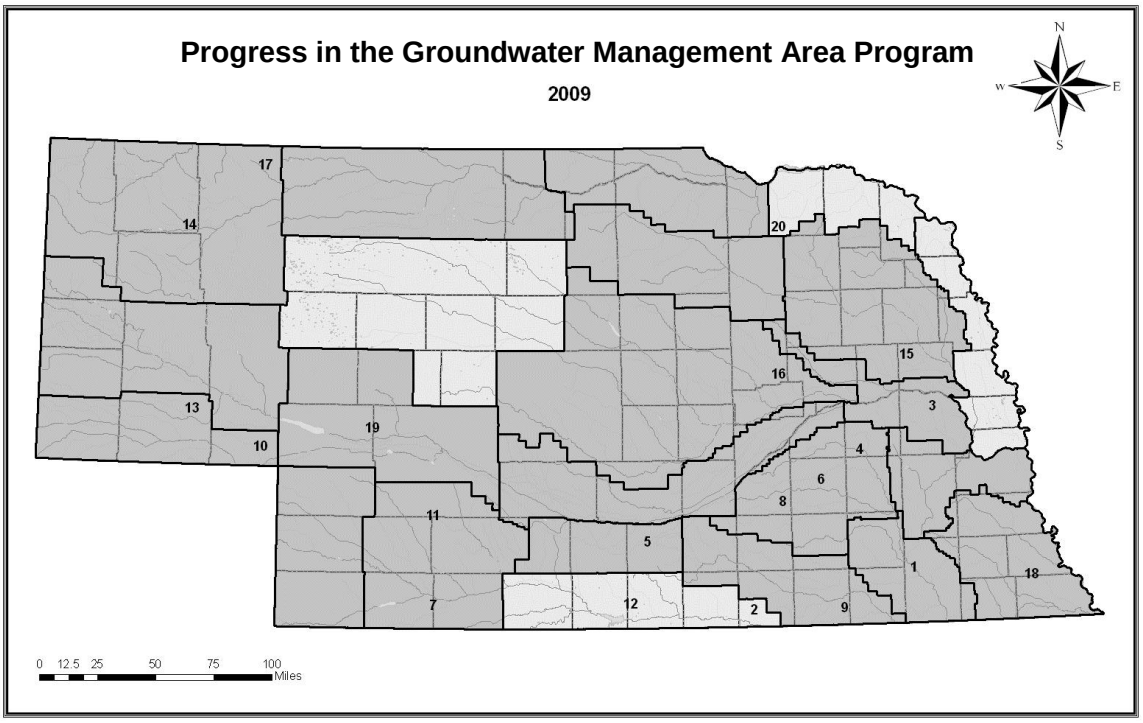
The most important aspect of the Network is the ability to sample the wells on regular basis. Utilizing irrigation wells requires the well to be running at the time the sampler arrives. If the well is not running the sampler must return another time, which in turn uses more resources. Monitoring wells with dedicated sampling equipment can be sampled any time, which reduces personnel costs. For that reason, NDEQ provided funds to the NRDs to purchase sampling equipment to be placed in active Network monitoring wells and the new wells added this year. The NDEQ worked with 13 NRDs for drilling 37 test holes and 29 dedicated monitoring wells. In addition, 15 NRDs were granted funds to purchase 143 pumps sampling devices. The addition of the dedicated monitoring wells and the equipment to sample them will greatly increase the data collection, reliability, and quality of data collected.

Hydrogeologic Studies and Reviews —The Groundwater Unit is responsible for hydrogeologic review of various Department projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks, surface spills, underground injection control, wastewater treatment facilities, septic systems, NPDES permits, livestock waste control facilities, the Natural Resources Districts' Groundwater Management Plans, and others.

In addition, the Groundwater Unit performs reviews and oversees remediation if a situation does not fall under another agency program and is of environmental significance. Unit personnel

continue to take responsibility under *Title 118 — Groundwater Quality Standards and Use Classification* for many site investigations, and have sampled and supervised site cleanups.

Groundwater Management Areas — The Groundwater Management Area (GWMA) program focuses on assessing areas where groundwater problems from nonpoint source contaminants (such as agricultural chemicals) exist or are likely to exist. The Agency carries out detailed field studies to collect groundwater data, assesses the data, and determines whether a correlation exists between land-use practices and any nonpoint contamination trends. The Department's conclusions and recommendations are presented at public hearings during which public comments on the study are also obtained. The Director makes a determination on whether or not to designate the study area as a Groundwater Management Area. The staff works closely with the Natural Resources District (NRD) within whose boundary the area is located throughout the investigation, designation and implementation stages. The NRDs are responsible for implementation of many aspects of this program. In fact, NRDs can designate Groundwater Management Areas acting on their own authority. In addition to the three NDEQ-designated areas, 20 NRDs have designated GWMAs within their jurisdiction. However, if an NRD does not implement a Groundwater Management Area, the Department has the responsibility of implementation. The Department reviews and comments on all proposed GWMA rules and regulations prior to public notice. The following map shows NDEQ study areas (numbers).



NDEQ GWMA Studies

1. Beatrice/DeWitt, 1988
2. Superior, 1988
3. Fremont, 1988
4. E. Upper Big Blue, 1989
5. Wilcox/Hildreth, 1989
6. York/Polk Co., 1990
7. Red Willow/Hitchcock Co., 1990
8. W. Upper Big Blue, 1991
9. E. Little Blue, 1992 - 1994
10. Deuel Co., 1992
11. N. Middle Republican, 1995
12. Lower Republican, 1996 - 97
13. E. Cheyenne Co., 1996
14. Box Butte Co./Mirage Flats, 1998
15. S. Lower Elkhorn, 1999
16. E. Lower Loup, 2000
17. E. Sheridan Co., 2001
18. Humboldt, 2001
19. Keith-Lincoln Co., 2002 - 2003
20. Bazile Triangle, 2004

Underground Injection Control (UIC) — The Underground Injection Control (UIC) program reviews and issues permits, conducts inspections and performs compliance reviews for wells used to inject fluids into the subsurface. The program must ensure that injection activities are in compliance with state and federal regulations, and that groundwater is protected from potential contamination sources. Injection wells are classified by activity. Most wells are Class I, II, III, and V wells. Class II wells are associated with oil and gas production, and are regulated by the Nebraska Oil and Gas Conservation Commission. NDEQ has authority over and manages Class I, III and V wells. Class IV wells are illegal and have never been allowed in Nebraska.

Three Class I injection wells are currently permitted within the state. The permits are issued for injection of wastewater below the lowermost underground source of drinking water. Two Class I well permits are issued to the Crow Butte Resources uranium mine near Crawford and the other to the City of McCook.

Class III wells are used to inject fluids for the purpose of extracting minerals. The only Class III wells in the state are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources operates over 4800 Class III wells as of October 1, 2014.

Injection wells not included in the other specific classes are considered to be Class V wells. Common examples of Class V wells include: open-loop heat pump systems, large capacity septic systems, and sub-surface drip irrigation systems.

Mineral Exploration Program — The Mineral Exploration program issues and reviews permits, conducts inspections, and performs compliance reviews for holes drilled, driven, bored, or dug for the purpose of mineral exploration. These permits are issued to persons exploring for potential mineral resources such as consolidated rock; sand and gravel; or material commingled, in solution, or otherwise occurring beneath the surface or in waters of the State, and are regulated under Title 135 – Rules and Regulations for Mineral Exploration Holes. This type of exploration specifically excludes oil and gas exploration, which is regulated by the Nebraska Oil and Gas Conservation Commission.

Wells that are drilled for the production of mineral resources are regulated as Class III injection wells, and are governed by Title 122 – Rules & Regulations for Underground Injection and Mineral Production Wells.

Wellhead Protection — The State Wellhead Protection program is a voluntary program, which assists communities and other public water suppliers in preventing contamination of their water supplies. State Wellhead Protection Program activities include delineating the zones of influence which may impact public supply wells, training communities on how to inventory all potential sources of pollution within these vulnerable zones, working with the local officials to identify options to manage these potential pollution sources, working on monitoring plans, and helping develop contingency plans to provide alternate water supplies and site new wells. All community public water supplies have a Wellhead Protection Area map as of October 1, 2009. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. One hundred three community water supplies have approved Wellhead Protection Plans as of October 1, 2014.

Water Quality Planning

Surface Water Quality Standards

NDEQ develops water quality standards that designate the beneficial uses to be made of surface waters and the water quality criteria to protect these assigned uses. Title 117 - Nebraska Surface Water Quality Standards forms the basis of water quality protection for all surface water quality programs conducted by the Department. The federal Clean Water Act specifies that states review their water quality standards and revise where appropriate once every three years. NDEQ presented proposed revisions to Title 117 as part of a triennial review package to the Environmental Quality Council on October 16, 2014. Proposed revisions included more stringent ammonia criteria, new criteria for carbaryl, addition of new lakes and reservoirs, and a number of housekeeping changes.

The most significant of these new proposals deal with water quality criteria for ammonia. The U.S. Environmental Protection Agency has adopted new Clean Water Act Section 304(a) criteria recommendations for ammonia based on new information about the toxicity of ammonia to aquatic life, specifically freshwater unionid mussels. EPA's new ammonia recommendations are lower than their previous criteria recommendation. The proposed revisions to ammonia criteria in Title 117 are consistent with EPA's recommendations and are lower than what is currently adopted in Title 117. Considerable outreach was conducted with permittees, wastewater treatment plant operators, consultants, and other affected parties regarding the proposed ammonia criteria revisions.

The proposed new criteria for carbaryl (a pesticide commonly known as Sevin®) are identical to EPA's newly recommended Section 304(a) criteria to protect aquatic life from both acute and chronic toxicity. Prior to 2012, EPA had no recommended criteria, thus Nebraska had not adopted criteria.

Three newly constructed reservoirs were proposed to be added to the list of lakes and reservoirs. Nine additional lakes or reservoirs that are under public management were also proposed to be added to the list of lakes and reservoirs.

The proposed revisions were adopted by the Environmental Quality Council at the October 16, 2014 meeting. The proposed revisions have been submitted to the Attorney General for review and, if approved, will be submitted to the Governor for approval.

The standards are available on the department's web page at http://deq.ne.gov/. In addition to developing the standards, the Water Division develops and implements procedures for applying the standards to surface water quality programs, such as NPDES permits.

Section 401 Water Quality Certification

The Water Division Planning Unit administers the Water Quality Certification Program in accordance with Section 401 of the Clean Water Act. This program evaluates applications for federal permits and licenses that involve a discharge to waters of the state and determines whether the proposed activity complies with Nebraska Surface Water Quality Standards. If the activity is likely to violate the standards, conditions for complying with the standards will be issued with the certification, or certification will be denied. The U.S. Army Corps of Engineers Section 404 Dredge and Fill Permits and Federal Energy Regulatory Commission licenses are examples of federal

regulatory programs that require State Water Quality Certification before federal permits or licenses can be issued. The Department reviewed 433 Section 404 permit applications during FY2014.

On January 9, 2001 the U.S. Supreme Court issued a decision in the matter of Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers, No. 99-1178. The court decision eliminated the Corp's regulatory jurisdiction over isolated, non-navigable intrastate waters where the only link to interstate commerce was the use of the waters by migratory birds. Therefore no permit or other authorization by the Corps of Engineers is required for projects that might impact waters meeting those criteria. Following the SWANCC decision in 2001, the Supreme Court handed down a decision in Rapanos, et al. v. United States on June 19, 2006 that further limits the Corps of Engineers' jurisdiction over waters of the U.S. This had the effect of further reducing the number of projects that needed a Corps 404 permit. However, these waters of the state are still under the authority of the Department of Environmental Quality, because isolated wetlands are regulated by Nebraska Surface Water Quality Standards.

Although the department has no permitting mechanism to authorize projects in advance of their implementation, procedures have been developed to assist project sponsors who wish to avoid violating state water quality standards and potential enforcement actions. Project sponsors are encouraged to contact NDEQ before implementing their project so that the plans can be discussed in light of requirements of *Title 117 - Nebraska Surface Water Quality Standards*.

Impaired Waters and Total Maximum Daily Loads (TMDLs)

The Federal Clean Water Act, Section 303(d) requires states to prepare a list of impaired surface waters. These are waters that do not support the assigned beneficial uses as listed in Nebraska Surface Water Quality Standards. From this list, states are to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters and remove the identified impairments so that these waters may meet their assigned beneficial uses. As in previous years, the Department has opted to combine the required CWA Section 303(d) list with the Section 305(b) report on the general status of water quality in the state. This combination is referred to as the Integrated Report. The 2014 Integrated Report is available on NDEQ's web site http://deq.ne.gov, by selecting Water, then selecting Water Quality Planning. Or, the report's direct URL is: http://deq.ne.gov/Publica.nsf/Pages/WAT214. The 2014 Integrated Report was submitted to EPA Region 7 in March 31, 2014 and was approved by EPA April 25, 2014.

Several TMDLs were prepared, submitted, and approved throughout the fiscal year. The table on the following page summarizes NDEQ's work in this area.

TMDL Name	# of Segments	Pollutant	Status
Big Blue River Basin			
Big Blue River Basin	10	*E. Coli*	Approved by EPA 12/17/2013
Big Blue River Basin	13	*Atrazine*	Approved by EPA 12/17/2013
Lower Platte River Basin			
Conestoga Reservoir	1	*Phosphorous*	Draft Under Review
Conestoga Reservoir	1	*Sedimentation*	Draft Under Review
Missouri Tributaries River Basin			
Bazile Creek	2	*E. Coli*	NDEQ & Santee Sioux Nation Developing Draft
Nemaha River Basin			
Buck and Duck Creeks	3	*E. Coli*	Draft Under Review
White-Hat River Basin			
White River Basin	3	*E. Coli*	NDEQ Developing Draft

Nonpoint Source Management Program

The Nebraska Nonpoint Source Management Program is an integrated statewide effort to protect and improve water quality impacted by nonpoint source pollution. The program is of particular significance because nonpoint source pollution is the most prevalent, widespread cause of water quality degradation in Nebraska. Nonpoint source pollutants of particular concern in Nebraska include those associated with runoff and percolation from agricultural and urban areas. Initiated in 1990, the program is largely funded by the Environmental Protection Agency (EPA) through Section 319 of the federal Clean Water Act (CWA) and involves a multitude of federal, state and local agencies and organizations.

Through the Nonpoint Source Management Program, the Department has initiated major shifts in program activities, including increased emphasis on watershed and groundwater management area planning, targeting of 303(d)-listed impaired waters, community participation in project development and implementation, and installation of management practices in smaller areas of manageable size. Because of these program changes, it was necessary to reduce financial support for outreach and demonstration projects. Prioritization of eligible projects and activities were refined in the 2014 Section 319 request for proposals, which emphasized watershed planning, knowing that in future years, 319 funds would primarily be granted to projects which have an EPA-approved watershed or groundwater plan in place.

Major components of the nonpoint source management program include program administration, nonpoint source monitoring and assessment, and implementation of nonpoint source pollution management projects through Section 319 grant funding. Nonpoint source monitoring and assessment is an integral and crucial element for the successful implementation of the program. Water quality information is needed to identify and prioritize nonpoint source problem areas, develop watershed management plans and TMDLs, and evaluate the effectiveness of measures implemented to abate nonpoint source pollution. Currently identified nonpoint source problems and priorities are defined in the primary guidance document of the Nonpoint Source Management Program: "Strategic Plan and Guidance for Implementing the Nebraska Nonpoint Source Management Program 2000-2015." This guidance document is currently being updated and is slated for EPA approval by the end of the calendar year. While the updated guidance is written for the years 2015-2030, it is scheduled to be updated every five years per EPA requirements.

Nonpoint source monitoring activities conducted during the past year included investigative water quality evaluations, detailed watershed assessments, and effectiveness evaluations of implemented nonpoint source management measures.

In the past year, the Nonpoint Source Management Program provided Section 319 grants to local sponsors of eligible projects in the two categories: 1) Large Competitive Projects (generally under $300,000) and 2) Small Project Assistance (under $15,000). Including the new 2014 funds, a total of 46 Section 319 projects were managed. All but one of these were large multi-year projects, with total funds of all projects equaling $5,620,679. One small project was managed with total funds equaling $15,000. To date, a total of 220 large projects, spending $63,801,646, have been funded through Section 319 funds since the beginning of the program in 1990 and have addressed both surface water and ground water quality concerns.

Source Water Assessment and Protection

When Congress amended the Safe Drinking Water Act in 1996, one of the amendments created the Source Water Assessment Program (SWAP) for public drinking water protection. Every state has developed a Source Water Assessment Program with the following basic components:

1) Delineate the source of each public drinking water system;
2) Identify potential contaminants in the source area;
3) Determine the drinking water source's susceptibility or vulnerability to contamination; and
4) Make the assessments available to the public.

NDEQ is implementing their EPA-approved program in cooperation with the Nebraska Health and Human Services System, Nebraska Rural Water Association, the Natural Resources Districts, and numerous other stakeholders. All assessments were completed and distributed by August 2003; however, delineations continue to be updated as needed upon receipt of new information about public water supply systems.

Beginning in SFY2004, funds were set aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide. Funds are provided to political subdivisions that operate a public water system serving a population of 10,000 or less. Eligible activities address drinking water quality, quantity, and/or education within the source water protection area. To date, Source Water Protection funds have been distributed to complete 79 separate Source Water Protection projects throughout the state. In SFY2014, Source Water Protection funds were distributed to the following public water systems: Cedar-Knox, Crete, Meadow Grove, Osmond, Prosser, and Wymore. The total amount available in SFY2014 was $100,000.

Water Quality Data Handling and Storage

The department has implemented the STORET electronic storage system for water quality data. This will make Nebraska surface water quality information available to anyone who has an internet connection. The web site for this information is www.epa.gov/storet**.** During FY2014, the department continued to add monitoring results to the STORET database, monitoring results conducted on surface waters of the state. The end result will be the centralization of NDEQ's previous and current surface water quality monitoring information.

Wastewater Permitting and Certification Programs

There are a number of certification and permitting programs relating to wastewater treatment facilities, ranging from certification of those who work on septic systems to the permitting of large municipal facilities. These programs include:

- **Onsite Wastewater Treatment Facilities Program** – This program administers system design, professional certification and system registration requirements that affect mostly smaller wastewater treatment or storage systems, such as septic systems, household lagoons, and holding tanks, and anyone doing work on these types of facilities.

- **Wastewater Treatment Facility Operator Certification Program** – This program administers the certification program for wastewater treatment facility operators to ensure proper operation and maintenance of these facilities.

- **Wastewater Construction Permit Program –** This permit program is for communities that are constructing new wastewater facilities or are renovating or expanding existing facilities.

- **The National Pollutant Discharge Elimination System (NPDES) Program** – This program is responsible for regulating discharges of pollutants to Waters of the State to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. Other NPDES-related programs include:
    - **Combined Sewer Overflows** -- to address municipalities that have combined storm water and wastewater sewer systems.
    - **Wastewater Treatment Sludge and Biosolids Disposal** -- requirements for treatment and disposal of municipal and industrial wastewater sludges and biosolids, and
    - **Storm Water Permit Program** -- involves: 1) Construction sites of a specific size; and 2) the Municipal Separate Storm Sewer System permits for medium and large municipalities.

- **The Nebraska Pretreatment Program** -- This program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

The Department initiated the **Assessing Wastewater Infrastructure Needs (AWIN)** project to assist Nebraska communities with environmental compliance with existing or upcoming regulations. The project is based in NDEQ's Wastewater Division, but it can involve other NDEQ programs, as well as other state and local agencies.

Many communities in the Upper Great Plains States and other regions of the country have population declines, aging populations, declining median household income, and limited or no job availability, all of which lead to limited resources to operate their utilities. AWIN uses data from the latest census and other available data sources to generate a rating for communities using modeling tools. NDEQ uses this information, the communities' input, their consultants' input, and NDEQ observations to make adjustments in NDEQ's standard procedures and design conditions. A few examples of changes include better interest rates on loans, longer compliance schedules, and designs which take into account future declining population. A recent example of AWIN use is a village that will install a lagoon that is half the size of the normal design. The revised smaller design should better fit the community's predicted population 15 years from now. The facility will have a long-term compliance schedule and use temporary irrigation and limited discharges to

achieve compliance until the community achieves no discharge from the lagoon. This project is slated to save this community's 177 residents $160,000 to $200,000.

Onsite Wastewater Treatment Facilities

The requirements administered by the Onsite Wastewater Program cover septic systems, wastewater holding tanks, individual household wastewater lagoons, and other decentralized wastewater treatment systems not connected to municipal wastewater treatment systems. The majority of onsite systems are for single households. However, there are onsite or decentralized systems that provide wastewater treatment for multiple houses (these systems are sometimes called cluster systems), mobile home parks, churches, recreational facilities, camper trailer parks, a variety of businesses with high strength wastes (such as restaurants, butcher shops, and wineries), equipment maintenance buildings, and other commercial or industrial facilities. The U.S. EPA estimates that nearly one in four households depend on onsite systems for wastewater treatment.

The *Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act* (Act) passed in 2003 required that anyone doing work associated with onsite wastewater systems be certified by the State of Nebraska. The Act provided for the registration of all onsite wastewater systems constructed, reconstructed, altered, or modified. The law also provided for certification and system registration fees to support the program.

Certification of onsite professionals covers design, installation, inspection, maintenance, and pumping of onsite systems. Subdivision review and approval requirements apply when onsite systems will be used on any proposed development lots that will have less than three acres suitable for building. Program staff work to make sure that the design, installation, modification, repair, and maintenance of onsite wastewater systems is performed by certified professionals who understand Title 124 and the proper practices of their trade.

The Act was amended in 2007 by LB333, which provided for application fees for permits and subdivision approvals and established a fee waiver provision for government inspectors. Nebraska Administrative Code *Title 124 – Rules and Regulations for the Design, Operation and Maintenance of Onsite Wastewater Treatment Systems* was last amended, effective August 11, 2012. Onsite or septic system regulations administered by the Department were first enacted in 1977.

The Onsite Program is focused on the protection of surface and groundwater in the area of proposed onsite systems through the use of standardized design requirements, the certification of onsite professionals, review and approval of plans for subdivision development, and review of plans and issuance of permits for large onsite systems, systems where other concerns have been identified (such as setback, soil limitations, shallow groundwater, design), or systems with non-domestic wastes (such as wineries, butchers shops, camping trailer parks, veterinarian clinics, equipment shops, hair salons, and drinking water treatment facilities).

A certification by examination is required for professionals to obtain initial certification. Currently, 525 people hold onsite certificates. Some professionals obtain certification in multiple categories. Current certificates expire December 31, 2015, unless renewed.

The registration requirement provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, nearly 17,800 systems have been registered, with 1,547 systems registered in FY14.

NDEQ has cooperative agreements with other governmental agencies (state and local) to help implement and coordinate the program. There are currently 16 certified Inspectors from local governments. NDEQ also works cooperatively with Nebraska Department of Health and Human Services personnel to resolve health-related onsite wastewater handling issues.

There were 280 new onsite-related complaints in FY14 and program staff resolved a total of 248 complaints, which includes both old and new complaints. Fifty-four Notices of Violation were issued and there were two enforcement resolutions in FY14.

The Private Onsite Wastewater Treatment System Advisory Committee advises the Department on administration of the Act and proposed rules and regulations.

The regulations set minimum design standards for all onsite wastewater treatment systems and include an “Authorization by Rule” provision which allows for the installation of typical onsite systems by a certified professional and subsequent operation by the owner without a site-specific construction or operating permit. These standard conforming systems constitute the vast majority of all new and replacement onsite systems.

Department engineers review construction/operating permit applications for systems that do not meet requirements for Authorization by Rule. Title 124 also provides for Department approval prior to construction of any subdivision with any lot less than three acres where onsite wastewater treatment is proposed. In the past year, the program received 46 applications for construction/operating permits and 10 applications (totaling 112 subject lots) for subdivision review and approval.

Program staff have worked and continue to work with many organizations, including local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association, the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, Nebraska Realtors, Nebraska Association of County Officials, and the Groundwater Foundation to educate the public about the importance of proper installation and maintenance of onsite wastewater treatment systems and to improve the knowledge and skills of the various practitioners who install and maintain onsite systems.

In FY14, Department staff continued the implementation of a new inspection program which began in FY13 and was encouraged by onsite professionals. The inspection program is focused on the evaluation of reporting and construction activities of certified installers to ensure that Title 124 requirements are met.

Wastewater Treatment Facility Operator Certification Program

Competent and qualified operators are a critical component to ensure that wastewater treatment plants are well run and protect the environment. The life span of treatment facilities can be prolonged and proper operation and maintenance programs can protect the owner’s substantial financial infrastructure investment. The Wastewater Treatment Facility Operator Certification Program was established to help accomplish this. The program administers the operator certification program, which includes administering certification exams, issuing certificates, evaluating continuing education programs, tracking certificate compliance, processing certificate renewals, and conducting facility ratings to determine operator needs, in addition to continuing to evaluate ways to help wastewater treatment facility operators obtain continuing education to maintain their certification and help them do their jobs.

This program administers nationally accredited certification exams to new wastewater operators, or to operators wishing to advance their credentials, and issues certification renewals for operators who have obtained the necessary Department-approved continuing education as provided for in *Title 197 – Rules and Regulations for the Certification of Wastewater Treatment Operators in Nebraska*. Staff will continue to monitor those facilities that are required to have certified operators and work with them to help them comply with the regulations. The wastewater operator certification program has 868 certified operators with municipal certificates and 74 operators with industrial certificates.

The Department also reviews applications and issues operator certification exemptions for towns and other entities that have full-retention non-discharging lagoon wastewater treatment facilities that may not require qualified operators due to very limited maintenance and operational needs. The exemption is for a fixed four-year period and the period under current review will end at the end of 2016. The Department contacted a total of 252 facilities potentially eligible for the exemption and, of these, issued four-year operator exemptions to 214 facilities.

In FY14, the Department provided 11 Discharge Monitoring Report training sessions, and seven operator certification examination sessions. Testing of municipal and industrial wastewater treatment facility operators will continue in FY15.

Wastewater Construction Permit Program

The Technical Assistance Unit of the Wastewater Section administers Nebraska's construction permit program for wastewater works. Industries and municipalities are required to submit the engineering designs for their wastewater projects to the Department for review and approval. These plans are reviewed by the Section's engineering staff to assure that the designs meet the Department's standards for protecting the public health and the environment from the effects of improperly handled or treated wastewater.

Nebraska's design standards for wastewater facilities are found in NDEQ Title 123, *Rules and Regulations for the Design, Operation and Maintenance of Wastewater Works*. These standards are updated periodically to keep Nebraska consistent with national standards. The State's design standards are written to encourage the use of proven technologies, but have also allowed Nebraska communities to utilize innovative designs where they are appropriate.

Title 123 also contains basic rules for the operation and maintenance of collection systems and wastewater treatment facilities. It requires that Operation and Maintenance Manuals be prepared for pumping stations and wastewater treatment facilities. Title 123 also contains rules for the proper abandonment of wastewater facilities that have been removed from service. The abandonment rules protect the public from the threat of unsafe conditions or public health hazards.

For FY2014, a total of 200 wastewater projects were submitted to the Department for review and approval.

Considerable time was spent last year working with communities that need to upgrade their wastewater treatment facilities. Section engineers regularly met with municipal officials, funding agencies, and consulting engineers to develop affordable projects for Nebraska's communities. The section also met with food processing industries, power generating plants, ethanol plants, and other industries to assist them in planning their projects. Staff also worked with the owners of many privately owned wastewater facilities that were not properly built and do not function properly.

Engineers from the Section continued to meet with the City of Omaha to discuss their combined sewer separation project. These meetings have been valuable to both sides. Omaha's project is expected to have about 90 separate construction projects over an 18-year period. Each of these individual projects must be submitted to NDEQ for review and approval.

National Pollution Elimination System (NPDES) and Related Programs

The Wastewater Section administers permitting programs that regulate point source dischargers of water pollutants, including:

- **The National Pollutant Discharge Elimination System (NPDES) Program**, which is responsible for regulating discharges of pollutants to waters of the State so as to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. Other NPDES-related programs include:
    - **Combined Sewer Overflows**, which addresses those municipalities that have combined storm water and wastewater sewer systems.
    - **Wastewater Treatment Sludge and Biosolids Disposal**, which are requirements for treatment and disposal of municipal and industrial wastewater sludges and biosolids,
    - **Storm Water Permit Program** – This permit programs involves: 1) Construction sites of a specific size; 2) the Municipal Separate Storm Sewer System permits for medium and large municipalities; 3) Industrial facilities.
    - **The Nebraska Pretreatment Program**, which functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

Activities include issuing permits to monitor and limit pollutants in wastewater discharges and evaluate compliance with the permits and other applicable regulatory requirements of the programs.

NPDES Permits

Anyone who directly discharges pollutants to waters of the state is required to obtain a permit. NPDES permits control pollutant discharges by establishing wastewater limitations for pollutants and/or requiring permittees to maintain certain operational standards or procedures. Permittees are required to verify compliance with permit requirements by monitoring their wastewater, maintaining records, and/or filing periodic reports.

The Department is responsible for developing and issuing NPDES permits, and for ensuring that permitted facilities comply with permit requirements. The regulatory basis for this program is through an EPA delegation agreement with the Department and NDEQ *Title 119 - Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System.* The Nebraska NPDES program encompasses a number of different types of discharges including: municipal, commercial and industrial wastewater discharges; livestock waste control; industrial discharges to public wastewater treatment systems (also known as the Nebraska Pretreatment Program); municipal combined sanitary and storm sewer overflows; and industrial and municipal storm water discharges. The graph on the next page titled "NPDES Discharge Authorizations" shows the distribution of permits issued to various types of NPDES dischargers,

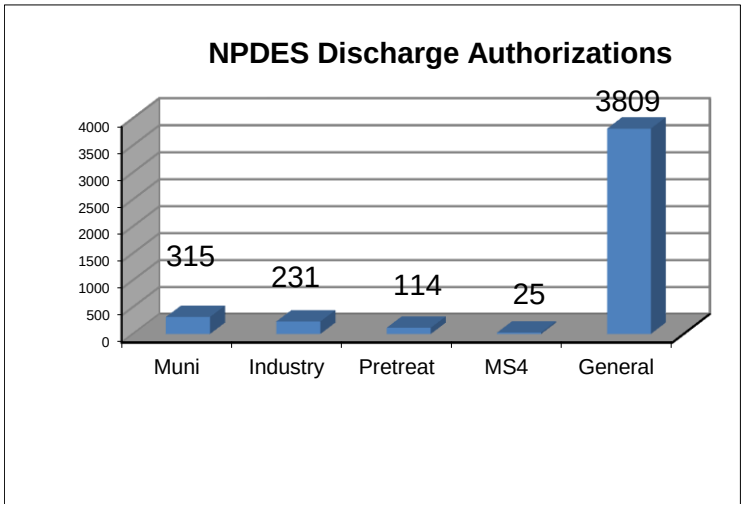
except Livestock. Information regarding Livestock NPDES permits is found on page 54 of this report.

Most NPDES permits limit the discharge of pollutants by establishing effluent limitations for specific pollutants such as carbonaceous biochemical oxygen demand, total suspended solids, and ammonia among others. The permittee is then responsible for testing their wastewater discharge to ensure that the limits are not exceeded. Permits may also limit toxicity in effluents and permittees may be required to demonstrate that their wastewater is not toxic to aquatic organisms (e.g., daphnia or fathead minnows). The permit may also require development of Best Management Practices Plans to reduce or control pollutant discharges.

The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology-based standards or water quality based standards. Technology-based standards reflect effluent quality that can be achieved using treatment technology that is available to the permittee. NDEQ Title 119 sets forth technology-based standards for municipal facilities and many types of industrial facilities. Technology-based standards can also be developed on a case-by-case basis when necessary.

Water quality based limits are the limits necessary to meet the in-stream water quality standards established in NDEQ *Title 117 - Nebraska Surface Water Quality Standards*. In some instances, where a surface water/groundwater interconnection may be of concern, NPDES permit limits may be based upon NDEQ *Title 118 - Groundwater Quality Standards and Use Classification*.

Permits may be developed and issued on an individual site-specific basis, or they may be developed and issued to apply to facilities with similar activities or effluent characteristics. These two types of permits are respectively referred to as individual permits and general permits. To date, the department has developed and issued general permits for the following activity categories: hydrostatic testing, dewatering, land application of concrete grooving/grinding slurry, pesticides applications to, over, and near Waters of the State, gasoline contaminated groundwater remediation projects, petroleum product contaminated groundwater remediation projects, construction site storm water, and industrial site storm water. Municipal Separate Storm Sewer System (MS4) permits have been issued to entities, including metropolitan areas and counties that meet the criteria of the NPDES Storm Water Program. There currently are 24 metropolitan areas and counties in Nebraska that have received MS4 permits, and one MS4 permit for the University of Nebraska-Lincoln. The Construction Storm Water General Permit was reissued January 1, 2008. It is currently under extension, and is expected to be reissued in Fiscal Year 2015. The Industrial Storm Water General Permit was issued on July 1, 2011.



There are 660 facilities with discharge authorizations under individual permits (municipal, industry and pretreatment), and 25 municipal storm water permits (MS4). There are 3809 active

facilities authorized to discharge under other general permits. The graph titled "NPDES Discharge Authorizations" provides a summary of this information. The general permits include 2831 active authorizations under the construction general storm water permit, 107 dewatering including Omaha, 30 hydrostatic testing, 772 industrial storm water, 39 pesticide, and 30 petroleum remediation sites.

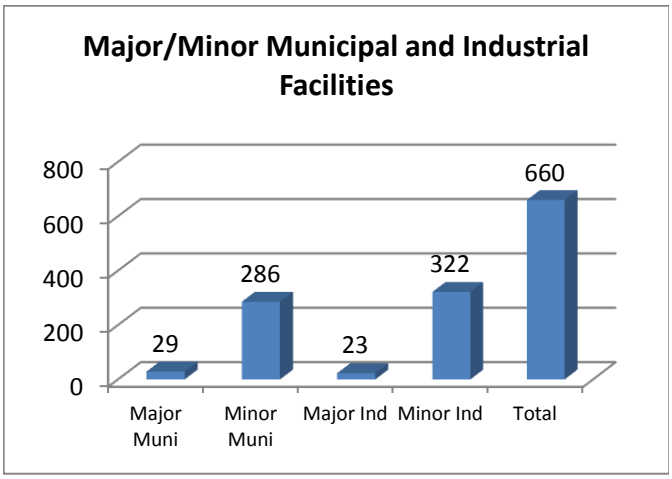
Municipal and Industrial Facilities

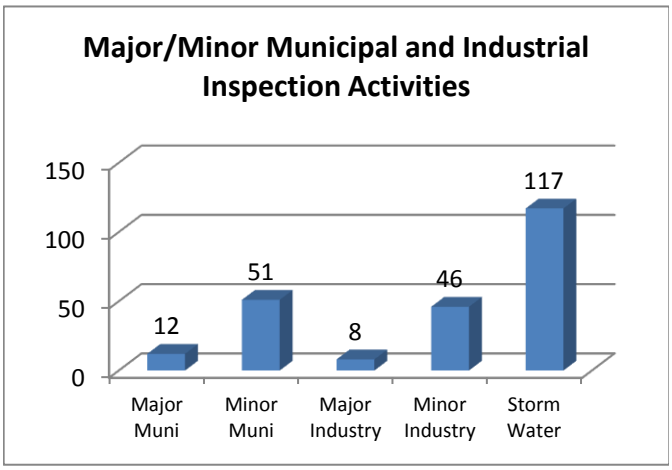
Industrial and municipal facilities are both grouped as major or minor facilities based upon their size and/or their potential to impact the receiving stream. The chart titled "Major/Minor Municipal and Industrial Facilities" provides a numeric break down of these types of facilities.

Municipal and industrial facilities are required to verify compliance with numeric permit limits by monitoring their effluents (i.e., self-monitoring). Monitoring frequency can vary from daily to annually depending upon the pollution and impact potential of the facility. The facility must report monitoring results to the Department; typically this is done on a quarterly basis. However, monitoring results that indicate non-compliance with permit requirements must be reported verbally within 24 hours. Records of all monitoring activities must be kept for a period of three years.

The Section verifies compliance through a variety of activities including reviewing discharge monitoring reports, following up on complaints and incident reports, conducting on-site inspections, and performing effluent monitoring inspections.

During on-site inspections, section personnel walk through the facility and review operational procedures and records. Major industrial and municipal facilities receive annual on-site inspections. The priority of minor facilities inspections is based on discharge compliance histories, incident reports and complaints. Inspectors performed 234 NPDES inspections in Fiscal Year 2014. A breakdown of those inspections is provided in the chart at right. In addition, the inspectors completed 102 pretreatment inspections and 41 inspections of non-discharging wastewater lagoons. During effluent monitoring inspections, effluent samples are collected and analyzed by the Department to compare with self-monitoring results. Facilities targeted for effluent monitoring inspections are chosen based upon pollution potential, past compliance or incident report histories, complaints, and/or Basin Management Approach priorities. One facility had an effluent monitoring inspection in FY14.





Data generated by facility monitoring and Department on-site and effluent monitoring inspections are reviewed and entered into the federal Integrated Compliance Information System (ICIS) computer database. This database is used to generate facility reports and review facility compliance history.

Combined Sewer Overflows

The Combined Sewer Overflow (CSO) program addresses Omaha's combined storm water and wastewater sewer systems. Omaha's systems were built prior to the existence of secondary sanitary wastewater disposal standards. When storm or snow melt runoff is occurring, these systems may become hydraulically overloaded and excess water flows bypass the treatment system. When bypasses occur, untreated wastewater is discharged into the receiving stream.

The City of Omaha has combined sewers that are subject to storm-induced bypasses of untreated waste. The City submitted a substantively complete long-term control plan on October 1, 2007 in compliance with an Administrative Consent Order between the City and NDEQ. On September 25, 2009, the City submitted their Final Long Term Control Plan, also in compliance with the Administrative Consent Order. This order initially required Omaha to complete the long-term control plan projects by 2024. In 2012 the order was modified to add an additional three years due to the 2011 Missouri River flood. The projects included in the plan span 18 years and are estimated to cost $1.5 billion. The goal of the projects is to reduce or eliminate combined sewer overflows and comply with State and Federal regulations.

The City of Omaha's CSO NPDES permit has been re-issued effective October 1, 2010 and includes a schedule for project implementation. This schedule utilizes the first five years of project implementation as defined by the Long Term Control Plan.

The City of Plattsmouth recently separated their storm and sanitary sewer lines. Separation projects began on July 1, 2010 and the City's re-issued permit, effective October 1, 2010, included a schedule for completion of this work in the next five years. As with Omaha, this schedule was modified due to the 2011 Missouri River flood. Separation work was completed on November 30, 2012. On or before September 1, 2016, the City of Plattsmouth is required to complete the Post Construction Compliance Monitoring Plan that will ascertain the effectiveness and completeness of the sewer separation project and send a final report to the NDEQ.

Wastewater Treatment Sludge and Biosolids Disposal

Disposal requirements for municipal and industrial wastewater treatment sludges or biosolids can be incorporated into NPDES permits. These sludge disposal requirements assure that sludges or biosolids are treated and disposed in a manner that is environmentally sound and protective of human health. Beneficial use, such as land application of biosolids, is strongly encouraged.

On Feb. 19, 1993, the EPA published the federal sludge regulations. Under these regulations, an estimated 330 municipal facilities in the state have additional sludge monitoring requirements. These additional requirements include increased metal and nutrient content analyses; improved records for tracking the amount of sludge and metals applied to each disposal site, and cumulative disposal limits. The Department has not sought delegation of this program from the EPA. The program is managed out of the EPA Region 7 office in Lenexa, KS.

Storm Water Program

In compliance with federal regulations, the NPDES Storm Water Phase I and Phase II Programs regulate the discharge of pollutants in storm water from certain construction sites, industrial facilities and municipal storm sewer outfalls. Phase II was promulgated by EPA in March of 2003. Storm Water Phase II federal regulations lowered the threshold for coverage of construction sites from five acres or more to one acre or more. And, sites that are less than one acre can also be regulated in Phase II, if they are part of a common plan of development or sale. The industrial facilities are defined to include a number of different types of facilities in addition to typical process industries (e.g., landfills, wastewater treatment sites, recycling centers, scrap yards, mining operations, transportation facilities, and hazardous waste facilities). These regulations also increase the number of municipalities and urban areas that are subject to the NPDES program for storm water discharges.

The cities of Omaha and Lincoln were subject to the Municipal Separate Storm Sewer System (also known as the MS4) Program with the implementation of Phase I. Lincoln was issued an MS4 Permit on September 1, 2002. This permit was reissued on July 1, 2008 and January 1, 2013. The Omaha MS4 Permit was issued on October 1, 2003 and was reissued in October 1, 2008. Phase II has expanded the areas requiring coverage under an NPDES MS4 Permit to include the urbanized areas in Douglas, Sarpy, Lancaster, Washington and Dakota Counties. An NPDES permit for Douglas, Sarpy and Washington Counties was issued effective August 1, 2004 and reissued October 1, 2009. The Dakota County MS4 permit was issued effective December 1, 2004.

The Department determined that the communities of Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Lexington, Norfolk, North Platte and Scottsbluff were exempt as of December 20, 2002. However, new approved Total Maximum Daily Loads and a review of the criteria for each municipality, made all subject to Phase II regulations for MS4s. A statewide general permit was issued January 1, 2006. The Storm Water Management Plans for all of these cities have been received, public noticed and each of these communities was authorized under this general permit. These permittees have entered into a cooperative agreement to form the Phase II Storm Water Cooperative. Their Storm Water Management Plans are being coordinated so that development work and implementation plans can be shared between them. The NDEQ is working closely with this group. The re-issuance of the statewide general permit for small MS4s is scheduled in Fiscal Year 2015. Dakota County, South Sioux City, and Dakota City will also be covered under this state-wide permit when it becomes effective.

Nearly $1.825 million in grant funds was awarded in FY2014 to MS4 permittees. This program, established by Legislative Bill 1226 in 2006, is awarded annually for implementation of the MS4 communities' Storm Water Management Plans. The grant is distributed by population and requires a matching 20% from each of the grantees. Funds are distributed near the end of each calendar year.

Two general permits have been issued to provide coverage for industrial facilities and construction sites. Both of these general permits require the permittee to develop Storm Water Pollution Prevention Plans to control and reduce the discharge of pollutants. The NPDES General Permit for Storm Water Discharges from Construction Sites, NER110000 was issued with change on January 1, 2008. The NPDES General Permit for Storm Water Discharges from Industrial Activity, NER900000, was issued July 1, 2011. The new permit requires benchmark monitoring for certain industrial activities. This monitoring was to be in place by July 1, 2012.

Nebraska Pretreatment Program Permits

The Nebraska Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industrial dischargers. The pretreatment regulations are found in Title 119. The rules and regulations set forth prohibited discharge standards that apply to all industrial users of publicly owned wastewater treatment facilities and require permits for significant industrial users. The significant industrial users are determined by one of several means: 1) the existence of an industrial category for which pretreatment discharge standards are established in NDEQ Title 119; 2) the volume or strength of the wastewater discharged from the facility; or 3) the potential of the industrial user to adversely affect the wastewater collection or treatment facilities.

The authority for establishing the Pretreatment Program is derived from the NPDES program requirements set forth in Section 402 of the Federal Clean Water Act. The issuance procedures and general format of Pretreatment Program and NPDES permits are very similar. Permittees are required to carry out self-monitoring activities, maintain records and submit periodic reports. Compliance activities include report reviews, on-site inspections and compliance monitoring inspections. Compliance data are entered into ICIS to facilitate compliance review activities.

Although the Pretreatment Program is really a subprogram of the NPDES program, administration of this program requires more coordination and cooperation with local municipal officials. To accomplish this, the Department has entered into Memorandums of Agreement (MOAs) with 11 communities describing respective city and state responsibilities. The agreements vary in nature depending on the size and capabilities of the community. Omaha and Lincoln are the most active municipal partners, accepting responsibility for a large variety of activities including facility sampling, inspections, complaint investigations, permit reviews, and industrial user technical assistance. Other communities rely more heavily upon the State for compliance inspections and technical reviews. However, all cities with agreements conduct initial complaint or incident investigations, report significant incidents to the Department and assist in permit development by reviewing draft permits. The Department is working with communities throughout the state to get them more involved in the pretreatment program and to improve cooperative efforts in this program.

State Revolving Loan Fund Programs

The Water Quality Division's Financial Assistance Section administers distribution of state and federal assistance for the Clean Water State Revolving Loan Fund and the Drinking Water State Revolving Loan Fund.

Clean Water State Revolving Loan Fund

The Nebraska Clean Water State Revolving Loan Fund (CWSRF) program provides low-interest loans and small community matching grants to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems to alleviate public health and environmental problems. The loan principal repayments go into new loans, and interest earnings on the Fund are used to pay off the state match bond issues and to make new loans.

The CWSRF program receives an annual federal EPA capitalization grant. A 20% state match, required to obtain the federal grant, is provided through Nebraska Investment Finance Authority (NIFA) bond issues. After 26 years of activity, the Fund's Net Assets have reached $251 million. Since its inception, the program has made loans totaling $432 million to 176 municipalities for 253 projects.

In SFY2014, the CWSRF funded projects totaling $45,512,151 in loans and $898,000 in principal forgiveness and grant funds.

The EPA awarded the 2013 capitalization grant, in the amount of $6,798,000, in August of 2013. A $1,360,000 bond was used to match this federal grant.

Initiatives in 2014 for the State Revolving Fund Program include:

- The Program is implementing Northbridge loan and grant tracking software purchased with the 4% set-aside funds from both CWSRF and DWSRF. Installation is being completed in phases. In July 2014 the first phase was completed and we started utilizing the financial tracking part of the software. It may take until the end of SFY15 to complete all the phases.
- In 2014, the Legislature passed LB514, which authorizes the creation of a Clean Water Linked Deposit Program. The bill authorizes a process of working with private lending institutions to provide low-interest loans for private uses associated with nonpoint source pollution control, such as: septic tank repair and replacement; certain livestock waste control facilities; and agricultural best management practices, among others.
- Also included in LB 514 is a provision for refinancing previous debt used for the construction of wastewater treatment facilities.
- NDEQ is currently revising Title 131 to include the LB 514 changes and plans on presenting these to the EQC in SFY15.
- The Preliminary Engineering Report Guide in the Intended Use Plan was updated with recommendations from USDA and EPA. It also includes steps to help communities assess options for sustainability, especially with those communities experiencing population decline.

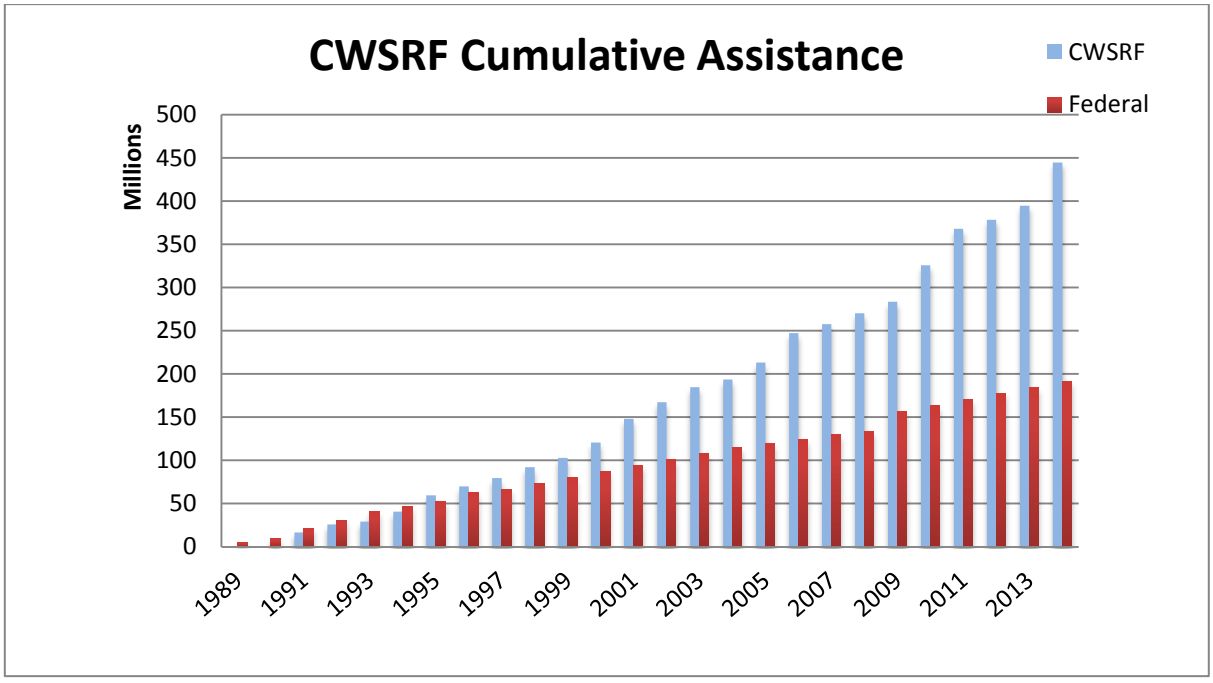
Municipalities Receiving CWSRF Loans in SFY2014

Municipality	Loan Date	Loan Amount	Principal Forgiveness Amount	Small Town Grant Amount	Total
Sprague (small town grant & principal forgiveness only)	6/26/2014		100,000	30,000	130,000
Winside (small town grant only)	6/20/2014			240,000	240,000
Bassett Amd #1	4/29/2014	135,000			135,000
Spencer	4/11/2014	78,000	78,000		156,000
Kearney	3/25/2014	1,200,000			1,200,000
Gothenburg	12/16/2013	2,133,400	100,000		2,233,400
Bruning Amd #1	12/11/2013	90,915			90,915
Mead	11/22/2013	976,836	100,000	250,000	1,326,836
Omaha Mo River Sch B	11/18/2013	40,000,000			40,000,000
TOTAL		**$44,614,151**	**$378,000**	**$520,000**	**$45,512,151**

Thirty-three projects were under construction during SFY 2014**:** Albion, Amherst, Ansley, Aurora, Bassett, Bertrand, Blair, Brainard, Bruning, Clarkson, Crawford, Denton, Dodge, Gothenburg, Gresham, Hickman, Jansen, Kearney, Lancaster County SID #5, Lexington, Lincoln, Maxwell, Mead, Nebraska City, Omaha, Osmond, Oxford, Plattsmouth, Polk County SID #1, South Sioux City, Spencer, Wakefield, and Wisner.

Ten SRF wastewater projects initiated operation in SFY 2014: Amherst, Oxford, Bruning, Crawford, Gresham, Clarkson, Dodge, Bertrand, Lexington, and Nebraska City.

The graph reflects the cumulative loan assistance of CWSRF.



Construction Administration Fund Small Community Matching Grants

In addition to and concurrent with loans, the CWSRF provides small community matching grants to financially distressed municipalities with population of 10,000 or less. This program has provided $7.9 million in grant funding for 70 projects concurrent with a CWSRF loan during the 26 years of the program. Many small municipalities find that needed projects are too costly without the additional grant subsidy provided concurrent with the CWSRF loan. During FY2008, legislation was passed providing the department with authority to allocate up to 65% of prior-year revenue from fees collected on CWSRF loans to the various grants. This legislation also increased the population level for eligible communities to 10,000 or less. The department intends to provide increased funding to as many qualifying projects as possible; therefore, for FY2014, up to $593,167 was available for small community grants, and any one community could receive a maximum of $250,000. The program provided a total of $520,000 in small community grants to the communities of Mead, Winside, and Sprague.

In FY 2014, five planning grants for a total of $100,000 from the Administrative Cash Fund were awarded to small communities. These communities identified wastewater treatment facility project needs. They were listed on the Project Priority List, have not received a planning grant in the previous five years and have 10,000 or fewer inhabitants.

Drinking Water State Revolving Loan Fund

The Nebraska Drinking Water State Revolving Loan Fund (DWSRF) program provides low-interest loans and loan forgiveness to owners of public water systems. The loan principal repayments go into new loans, and interest earnings on the Fund are used to pay off the state match bond issues and to make new loans. An agreement between the NDEQ and the Nebraska Department of Health and Human Services, Division of Public Health (NDHHS-DPH), effective on October 30, 1997, defined the authority of the two agencies in administering the DWSRF program.

The DWSRF is similar to the Clean Water State Revolving Fund in that both obtain the required 20% state match through Cash Funds or revenue bonds, give low interest loans, and will be self-sustaining. The DWSRF is unique in that loans may be awarded to privately owned public water supplies. Other program differences include set-asides for program administration, technical assistance, wellhead protection, capacity development and operator certification. After 17 years of activity, the Fund's Net Assets have reached $153 million.

DWSRF Set Aside Funds and Administration Cash Fund

Administrative costs are being paid out of the administrative Cash Fund and may include program operating costs for both NDEQ and NDHHS-DPH, including day-to-day DWSRF program management activities for both agencies. Also included are other costs associated with debt issuance, financial management, consulting, and support services necessary to provide a complete program.

The Small System Technical Assistance set-aside (2%) provides technical assistance to Public Water Supply Systems serving 10,000 or fewer persons. This is accomplished through contracts with organizations with expertise in dealing with small systems and is coordinated by the NDHHS-DPH.

In FY2014, under the Source Water Protection Implementation set-aside (15%), ten agreements for preliminary engineering reports totaling $160,000 were awarded to high priority

ranked communities to address public health issues associated with public water supplies, and $100,000 for source water protection project agreements. The NDEQ administers these programs.

The DHHS-DPH has determined eligibility for Public Water Supply program management, development and implementation of a capacity development strategy, and a water operator certification program set-aside of $750,000. The state may use up to a total of 10 percent for this set-aside but must provide a one-to-one state match. DHHS-DPH has determined the set-aside eligibility by using program overmatch dollars for federal fiscal years 1993 to 1997. No additional state dollars are required for the set-aside.

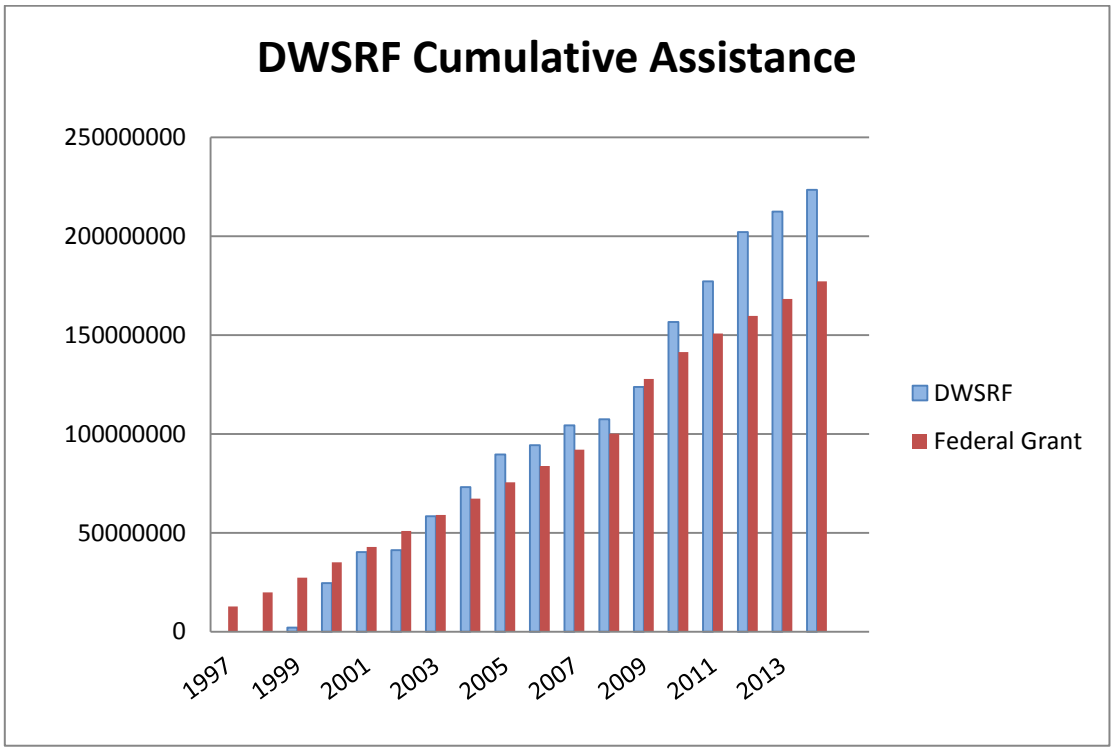
Municipalities Receiving DWSRF Loans in SFY2014

Municipality	Loan Date	Loan Amount	Principal Forgiveness
Ogallala	4/30/2014	2,719,119.00	543,824.00
Waverly	4/23/2014	4,610,000.00	-
McCook	4/9/2014	2,086,810.00	417,362.00
Kearney	4/1/2014	2,000,000.00	-
Wakefield **(30 year loan)**	12/23/2013	1,200,000.00	240,000.00
Utica	10/24/2013	1,370,000.00	274,000.00
Scribner **(30 year loan)**	9/30/2013	3,500,000.00	700,000.00
Haigler	9/23/2013	210,000.00	42,000.00
Lindsay	8/1/2013	618,850.00	188,502.00
TOTAL		**$18,314,779.00**	**$2,405,688.00**

The FY2013 DWSRF capitalization grant allocation totaled $8,421,000 million. In FY2014, the DWSRF entered into nine binding commitments to communities in order to provide financial assistance to PWS projects totaling $18,314,779, of which disadvantaged communities received $2,405,688 in forgiveness funding. Further, the Federal Fiscal Year (FFY) 2013 capitalization grant required that a minimum of 20% of the grant be reserved for additional subsidization (e.g., principal forgiveness).

In addition, from the FFY 2013 capitalization grant $2,385,520 was allocated to the 2% ($168,420), 10% ($1,492,100) and 15% ($725,000) Set-Asides. More details on the programs associated with these Set-Asides can be found in the Drinking Water State Revolving Fund Annual Report for SFY 2014 on our website at http://deq.ne.gov/.

The graph reflects the cumulative loan assistance of DWSRF.



CHAPTER 7:
Field Services and Assistance Division

The purpose of the Field Services and Assistance Division is to provide information and assistance to the public and the regulated community, as well as to conduct inspections, maintain monitoring programs, and manage specific projects. With regard to performing inspections, operating monitoring programs, and managing projects, Field Services staff coordinates all activities with the Agency's Air Quality, Waste Management, and Water Quality Divisions. Many of the agency's field activities occur out of the department offices located in Omaha, Norfolk, Chadron, Scottsbluff, North Platte, and Holdrege.

In addition to Field Services, the Division consists of the following programs: Small Business and Public Assistance, Community Right-To-Know, Emergency Response, Homeland Security, and Quality Assurance.

Over the last year, the programs within the Field Services and Assistance Division have devoted efforts to a number of significant projects. A short summary of some of those efforts follow.

- The Department played an active role in the response to the devastating tornadoes that hit Pilger and Beaver Crossing. The tornadoes also impacted large rural areas around the towns. The Norfolk Field Office responded and under the direction of the Nebraska Emergency Management Agency assisted in debris management and the identification of hazardous materials.

- The Field Services and Assistance Division devotes significant resources to the coordination of the review and response to submissions pursuant to the National Environmental Protection Act (NEPA). The environmental assessments are conducted by five NDEQ programs: Air Quality, Waste Compliance, Storm Water, Wastewater, and Water Quality. The purpose of the assessments is to ensure related projects are conducted in an environmentally responsible manner and to give the project sponsors an early awareness of any potential permits that will be needed for a successful project. During FY2014, NDEQ received 57 new project notifications for NEPA review.

- The Community Right-to-Know Program continues to work with Local Emergency Planning Committees in planning efforts, such as planning and participating in emergency response exercises. The program also participates in educational activities. The Program participated in 15 local emergency management agency meetings over the last year and participated on the State Emergency Response Commission Education/Outreach Committee.

- The Division continues to coordinate environmental partnership efforts with different organizations. With regard to one such organization, the Nebraska Public Power District (NPPD), both NDEQ and NPPD have been able to utilize the strengths of the other organization to better the understanding of power generation in Nebraska and its interaction with the local and regional environment. One of the principal efforts of the Partnership has been to organize an annual workshop, the "Power Summit," which brings those responsible for generating electricity together with environmental regulators for the purposes of examining topics of mutual interest. The Partnership also coordinated a meeting of the Nebraska Methane Workgroup. This meeting was held to learn of advancements made in technologies

associated with the capture and use of methane from livestock operations.

- The Emergency Response Program continues to enhance the Department's ability to respond to releases into the environment by securing equipment and coordinating and providing additional training for the Department's Emergency Response Team. Additionally, the Emergency Response Coordinator serves as the Department's Complaint Coordinator. The Complaint Coordinator implements the Department-wide notification system. The system is designed to increase the effectiveness and bring consistency to the Department's response to notifications and complaints.

- The Division, primarily through the efforts of the Small Business and Public Assistance Coordinator, is responsible for the planning of the Department's annual Environmental Update – a one-day conference held for the regulated community and environmental consultants to provide an opportunity for NDEQ programs to present updates and explain new developments.

- The Division, through the Small Business and Public Assistance Coordinator, arranges "One Stop Permit Meetings" with businesses, city representatives, or the Nebraska Department of Economic Development, to help facilitate any environmental regulatory permitting requirements an incoming business may have.

- The Environmental Assistance Division provides assistance to the Waste Management Division in the conduct of the federal Brownfields program. The Brownfields program's purpose is to restore blighted and contaminated areas of the country to productive use. The Field Service and Assistance Division has been reviewing and providing comments on grant applications to those organizations applying for federal Brownfields grants. In 2014, EPA selected the City of Gering to receive a $200,000 grant to conduct 14 Phase I and six Phase II environmental site assessments. Grant funds also will be used for cleanup planning at four sites and community outreach activities.

- The Field Office Section Supervisor has continued one-on-one informal visits with small community Municipal Clerks. Clerks often receive requests for information associated with the Department's various programs and providing them with knowledge of the Department's programs, and letting the Clerks know who to contact in given situations, benefits the citizens of the state.

Field Offices

The NDEQ Field Office Section is responsible for conducting compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency's Air Quality, Waste Management and Water Quality Divisions. The number of inspections and other duties performed by field office staff is incorporated in the charts and graphs provided by other divisions in the previous chapters. There are 15 employees in six field offices around the state. The field offices enable the agency to provide the public with greater access to NDEQ staff, to provide more timely responses to citizens. Additionally, field offices help the entire Department develop a better understanding of local issues because NDEQ staff live and work in the local community.

One of NDEQ's goals is to have a strong community presence and build relationships with the public and with local entities. This is accomplished in a number of different ways in the field offices. One way is by making personal one-on-one contacts with local governmental agencies that have

mutual needs or responsibilities. Another way to establish a local presence is to participate on local task forces, boards of directors and emergency planning organizations. The feedback that the agency receives is that the NDEQ representatives who participate in these local organizations add depth and insight which is highly valued. Another way a local presence is established is by participating in environmental education events in their regions. Building a strong community presence helps NDEQ carry out the work of preserving the state's natural resources and serving the citizens of Nebraska.

Small Business and Public Assistance Program

The Small Business and Public Assistance program was created as a result of the Clean Air Act Amendments of 1990. Congress saw the need to create programs to assist small businesses comply with ever more complex air quality regulations. Similar to many state's environmental agencies, NDEQ expanded its scope to encompass all environmental media: air, waste management, and water.

Nebraska's Program is divided into four major components: the Small Business and Public Assistance (SBPA) program, the One-Stop Permit Assistance program, the Public Advocate, and the Small Business Compliance Advisory Panel. The Program Coordinator is involved with all four functions, as well as coordinating with other NDEQ personnel within the Department's Air Quality, Water Quality and Waste Management Divisions involved in compliance assistance activities on the NDEQ Compliance Assistance Team.

The Program includes site visits, development of outreach materials, workshops, and helping the regulated community to understand their obligations under state and federal law. The Program Coordinator answered questions from over 50 individuals regarding air, waste water, or solid and hazardous waste issues. The Program Coordinator is also responsible for the Department's annual Environmental Update held in Lincoln on May 15, 2014, with 150 individuals attending the workshop.

The One-Stop Permit Assistance Program was established to offer information and permit assistance related to the Department's various divisions, providing the customer with one initial point of contact in the environmental permitting process. This program's objectives are to ensure businesses are aware of the permits they are required to apply for, know information they will need to provide in the application process, and ensure that inquiries receive a timely response. The Program Coordinator conducted meetings with eight potential facilities between July 1, 2013 and June 30, 2014.

The Public Advocate serves as the ombudsman for purposes of the Clean Air Act requirements, receiving requests for regulatory information or environmental complaints from the public and ensuring the Department is accessible and responsive to public concerns. In this role, the Program Coordinator provided outreach to individuals to address specific questions or concerns they had.

The Small Business Compliance Advisory Panel resulted from the Clean Air Act Amendments of 1990 and amendments to the Nebraska Environmental Protection Act of 1992. The Panel is composed of seven members: two representatives from the general public selected by the Governor, four representatives from small businesses selected by the Legislature, and one representative selected by the Director. The panel evaluates the effectiveness of the Program, providing feedback on outreach and education methods and identifying program obstacles. The Panel members met with NDEQ staff to discuss several issues during a meeting in October 2013, and provided their annual report to the Governor regarding the SBPA Program.

Community Right-To-Know Program

The Community Right-to-Know Program provides assistance to those subject to the Nebraska Emergency Planning and Community Right-To-Know Act and the related federal Emergency Planning and Community Right-To-Know Act. These acts are designed to: 1) increase the public's access to information concerning the presence and release of hazardous chemicals in their communities; 2) provide emergency planning and response information; and 3) provide information on toxic chemical releases to the environment. Compliance assistance is available to any persons or facilities requesting it through the division. The EPA enforces this program.

The Community Right-To-Know Program distributes outreach materials, responds to public requests for information, and receives and stores information required under this act. The information that facilities are required to provide the department includes: 1) a one-time report of an extremely hazardous substance at a facility that triggers the emergency planning process; 2) notification of any significant changes to a facility's emergency plans; 3) notification of the sudden release of a hazardous substance; 4) an annual report listing the hazardous chemicals present at 10,000 pounds or above the threshold planning quantity at the facility; 5) an annual quantitative report of the listed chemicals; and 6) an annual facility inventory report of toxic chemicals manufactured, stored or used, and the amounts released to the environment by the specific media.

A facility in Nebraska is required to submit a Tier II report if listed hazardous substances are present at any one time during the preceding calendar year at the facility in amounts either equal to or greater than amounts established by the EPA. In 2014, 2,780 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This was slightly down from the previous year. This information has been used to assist the Nebraska Hazardous Incident Team (NHIT) in responding to the aftermath of the Pilger, Nebraska tornado.

Facilities required to report information pursuant to the Community Right-to-Know Program are able to access, view, change and report their chemical information online. Approximately 96% of the facilities reported online in Nebraska in 2014. The information stored electronically is much more usable and enhances the ability of Local Emergency Planning Committees to access the data for use in their local emergency plans.

Additionally, the Community Right-To-Know Coordinator has been active in establishing relationships with the Local Emergency Planning Committees by attending their local meetings and making presentations at related conferences. In 2014, the Community Right-to-Know Coordinator attended 15 local meetings, assisted with local emergency exercises, and provided information regarding chemicals at facilities in their communities. In 2014 the Community Right-to-Know Coordinator assisted with the planning of the 2015 Regional LEPC Conference in Nebraska City, NE. These events provided information and training to over 200 First Responders and Local Emergency Planning Committee members.

Emergency Response Program

Through the Emergency Response Program, NDEQ personnel provide technical and regulatory assistance to those responsible for spills, leaks, and accidents that pose a hazard to the environment or public health. Assistance is also provided to those at the local level who are the first on the scene at these releases; typically this is the local fire department.

The Emergency Response Program Coordinator is responsible for training, equipping and coordinating a group of personnel who, in addition to their responsibilities to other departmental programs, provide initial documentation, assistance and response to spills. These individuals have the responsibility of maintaining an emergency response system, which is on call 24 hours a day. The Emergency Response Program assists in arranging for the disposal of harmful and potentially hazardous materials. The Program represents the environmental interests of the state at the scene of a petroleum/chemical spill or other environmental emergency. All personnel are members of the Nebraska Hazardous Incident Team (NHIT) and coordinate closely with the local, state and federal agencies involved in emergency response situations. Over the past year the Emergency Response Program responded to 4 incidents and conducted 6 on-site visits to these incidents.

Homeland Security

The Department has been actively involved in the state's Homeland Security efforts, which are directed by the Lieutenant Governor. The Department's Deputy Director of Programs represents the Department on the Lieutenant Governor's Homeland Security Leadership Group. The Field Services and Assistance Division has been active in planning for the annual Nebraska Infrastructure Protection Council Conference sponsored by the Lieutenant Governor. As has been the case in the past, Department staff, specifically the Community Right to Know Coordinator, have participated in a number of Local Emergency Response Committee exercises. Most significantly those exercises included incidents related to releases of anhydrous ammonia, pipeline releases, and responding to and mitigating spills of materials into the surface waters of our state.

Quality Assurance Program

The function of the Quality Assurance Program is to ensure that environmental data used by the Department in regulatory and decision-making activities is properly documented and sufficiently reliable to meet Department needs. NDEQ is committed to ensuring that environmental data used by the Department are sufficiently precise, accurate, and complete to carry out NDEQ's responsibilities. In the last year, the Department’s Quality Assurance Manager and Quality Assurance team members have reviewed 22 project plans to ensure adequate planning for environmental data collection. Additionally, the Quality Assurance Manager was successful in coordinating Department-wide Quality Assurance training, provided locally, for all DEQ staff. This training had not been available locally since 2009, and was attended by almost one-quarter of DEQ’s staff. The cost savings for the Department for providing training locally, rather than at EPA’s Region 7’s offices in Kansas City, was over $15,000.

CHAPTER 8:
Expenditure and Budget Summary

The following information summarizes department expenditures for fiscal year 2014 and outlines budget projections for fiscal year 2015. The figures in the expenditure summaries were derived from the state accounting system. The budget projections were prepared by the Department. Some limited flexibility exists to adjust these numbers to meet unforeseen needs.

Chart A shows actual FY14 expenditures for each federal grant, including the state match.

Chart B lists actual FY14 expenditures of programs funded by state general funds and/or cash funds. This chart lists expenditures by activity. Activity in this case is not considered a program activity, but is a category of expenditure. Activities listed in this chart are personal services, operating expenses, travel, capital outlay, contracting and distribution of aid.

Chart C outlines the proposed FY15 budget for each federal grant. Chart C also lists proposed match for each program for which a non-federal match is required. Additionally, match for the 319H grant is provided by in-kind services in the Groundwater Management Area program.

Chart D outlines proposed FY15 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. As in Chart B, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, contracting and distribution of aid.

Agency program activities are described in Chapter 2 and Chapters 4 through 7 of this report.

Chart A -- Actual Expenditure for Each Federal Grant for State Fiscal Year 2014

Grant Program / Title	Assistance ID #	Grant	Match	Total
Performance Partnership	BG997325-07	1,808,545	306,318	2,114,863
Performance Partnership	BG997325-08	3,211,567	826,461	4,038,028
604 B Water Quality Management	C6007328-22	57,944		57,944
604 B Water Quality Management	C6007328-23	72,286		72,286
319 H Non-Point Source	C9007403-XX	2,301,273		2,301,273
Clean Water State Revolving Fund	CS310001-XX	5,279,644	2,205,346	7,484,990
Clean Diesel	DS977423-01	24,630		24,630
Drinking Water State Revolving Fund	FS997805-XX	9,952,786	1,707,581	11,660,367
Section 106 Monitoring	I987678-XX	118,251		118,251
Leaking Underground Storage Tanks	LS987161-08	393,654	18,938	412,592
Leaking Underground Storage Tanks	LS987161-09	341,196	49,024	390,220
Exchange Network 07	OS833475-01	17,870		17,870
Department of Defense	NE-12	144,018		144,018
Section 128 (a) State Response	RP987322-04	479,591		479,591
Superfund UNL Mead	V977350-01	4,073		4,073
Superfund Management Assistance	V997531-08	157,823		157,823
Superfund Site Assessment	V997532-06	349,915		349,915
Superfund Core	VC987267-06	427,165		427,165
PM 2.5 Ambient Air Monitoring	XA977347-01	261,882		261,882
Totals		**$ 25,404,113**	**$ 5,113,668**	**$ 30,517,781**

Administrative costs are negotiated with the EPA as a combined, per hour rate, and then charged back against each grant based on direct service hours worked

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of nonpoint source program, Underground Injection Control, and Mineral Exploration

A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses

Chart B - Actual Expenditure of State Funds for State Programs for Fiscal Year 2014 Including Aid

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,100,540	442,199	39,449		12,420	1,594,608		1,594,608
CLEAR / Environmental Trust	011	C						-		-
Ag - Livestock	016	G/C	1,393,963	97,570	55,399		4,134	1,551,065		1,551,065
Air Construction Permits	020	C	18,499	19,087	477			38,063		38,063
Superfund State Cost Share	023	G/C	3,426	1,367				4,793	269,272	274,065
Litter Reduction	024	C	102,347	38,983	979		117,968	260,277	1,898,228	2,158,505
Mineral Exploration	029	C	87,593	57,661	14,900		607	160,761		160,761
Private Onsite Wastewater Cert & Registration	030	C	246,773	120,373	8,013		1,894	377,053		377,053
Environmental Official Training	031	C		1,410	2,468			3,878		3,878
Emission Inventory - Title V	033	C	1,876,394	764,853	31,836	4,824	22,593	2,700,500		2,700,500
Chemigation	034	C	3,947	3,125	326		14,481	21,879		21,879
Groundwater Management Areas	035	G	30,110	364	491		1,694	32,659		32,659
Remedial Action Plan Monitoring Act	036	C	92,688	36,209	465			129,363		129,363
Private Onsite Wastewater Permit & Approval	037	C	33,643	11,870				45,513		45,513
Operator Certification	040	C	50,587	23,838	1,075		9,629	85,129		85,129
Community Right to Know	041	G	93,574	1,512	4,558			99,644		99,644
Petroleum Release Remedial Action Act	051	C	902,707	455,356	12,872	130,301	3,829,678	5,330,915	5,436,218	10,767,133
Emergency Response	057	G/C	76,548	34,015	1,258			111,821		111,821
Engineering Reviews	061	G	221,988	1,988	206		129	224,311		224,311
Stormwater Grants	067	G	6,734					6,734	1,824,996	1,831,730
Waste Reduction & Recycling	091	C	199,120	88,092	5,832		56,021	349,065	2,859,583	3,208,648
Superfund Special Projects	095	G	7,887	2,833	132		76,089	86,941		86,941
Agency Organizational Dues	099	G		15,162	683			15,845		15,845
Totals			**$ 6,549,068**	**$ 2,217,866**	**$ 181,421**	**$ 135,125**	**$ 4,147,338**	**$ 13,230,817**	**$ 12,288,296**	**$ 25,519,113**

FUND TYPE LEGEND
G - Program Expends General Funds
C - Program Expends Cash Funds
G/C - Program Expends Both General and Cash Funds

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses.

Chart C - Proposed Budget for Each Federal Grant Program for State Fiscal Year 2015

Grant / Program Title	Grant	Match	Total
Performance Partnership	4,517,024	1,393,286	5,910,310
Clean Water State Revolving Fund	5,312,458	2,275,046	7,587,504
604 B Water Quality Management	100,000		100,000
319 H Non-Point Source	2,584,681		2,584,681
Drinking Water State Revolving Fund	11,182,882	1,752,227	12,935,109
Leaking Underground Storage Tanks	777,051	86,339	863,390
Clean Diesel	79,000		79,000
Section 106 Monitoring	209,500		209,500
Department of Defense	168,095		168,095
PM 2.5 Ambient Air Monitoring	230,359		230,359
Superfund UNL Mead	5,235		5,235
Superfund Core	126,531	14,059	140,590
Superfund Management Assistance	217,522		217,522
Superfund Site Assessment	231,699		231,699
Section 128 (a) State Response	564,176		564,176
Totals	**$ 26,306,213**	**$ 5,520,957**	**$ 31,827,170**

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of nonpoint source program, Underground Injection Control, and Mineral Exploration

A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses.

Chart D - Proposed Budget of State Funds for State Programs for Fiscal Year 2015 Including Aid

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,304,168	507,937	39,000		14,997	1,866,102		1,866,102
Ag - Livestock	016	G/C	1,543,845	35,200	55,700		8,000	1,642,745		1,642,745
Air Construction Permits	020	C	61,146	34,431	350			95,927		95,927
Superfund State Cost Share	023	G/C	14,244				170,245	184,489	316,200	500,689
Litter Reduction	024	C	107,502	41,370	1,500		121,000	271,372	1,600,000	1,871,372
Mineral Exploration	029	C	144,717	83,581	16,785		1,500	246,583		246,583
Private Onsite Wastewater Cert & Registration	030	C	257,152	109,186	6,900		400	373,638		373,638
Emission Inventory - Title V	033	C	2,117,341	836,269	31,000		25,000	3,009,610		3,009,610
Chemigation	034	C	7,640	4,747	200		27,000	39,587		39,587
Groundwater Management Areas	035	G	31,203	1,650	300			33,153		33,153
Remedial Action Plan Monitoring Act	036	C	107,155	41,533	500			149,188		149,188
Private Onsite Wastewater Permit & Approval	037	C	26,457	9,341				35,798		35,798
Operator Certification	040	C	58,946	25,485	1,150		7,500	93,081		93,081
Community Right to Know	041	G	99,129	1,250	4,950		1,000	106,329		106,329
Petroleum Release Remedial Action Act	051	C	941,766	483,061	12,100	250,000	5,636,502	7,323,429	8,775,000	16,098,429
Emergency Response	057	C	126,602	52,063	2,716		560	181,941		181,941
Engineering Reviews	061	G	203,538	2,200	750		300	206,788		206,788
Stormwater Grants	067	G	17,243	400	800			18,443	1,824,996	1,843,439
Waste Reduction & Recycling	091	C	223,207	97,618	4,975		2,000	327,800	3,000,000	3,327,800
Agency Organizational Dues	099	G		11,000				11,000		11,000
Totals			**$ 7,393,001**	**$ 2,378,322**	**$ 179,676**	**$ 250,000**	**$ 6,016,004**	**$ 16,217,003**	**$ 15,516,196**	**$ 31,733,199**

FUND TYPE LEGEND
G - Program Expends General Funds
C - Program Expends Cash Funds
G/C - Program Expends Both General and Cash Funds

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses.

CHAPTER 9:
Distribution of Aid

The Department has a number of programs that distribute aid for specific activities. These range from funding for roadside cleanup to providing loans through the State Revolving Fund Loan Programs for construction of wastewater treatment facilities and drinking water systems.

WASTE MANAGEMENT AID PROGRAMS

Following is a summary of funds provided in FY 2014 through the Waste Grants programs managed in the Waste Planning and Aid Unit.

A. Litter Reduction and Recycling

The Litter Reduction and Recycling Grant Program provides funds to reduce litter, provide education and promote recycling in Nebraska. Funding for the program is an annual fee on manufacturers, wholesalers and retailers who have significant sales in categories of products that would generally be considered to produce litter. Approximately $2.06 million was received in FY2014.

In FY 2014, 51 Litter Reduction and Recycling grants were awarded, totaling $2,006,707. The grants were awarded in three categories: Public Education, $887,141; Cleanup, $67,164; and Recycling, $1,052,402. These grants were awarded to both public and private entities.

B. Waste Reduction and Recycling

The Waste Reduction and Recycling Incentive Grants Program provides grants for various solid waste management activities. Revenues to the fund are provided by proceeds from various fees, including a one-dollar fee on each new tire sold in the state, and a retail business fee on tangible personal property sold in the state. In addition, 50% of a fee collected on the disposal of solid waste going to landfills goes to this fund.

In FY2014, 161 projects totaling $4,296,581 were funded from the Waste Reduction and Recycling Incentive Grants Program.

C. Illegal Dumpsite Cleanup Program

The Illegal Dumpsite Cleanup Program, established in 1997, provides funding for political subdivisions to clean up solid waste disposed of along public roadways or ditches. Potential funding is limited to five percent of the total revenue from the disposal fee collected in the preceding fiscal year. In FY2014, the program provided $49,792 to eight recipients.

D. Landfill Disposal Fee Rebate Program

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund. In FY2014, the program provided $94,878 to 11 recipients.

Any municipality or county may apply for a rebate if they have a written purchasing policy in effect requiring a preference for purchasing products, materials or supplies which are

manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a ten cent rebate from the $1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

Additional information about these programs can be found in the Planning and Aid portion of Chapter 5.

WATER QUALITY AID PROGRAMS

A. Petroleum Remediation

The Petroleum Remediation program provides aid through the Petroleum Release Remedial Action Fund to assist in paying the cost of cleanup of sites where petroleum has leaked from tanks, generally service stations. Funding to this program is primarily provided by a fee on petroleum sold in Nebraska. Over $191 million has been disbursed since the program began. The program provided $5,176,395 to 233 sites for investigation and cleanup in FY2014.

Additional information about this program can be found in the Petroleum Remediation portion of Chapter 6.

B. State Revolving Loan Fund Program

I. Clean Water (Wastewater) State Revolving Loan Fund Program -- Grant and loan programs administered by DEQ related to wastewater facilities, which are funded through the Clean Water State Revolving Fund program, include:

- The **Clean Water State Revolving Loan Fund** provides low interest loans and loan forgiveness to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems. The sources of funding for this program include federal grants and funds from the Nebraska Investment Financial Authority (NIFA) through bond issuance. In FY2013, the CWSRF funded projects totaling $25,516,744 in loans and $1,455,578 in loan forgiveness and grant funds.

- **Clean Water Construction Administration Small Community Matching Grants** provide matching grants to eligible communities with populations of 10,000 or less. In FY2013, $540,494 was allocated for small community grants.

- **Planning Grants** totaling $100,000 were awarded to five small (under 10,000) communities in FY2014. These communities were listed on the Project Priority List and used the grants to identify wastewater treatment facility project needs.

II. Drinking Water State Revolving Fund Program -- The Drinking Water State Revolving Fund provides low-interest loans and loan forgiveness to owners of public water systems. In FY2013, the program provided financial assistance to public water system projects totaling $10,381,166, of which disadvantaged communities received $2,333,733 in forgiveness funding.

Additional information about these programs can be found in the State Revolving Loan Programs portion of Chapter 6.

C. Nonpoint Source Management

The Nonpoint Source Management program provides pass-through funding for the prevention and abatement of nonpoint source water pollution and the restoration of watershed resources under Section 319 of the federal Clean Water Act. This funding is provided to units of government, educational institutions, and non-profit organizations, for projects that facilitate implementation of the state Nonpoint Source Management Plan. Including the new 2014 funds, a total of 46 Section 310 projects were managed. All but one of these were large multi-year projects, with total funds of all projects equaling $5,620,679.

Additional information about these programs can be found in the Water Quality Planning portion of Chapter 6.

D. Storm Water Grants

In 2006, the Nebraska Legislature passed LB1226, which established the Storm Water Management Plan Program. This grant program provides funding to cities and counties to implement their local Storm Water Management Plans (SWMPs). In FY2014, nearly $1.825 million was awarded to 25 communities for implementation of their Storm Water Management Plans. The grant recipients must provide a 20% cash match for any funds received and submit annual reports for the duration of the project.

CHAPTER 10:
Staffing

This chapter consists of an assessment of the department's ability to hire and retain qualified staff with a chart showing turnover by job classification for the last ten years.

Because the department deals with a wide array of complex environmental issues, it is essential to our operations that technically competent people are hired for vacant positions. Without highly trained and experienced staff, the department would not be able to effectively carry out its mission of protecting Nebraska's environment.

Recruiting qualified and experienced employees for the more advanced positions that require extensive education and experience remains a focus. The creation of the Environmental Quality Programs Specialist I, Environmental Quality Programs Specialist II, Groundwater Geologist I and Groundwater Geologist II positions in 2011 continues to help significantly with agency competitiveness in the job market. The department feels very fortunate to have recruited excellent staff in 2013/2014.

Staff retention continues to be an important goal for the agency. Staff turnover impacts continuity in the department's programs and enforcement activities, and causes additional costs for training of replacement staff members. The department strives to foster and maintain an employee-friendly workplace by offering transfer and promotional opportunities for qualified internal applicants. In addition, training and tuition assistance are provided to interested staff.

The department monitors diversity to encourage the receipt of applications from qualified members of protected groups by seeking to recruit members of protected groups.

The chart on the following page shows hiring activity on specific job categories:

Employees Assuming Agency Positions

These figures include new hires, promotions, transfers and classification upgrades for a one-year period. Figures for 2014 are from October 1, 2013 through September 30, 2014.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Director/Deputy Director/Assistant Director/Division Administrator	0	0	0	0	0	0	0	0	0	0
Section Supervisor, Records Manager, Budget Officer	0	0	2	0	4	0	0	0	1	5
Unit Supervisor	1	1	2	0	5	2	0	2	1	1
Human Resources	0	0	0	2	0	1	0	0	0	0
Federal Aid Administrator, Financial Assurance Coordinator, Accountant	2	0	0	0	0	2	1	1	0	0
Clerical/Accounting Clerk	0	4	6	4	9	3	5	0	2	4
Information Technology/Public Information/Research Analyst	1	0	3	2	3	0	1	0	0	0
Attorney I, II & III	3	0	0	0	0	1	0	0	0	2
Environmental Engineer	6	3	5	2	4	0	3	2	2	7
Compliance Specialist	0	0	0	1	0	0	0	0	1	0
Programs Specialist I & II	12	7	12	13	17	8	9	11	10	7
Geologist, Groundwater I & II	1	3	0	4	3	2	0	2	4	2
Environmental Assistance Coordinator	0	0	0	0	0	0	1	1	1	0
TOTALS	26	18	30	29	45	20	20	19	22	28

CHAPTER 11:
Financial Assurance Requirements

Section 81-1505(21) provides the statutory authority for the Department to develop, and the Council to adopt as regulations, requirements for all applicants to establish proof of financial responsibility. The requirements pertain to all new or renewal permit applicants regulated under the Nebraska Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act, unless a class of permittees is exempted by the Council. The purpose of financial responsibility is for an applicant to provide funds to be used in the event of abandonment, default or other inability of the permittee to comply with terms or conditions of its permit or license. State statutes also identify types of funding mechanisms that applicants can use to meet the requirements.

Following is a table which provides a comprehensive list of existing financial assurance requirements for each permittee. Financial assurance amounts are listed in two categories: the first is the obligated amount, which lists the total amount of financial assurance which must be provided by the time of closure of the facility. Second is the current amount demonstrated, which lists the amount of financial assurance which is currently accrued towards the obligated amount. The table lists the facility location, permit type, initial date financial assurance provided, method or type of financial assurance provided and the guarantor for each permittee.

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (Sanitary LF)							
Alliance Landfill	Alliance	MSWDA	03/17/94	$ 3,394,288	$ 1,615,215	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	$ 165,700	$ 165,700	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	$ 4,005,800	$ 4,005,800	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	$ 10,855,552	$ 3,623,285	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	$ 7,280,586	$ 7,280,586	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	$ 9,486,267	$ 2,681,406	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	$ 2,052,748	$ 906,293	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	$ 5,755,541	$ 2,724,265	Trust Fund	Premier Trust
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	$ 9,758,600	$ 9,758,600	Financial Test	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	03/18/13	$ 5,918,899	$ 2,857,932	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	$ 154,996	$ 27,729	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	$ 3,039,995	$ 1,822,153	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	$ 4,426,332	$ 4,426,332	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	$ 6,791,204	$ 2,816,025	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	$ 1,599,184	$ 1,176,514	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	$ 646,719	$ 250,049	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	$ 2,434,673	$ 2,111,369	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	$ 21,230,592	$ 21,230,592	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	$ 2,300,436	$ 817,151	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	$ 591,668	$ 126,211	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	$ 68,705	$ 84,846	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	10/03/08	$ 2,334,238	$ 772,138	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	$ 19,547,621	$ 5,345,477	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	$ 24,389,786	$ 24,389,786	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	$ 7,082,787	$ 7,182,126	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	$ 2,303,082	$ 886,467	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	$ 1,452,700	$ 660,539	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	$ 1,720,542	$ 511,158	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	$ 75,527	$ 11,215	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	$ 3,453,140	$ 1,343,025	Enterprise Fund	City of York

*MSWDAs are landfills that are operating under current solid waste management regulations.

**Sanitary LFs are closed facilities that have post-closure monitoring and maintenance.

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
Construction/Demolition Landfills (Const./Demol.)							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	$ 239,862	$ 239,862	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	$ 146,247	$ 42,119	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	10/19/98	$ 906,763	$ 906,763	Surety Bond	Employers Mutual Cas. Co.
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	$ 36,696	$ 31,105	Enterprise Fund	Village of Arnold
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	$ 987,450	$ 987,450	Financial Test	City of Beatrice
Benkelman C & D Landfill	Benkelman	Const/Demol.	10/15/06	$ 63,897	$ 15,576	Enterprise Fund	City of Benkelman
Broken Bow C & D Landfill	Broken Bow	Const/Demol.	11/23/07	$ 108,563	$ 21,778	Enterprise Fund	City of Broken Bow
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	$ 35,657	$ 35,657	Letter of Credit	First Natl. Bank Newman Gr
Butler County C & D Landfill	David City	Const./Demol.	06/01/97	$ 34,974	$ 34,974	Surety Bond	Evergreen Ntl. Indemnity Co.
Eco-Storage C & D Landfill	Omaha	Const./Demol.	04/01/09	$ 90,140	$ 70,951	Trust Agreement	Security Natl. Bank
Franklin C&D Landfill	Franklin	Const./Demol.	11/08/10	$ 22,889	$ 5,671	Enterprise Fund	City of Franklin
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	$ 193,621	$ 199,399	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction C & D	Omaha	Const./Demol.	01/03/02	$ 371,604	$ 371,604	Surety Bond	Hartford Fire Ins. Co.
Holdrege C & D Landfill	Holdrege	Const/Demol.	05/01/09	$ 299,639	$ 36,752	Enterprise Fund	City of Holdrege
KGP Services C & D	Norfolk	Const/Demol.	11/06/03	$ 85,524	$ 88,499	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	$ 51,300	$ 51,266	Enterprise Fund	City of Kimball
Lead Waste Mgmt C&D Landfill	Waterbury	Const./Demol.	05/28/14	$ 36,877	$ 36,877	Letter of Credit	Adrian State Bank
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	$ 169,104	$ 149,255	Enterprise Fund	Lexington Area SW Agency
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	$ 1,009,115	$ 1,009,115	Financial Test	City of Lincoln
Loup Central C & D Landfill#1	Elba	Const./Demol.	01/28/01	$ 4,600	$ 5,895	Trust Fund	Citizens Bank & Tr. St. Paul
Loup Central C & D Landfill#2	Elba	Const./Demol.	01/28/01	$ 92,859	$ 32,740	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const/Demol.	04/09/96	$ 131,879	$ 39,802	Trust Fund	Premier Trust
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	$ 242,791	$ 242,791	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	$ 75,479	$ 72,539	Enterprise Fund	City of O'Neill
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	$ 165,744	$ 165,744	Escrow Account	Five Points Bank
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	$ 44,547	$ 42,605	Enterprise Fund	City of Plainview
Rainwood Hill LLC C & D	Omaha	Const/Demol.	02/10/08	$ 191,485	$ 191,485	Surety Bond	International Fidelity Ins. Co.
Schmader C & D Landfill	West Point	Const/Demol.	07/27/12	$ 135,819	$ 135,819	Letter of Credit	Charter West Ntl Bank
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	$ 95,434	$ 41,194	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	$ 140,274	$ 41,936	Enterprise Fund	City of Imperial
Three Valleys C & D Landfill	Indianola	Const./Demol.	02/24/10	$ 75,043	$ 75,043	Letter of Credit	McCook Ntl Bank
York C & D Landfill	York	Const/Demol.	12/01/07	$ 735,295	$ 49,514	Enterprise Fund	City of York

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
Fossil Fuel Combustion Ash (Fossil Fuel), Industrial Waste Landfills (Indus. Waste), Monofills							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	$ 4,398,452	$ 4,398,452	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	$ 3,924,707	$ 3,924,707	Insurance Policy	Indian Harbors Insurance Co.
Fremont Utilities	Fremont	Fossil Fuel	05/28/96	$ 374,050	$ 500,000	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	Fossil Fuel	02/01//01	$ 4,362,500	$ 1,286,951	Enterprise Fund	City of Hastings & PPGA
NPPD Gerald Gentleman 4	Sutherland	Fossil Fuel	04/01/95	$ 2,213,922	$ 2,213,922	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	Fossil Fuel	07/01/01	$ 640,990	$ 640,990	Financial Test	NPPD
OPPD NE City 1	NE City	Fossil Fuel	04/04/95	$ 4,358,946	$ 4,358,946	Financial Test	OPPD
OPPD NE City 2	NE City	Fossil Fuel	06/30/09	$ 847,542	$ 847,542	Financial Test	OPPD
OPPD North Omaha	Omaha	Fossil Fuel	04/04/95	$ 1,831,911	$ 1,831,911	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	$ 184,797	$ 184,797	Financial Test	OPPD
Platte Generation	Grand Island	Fossil Fuel	08/25/97	$ 347,606	$ 347,606	Enterprise Fund	City of Grand Island
Waste Management of NE	Bennington	Indus. Waste	04/01/02	$ 1,343,149	$ 1,343,149	Surety Bond	Evergreen Ntl. Indemnity Co.
Transfer Stations, Material Recovery Facilities (Mat. Recovery), Compost Sites, Processing Facilities (Processing Fac.)							
AltEn LLC	Mead	Compost	04/01/07	$ 188,466	$ 188,508	Escrow Account	American Ntl Bank
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	$ 3,937	$ 3,937	Letter of Credit	First Natl. Bank, NG
Custer Transfer Station	Broken Bow	Transfer Station	12/23/08	$ 10,693	$ 10,693	Letter of Credit	Great Western Bank
Doernemann Const. Co.	Clarkson	Compost	12/15/99	$ 101,013	$ 101,013	Letter of Credit	Clarkson Bank
Edgetown Properties LLC	Madison	Transfer Station	06/27/12	$ 7,500	$ 7,500	Escrow Account	Frontier Bank
Fremont CRD, Inc.	Fremont	Transfer Station	07/02/03	$ 12,627	$ 12,627	Surety Bond	Capitol Indemnity Corp
King Transfer Station	Walthill	Transfer Station	04/02/96	$ 1,182	$ 1,187	Escrow Account	First Natl. Bank, Walthill
Recycling Enterprises of NE, Inc.	Lincoln	Mat. Recovery	08/30/12	$ 60,390	$ 60,390	Letter of Credit	CityBank & Trust Co.
River City Recycling	Omaha	Mat. Recovery	01/01/01	$ 55,920	$ 55,920	Escrow Account	US Bank Ntl Assoc
Sarpy County	Papillion	Transfer Station	04/17/12	$ 98,643	$ 98,643	Surety Bond	Travelers Surety Co. of Amer.
Seneca Sanitation	Dubois	Transfer Station	02/01/04	$ 4,224	$ 4,224	Letter of Credit	First Natl. Bank, Centralia
Stericycle	Lincoln	Processing Fac	07/01/12	$ 52,457	$ 53,000	Surety Bond	Westchester Fire Ins. Co.
Waste Connections of NE	Bridgeport	Transfer Station	08/15/03	$ 3,956	$ 3,956	Surety Bond	Evergreen Ntl. Indemnity Co.
Waste Connections of NE	Gering	Transfer Station	08/15/03	$ 10,076	$ 14,740	Surety Bond	Evergreen Ntl. Indemnity Co.
Waste Connections of NE	Ord	Transfer Station	07/02/03	$ 8,387	$ 8,387	Surety Bond	Capitol Indemnity Corp
Waste Connections of NE	Wahoo	Transfer Station	07/02/03	$ 7,190	$ 7,190	Surety Bond	Capitol Indemnity Corp
Waste Connections of NE	Central City	Transfer Station	05/30/13	$ 9,223	$ 9,223	Surety Bond	Platte River Ins Co.

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
RCRA Closure and RCRA Post-Closure (RCRA PC)							
Agrium Advanced Technologies	Fairbury	RCRA PC	03/13/14	$ 630,697	$ 630,697	Letter of Credit	Royal Bank of Scotland
Agromac International	Gering	RCRA PC	12/11/07	$ 8,209	$ 8,209	Escrow Account	Platte Valley Ntl. Bank
Behlen Manufacturing Co.	Columbus	RCRA PC	02/29/12	$ 96,720	$ 96,720	Financial Test	Behlen Mfg
Bosch Security Systems	Lincoln	RCRA PC	06/02/09	$ 10,344	$ 10,344	Letter of Credit	Bank of Montreal
Clean Harbors Technology	Kimball	RCRA Closure	09/16/13	$ 18,348,529	$ 18,348,529	Insurance Policy	Indian Harbors Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	$ 234,640	$ 265,706	Trust Fund	First Natl Bank of Omaha
Eaton Corporation	Omaha	RCRA PC	06/08/09	$ 4,463,158	$ 4,463,158	Letter of Credit	JP Morgan/Chase Bank
Safety Kleen	Grand Island	RCRA Closure	10/15/01	$ 138,690	$ 138,690	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	$ 367,453	$ 367,453	Insurance Policy	Indian Harbors Insurance Co.
Tenneco Automotive Inc.	Cozad	RCRA PC	11/25/85	$ 50,630	$ 50,630	Letter of Credit	JP Morgan/Chase Bank
USA Tire Management	Dakota City	RCRA Closure	12/14/07	$ 15,334	$ 15,334	Escrow Account	Great Southern Bank
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	$ 2,627,776	$ 2,627,776	Letter of Credit	1st State Bank Webster Cty IA
Underground Injection Control (UIC)							
Crow Butte Resources, Inc.	Crawford	UIC		$ 44,719,032	$ 44,719,032	Letter of Credit	Royal Bank of Canada
Waste Tire Sites and Haulers							
ABC Tire LLC	Kansas C, KS	Waste Tire	06/24/13	$ 10,000	$ 10,000	Surety Bond	Nationwide Mutual Ins.
Butler County Landfill	David City	Waste Tire	05/16/97	$ 50,000	$ 50,000	Surety Bond	Travelers Casualty & Surety
Champlin Tire Recycling Inc	Concordia KS	Waste Tire	10/04/96	$ 10,000	$ 10,000	Letter of Credit	United Bank & Trust
David's Tire	Nevada, MO	Waste Tire	10/22/09	$ 10,000	$ 10,000	Surety Bond	Ohio Casualty Ins. Co.
D & B Enterprise LLC	Correctville, IA	Waste Tire	11/17/08	$ 10,000	$ 10,000	Surety Bond	Great American Ins.Co.
Don's Used Tires	Lincoln	Waste Tire	03/13/03	$ 5,000	$ 5,000	Surety Bond	Old Republic Surety Co.
EnTire Recycling Inc	Brock	Waste Tire	04/18/13	$ 10,000	$ 10,000	Letter of Credit	Great Western Bank
Gill Hauling Inc.	Jackson	Waste Tire	02/04/09	$ 10,000	$ 10,000	Letter of Credit	Dakota County State Bank
Hoke Transport LLC	Gering	Waste Tire	04/04/12	$ 5,000	$ 5,000	Surety Bond	Old Republic Surety Co.
J & M Steel	Hastings	Waste Tire	08/27/98	$ 5,000	$ 5,000	Letter of Credit	1st Bank & Trust,Clay Center
Kenny Frazier	Edmond OK	Waste Tire	05/26/04	$ 5,000	$ 5,000	Escrow Account	Bank of America, Inc.
Leo Porter	Oshkosh	Waste Tire	02/21/08	$ 5,000	$ 5,000	Escrow Account	Nebraska State Bank
Liberty Tire Services of Ohio	Savage, MN	Waste Tire	03/09/09	$ 10,000	$ 10,000	Surety Bond	Evergreen Ntl. Indemnity Co.
New Horizons Enterprises LLC	Lincoln	Waste Tire	05/11/12	$ 5,000	$ 5,000	Surety Bond	Granite Re, Inc.
Resource Management Co	Brownell, KS	Waste Tire	01/17/06	$ 10,000	$ 10,000	Letter of Credit	First State Bank, Ness Cy, KS
River City Recycling	Omaha	Waste Tire	04/05/12	$ 43,750	$ 43,750	Letter of Credit	Mutual of Omaha Bank
Russell Brandenburgh	Beaver Crossing	Waste Tire	02/25/13	$ 10,000	$ 10,000	Letter of Credit	Citizens State Bank
Tire Cutters	Centralia KS	Waste Tire	05/13/06	$ 5,000	$ 5,000	Letter of Credit	1st Natl. Bank, Centralia, KS
Tire Town, Inc.	Leavenworth,KS	Waste Tire	03/07/05	$ 10,000	$ 10,000	Letter of Credit	Enterprise Bank & Trust
Uribe Scrap Tires, LLC	Lincoln	Waste Tire	01/06/14	$ 5,000	$ 5,000	Surety Bond	Ohio Casualty Ins. Co.
Winnebego Tribe of Nebraska	Winnebago	Waste Tire	09/15/10	$ 5,000	$ 5,000	Letter of Credit	Charter West National Bank