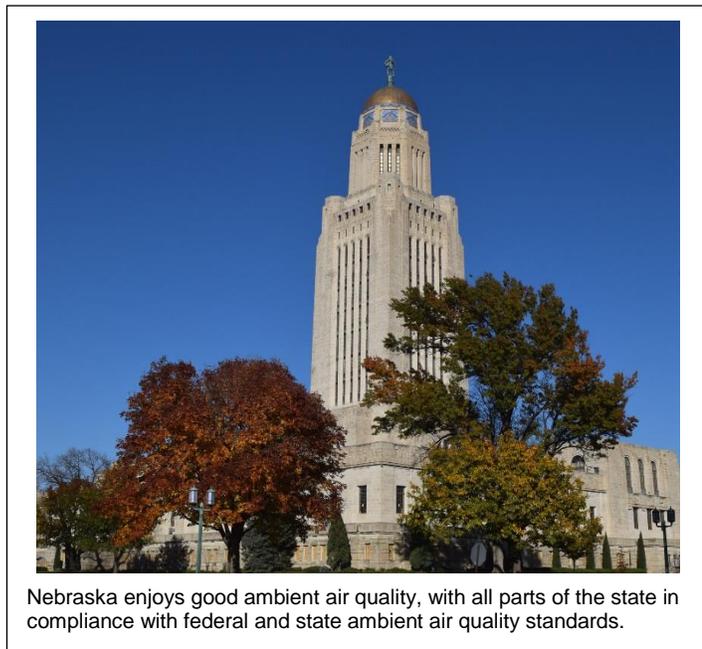


CHAPTER 4:

Air Quality Division

The objective of the Air Quality Division is to maintain and protect the quality of the outdoor air in Nebraska. Thousands of tons of pollutants are emitted into the air in the state each year from industrial and other human activities. These air pollutants can affect human health, cause property damage, harm the environment, and reduce visibility. The Air Division works to maintain Nebraska's air quality by implementing state and federal air quality regulations, through permitting and compliance activities for stationary sources, and by monitoring outdoor ambient air for regulated pollutants. Nebraska's air quality rules are set forth in *Nebraska Administrative Code Title 129 – Nebraska Air Quality Regulations* (Title 129).



The regulated air pollutants of most concern are particulate matter, ozone, nitrogen oxides, sulfur dioxide, carbon monoxide, and lead. These pollutants are subject to National Ambient Air Quality Standards (NAAQS). All areas of the state are currently in “attainment”, meaning that the state has air cleaner than the federal limits for these pollutants. Maintaining attainment with these federal standards is important to protect the public health. NAAQS nonattainment could result in additional requirements and significant economic costs to regulated facilities. The Department also regulates the emission of substances defined by the U.S. Environmental Protection Agency (EPA) as hazardous air pollutants (HAPs), which are toxic substances known to cause cancer and other serious health impacts. Title 129 does not include any requirements specifically for the control of odors.

The Air Quality Division consists of the Air Permitting Section, which issues construction permits, operating permits, and performs air dispersion modeling; and the Air Compliance Section, which maintains an ambient air monitoring network, compiles emission inventories, and conducts inspections and other compliance and enforcement activities. In addition, planning staff work with the Division Administrator to monitor federal regulations, update state regulations and Nebraska's state implementation plans to remain in compliance with air quality standards, and inform the regulated community and the public about changes in air quality regulations.

Three local agencies – Lincoln-Lancaster County Health Department, Omaha Air Quality Control, and Douglas County Health Department – have accepted, through agreement with the Department and direct delegation from EPA, responsibility for various facets of the air quality

program within the jurisdictions of those agencies. These responsibilities include air quality monitoring, permitting, and enforcement.

Permitting Section

An air quality permit sets enforceable limits on the amounts of pollutants that a facility may emit, ensuring that facilities are constructed and operated in a manner that protects the quality of the surrounding ambient air. The Department issues two main types of air quality permits: construction permits and operating permits. A construction permit may be required for a facility before the construction or modification of an emission unit. An operating permit may be required for an existing source of certain air pollutants.

Title 129 provides for three types of construction and operating permits: individual, permit-by-rule, and general. Some sources are not eligible for coverage under permit-by-rule or general permits.

Individual permits are available for all regulated sources. These permits include all requirements applicable and specific to that source and location. Because it is “tailor made” for the source, significant time and labor is required for each permit issued. The individual permit process includes a required public notice with a 30-day comment period.

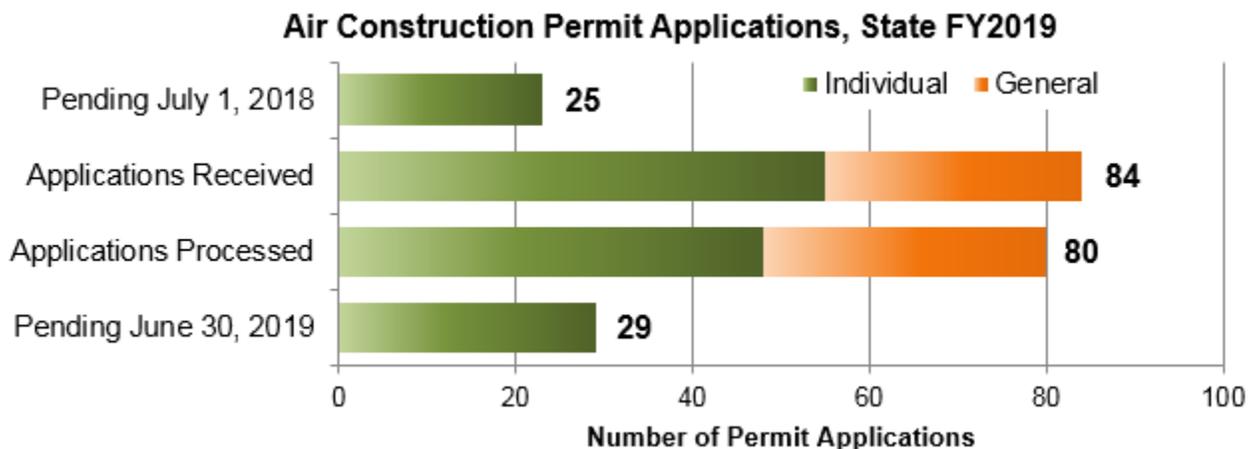
A permit-by-rule and a general permit are similar in that the rule or general permit has the same requirements for, and covers, all sources in a particular industrial category, provided that the source meets the applicability criteria and applies for and obtains coverage. The requirements for a permit-by-rule are established in Title 129. Requirements for a general permit are established in that general permit. Each general permit is issued only once (including the public notice period). Eligible applicants then apply for and obtain coverage without the need to develop an individual permit for that facility or to go through a public comment period each time coverage is approved for an eligible source under that permit-by-rule or general permit.

General construction permit coverage is currently available for eligible sources in nine categories (including time-sensitive construction activities), and general operating permit coverage is available for one category (small incinerators). Approval of general and permit-by-rule coverage takes much less time for the agency and for the facility than an individual permit. The permit-by-rule approval process usually takes less than 30 days. An online-only application process is used for general permit coverage, and approval may take only a few days or less.

Construction Permit Program

The Department 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 thresholds specified in Title 129 for particular pollutants. Only sources with potential emissions at or above these thresholds are required to obtain a construction permit. A construction permit is valid for the life of the covered emission units.

The chart on the next page summarizes construction permit applications received, processed, and pending during the 2019 state fiscal year. (Note: the *Processed* category includes permits issued, withdrawn, denied, and determinations of no permit required.)

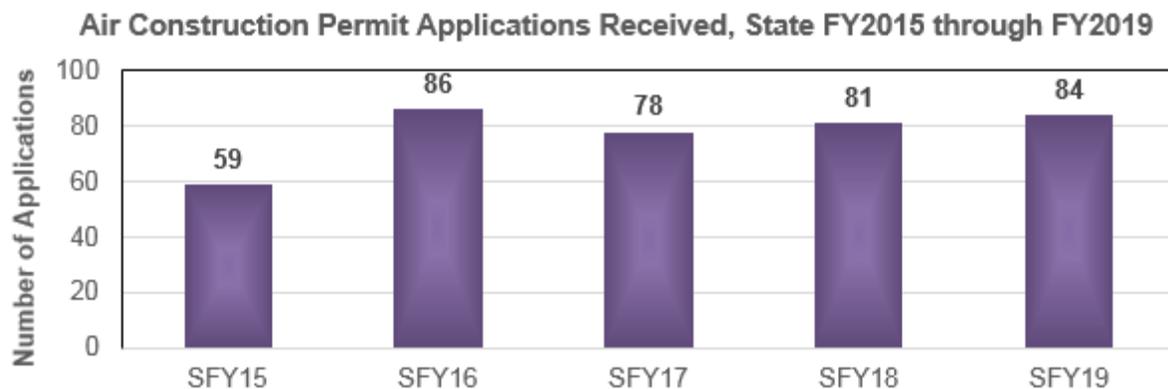


Nebraska’s program also implements the federal construction permit program, called Prevention of Significant Deterioration (PSD). The PSD program applies to construction of new major sources or major modifications to existing sources that emit significant levels of certain types of pollutants. The purpose of the PSD program is to protect air quality in areas where the air is cleaner than the ambient air quality standards while still allowing industrial and economic growth.

For sources regulated under the construction permit program that emit levels of certain types of air pollutants sufficient to trigger PSD requirements, Division staff conduct additional, more rigorous reviews of the construction permit application to ensure that best available control technology will be used in order to minimize impacts on the environment. The Department must also assure that the source will not cause or contribute significantly to any deterioration of air quality or violations or exceedances of the ambient air quality standards. Six PSD construction permits were issued in State FY2019.

The PSD program also helps to protect visibility in nearby national parks and wilderness areas. The Department notifies federal land managers and nearby States and Tribes of pending PSD decisions and those authorities can express relevant concerns for potential impacts.

The economy and business activity in the state impact the number of air quality construction permit applications received each year. The graph below shows the number of construction permits received annually from SFY2015 through SFY2019.



Air Dispersion Modeling

Air dispersion computer models predict how air pollutants emitted by a facility spread and disperse. These regulatory models use expected emissions, meteorological and geographical data, and other factors to estimate ground level concentrations of air pollutants at a large array of locations outside of the facility fence line. A model, in a relatively short amount of time, can predict in a standardized and cost-effective manner the ground-level impact of facility emissions.

Modeling is required in conjunction with an air quality construction permit application when the expected increase in emissions of any regulated pollutant by a facility is greater than the emission rate specified in state or federal regulations. An air dispersion model is the primary tool used to determine if the predicted impacts from a new facility or modification will be in attainment with current air quality standards. Models are also used as a design tool to analyze the effects of different pollution control strategies. The Air Quality Division’s air dispersion modeler reviews all aspects of the models that facilities provide as part of their construction permit applications. These reviews include facility emissions and meteorological data, background concentrations, the modeling protocol, and the final modeling results.

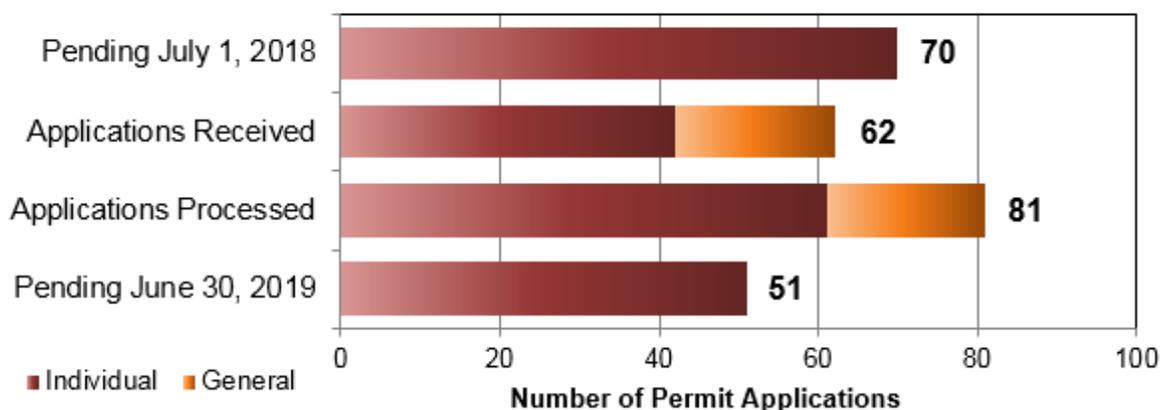
During SFY2019, 13 Division staff completed an intensive three-day training course in air dispersion modeling. This training gave permitting and compliance staff a greater understanding of the fundamentals of the models and the interpretation of the results.

Operating Permit Program

As required by Title V of the Federal Clean Air Act Amendments of 1990, Nebraska issues operating permits for Class I (major) sources of certain air pollutants. The Department also regulates so-called minor sources using Class II operating permits as required under Nebraska law. Application for an operating permit is required by Title 129 within 12 months of startup of a regulated air contaminant source. Title 129 provides for operating permit terms up to five years, after which the permit must be renewed. An operating permit contains all applicable requirements for emission points at a facility. For a large, complicated, growing facility, an operating permit incorporates requirements from all construction permits issued for the facility, providing the source with one permit document to help compliance with all associated air permitting requirements.

The chart below provides statistics on the number of operating permit applications received, processed, and pending during the 2019 state fiscal year. These statistics include general permit coverage approvals. The current general operating permit for small incinerators

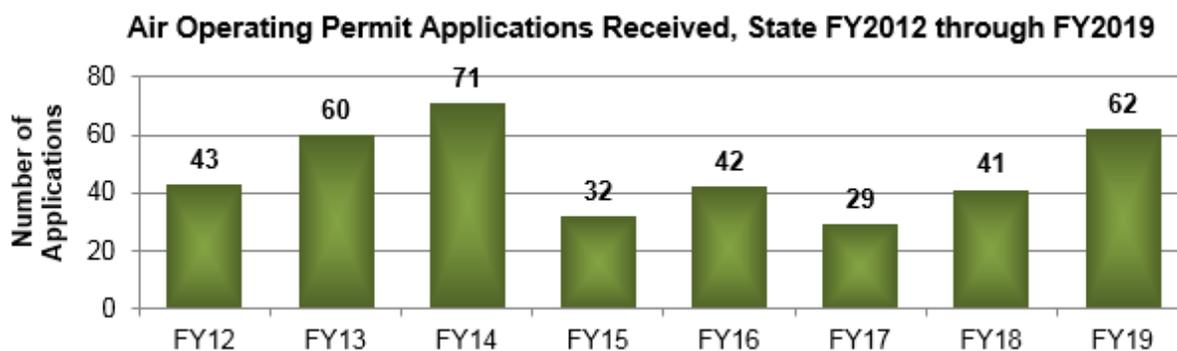
Air Operating Permit Applications, State FY2019



was issued in SFY2018, replacing the previous five-year general operating permit that expired that year. Most of the general operating permit coverages issued in SFY2019 were for applicants whose previous coverage was expiring. (The current general operating permit for small incinerators is available only through an efficient on-line process, whereas the previous general permit required a paper application).

The Nebraska operating permit program also offers an innovative alternative for major sources that have taken measures to keep their emissions very low, called the Low Emitter Rule. To be eligible, a Title V or Class I source must document five years of actual emissions at or below the Class II or minor source threshold levels, meet other requirements established in the regulations, and not otherwise be required to obtain an operating permit. Since its inception in 1997, the Low Emitter Rule has allowed 129 sources to opt out of their major source operating permits, with no identifiable degradation of air quality in Nebraska.

The five-year renewal cycle, past delays in issuing renewals, and other factors have resulted in wide variations over time in the numbers of operating permits up for renewal each year. The following chart summarizes air quality operating permit applications received from State FY2012 through SFY2019 (applications for all application types, including permit revisions, general operating permits, permit-by-rule, etc.).



Permit Program Process Improvements

Individual construction and operating permits are complex, highly technical documents that must address all emission points for various pollutants at a facility in a manner that is enforceable as a practical matter. Processing a permit application includes complex analysis with multiple steps and personnel. In state fiscal year 2019, the Operating Permits Unit undertook a process improvement project on renewals. The project resulted in a significant reduction in the time needed to prepare and process an operating permit renewal application. One applicant estimated an 80% reduction in their application preparation time. The Air Division documented similar savings in staff time to process the renewal.

Each construction and operating permit includes a fact sheet, which provides a technical description of the facility, applicable regulatory requirements, and a statement of basis for each permit condition. Division staff made significant fact sheet process improvements in SFY 2018 and will revisit permit fact sheets each year to pinpoint opportunities for streamlining. Additional improvements were made in SFY2019 that continue to make these fact sheets more uniform and easier to understand, making compliance easier for facility staff, which also assists the efforts of agency compliance inspectors.

The permitting section also developed and released in SFY2019 nine new potential emission (PTE) calculation spreadsheets for use by permit applicants to streamline applications and further the Department's process improvement efforts. These include an expansive spreadsheet for use by ethanol plants, along with spreadsheets for Haul Roads, Tanks, Internal Combustion Engine Driven Generators, and others.

With the process improvement event that started in 2016, fact sheet project initiated in 2018, application renewal project in 2019, and other ongoing efforts, the average time required to reach a decision on a construction permit application improved significantly from 188 days to approximately 65 days (including online-only general construction permit coverage) at the end of SFY2019. The operating permit application backlog was also significantly improved from approximately 120 applications a couple years ago to approximately 51 applications pending at the end of SFY2019, even with a steady influx of applications. Although some impacts of improvements that have been made may not be realized in the immediate future, sources with permits being issued now should see processing times significantly improved several years from now when they apply for permit renewal.

The Air Quality program has consistently had a significant amount of staff turnover, leading to recurring discussions about permit decisions, regulations and other challenges. The Division established an electronic Air Quality Permitting Compendium that allows important information about existing permits, such as permit decisions, regulatory determinations, and internal procedures, to be archived, easily searched, and readily accessible to Air Quality Division Staff. This is an example of one of the significant efforts to help improve staff training and permitting consistency. This tool allows Division staff to research past permitting actions and associated publications and documents to help facilitate more rapid permit and uniform permit decisions.

Compliance Section

Ambient Air Quality Monitoring Program

The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment, which are called "criteria pollutants." The Act established two types of national air quality standards: primary standards, which are intended to protect public health, and secondary standards, intended to protect the environment. National standards have been established for the following six pollutants:

- Particulate Matter
 - With a diameter of 10 micrometers or less (PM₁₀)
 - With a diameter of 2.5 micrometers or less (PM_{2.5})
- Sulfur Dioxide (SO₂)
- Nitrogen Dioxide (NO₂)
- Carbon Monoxide (CO)
- Ozone (O₃)
- 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.

Nebraska Ambient Air Monitoring Network

The State of Nebraska operates an ambient air-monitoring network to determine compliance with the NAAQS and with state air quality standards. In addition, the Nebraska network includes a site for monitoring regional haze impacts that is 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. Omaha Air Quality Control (part of the Omaha Public Works Department) also provides technical support for network-related activities.

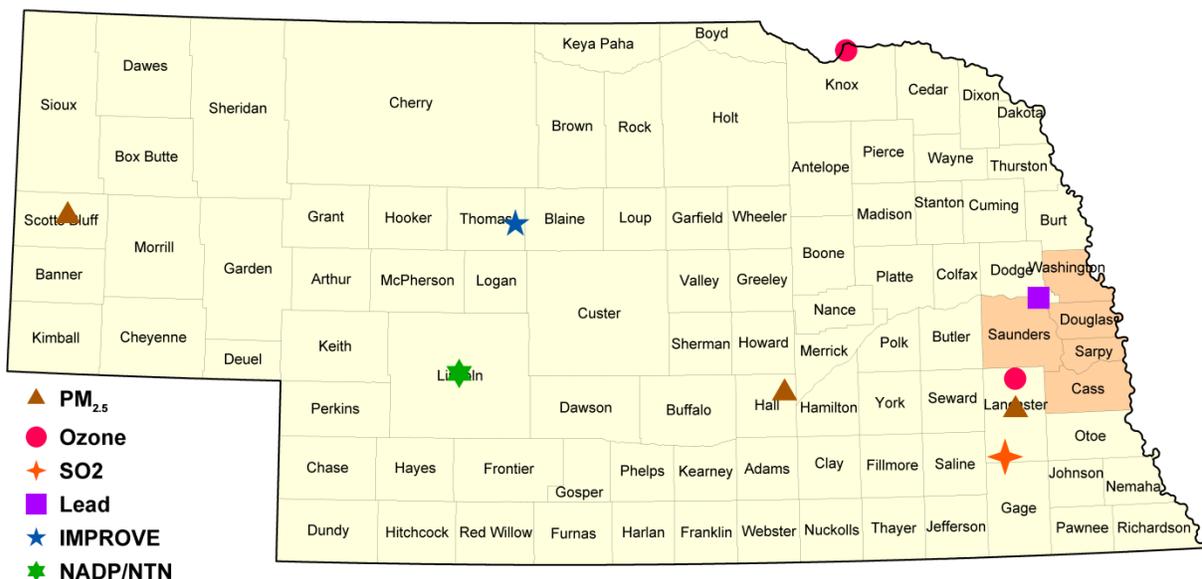
The Nebraska monitoring network includes sites at which air quality is monitored to evaluate attainment with the standards and other health- and welfare-associated priorities. The Department evaluates the adequacy of its monitoring network in accordance with federal regulations each year. Changes may be made to the network due to changes in monitoring regulations, 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.

Most of the sites in the monitoring network evaluate pollutants for which standards are established (*i.e.*, PM_{2.5}, PM₁₀, CO, SO₂, Lead, or Ozone). Some sites monitor for more than one pollutant. The NCore site in Omaha is part of a National Core Network that monitors for nine pollutant parameters. 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. (See the following maps for locations.)

IMPROVE monitors provide information for studying regional haze that may impact the visibility in listed federal Class I National Park and Wilderness Areas. There is one IMPROVE monitoring site at Nebraska National Forest at Halsey, Nebraska. This site provides 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 pollutants deposited by 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 is part of the NADP/Mercury Deposition Network (MDN). Both sites maintain the NADP monitoring. Additional information about the NADP/NTN can be found at: <http://nadp.slh.wisc.edu>.

Nebraska Monitoring Sites Outside of the Omaha Metropolitan Statistical Area



- PM_{2.5}**
Lincoln (Lancaster County)
Grand Island (Hall County)
Scottsbluff (Scottsbluff County)
- Ozone**
Davey (Lancaster County)
Santee (Knox County)
- Sulfur Dioxide (SO₂)**
Sheldon Station (Lancaster County)

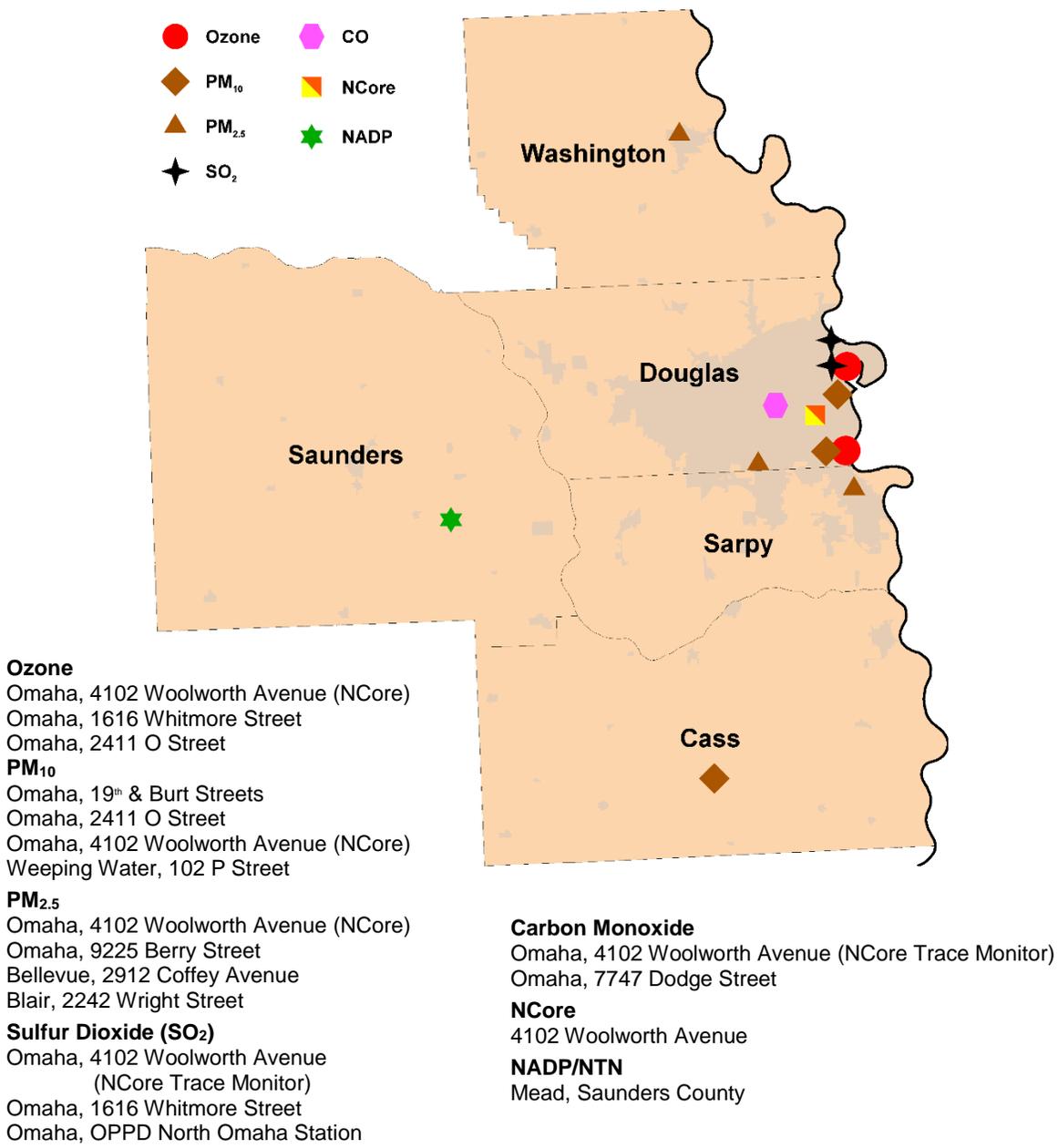
- Lead**
Fremont (Dodge County)
- IMPROVE**
Nebraska National Forest (Thomas County)
- NADP/NTN**
Maxwell (Lincoln County)

The Nebraska counties in the Omaha-Council Bluffs Metropolitan Statistical Area are indicated by the orange shading.

The state map above shows the nine monitoring sites that are located outside of the Omaha-Council Bluffs Metropolitan Statistical Area (counties shown in orange). Three of these sites are operated by the Department, either directly or under contract. The three 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. An additional ozone site near Santee in northeast Nebraska is operated by the U.S. EPA.

The map on the following page shows the location of the monitoring sites in the Nebraska portion of the Omaha-Council Bluffs Metropolitan Statistical Area (two sites monitor two pollutants and are represented by overlapping pairs of symbols). Nine of these sites, located in Douglas, Sarpy, and Washington Counties, are operated by the Douglas County Health Department with oversight by the Department. A PM₁₀ site in Weeping Water in Cass County is operated by NDEQ. The National Atmospheric Deposition Program site at Mead is operated by the University of Nebraska.

Monitor Locations in the Nebraska Portion of the Omaha-Council Bluffs Metropolitan Area



Monitoring Information On-Line

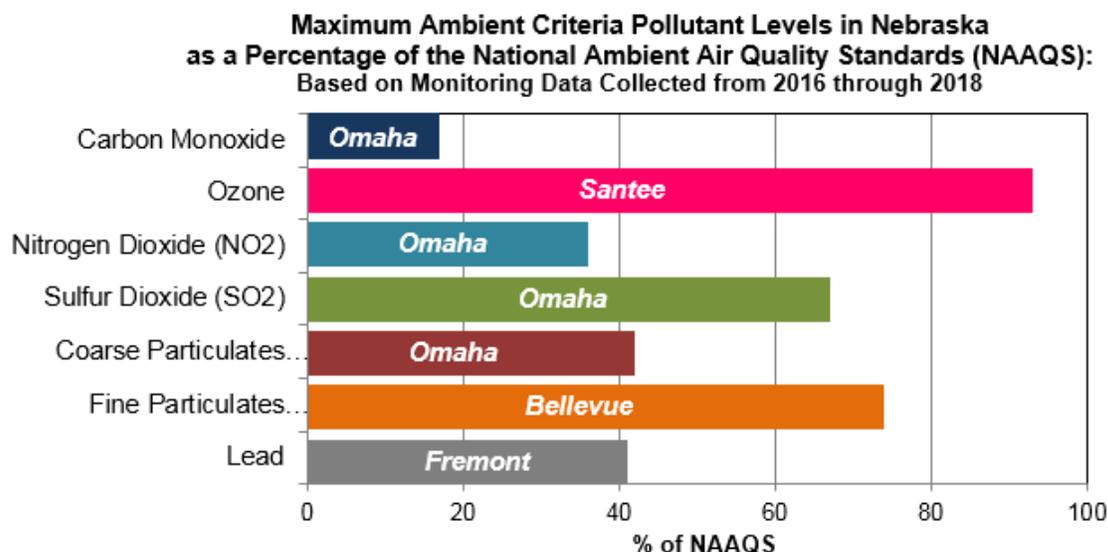
Data from continuous ozone and PM_{2.5} monitors in Lincoln and Omaha are reported hourly to the EPA AirNow system, which makes current air quality information available to the public on the web at <http://www.airnow.gov>. EPA uses the data to calculate an hourly Air Quality Index (AQI) for each monitor location. The AQI is a numeric rating of the current air quality that provides the public with a quick and simple means to evaluate current air quality in each metro area. The Douglas County Health Department and Lincoln-Lancaster County Health Department websites provide links to current AQI values for their cities. 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.

During SFY2019 the Division began planning to replace the current PM_{2.5} monitor in Grand Island (a filter-based monitor that provides average concentrations every six days) with a continuous monitor that will provide real-time data that will be available to the public via the AirNow system.

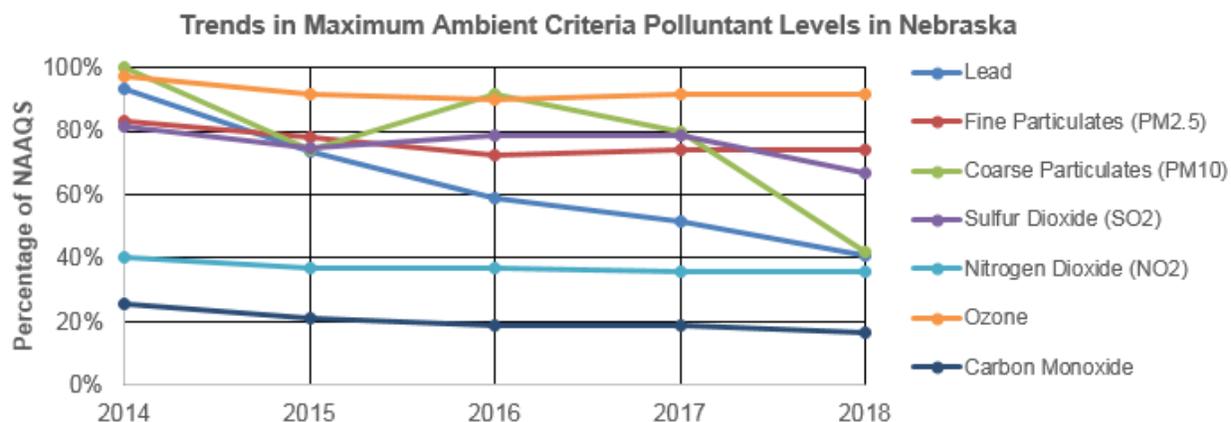
Compliance with National Ambient Air Standards (NAAQS)

Current air quality monitoring data shows that all areas of Nebraska are in attainment (in compliance) with the NAAQS. The chart below shows where the highest air pollutant levels are being detected in Nebraska for each criteria pollutant and how their levels compare to the NAAQS. (A reading of greater than 100% would mean that the NAAQS standard was exceeded, but the highest readings for all criteria pollutants are well below 100%.)



The U.S. EPA has designated all of Nebraska as “Attainment/Unclassifiable” with respect to the NAAQS for sulfur dioxide except for Lancaster County, which was designated “Unclassifiable” in 2016 (due to the need for additional characterization), and Douglas County, which will be designated by the end of 2020. The latter two counties include coal-fired power plants in North Omaha and near Hallam, respectively. Two additional sulfur dioxide monitoring sites were established at the end of 2016 to provide data on the air quality at these sites and will be monitored until at least the end of calendar year 2019. Initial monitoring data indicates that sulfur dioxide levels at these locations are in attainment/compliance with the NAAQS.

The chart on the next page shows trends in the maximum measured levels of criteria pollutants in Nebraska from 2014 through 2018. The value for each pollutant and year is the maximum measured at any monitor site in the state (as a percentage of the NAAQS for that pollutant). All of the criterial pollutants show modest to significant declines in maximum levels since 2014. Ozone is the criteria pollutant of most concern, as maximum levels have remained above 90% of the NAAQS at a number of urban and rural monitor sites in Nebraska as well as in the adjacent states.



The Division compiles an annual Ambient Air Monitoring Network Plan that provides a more detailed analysis of ambient air monitoring data, pollutant trends through time, and NAAQS compliance. These reports are available on the agency website: http://deq.ne.gov/Publications/Pubs_Air_Amb.xsp.

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 Quality 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 Department when compliance issues are serious, chronic or cannot otherwise be resolved. In certain instances, an enforcement settlement may include a Supplemental Environmental Project to further the Department’s goals to protect and enhance public health and the environment. The table below lists the compliance activities conducted by the Department and by local air quality agencies during the year.

State FY2019 Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD*	OAQC*
On-site Inspections	164	120	47
Facility Stack Tests Conducted	94	13	0
On-site Observations Conducted	28	0	0
Continuous Emission Monitoring Audits Conducted	52	4	0
On-site Observations Conducted	18	0	0
Complaints Received	89	56	46
Burn Permits Issued	55	47	50
Burn Permits Denied	0	1	7
Burn Permits Withdrawn	0	4	0

*LLCHD – Lincoln Lancaster County Health Department; OAQC – Omaha Air Quality Control

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. Emission inventories are due on March 31st each year for the previous calendar year. Every three years, the Department assists the EPA in preparing a comprehensive national inventory of emissions. The next national inventory compiled will include emissions reported by our sources 2018, 2019 and 2020. The emissions inventory is used to support the planning efforts for national rulemaking and to assess trends in emissions through time.

The Department also uses the emission inventories to determine 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 between 75 and 115 megawatts, the maximum emission for which a fee is assessed is 400 tons per pollutant. 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 agency website. The rate for emissions generated in 2018 was \$70 per ton, a reduction from \$78 per ton for the previous two years.

Starting with the 2019 calendar year, facilities will submit emission inventories to the Department via an on-line electronic reporting system called State and Local Emissions Inventory System (SLEIS). A few facilities submitted their emissions inventory for 2018 electronically on a trial basis. SLEIS training workshops have been held over the course of this year and will continue to be offered along with a webinar in November 2019 and instructional videos.

Planning

The Air Quality Division is responsible for maintaining state air quality regulations and the National Ambient Air Quality Standards (NAAQS) and for providing expert information on the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS). The Division also provides support and training resources to the regulated community and the general public. Brief information updates about important happenings in the air quality regulatory world are provided to interested parties via email through the AirNews listserv. The Air Division also administers local agreements with Lincoln-Lancaster County Health Department, the City of Omaha Air Quality Control division, and the Douglas County Health Department for their delegated functions in air quality permitting, compliance, and planning.

Planning for Air Quality Issues in Nebraska

NAAQS are periodically reviewed by EPA using the most recent scientific information available and are revised or retained as appropriate. When a new, revised or retained standard is issued, states must determine if they are in attainment with the standard and, if they are not, take the necessary corrective action. States are required to submit to EPA their recommendations for attainment or nonattainment designations and State Implementation Plans (SIPs) for each new or revised standard.

Nebraska is currently designated as in attainment with all of the National Ambient Air Quality Standards. Planning activity is underway to address regulatory issues concerning sulfur dioxide, Regional Haze, and the Affordable Clean Energy (ACE) Rule.

Sulfur dioxide (SO₂)

The 2010 sulfur dioxide (SO₂) standard requires that states demonstrate attainment in the areas surrounding large sources of this pollutant. To supplement the 2010 SO₂ standard, the EPA finalized the Data Requirements Rule (DRR) in 2015 to assist in implementation of the 2010 standard. This rule requires air quality agencies to characterize the air quality near sources that emit 2,000 tons per year or more of SO₂ by the use of air quality monitoring or pollutant dispersion modeling or to adopt enforceable SO₂ emission limits not to exceed 2,000 tons per year for the affected sources. Sources in Nebraska subject to this rule are coal-fired power plants and include Whelan Energy Center (Adams County), Sheldon Station (Lancaster County), North Omaha Station (Douglas County), Gerald Gentleman Station (Lincoln County), and Nebraska City Station (Otoe County).

Areas surrounding Gerald Gentleman Station and Nebraska City Station were characterized by modeling, and EPA designated them as “unclassifiable/attainment” in 2016. The area around Whelan Energy Center was also characterized by modeling that demonstrated attainment with the standard and was designated as “attainment/unclassifiable” by EPA on April 9, 2018. Air quality monitors were installed in 2016 near Sheldon Station and North Omaha Station and began operation in January 2017. Monitoring will continue at least through the end of 2019 and EPA is required, by court order, to complete designations by December 2020.

The DRR requires annual reporting (termed “ongoing requirements”) for areas that were characterized by modeling, and this year’s report was submitted in September 2019. The three facilities subject to these ongoing requirements include Whelan Energy Center, Gerald Gentleman Station, and Nebraska City Station. Emissions data from these facilities were evaluated in preparation for this report and indicated that all areas continue to demonstrate attainment with the federal standard.

Ozone

EPA issued revised ozone standards in 2015, lowering the standard from 0.075 parts per million (ppm) to 0.070 ppm. In September 2016 Nebraska submitted its designation recommendation to EPA, which designated the entire state as “unclassifiable/attainment” with respect to the 2015 ground-level ozone standard. The revised State Implementation Plan for ozone was submitted to EPA in September 2018, and EPA designation for the state is anticipated in early 2020.

Lead

EPA issued lead standards in October 2016, retaining the level of the previous primary and secondary standard of 15 micrograms per square meter (3-month rolling average) issued in 2008. Because the standard was retained without revision, a revised State Implementation Plan for Nebraska was not required.

Regional Haze

Introduction of particulates and industrial gases into the atmosphere can result in haze that reduces visibility. EPA implemented the Regional Haze Rule in 1999 to improve

visibility in national parks and wilderness areas. The rule directs state and federal agencies to work together to achieve this goal. Numerous amendments to the Rule have been issued, most recently affirming the Cross-State Air Pollution Rule (CSAPR) as an alternative to Best Available Retrofit Technology (BART) determinations for particular pollutant sources. In addition, recent guidance and technical support documents have been published to assist states in preparing State Implementation Plans (SIPs) for the second implementation period (2008-2018).

Nebraska submitted the Regional Haze SIP for the first implementation period (2008-2018) in July 2011; in 2012, EPA issued a partial approval/partial disapproval of the SIP. The disapproved portions include the BART determination for sulfur dioxide for Gerald Gentleman Station and the state's long-term strategy for regional haze insofar as it relied on the BART determination. This source participates in the CSAPR program, which allots each source an emissions budget for SO₂ and allows trading of allotments. Emissions to date from this source have been below the allotted SO₂ budget under CSAPR, and no additional control measures have been required.

The Department submitted the Regional Haze Five-Year Progress Report in April 2017 and provided additional clarification to EPA to demonstrate progress toward visibility goals. At present, the Division is awaiting final approval from EPA, which will effectively finalize Nebraska's obligations under the first implementation period of the Regional Haze Rule, ending in 2018.

The second implementation period of the rule began in 2018, and Nebraska's Revised SIP will be due to EPA in July 2021.

Affordable Clean Energy Rule

In July 2019, EPA finalized the Affordable Clean Energy (ACE) Rule as a replacement for the Clean Power Plan. This rule included three separate rulemakings: 1) repeal of the Clean Power Plan; 2) establishment of emission guidelines for states to use when developing plans to limit greenhouse gas emissions at power plants and 3) determination that Heat Rate Improvement is the best system for reducing greenhouse gas emissions from coal-fired power plants. The Air Division has begun planning activities for implementation of this ACE Rule.

Air Toxics Program

EPA currently lists 187 substances as hazardous air pollutants, or air toxics, which are air pollutants known to cause cancer and other serious health impacts. The Division developed the Air Toxics Notebook on the Department website as a reference on the air toxics program and NESHAP standards that have been issued by EPA and that are applicable to facilities in Nebraska. The Notebook is intended to help the regulated community and the public understand the air toxic regulations. For each standard the Notebook has a page that provides applicability information, regulatory citations, amendment dates, guidance documents, forms, and a listing of sources in the Department's jurisdiction that are subject to each NESHAP. For most of SFY2019, the position of Air Toxics coordinator was vacant.