



# Nebraska Department of Environmental Quality

## Annual Report to the Legislature 2010

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- Public Notices
- Enforcement Resolutions

# Table of Contents

---

Chapter 1 --	<b>Agency Overview</b> .....	<b>1</b>
	Agency Goals .....	3
	ARRA Funding and Expenditures.....	4
	Legislation/Actions Affecting Staffing .....	5
Chapter 2 --	<b>Administration/Legal/ Management Services</b> .....	<b>8</b>
	Administration.....	8
	Legal.....	9
	Management Services.....	9
	<i>Includes: Fiscal Services, Human Resources, Records Management, Information Technology, Public Information</i>	
Chapter 3 --	<b>Environmental Quality Council</b> .....	<b>13</b>
Chapter 4 --	<b>Air Quality Division</b> .....	<b>16</b>
	Permitting .....	16
	<i>Includes: Construction Permits, Operating Permits</i>	
	Compliance .....	18
	<i>Includes: Ambient Air Quality Monitoring, Renewable Power Projects, Inspections and Facility Compliance</i>	
	Program Planning and Development .....	23
	<i>Includes: Emission Inventory Program, Future Air Issues</i>	
Chapter 5 --	<b>Waste Management Division</b> .....	<b>26</b>
	RCRA Program .....	26
	Superfund Program .....	30
	<i>Includes: Superfund Site Assessment, Superfund NPL Management Assistance, Nebraska Voluntary Cleanup Program, Brownfield Assessments</i>	
	Solid Waste Program .....	34
	<i>Includes: Financial Assurance, Waste Tire Management Program</i>	
	Planning and Aid .....	37
	<i>Includes: Waste Reduction and Recycling Incentive Grant Program, Litter Reduction and Recycling Grant Program, Illegal Dumpsite Cleanup Program, Landfill Disposal Fee Rebate Program</i>	
Chapter 6 --	<b>Water Quality Division</b> .....	<b>46</b>
	Leaking Underground Storage Tanks Program .....	46
	Agriculture Programs.....	51
	<i>Includes: Inspections, Permitting, Chemigation, Agricultural Chemical Containment</i>	
	Surface Water Assessment Programs.....	56
	<i>Includes: Ambient Stream Monitoring, Basin Rotation Monitoring, Lake Bacteria and Toxic Algae Monitoring, Fish Tissue Monitoring, Stream and Lake Monitoring, Fish Kill and Complaint Investigations, Watershed Grants Project</i>	

Chapter 6 (continued)

Ground Water Assessment Programs .....	60
<i>Includes: Groundwater Management Areas, Underground Injection Control, Wellhead Protection</i>	
Water Quality Planning.....	63
<i>Includes: Section 401 Water Quality Certification, Impaired Waters and Total Maximum Daily Loads (TMDLs), Nonpoint Source Management, Section 319 grants, Source Water Assessment</i>	
Wastewater Engineering Management .....	67
<i>Includes: Wastewater Construction Permits, Wastewater Facility Operator Certification, Onsite Wastewater Treatment Facilities (septic systems and lagoons)</i>	
Water Permitting Programs.....	71
<i>Includes: NPDES Permits, Municipal and Industrial Facilities, Storm Water Program, Combined Sewer Overflows, Wastewater Treatment Sludge and Biosolids Disposal, Nebraska Pretreatment Permits</i>	
Financial Assistance.....	77
<i>Includes: Clean Water State Revolving Fund, Drinking Water State Revolving Fund</i>	
<b>Chapter 7 -- Field Services and Assistance Division.....</b>	<b>83</b>
Field Offices .....	84
Small Business and Public Assistance Program.....	85
Community Right-To-Know .....	86
Nebraska Environmental Partnerships.....	86
Release Assessment.....	88
Homeland Security .....	89
<b>Chapter 8 -- Expenditure and Budget Summary .....</b>	<b>90</b>
<b>Chapter 9 -- Distribution of Aid.....</b>	<b>95</b>
<b>Chapter 10 -- Staffing Issues .....</b>	<b>98</b>
<b>Chapter 11 – Financial Assurance Requirements .....</b>	<b>100</b>

# CHAPTER 1:

## Agency Overview

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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 215.25 full-time employees.

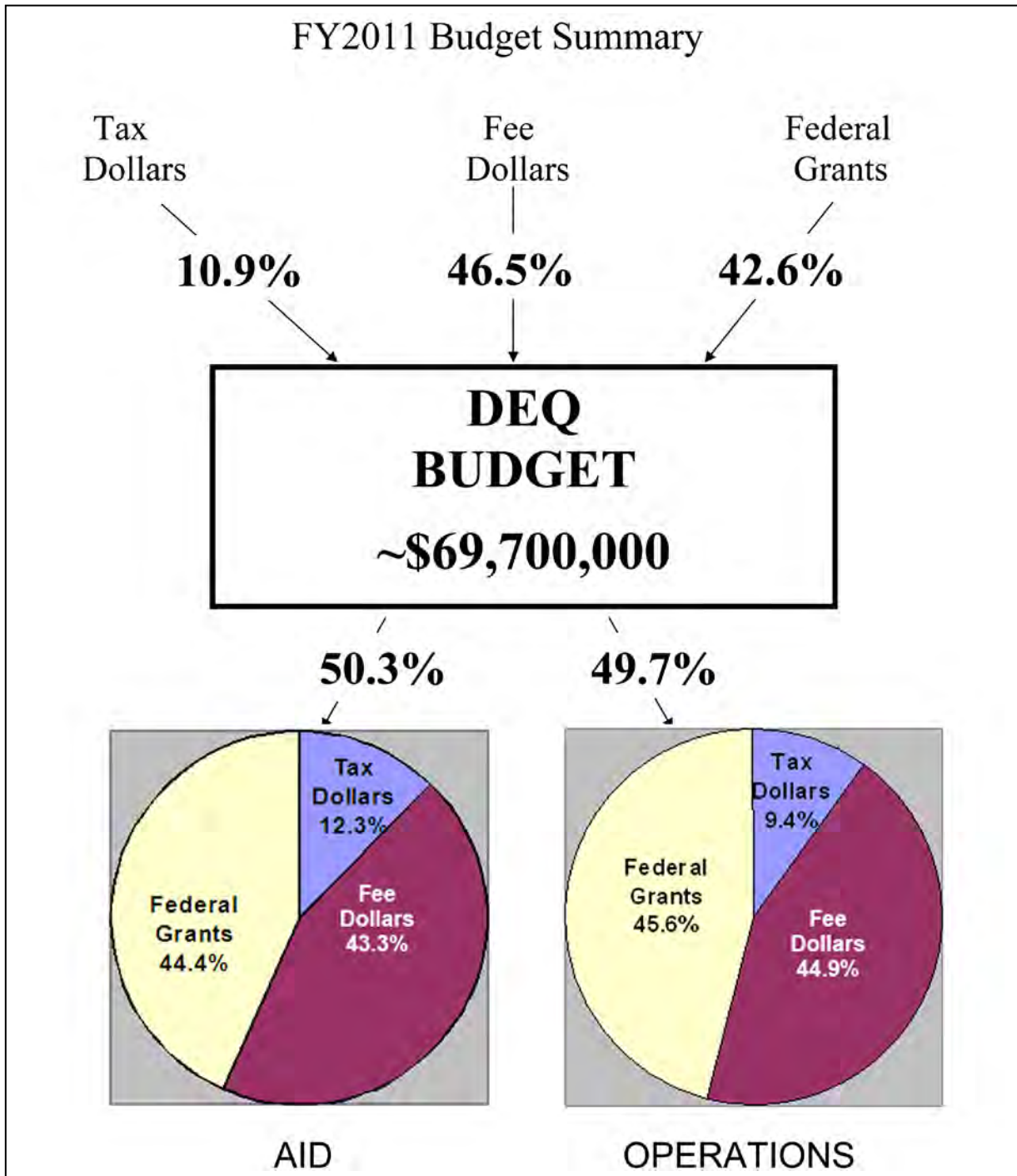
The Department has a total annual budget for FY11 of approximately \$69.7 million. This includes money collected from state taxes, fees and federal grants. Of that amount, \$35.1 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans). In addition, NDEQ expects to receive and redistribute approximately \$42 million in trust funds in FY11, which are loan repayments received by the department. NDEQ has also received approximately \$44 million in federal American Recovery and Reinvestment Act funds, which is primarily being used for local environmental projects.

On 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 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:

<b>Funding Type</b>	<b>Operations: \$ Amount</b>	<b>Percent of Operations Budget</b>	<b>Aid: \$ Amount</b>	<b>Percent of Aid Budget</b>
<b>Federal Funds</b> (Grants)	\$15.8 million	45.7%	\$15.6 million	44.4%
<b>State General Funds</b> (Tax \$)	\$3.3 million	9.5%	\$4.3 million	12.3%
<b>Cash Funds</b> (Fees)	\$15.5 million	44.8%	\$15.2 million	43.3%
<b>Total</b>	\$34.6 million		\$35.1 million	
Note: This table does not include ARRA grants.				

The following graphic depicts the department’s FY11 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 FY10.

This chapter provides: 1) a brief description of agency goals and related activities; 2) an overview of ARRA funding activities and accomplishments in FY2010; 3) significant legislation of 2010 and 4) 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 that 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 whether they need to be modified.

## II. ARRA Funding and Expenditures in FY2010

In fiscal years 2009 and 2010, NDEQ received significant supplemental funding from the American Recovery and Reinvestment Act of 2009.

These are funds provided to Nebraska through the U.S. Environmental Protection Agency, and are being distributed by the state to local efforts that protect the environment and stimulate the economy. This is just one segment of a much larger package of Recovery Act funds being provided to the state of Nebraska and local communities. More information about state programs receiving ARRA support can be found at the state web site: [www.Recovery.Nebraska.gov](http://www.Recovery.Nebraska.gov). More information about the national program can be found on the federal web site: [www.Recovery.gov](http://www.Recovery.gov). More information about the NDEQ programs receiving ARRA support can be found at the agency web site, [www.deq.state.ne.us](http://www.deq.state.ne.us), by selecting NDEQ Recovery Fund Information. Or, the direct URL to the site is: <http://www.deq.state.ne.us/Recover.nsf/Pages/Recovery>.

Five programs administered by NDEQ have been allocated Recovery Act funds by the U.S. EPA. They are:

- **Clean Water State Revolving Fund** — \$20 million in Recovery Act funds have been allocated to Nebraska for wastewater treatment facility improvements. These funds have been distributed to 19 projects.
- **Drinking Water State Revolving Fund** — This program is administered jointly by NDEQ and the Nebraska Department of Health and Human Services – Health Division. \$19.5 million in Recovery Act funds have been allocated to Nebraska to support improvements in communities' drinking water systems. These funds have been distributed to 26 projects for either infrastructure improvements or water meters.
- **Leaking Underground Storage Tank Program** — About \$2.3 million has been allocated to Nebraska for the cleanup and investigation of leaking underground storage tanks. The department has or will complete initial investigation at 65 sites. In addition, funds are being used at seven sites for cleanup activities.
- **Diesel Emission Reduction Act** — \$1.73 million has been allocated to Nebraska for projects to reduce emissions from diesel engines. DERA funds have been passed through to 60 recipients for various types of activities shown to reduce diesel emissions.
- **604 (B) Water Quality Planning** — EPA awarded NDEQ \$202,500 for Water Quality Planning. NDEQ is providing these funds to the Nebraska Department of Natural Resources to continue ground and surface water quality and quantity planning for the Platte River Conjunctive Management Project. The project will help to optimize activities to best protect water quality and quantity for all uses on the Platte River, including endangered species, irrigation, and public recreation and drinking water.

In addition, EPA has allocated \$25.3 million in Recovery Act Funds to the **Omaha Lead Superfund Site**. More information on this site can be found at EPA's web site at <http://www.epa.gov/superfund/eparecovery/omaha.html>. The funds are being used to significantly increase the pace of ongoing long-term soil cleanup and lead-based paint stabilization activities. Nebraska has contributed a 10% cost share to the federal funds provided.



The table below provides an overview ARRA funds that were awarded to the agency, and the expenditures through June 30, 2010. These funds are considered to be a one-time provision designed to stimulate local economic growth and protect the environment, and are not expected to be renewed in future federal allocations.

### Awards Status as of June 30, 2010

Program	Amount Awarded	Funds Received	Number of Recipients	Expenditures as of June 30, 2010
Clean Water SRF	\$20 million	April 10, 2009	19 projects	\$10,569,303
Drinking Water SRF	\$19.5 million	April 10, 2009	26 projects	\$15,503,706
Leaking Underground Storage Tanks	\$2.3 million	July 6, 2009	72 sites	\$1,221,340
Diesel Emission Reduction Act	\$1.73 million	April 10, 2009	60 recipients	\$1,222,857
604B Water Quality Planning	\$202,500	May 6, 2009		\$76,443

### III. Legislation in 2010

Four pieces of legislation passed in 2010 had an impact on the agency. They include:

**LB 696** – This bill amends the Integrated Waste Management Act to expand the fees imposed on solid waste disposed of within the state's borders to solid waste that is transported for disposal out of the state by certain permitted solid waste facilities (transfer stations). The fee collected is \$1.25 for each six cubic yards of uncompacted solid waste, \$1.25 for each three cubic yards of compacted solid waste or \$1.25 per ton of solid waste disposed of at a permitted facility. Municipalities or counties who have buy-recycled programs may request a rebate of a portion of those fees. The fees collected on waste that is sent for disposal out of the state is also eligible for the rebate.

**LB 798** – The sunset date of the Litter Reduction and Recycling Act is extended for an additional five years to October, 2015. The Litter Reduction and Recycling Grant Program, created in 1979, supports programs developed to reduce litter, provide education, and promote recycling in Nebraska. Grants can be awarded to both public and private entities. Grant funding is generated by an annual litter fee imposed on businesses in the state which commonly contribute to the litter stream and who have annual gross proceeds of at least \$100,000.

**LB 832** – This bill eliminates the private insurance requirement in the Petroleum Release Remedial Action Act for owners of new tanks at sites where tanks have not been previously located. The law, passed in 2005, required that on July 1, 2009 these tank owners be fully insured through private insurance to cover the costs of any future remedial action. Proponents of the new law argued that petroleum marketers were paying the equivalent of two insurance premiums because Nebraska currently collects a nine-tenths of one cent fee on gasoline and a three-tenths of one cent fee on diesel for a Leaking Underground Storage Tank Fund to cover the costs of cleaning up contaminated sites.

**LB 882** – This legislation amends provisions of Nebraska law that governs dead animal disposal. The old language limited animal owners to burying or burning the dead animals on the site where the animal died or allowing transport by a licensed rendering truck to a rendering facility. One provision of the new law is that an animal owner may now take the carcass to a licensed landfill regulated under the Integrated Solid Waste Management Act. However, there is also specific language included in the bill that allows a landfill operator the option to decline to accept the animal for disposal.

One piece of legislation passed in Legislative Special Session in the fall of 2009 also impacted the agency:

**LB 1** – Because of economic conditions, the Nebraska Legislature conducted a special session in the fall of 2009. During that special session, General Funds and Cash Funds spending authority were reduced. In addition, funds from several Cash Funds were transferred to the state's General Fund.

#### **IV. State and Federal Actions Affecting Agency Staffing**

The following is a breakdown of legislation over the past ten 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).

##### **2001 (209 FTE)**

###### **State Legislation/Not Federally Mandated**

- Clean Air Act (Emission Fee Cap)
- Groundwater Monitoring Report
- Extension of Litter Reduction and Recycling Grant Program
- Public Notice Requirements for Environmental Quality Council meetings
- Integrated Solid Waste Management Act (Additional Fund Uses)

##### **2002 (209 FTE)**

###### **State Legislation/Not Federally Mandated**

- Cash fund transfer legislation

##### **2003 (212 FTE)**

###### **State Legislation/Not Federally Mandated**

- On-site Wastewater Treatment Act (septic systems)

##### **2004 (217 FTE)**

###### **State Legislation/Federally Mandated**

- Livestock Waste Management Act

###### **State Legislation/Not Federally Mandated**

- Air Quality Permit Fees

**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

# CHAPTER 2:

## Administration/Legal/ Management Services

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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 is derived through 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 FY10, the Director issued 33 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled 18 civil judicial cases and judgments were entered for a total of \$558,600 in civil penalties with deferments possible in many cases for subsequent compliance. In addition, these judgments included \$380,400 for supplemental environmental projects (\$15,000 to WasteCap of Nebraska Finishing Technology Certification Program, \$43,400 to the West Point Community Foundation for Neligh Park maintenance fund, two utility vehicles totaling \$19,500 were donated to YMCA Camp Kitaki and Henry Doorly Zoo, \$49,000 to the Ravenna Public Schools, \$20,000 to York Public Schools, \$5,000 to St. Edward Fire Department and \$228,500 to the Attorney General's Environmental Protection Fund).

## 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 the budgeting and finance functions and coordinates Department spending, purchasing, and accounting responsibilities. The section also provides advice and assistance to various programs on financial questions and conducts financial reviews of grantees. For example, the section provides significant staff assistance to the Water Division regarding the State Revolving Fund Loan Program.

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.

As stated above, this section conducts financial reviews of the Department's various grant programs. Given the substantial amount of grant funds the Department distributes, it is essential to have staff reviewing financial activities of entities which receive 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.

## Human Resources

The Human Resources team assists supervisors to recruit, hire, develop, retain, and reward a high quality of 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 developing the agency's Affirmative Action Plan, monitoring the plan's goals and ensuring equal employment opportunity is an integral part of the daily activities of the agency. Other activities include: provision of technical assistance to supervisors concerning performance management and investigations of conduct complaints; participation on the agency's policy management team; evaluation of reasonable disability accommodations; and coordination of reporting requirements of the conflicts of interest provisions of the Nebraska Political Accountability and Disclosure. 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 records are indexed into the Agency's computerized database, the Document Tracking System, and placed in files. Document indexing provides a brief description of individual documents in a file folder, or bound documents. Non-print formats like compact discs, diskettes, audiotapes and videotapes are also described through indexing. Approximately 187,500 agency files have been centralized into the agency's Document Tracking System. Centralizing the agency's records has increased accessibility to agency files to respond to records requests from the public, as well as for agency staff.

The Records Management Section coordinates responses to requests for information from the public, 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, hazardous waste sites, and regulation development. The Section responded to approximately 1,300 records requests during FY2010.

In 2009 the agency completed and introduced a "Document / Record Retention and Preservation Plan" to agency staff. The Plan includes guidelines for document management, best practices for email, photo handling guidelines and links to access the agency's Records Retention and Disposition Schedule (Schedule 58) as well as to the Secretary of State's Retention Schedule for State Agencies General Records (Schedule 124). An online records training module was developed with the Plan and all agency staff were required to complete the online training and attend follow-up discussion sessions. New staff are also required to complete the online training.

As part of the Agency Document / Record Retention and Preservation Plan, the agency implemented a centralized mail handling process which allows better management of incoming documents and positions the agency for more efficient utilization of a document imaging system.

Database Administration is the facility data clearinghouse for the agency's Integrated Information System (IIS). Database Administration provides accurate descriptive and locational information for each IIS facility, communicating and coordinating database information with agency program staff, Records Management, Information Technology, and the regulated community.

The Records Management Section also provides other support functions for the agency, such as ordering supplies, staffing the main reception and switchboard area, and providing assistance in special projects or requests as needed.

### **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, two midrange AS/400 computers, four network servers, and software support. They also conduct training and oversee data 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 member provides support and assistance with mapping/locational information through a Geographical Information System. 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 decade, 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. Currently the agency is participating, as members in a number of the work groups for the development of the Exchange Network.

In 2006, the agency, 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.

During the last year, 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 will be 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 will incorporate the ECM into existing business processes and operations.

### **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 section 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.

This Section 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 Section 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: **[www.deq.state.ne.us](http://www.deq.state.ne.us)**. The web site has grown considerably in recent years, and an agency-wide effort is on-going to revise the site to make it more accessible and interactive for our customers.

The Public Information Office also coordinates responses to inquiries submitted to the agency web site's e-mail address. That address is: **[NDEQ.moreinfo@Nebraska.gov](mailto:NDEQ.moreinfo@Nebraska.gov)**

### **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

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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 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 meets quarterly. 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 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 charts. The first lists the council members, the second summarizes Council actions during FY2010.

**Council Members**

<b>Representing</b>	<b>Council member</b>	<b>Term expires</b>
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2013
Automotive/Petroleum Industry	Mark Whitehead Lincoln	June 22, 2013
Biologist	Mark Czaplewski Grand Island	June 22, 2013
Food Products Manufacturing	Michelle Bucklin Omaha	June 22, 2013
Labor	Robert Hall Wahoo	June 22, 2013
Livestock Industry	Alden Zuhlke Brunswick	June 22, 2013
Minority Populations	Dr. Ethel Williams Omaha	June 22, 2013
Municipal Government	Lance Hedquist South Sioux City	June 22, 2013
Power Generating Industry	Joseph Citta, Jr., Columbus	June 22, 2013
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2011
Chemical Industry	Donald E. Williams Orchard	June 22, 2011
Conservation	John C. Turnbull York	June 22, 2011
County Government	Leigh Hoyt McCook	June 22, 2011
Heavy Industry	John Kinter Norfolk	June 22, 2011
Municipal Government	Ronald Zeiger Syracuse	June 22, 2011
Professional Engineer	John T. Baker Scottsbluff	June 22, 2011
Physician	Vacant	June 22, 2011

**FY 2010  
Environmental Quality Council Actions**

<b>Council Meeting Date</b>	<b>Regulation</b>	<b>Action</b>
September 17, 2009	Amendments to Title 199 – Waste Reduction and Recycling Incentives Grant Program	Approved
	Amendments to Title 132 – Integrated Solid Waste Management Regulations	Approved
	Amendments to Title 132 – Integrated Solid Waste Management Regulations	Approved
	Amendments to Title 198 – Rules and Regulations Pertaining to Agricultural Chemical Containment Rulemaking Petition	Approved
December 4, 2009	Amendments to Title 198 – Rules and Regulations Pertaining to Agricultural Chemical Containment Rulemaking Petition	Approved
	Litter Reduction and Recycling Grant Program 2010 Funding Percentage Allocations	Approved
	Waste Reduction and Recycling Incentive Grants Program Priority System	Approved
	Amendments to Title 129 – Nebraska Air Quality Regulations	Approved
	Amendments to Title 197 – Rules and Regulations for Certification of Wastewater Treatment Operators in Nebraska	Approved
April 20, 2010	Amendments to Title 129 – Air Quality Regulations	Approved

# CHAPTER 4:

## Air Quality Division

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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 areas of the state 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 can directly or indirectly 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 188 listed hazardous air pollutants.

The major 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, the air toxics program, and planning and development program.

Three local agencies -- the Lincoln/Lancaster County Health Department, the Omaha Air Quality Control, and the Douglas County Health Department -- have accepted through contract with the NDEQ and direct delegation from the US Environmental Protection Agency, 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

#### Construction Permit Program

NDEQ has had a construction permit program for air contaminant sources since the 1970's. 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 applications received, processed and pending:

<b>Pending July 2009</b>	<b>Applications Received</b>	<b>Applications Processed</b>	<b>Pending June 2010</b>
<b>35</b>	<b>55</b>	<b>53</b>	<b>37</b>

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). The purpose of the PSD 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 PSD program applies to sources that emit significant levels of certain types of emissions. If a source is regulated under PSD, 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, making the area potentially vulnerable to violations of the ambient air quality standards. NDEQ also requires significant

sources of hazardous air pollutants to control emissions with the best control technology available.

The Legislature passed LB449 in 2004, which provides the Department the authority to assess construction permit application fees. Fee amounts are based upon the emissions potential of the facility. The fees generated through this program are used to pay a portion of the costs associated with processing construction permit applications.

In recent years, 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. That trend changed during FY09 and continued in FY10. While we have had fewer construction permits to process, the slowdown in applications has allowed permit writers in the construction permit program to help out with processing operating permits (see discussion below).

	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>
<b>Number of Construction Applications Received</b>	<b>69</b>	<b>74</b>	<b>104</b>	<b>53</b>	<b>55</b>

### **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:

<b>Pending July 2009</b>	<b>Operating Permit Applications Received</b>	<b>Operating Permit Applications Processed</b>	<b>Pending June 2010</b>
<b>79</b>	<b>20</b>	<b>38</b>	<b>61</b>

Similar to the construction permit program, the operating permit program has experienced an increase in applications in recent years. From 2002 through 2004, the operating program was successful in eliminating the majority of the permitting backlog created at the onset of the program. However, this success has caused inconsistency in the amount of permits being received over a five-year time-frame. Because these permits were issued for five year terms,

the operating permit program experienced a significant increase in renewal applications beginning in FY07 through FY09. Renewal applications then dropped significantly in FY10. The following table summarizes the applications received from FY06 through FY10 (applications for site specific individual permits only, does not include applications for permit revisions, general permits, permit-by-rule, etc.).

	FY06	FY07	FY08	FY09	FY10
<b>Number of Operating Permit Applications Received</b>	<b>21</b>	<b>47</b>	<b>44</b>	<b>52</b>	<b>20</b>

The Department has the authority to issue operating permits for a fixed term of up to five years. To prevent a reoccurrence of this large fluctuation, the program has been seeking volunteer sources to accept shorter permit terms, i.e., three or four year permit terms. By doing this, the program will be able to stabilize the receipt of future renewal applications over a five year period.

## 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: the Nebraska Department of Environmental Quality, 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 are 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<sub>10</sub>)
  - With a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>)
- Sulfur Dioxide (SO<sub>2</sub>)
- Nitrogen Dioxide (NO<sub>2</sub>)
- Carbon Monoxide (CO)
- Ozone (O<sub>3</sub>)
- 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 two areas of the state, Lexington and Dakota City/South Sioux City. There have been significant reductions in TRS levels in those locations since 2000.

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 occurs. 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., PM<sub>2.5</sub>, PM<sub>10</sub>, CO, SO<sub>2</sub>, 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.

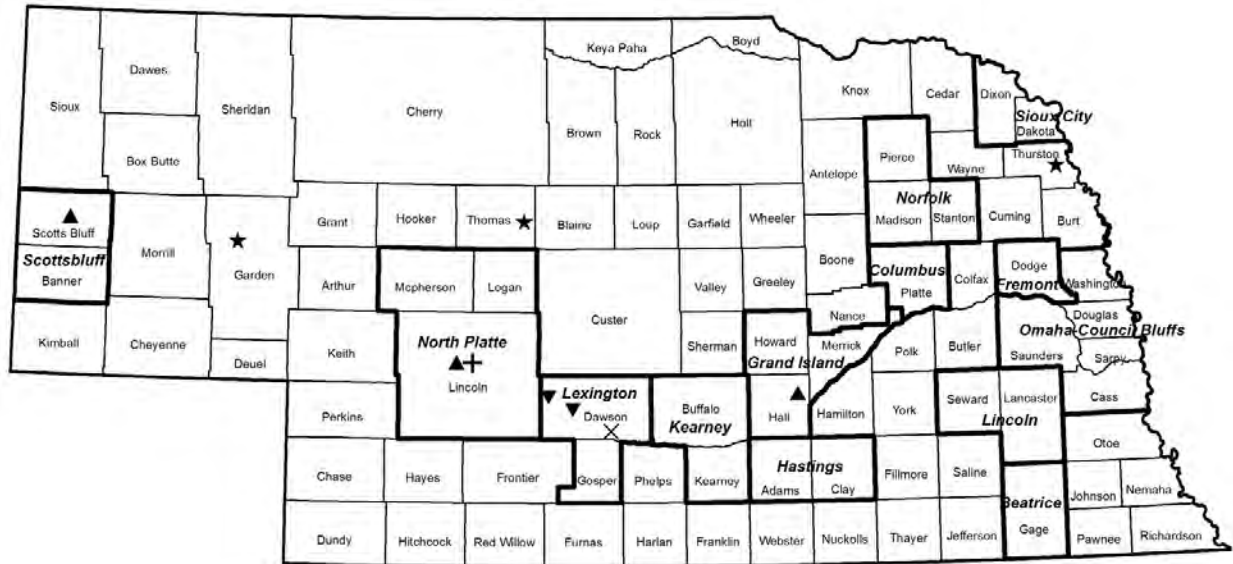
The National Trends Network (NTN) of the National Atmospheric Deposition Program (NADP) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride, and base-cations (e.g., calcium, 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. In the last three years, both sites have been upgraded to include mercury (Hg) deposition monitoring and both became part of the NADP/Mercury Deposition Network (MDN). These upgrades were made possible through cooperative efforts of the NDEQ, the University of Nebraska, and Nebraska Environmental Trust grant funding. Additional information about the NADP/NTN can be found at: <http://nadp.sws.uiuc.edu/nadpoverview.asp>. It is expected that mercury monitoring will cease at one of the sites due to the lack of sufficient funding.

### **Monitoring Information On-Line**

Ozone and continuous PM<sub>2.5</sub> 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 [www.airnow.gov](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 not in a Metropolitan Statistical Area



- ▲ PM<sub>2.5</sub>
- ▼ PM<sub>10</sub>
- × TRS
- ★ IMPROVE
- + NADP/NTN

- PM<sub>2.5</sub>  
Grand Island, 2124 North Lafayette Avenue
- North Platte, 211 West 3rd Street  
(discontinued December 2005)
- Scottsbluff, 1809 3rd Avenue
- PM<sub>10</sub>  
Cozad, 215 West 8th Street
- Gothenburg, 9th Street

- TRS  
Lexington County Roads 753 & 435
- IMPROVE  
Garden County, Crescent Lake Wildlife Refuge
- Thomas County, Nebraska National Forest
- Thurston County, Omaha Tribal Land
- NADP/NTN  
Maxwell, North Platte Agricultural Experiment Station

The map above shows monitoring sites that are in non-metropolitan areas. Maps on the next two pages show monitoring sites in the metropolitan areas of Lancaster County, Omaha, and South Sioux City. (The Omaha and South Sioux City maps also include adjoining counties in Iowa that are part of the region.)



Nebraska Monitoring Sites in Metropolitan Areas

Lancaster County Monitoring Locations

- Ozone
- ▲ PM<sub>2.5</sub>
- Carbon Monoxide

**Carbon Monoxide**  
2620 O Street

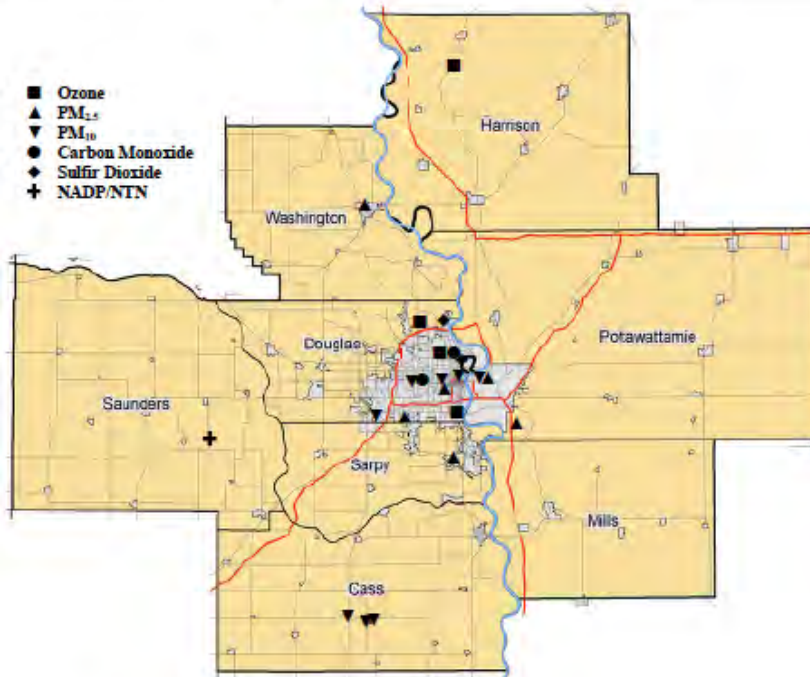
**Ozone**  
1<sup>st</sup> & Maple Street (Davey)

**PM<sub>2.5</sub>**  
3140 N Street



Omaha-Council Bluffs Metropolitan Statistical Area Monitor Locations

- Ozone
- ▲ PM<sub>2.5</sub>
- ▼ PM<sub>10</sub>
- Carbon Monoxide
- ◆ Sulfur Dioxide
- + NADP/NTN



**PM<sub>2.5</sub>**  
4102 Woolworth Avenue  
9225 Berry Street  
2912 Coffey Avenue (Bellevue, NE)  
2242 Wright Street (Blair, NE)  
3130 C Avenue (Council Bluffs, IA)  
2115 Navajo Road (Council Bluffs, IA)

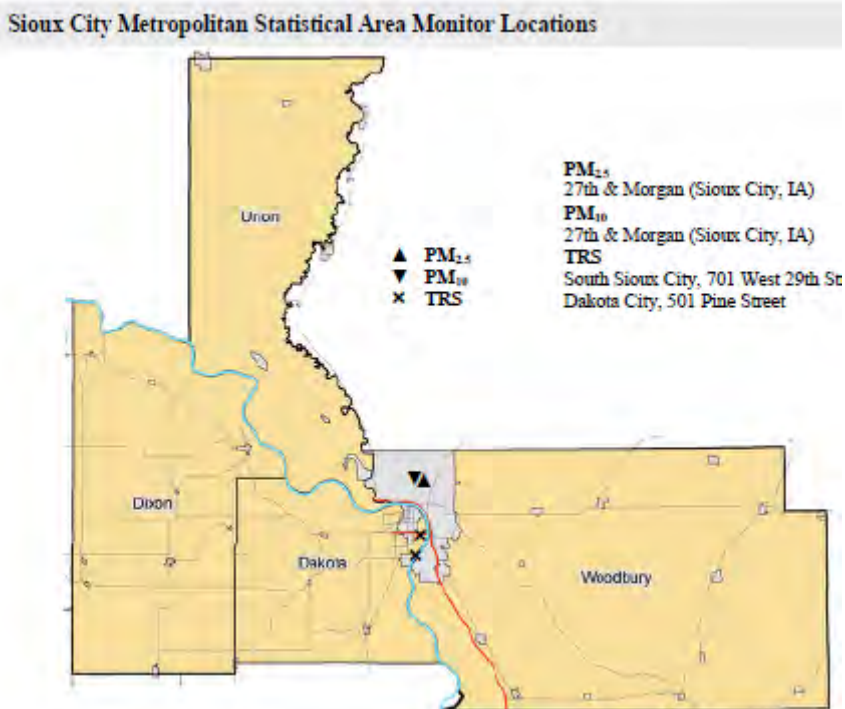
**Ozone**  
30<sup>th</sup> & Fort Streets  
11414 North 72<sup>nd</sup> Street  
2411 O Street  
1575 Highway 183 (Harrison County, IA)

**Carbon Monoxide**  
30<sup>th</sup> & Fort Streets  
(discontinued in December of 2007)  
7747 Dodge Street, Omaha

**PM<sub>10</sub>**  
19<sup>th</sup> & Burt Streets  
7717 Dodge Street  
132<sup>nd</sup> & Q Streets  
46<sup>th</sup> & Farnam Streets  
2411 O Street  
102 P Street (Weeping Water, NE)  
112 Randolph Street (Weeping Water, NE)  
5102 Highway 2 (Weeping Water, NE)  
3130 C Avenue (Council Bluffs, IA)

**Sulfur Dioxide**  
11300 North Post Road  
1616 Whitmore Street  
2115 Navajo Road (Council Bluffs, IA)

**NADP/NTN**  
Mead, Saunders County



### Renewable Power Projects

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 such that it could be easily set up in any location of the state where sufficient solar and/or wind resources exist. The Scottsbluff site also allows an opportunity for NDEQ to partner with the 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	133	111	37
Facility Stack Tests Reviewed	65	1	0
On site observations conducted	42	1	0
Continuous Emission Monitoring Audits Reviewed	31	2	0
On-site observations conducted	10	2	0
Complaints Received	67	5	91
Burn Permits Issued	120	45	54
Burn Permits Denied	0	1	0

During SFY2010, the compliance program undertook a process improvement effort. The week-long effort focused on how to improve the inspection process and what tools are needed to make the inspectors jobs run smoother. At the end of the event, concrete ideas were implemented, including the shifting of some resources and making changes to the permit structure.

### Asbestos Program

In July of 2003, the Legislature reduced funding for the Division's Asbestos Program. Complaints are referred to the Nebraska Department of Health and Human Services. Lincoln/Lancaster County and Omaha Air Quality Control continue to be responsible for National Emission Standards for Hazardous Air Pollutants for Asbestos in their respective areas of authority.

### Program Planning and Development Unit

The Air Quality Division's Program Planning and Development Unit was expanded and reorganized during FY2009 in order to provide better support to permitting and compliance staff, and to provide increased information and analyses to Department and other policy makers. The expansion involved moving the air dispersion modeling function from the Permitting section to the Planning Unit and also moving the Emissions Inventory function from the Compliance section to the Planning Unit. These organizational changes were made to better position the Air Division to address future requirements.

Over the last year, the unit continued to devote resources for assistance and outreach activities. It developed a comprehensive training DVD for use by both staff and regulated industry. It also developed a web-based information center on regulated hazardous air

pollutants called the Air Toxics Notebook, which can be found on the DEQ website by going to Programs/Air Toxics Program. Or, the direct URL to the page is: <http://www.deq.state.ne.us/AirDivis.nsf/Pages/AirToxics>. Staff continue to populate the notebook and to develop a similar information center for New Source Performance Standards.

The unit continued ongoing functions of developing fact sheets and guidance documents to help Nebraska businesses understand and comply with air quality regulations and also continued to sponsor annual Air Program Update Workshops in the summer 2010 for representatives from businesses, consulting firms, and industry. These half-day workshops are held across the state where general and technical information is provided on current events, regulations, permitting activities, and modeling activities pertaining to the Air Quality Program. The Program Planning and Development Unit also develops the state air quality regulations.

During SFY2009 and 2010, the Planning Unit participated in the national Clean Diesel Program, providing grants to two government entities to reduce their diesel emissions. The unit also participated in the separate Clean Diesel Program under the American Recovery and Reinvestment Act. (See Chapter 1 for more details on NDEQ ARRA funding.)

### **Emission Inventory Program**

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 emission inventory program also supports the assessment of annual emission fees. Major industrial sources of air pollution pay emission fees for each ton of pollutant emitted during the calendar year. The maximum emissions for which a fee is assessed is 4000 tons per pollutant. For electrical generating facilities with a capacity of between 75 and 115 megawatts, the maximum emissions is 400 tons per pollutant. The fees generated are used to support the major industrial source permitting programs.

The Department makes every attempt to set the fee rate at the minimal 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's website. The rate for 2009 emissions was \$70 per ton.

### **Future Air Issues for Nebraska**

In the last few years, EPA has finalized regulations that will require changes to the Nebraska program. EPA has been revising the National Ambient Air Quality Standards. With each change to the standards comes the potential for areas of the state to be in non-compliance (non-attainment) with the standards. Furthermore, EPA has been implementing additional ambient air monitoring requirements to implement the revised standards. These new monitoring requirements are a reversal of a trend we had seen 5 to 10 years ago when ambient air monitors were shut down. Some of the new NAAQS changes affecting Nebraska are listed on the next page, including new monitoring that is required, and additional monitoring that is proposed:

#### NAAQS Monitoring

January 2010 – Lead monitoring in Auburn and Fremont

January 2011 – Multi-pollutant monitoring in Omaha. Monitoring to include PM<sub>2.5</sub>, PM<sub>10</sub>, trace gases (CO, NO<sub>x</sub> & SO<sub>2</sub>), ozone and meteorological parameters

January 2011 – One lead monitoring site in Omaha

#### Proposed Monitoring

January 2011 – Lead monitoring in Norfolk

2012 – Two to three rural ozone monitoring sites: one possibly in Scottsbluff or other similarly-sized city and one in an agricultural setting. There could also be one or more additional ozone monitors required in the Omaha area.

2012 – NO<sub>x</sub> monitoring in Omaha and/or along roadsides

#### NAAQS Standards

In June 2010, EPA finalized the standard for sulfur dioxide (SO<sub>2</sub>). EPA eliminated the 24-hr standard and created a 1-hr standard of 75 ppb. Based upon the last three years of data, Douglas County appears to not attain the new standard. NDEQ will be looking for upcoming guidance from EPA on implementing the standard.

In February 2010, EPA proposed changes to the ozone standard which could impact the Omaha-Council Bluffs area. The decision on the final standard is not expected until the end of December, 2010. However, NDEQ is working with the Iowa Department of Natural Resources (IDNR), the EPA, the Omaha Air Quality, Douglas County Health Department, Nebraska Department of Roads, Iowa Department of Transportation, and the Metro Area Planning Agency on a Community Based Planning program to proactively address ozone in the area. Our intent is to garner as much voluntary action up front as possible, to minimize regulatory actions later.

EPA is required under the Clean Air Act to review the adequacy of the NAAQS every five years. The other NAAQS (particulate matter, carbon monoxide, and the secondary standards for SO<sub>2</sub> and NO<sub>2</sub>) are scheduled for review in the next year or two.

For more information about the Nebraska ambient air quality and monitoring, 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 [www.deq.state.ne.us](http://www.deq.state.ne.us).

# CHAPTER 5:

## Waste Management Division

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The Waste Management Division is comprised of two sections and one unit. These include the Waste Management Section, the Remediation Section, and the Planning and Aid Unit. Both Waste Management and Remediation sections share responsibilities for the hazardous waste, 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. There were no regulatory changes made in fiscal year 2010 to the Title 128 regulations.

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 RCRA 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 ultimately reducing 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 (TSD) 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 eliminate the release of hazardous material into the environment. Closure actions are required for treatment, storage or disposal (TSD) facilities that are discontinuing operations or that have operated without a permit. Permits are required for operating TSD facilities. Post-closure permits are required for TSD 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 have resulted in numerous permit modifications. These changes were made to improve the performance of the facility and ensure compliance with applicable regulations. 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 that 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 from regulated facilities. These regulations can make the former owner of a property responsible for mismanagement of hazardous waste if the current owner could not reasonably be expected to have actual knowledge of the presence of hazardous waste at the site. 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. There were no new facilities proposed in FY10.

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.





<b>Summary of FY2010 RCRA Activities</b>		
<b>Activity</b>	<b>State</b>	<b>EPA</b>
<b>Compliance Assistance</b>		
On-site Visits	4	0
Direct Assistance Contacts	999	*
Public Outreach Presentations (total 338 in attendance)	12	*
<b>Inspections</b>		
Land Treatment Facilities	0	0
Treatment and Storage Facilities	1	2
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	2	0
Facility Self-Disclosure	1	0
Large Quantity Generator	15	1
Small Quantity Generator	3	8
Conditionally Exempt Small Quantity Generators	6	8
Transporters	0	0
<b>Permitting</b>		
Closure Plans Finalized	1	0
Permits Issued/Renewed	1**	1**
Modifications	21**	5**
EPA Corrective Action Orders	0	0
<b>Record Reviews</b>		
Financial Assurance	18	0
*Data not available    **Joint State/EPA		

## 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 (NPL). Nebraska currently has thirteen sites on the National Priorities List. One site, the Waverly Groundwater Contamination Site, was deleted from the NPL on November 20, 2006 as the cleanup goals for the site have been achieved. Eleven of the sites are in the cleanup phase; and two sites (Garvey Elevator in Hastings, and West Highway 6 & 281 in Hastings) are relatively new to the National Priority List and are in either the site studies or remedy selected stages. 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 full Superfund process.

The investigation and remediation of contaminated sites are the primary responsibility 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 a preliminary assessment. This step involves the collection of background information such as property ownership, operational history, geology/hydrogeology, and performing a site reconnaissance. The third step is called a site investigation, which involves sampling environmental media, such as soil and groundwater. 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 three preliminary assessments, two combined preliminary assessments/site investigations and one site investigation.

**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. The table on the next page identifies completion of major phases of work at NPL sites in Nebraska.

### Cleanup Progress at NPL Sites in Nebraska

Site	County	Removal Actions	Site Studies	Remedy Selected	Remedy Design	Remedy Construction	Cleanup
Cornhusker Army Ammo Plant (Grand Island)	Hall	X	X	X	X	X	Ongoing
Hastings Groundwater Contamination (Hastings)	Adams	X	X	X	X	X	Ongoing
Lindsay Manufacturing Co. (Lindsay)	Platte	•	X	X	X	X	Ongoing
Nebraska Ordnance Plant (Mead)	Saunders	X	X	X	X	X	Ongoing
10th Street Site (Columbus)	Platte	X	X	X	X	X	Ongoing
Cleburn Street (Grand Island)	Hall	•	X	X	X	X	Ongoing
Ogallala Groundwater Contamination Site (Ogallala)	Keith	X	X	X	X	X	Ongoing
Bruno Coop Association (Bruno)	Butler	X	X	X	X	X	Ongoing
Sherwood Medical (Norfolk)	Madison	X	X	X	X	X	Ongoing
Omaha Lead Site (Omaha)	Douglas	X	X	X	X	X	Ongoing
Parkview Well Site (Grand Island)	Hall	X	X	X	X	X	Ongoing
Garvey Elevator (Hastings)	Adams	Ongoing	Ongoing	X	X		
West Highway 6 & 281 (Hastings)	Adams	Ongoing	Ongoing				

**Chart definitions:**

**Removal Actions:** Short-term action intended to stabilize or clean up an incident or site that poses an imminent or substantial threat to human health or the environment.

**Site Studies:** Investigation of the nature and extent of contamination at a site, the potential long-term risks to human health and the environment posed by the contamination, and evaluation of a list of potential cleanup actions to address the contamination.

**Remedy Selected:** Preferred cleanup action selected from the list of potential cleanup actions.

**Remedy Design:** Completion of detailed engineering design plans for the cleanup system.

**Remedy Construction:** Status of the construction of the cleanup system.

**Cleanup:** Status of operation and maintenance of the cleanup system.

**Symbol key:**

**X** = Activity Completed      **•** = Activity Not Necessary      **Blank** = Activity Not Started

*Note: Various Operable Units at large sites may be at different stages.*

**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 seventeen formerly used defense sites. Military munitions response activities are being performed at nine sites. A military munitions response site is a site that may have the potential for unexploded ordnance, discarded military munitions, and 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 recently entered into a Memorandum of Agreement (MOA) 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, 27 sites have entered the voluntary cleanup program. Currently, seven sites are active in the voluntary cleanup program. Two of the seven active sites are expected to be completed in the upcoming year. Two sites have been deferred to the EPA Superfund program. Four 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. Nine sites have successfully completed cleanup requirements and have received "No Further Action" letters from the Department.

The department anticipates a significant increase in applications to the voluntary cleanup program over the next several years. Likely new applicants include the City of Lincoln on the West Haymarket Arena redevelopment and two current EPA brownfield grantees (City of Fremont Target Range, Former PCS Nitrogen site in Sarpy County). The department has also been negotiating a multi-site Memorandum of Agreement with the U.S. Department of Agriculture (USDA) to enter several former grain bin sites into the program. In addition, several former manufactured gas plant (FMGP) sites have inquired about potentially joining the program.

The fee structure for this program was revised in 2008. The application fee to participate in the program was reduced from \$5,000 to \$2,000, and the initial deposit to pay for state oversight costs was reduced from \$5,000 to \$3,000.

**Brownfield Assessments and Cleanups** — A brownfield site is 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 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. 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 nine brownfield assessments.

### Voluntary Cleanup Program Sites and Status

Site	Location	Status	Date of Entry into RAPMA Program
KN Energy	Holdrege	Completed 5/01/97	4/3/95
Garvey Elevator	Hastings-West	Deferred to EPA Superfund	4/13/95
ASARCO	Omaha-Riverfront	Completed 10/11/01	1/8/96
BNSFRR	Lincoln-N. Havelock	Terminated 12/4/06	1/17/96
Union Pacific RR	Omaha-N. Downtown	Withdrawn 3/7/03	1/17/96
Farmland Industries	Scottsbluff	Completed 7/2/09	2/26/96
Lincoln Journal Star	Lincoln-Downtown	Terminated 1/28/09	2/26/97
Farmland Industries	Hastings-East	Completed 9/2/03	6/25/97
Hastings Area wide	Hastings	Withdrawn 6/23/00	12/17/97
Lincoln Plating Co.	Lincoln	Active	8/17/98
Witco Corporation	Omaha-North	Completed 6/29/99	1/20/99
BNSFRR	Lincoln-Lot 9 Havelock	Completed 2/20/01	4/28/99
Dana Corporation	Hastings-West	Deferred to EPA Superfund	9/27/99
Ballpark Complex	Lincoln-Haymarket	Completed 9/1/06	11/9/99
Progress Rail Services	Sidney-North	Completed 1/3/06	11/22/99
Brownie Manufacturing	Waverly-Highway 6	Withdrawn 7/19/01	4/25/00
BNSFRR	Lincoln-Havelock Yards	Terminated 12/4/06	10/26/00
New Holland	Grand Island-Southwest	Active	11/9/00
Owen Parkway East	Omaha-Abbott Drive	Withdrawn 11/26/02	12/13/00
Omaha Riverfront Redevelopment - 3 parcels	Omaha-Riverfront	Completed 6/18/03, 12/9/03, 11/9/04	5/18/01
Sanford & Son	Lincoln-North	Terminated 4/18/07	1/22/02
Union Pacific RR Child Development Center	Omaha-N. Downtown	Active	3/5/04
Vishay Dale Electronics	Norfolk	Terminated 4/20/09	11/13/06
Union Pacific RR Nebraska Solvent Site	Grand Island	Active	2/23/07
Archer Daniels Midland	Lincoln	Active	11/3/08
Plaza North Station LLC	Omaha	Active	7/14/09
Former Pfizer Facility	Omaha	Active	7/28/09

## 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 debris 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:

<b>Total Permitted Facilities in FY 2010</b>	
Municipal Solid Waste Disposal Areas (Landfills)	23
Industrial Waste	1
Solid Waste Compost Sites	8
Transfer Stations	37
Materials Recovery Facilities	5
Construction & Demolition Waste Disposal Areas	27
Delisted Waste Disposal Areas	1
Fossil Fuel Combustion Ash Disposal Areas	8
<b>Total</b>	<b>110</b>

The following chart indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2010:

<b>Summary of Activities: FY2010</b>	
<b>Compliance</b>	
Facility Inspections (General)	111
Facility Inspections (Construction)	2
Complaints Received	142
Complaints Investigated	114
Complaints Closed	81
<b>Permitting</b>	
New Permits Issued	2
Permit Renewals	27
Major Permit Modifications	4
Transferred Permits	0
Public Hearings	2
Financial Assurance Reviews	194
Facilities Closed	0

### **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.

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 at 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 administration of the Waste Reduction and Recycling Incentives Grants Program and fifty percent of the quarterly disposal fees are utilized for administrative costs of 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 waste tire management program is also regulated under Title 132. Approved beneficial uses of waste tires are outlined in the 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.

<b>Waste Tire Permit Totals, FY2010</b>	
<b>Permitting</b>	
Renewed Hauler Permits	18
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.

### Staffing

The grant programs of the Planning and Aid Unit are administered through the cooperative effort of three Program Specialists and a Unit Supervisor. Duties include promoting the availability of grant funding, reviewing all grant applications, arranging for the Citizen Advisory Committee ranking, announcing grant awards, networking among all grant-funded programs, contributing to the development of the Nebraska Recycling Resource Directory, performing compliance inspections, and providing integrated waste management information to the public.

The Program Specialists also are responsible for monitoring each grantee's program activities, budget status, and equipment purchases. Quarterly performance reports on each grant-funded program are reviewed and direction is provided as needed.

The program staff gain feedback from the public regarding their grant-funded projects and activities, verify that activities are in line with the approved application, and inspect equipment during on-site inspections. Field office staff assist with on-site inspections.

In addition to the on-site compliance inspections, the Department conducts financial reviews of grant recipients. Staff review quarterly reporting records, ledgers, checkbook entries, bank statements, canceled checks, invoices, receipts, budget statements, and other appropriate documents to ensure grant funds are spent as approved by the Department.

### Review Process

The Litter Reduction and Recycling Grant Program and the Waste Reduction and Recycling Grants Incentive Program both utilize a Program Priority System to rank applications received annually by the Department. Applications for funding assistance are prioritized by evaluating the following factors:

- Program Design and Implementation
- Program Impact
- Demonstrated Ability
- Matching Contributions

Each year, grant requests exceed the available funding. The NDEQ Director created the 24-member Citizen Advisory Committee to review all grant applications and rank them according to the Program Priority System. The Director relies heavily on the Citizen Advisory Committee's rankings when making grant awards.

### 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 equipment status reports 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.

LB 592, passed in 1999, provides for multi-year renewable grants to political subdivisions. Priority for multi-year grants is given to applicants who address the first component of the solid waste hierarchy, waste reduction, which also includes reducing the toxicity of waste. Additionally, priority is given to those that indicate regional participation. Multi-year grants are limited to 50 percent of the fees available in the Waste Reduction and Recycling Incentive Fund after rebates, and can be renewed for a period of up to five years. Applicants for multi-year grants must submit an updated integrated solid waste management plan.

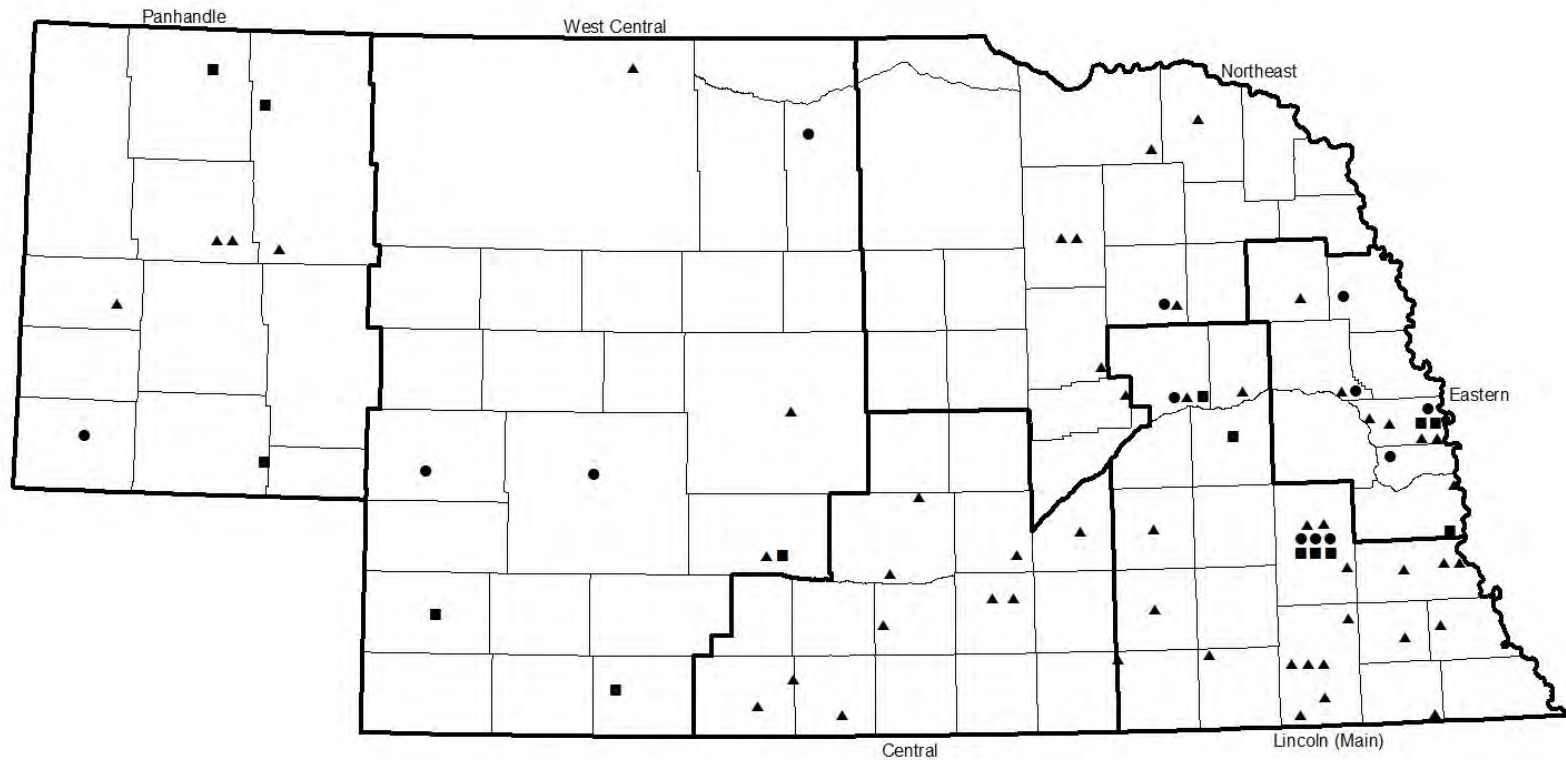
The Deconstruction Grants Program was created by LB 180, passed in 2009. Through this bill, the Waste Reduction and Recycling Act was expanded to include grants for the reimbursement of costs of smaller counties and cities for the deconstruction of abandoned buildings, and to encourage the reuse and recycling of the building's materials.

***Fund Summary*****Waste Reduction and Recycling Fund  
July 1, 2009 - June 30, 2010**

<b>Fund Balance June 30, 2009</b>	<b>\$</b>	<b>5,422,690</b>
Revenues:		
New Tire Fees		1,795,340
Business Fees		482,793
Solid Waste Disposal Fee		1,188,740
Interest, Grant Returns		233,453
<b>Net Collections for Year</b>	<b>\$</b>	<b>3,700,326</b>
Expenditures:		
Administration		304,367
FY 2010 Grant Funds Expended		3,514,132
Legislative Reduction in Fund		1,608,863
<b>Total Expenditures FY 2010</b>	<b>\$</b>	<b>5,427,362</b>
<b>Fund Balance June 30, 2010</b>	<b>\$</b>	<b>3,695,654</b>

**Summary of Activities** - For FY2010, the Department awarded \$2,442,902 for Waste Reduction and Recycling Incentive Grants to 79 projects. Thirteen of these grants were awarded from the Business Fee category (\$423,075), 14 were awarded from the Disposal Fee category (\$1,019,827), and 52 received grants from the funds prioritized for scrap tire projects (\$1,000,000). The following map shows the locations across Nebraska that received funds.

## Waste Reduction and Recycling Incentive Grants Program 2010 Grant Awards



■ Disposal Fee	\$1,019,827	14 grants, including 5 regional
● Business Fee	\$423,075	13 grants, including 1 statewide
▲ Tire Projects	\$1,000,000	52 grants, including 3 regional
<b>Total</b>	<b>\$2,442,902</b>	<b>79 grants</b>

October 2010

## **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:

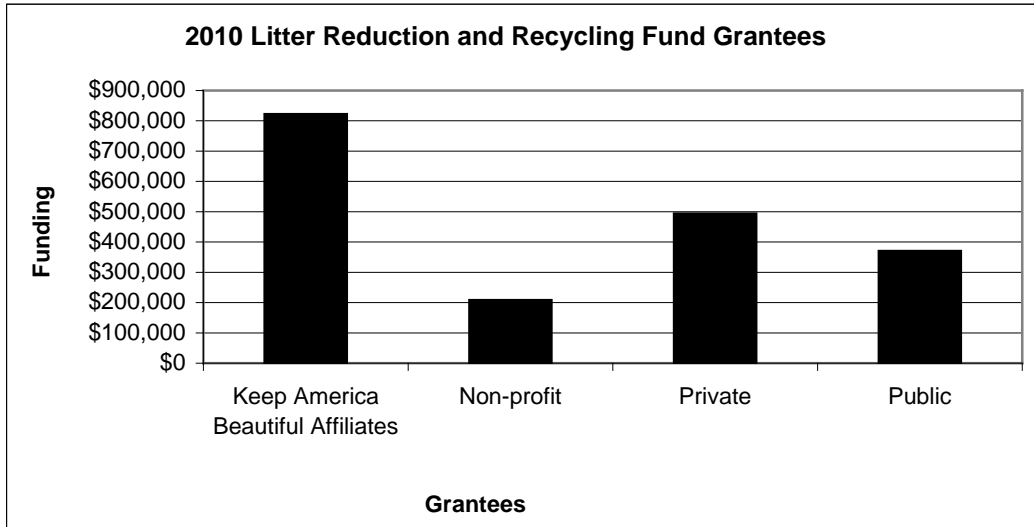
- Food for human consumption, beverages, soft drinks, carbonated water, liquor, wine, beer, and other malt beverages, unless sold by retailers solely for consumption indoors on the retailer's premises;
- Food for pet consumption;
- Cigarettes and other tobacco products;
- Household paper and household paper products;
- Cleaning agents; and
- Kitchen supplies.

## ***Fund Summary***

### **Litter Reduction and Recycling Fund July 1, 2009 - June 30, 2010**

<b>Fund Balance June 30, 2009</b>	<b>\$</b>	<b>556,614</b>
Revenues:		
Litter Taxes Collected		1,799,257
Interest, Grant Returns		96,779
<b>Net Collections for Year</b>	<b>\$</b>	<b>1,896,036</b>
Expenditures:		
Department of Environmental Quality Administration		270,886
FY 2010 Grant Funds Expended		1,815,443
<b>Total Expenditures FY 2010</b>	<b>\$</b>	<b>2,086,329</b>
<b>Fund Balance June 30, 2010</b>	<b>\$</b>	<b>366,321</b>

In FY2010, \$1,893,244 was awarded from the Litter Reduction and Recycling Grant Program. Grant funding is awarded to several types of programs; Keep America Beautiful affiliates, non-profits, private businesses, and public entities. 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 2010 grantees.



**2010 Grant Allocations**

In FY2010, the Department gave 68 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

<b>Public Education</b>	(29%)	21 grants	\$ 547,595
<b>Cleanup</b>	( 4%)	14 grants	\$ 76,575
<b>Recycling</b>	(67%)	33 grants	<u>\$ 1,269,074</u>
			<b>\$ 1,893,244</b>

**Public Education**

In FY2010, 21 grants totaling \$547,595 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.

**Cleanup**

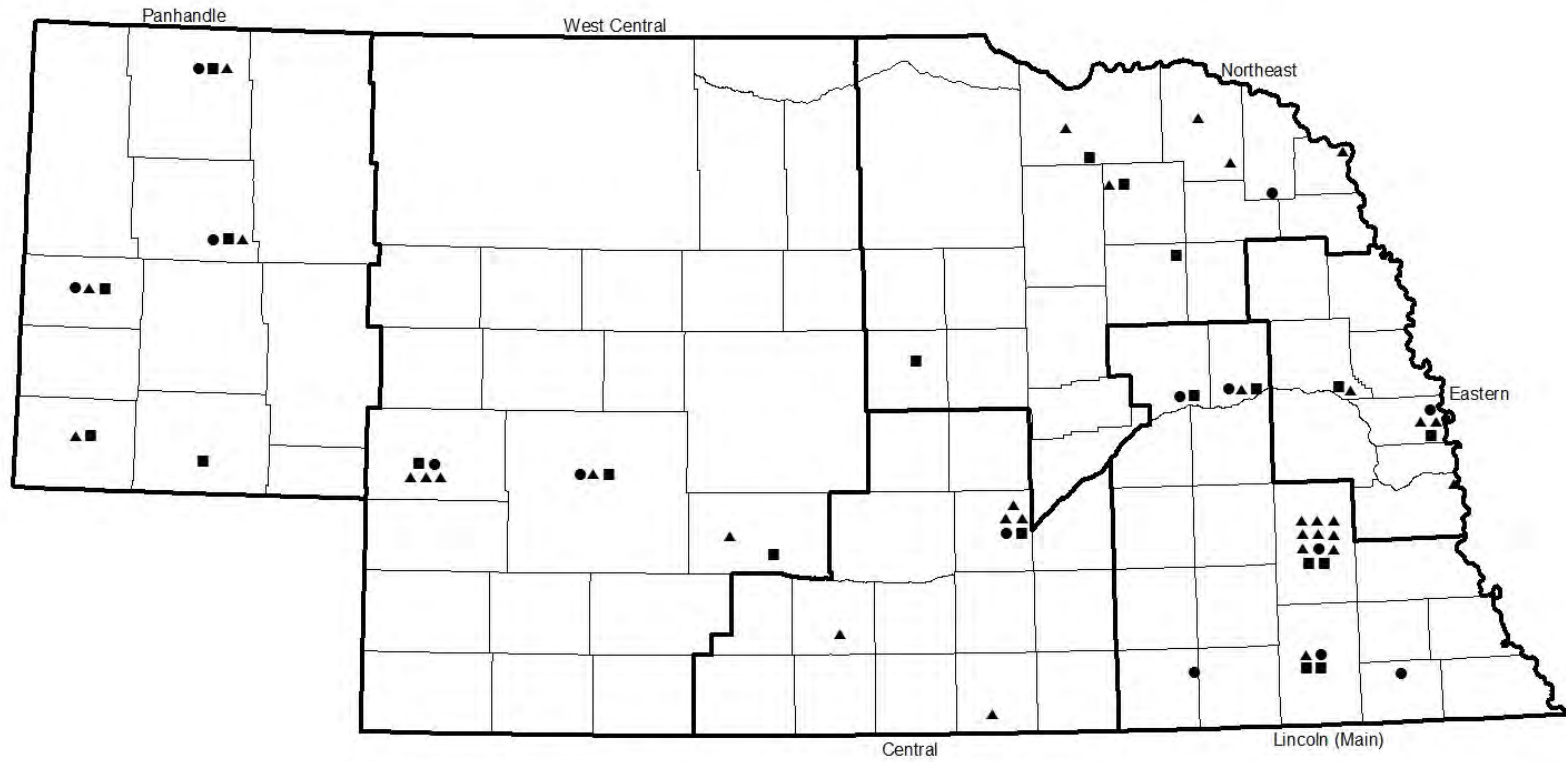
In FY2010, 14 grants totaling \$76,575 were awarded under the category of cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas, and other public use areas within the state. Not only are the 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.

**Recycling**

In FY2010, 33 grants totaling \$1,269,074 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.

A map showing the location of the recipients follows on the next page.

## Litter Reduction and Recycling Grant Program 2010 Grant Awards



■ Public Education	\$547,595	21 grants, including 1 statewide and 1 regional
● Cleanup	\$76,575	14 grants
▲ Recycling	\$1,269,074	33 grants, including 3 statewide and 2 regional
<b>Total</b>	<b>\$1,893,244</b>	<b>68 grants</b>



**Illegal Dumpsite Cleanup Program**

The Illegal Dumpsite Cleanup Program, established in 1997, is a cleanup program which 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 \$130,000 is available annually. The Department is encouraging municipalities, counties, and other political subdivisions to submit applications for the reimbursement of cleanup efforts. In FY2010, the program provided \$60,065 to 6 recipients.

**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 drawn 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 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 10-cent rebate from the \$1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually. In FY2010, the program provided \$74,772 to 11 recipients.

# CHAPTER 6:

## Water Quality Division

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The goal of the Water Quality Division is to protect the surface and groundwater resources in Nebraska. This chapter describes the major programs that the Water Quality Division administers.

### **Petroleum Remediation Program**

NDEQ's activities regarding the Petroleum Remediation Program involve two inter-related program areas:

1. overseeing the **investigation and cleanup** of petroleum contamination resulting from leaking above-ground and underground storage tanks; 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 to determine whether potential contamination exists. After there has been some initial indication that there may be petroleum contamination at a site, NDEQ becomes involved in determining whether more investigation and cleanup is required. The agency determines whether parties who caused the contamination are still 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.

Due in part to the recommendations of a technical advisory committee and legislative requirements, 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. In recent years, 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 generally 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 is 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 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 FY10, 101 orphan sites were activated for investigation and/or cleanup. At the end of FY10, there were 573 orphan sites waiting 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 32 Pay for Performance contracts since the program's inception. Of these projects, nine have been successfully completed, six were terminated prior to completion, and 17 are still in the cleanup phase.

### **Program Statistics**

Since June 1999, through July 16, 2010, 2,336 Tier 1 site investigations have been initiated. Of the 1,816 Tier 1 field investigations completed, 1,027 (57%) were closed, and 789 (43%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 567 Tier 2 investigations have been completed; 404 (71%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, 285 (16%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

The revenue going into the cleanup fund in FY10 was about \$11.4 million. As of June 30, 2010, a total of \$152,939,994 has been disbursed since the program began. During the past fiscal year, NDEQ reimbursed \$3,351,216 to 159 active sites and an additional \$3,329,567 to 142 Tier 1 sites.

The 31 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 (either \$975,000 or \$985,000, depending on the applicable deductible/co-payment amount), the responsibility of funding the remainder of cleanup necessary reverts to the responsible person.

	<b>City</b>	<b>Reimbursed amount as of June 30, 2010</b>	<b>Has Statutory Limit Been Reached?*</b>
Burlington Northern & SF	Alliance	\$975,000.00	yes
Burlington Northern & SF	Alliance	\$972,578.98	yes
Coop firth	Firth	\$975,000.00	yes
Burlington Northern & SF	McCook	\$975,000.00	yes
Corner Service	Bancroft	\$973,000.00	yes
Konecky Oil	Mead	\$975,000.00	yes
Burlington Northern & SF	Alliance	\$973,682.45	yes
Elkhorn Valley Coop	Snyder	\$953,516.14	no
Magers Service	North Platte	\$947,669.57	no
Wortman Motor Co.	Doniphan	\$890,966.27	no
Nu Star Energy LP	Norfolk	\$902,937.57	no
Former Hershey Truck Stop	Hershey	\$875,938.33	no
Cobb Motors Inc	Stuart	\$854,701.19	no
Western Cooperative co.	Alliance	\$850,530.12	no
Neitzel Oil Co.	Springfield	\$843,298.21	no
Ag Valley Coop	Bartley	\$841,042.87	no
IBP ATV(at the verticals)	Dakota City	\$813,044.35	no
Burlington Northern & SF	Alliance	\$802,363.63	no
Unocal Corporation	Ogallala	\$785,586.09	no
Conoco Phillips	Sidney	\$792,276.67	no
Magellan Pipeline Co	Roca	\$644,851.77	no
Ag Valley Coop	Curtis	\$673,675.57	no
Sinclair Oil Corp.	Grand Island	\$675,079.04	no
Whitehead Oil 33rd A	Lincoln	\$671,166.62	no
Farmers Coop Grain Supply	Trenton	\$656,367.78	no
Leigh Oil Co	Leigh	\$636,956.38	no
Foote Oil Company	Hastings	\$653,198.81	no
Carpenter Oil & Propane	Sterling	\$652,138.61	no
Wymore Oil Co	Wymore	\$618,051.76	no
Lohr Petroleum Co	Columbus	\$615,687.98	no
Former Farmers Coop	Cedar Bluffs	\$607,091.97	no

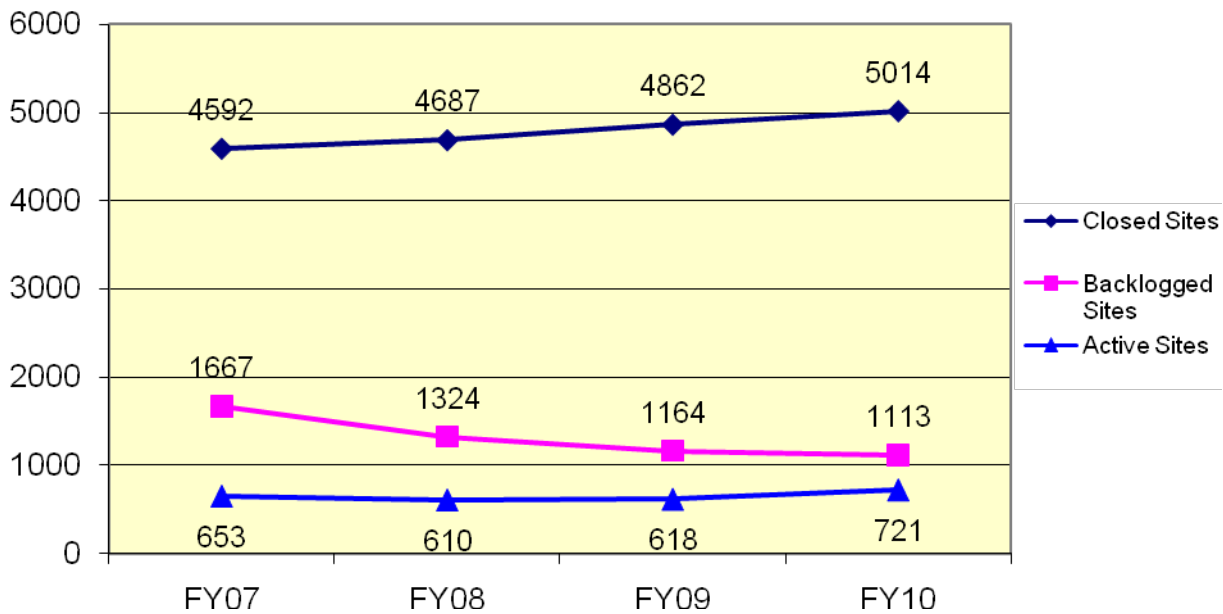
\* Those with a yes indicate that the statutory limit was reached prior to June 30, 2010. The total reimbursed amount may have been reduced due to noncompliance reductions.

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. About 163 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:

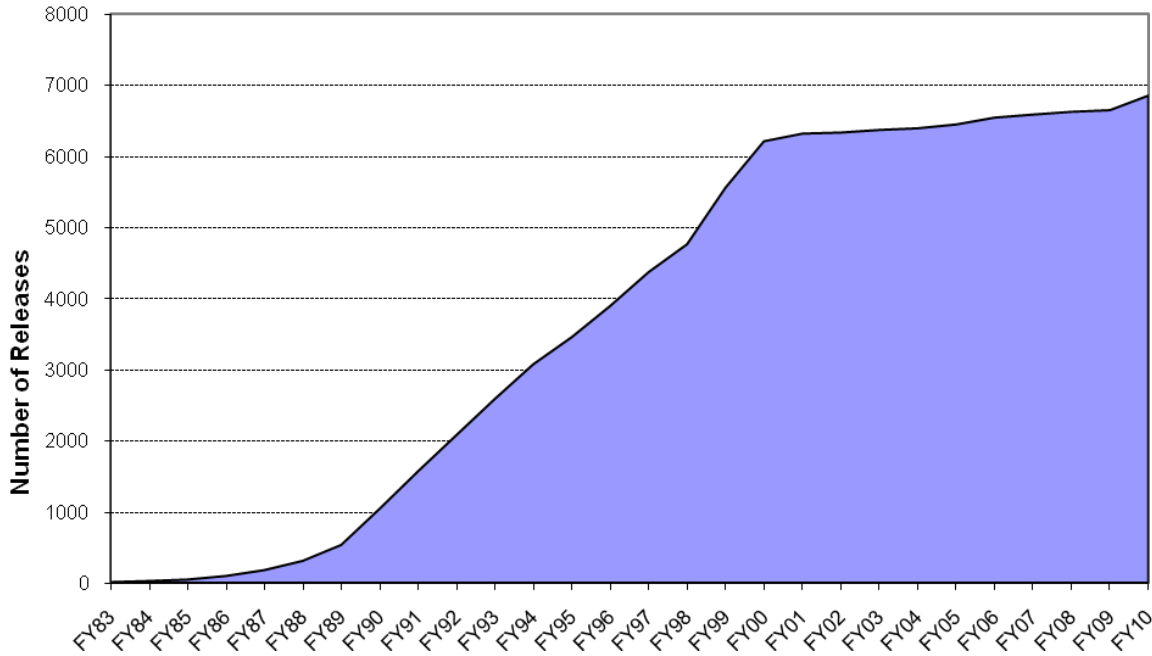
- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary
- **Backlogged Sites:** Sites identified as potentially needing cleanup, but are on a waiting list for further investigation
- **Active Sites:** Sites that are currently being actively investigated or remediated

**Petroleum Remediation trends:  
End-of-Year Totals, FY07-FY10**

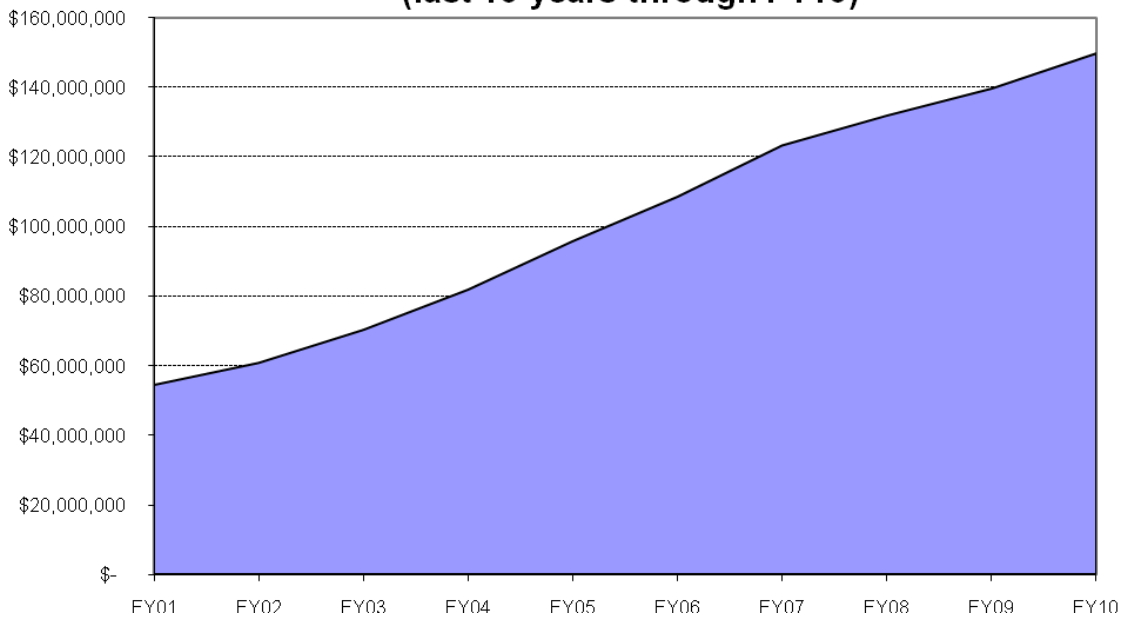


The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.

**Cumulative Release Totals (Through FY10)**



**Cumulative Title 200 Disbursements (last 10 years through FY10)**



## Agriculture Section

The Agriculture Section programs consist of the Livestock Waste Control Program, the Chemigation Program, and the Agricultural Chemical Containment Program.

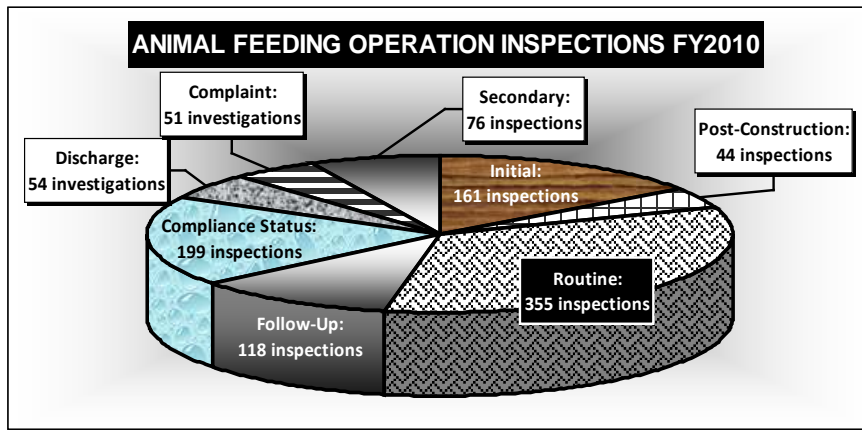
### LIVESTOCK WASTE CONTROL PROGRAM

#### 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 741 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with about 2,000 Medium AFOs. The LWC Program uses inspections, permitting, and periodic monitoring to fulfill this responsibility.

#### Inspections



The LWC Program staff conducted a total of 1,058 livestock waste control inspections and investigations in FY2010 (including complaint and discharge investigations). The chart above illustrates the breakdown by type of inspection.

A short description of each type of inspection 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 LWC Program staff. The reason for this inspection is to determine if livestock waste control facilities (LWCF) 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 LWCF, 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 LWCF, 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 LWCF, 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. Heavy rains in several parts of the state this year prompted many discharge reports that staff investigated.

**Complaint Investigations.** In FY2010, the LWC Program received 71 complaints. When a complaint is received, LWC Program staff will investigate the complaint and may conduct an on-site complaint investigation. During FY2010, Program staff conducted 51 complaint investigations.

**Secondary Inspections.** Secondary Inspections primarily are conducted for training purposes.

**State Permitting Program**

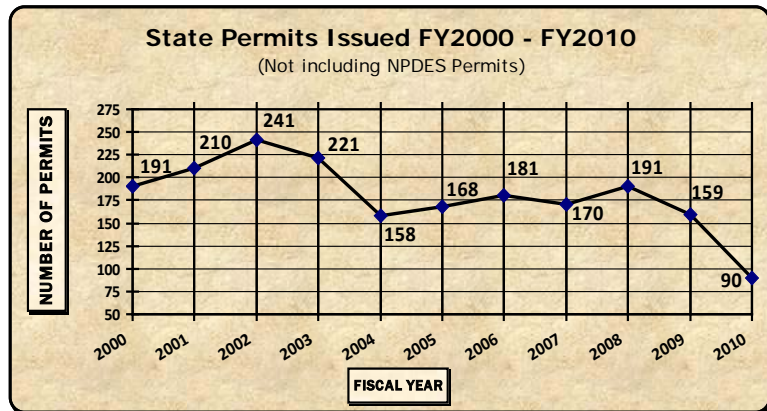
After conducting an initial inspection, the Department may require the AFO to submit an application for a Construction and Operating Permit – the state permitting program for livestock waste control facilities – prior to construction of livestock waste control facilities.

The Department received a total of 68 permit applications and issued 90 permits during FY2010, as shown in the table above. The totals do not include applications received or permits issued for any NPDES permits. The chart on the next page shows the total number of state permits issued for livestock waste control facilities for each year since FY2000.

Construction and Operating Permits – FY2010		
Type of Application or Permit	Applications Received	Permits Issued
New permits	22	24
Modified permits	31	47
Transfer permits	15	19
<b>TOTAL</b>	<b>68</b>	<b>90</b>



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 FY2010, the Department gave approval to 88 AFOs for operation of their new or expanded LWC facilities.



**National Pollutant Discharge Elimination System (NPDES) Permit Program**

The LWC Program also oversees the NPDES permitting program for livestock, issuing coverage under an individual NPDES permits to CAFOs, as well as coverage under a 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 FY2010.

NPDES PERMITS – FY2010		
Type of NPDES Application/Permit	Applications Received	Permits Issued
<b>GENERAL PERMIT FOR OPEN LOTS</b>		
New Coverage	27	29
Modified or Transferred	13	19
Reissued	2	11
<b>SUBTOTAL GENERAL PERMIT:</b>	<b>42</b>	<b>59</b>
<b>INDIVIDUAL PERMIT</b>		
New Coverage	7	11
Modified or Transferred	1	2
Reissued	0	0
<b>SUBTOTAL INDIVIDUAL PERMIT:</b>	<b>8</b>	<b>13</b>
<b>NPDES TOTALS:</b>	<b>50</b>	<b>72</b>

**Fees**

The annual permit fee is assessed on all permitted Large CAFOs and all CAFOs covered under a NPDES permit. The fee is determined based upon the number of head of livestock for which the operation has a permit. In FY2010, DEQ received \$107,552 in annual permit fees from 666 permitted AFOs. In addition, the Department received 54 initial inspection fees, 86 permit application fees and two late payment fees.

General information about the Livestock Waste Control Program, including applications, fact sheets, forms, guidance documents, copies of the NPDES General Permit, Title 130 regulations, and public notices of permit issuance or denial, can all be found on the Department's web site at: [www.deq.state.ne.us](http://www.deq.state.ne.us).

**CHEMIGATION PROGRAM**

The Chemigation program, in cooperation with Nebraska's 23 Natural Resources Districts (NRDs), works to make sure that users of irrigation systems applying fertilizers and pesticides do not contaminate the sources of irrigation water.

The NRDs inspect systems and issue site permits for specific safety equipment that is required to be installed on irrigation systems. Agriculture Section staff occasionally will conduct inspections of the irrigation systems. Last year, the DEQ staff conducted two such inspections. The Chemigation program and the NRDs monitor compliance with the Nebraska Chemigation Act and state regulations.

Chemigation permits for chemigation sites are issued annually, and are reported to the Department on a calendar year basis, rather than by fiscal year. Since permitting began in 1987, the total number of annual permits issued initially followed an upward trend, but leveled off in recent years. In 2009, the NRDs issued 19,539 chemigation permits, slightly more than the 18,331 permits issued in 2008. The NRDs have reported to the Department that, as of September 27, 2010, a total of 8,955 chemigation permits had been recorded. Final permit totals for 2010 will not be available until after December 31.

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 by the University of Nebraska Cooperative Extension. Applicator certifications also are reported on a calendar-year basis. In 2010, the application form for the Chemigation Applicator Certification was redesigned to include the United States Citizenship Attestation Form required of individuals that receive State benefits.

In 2010 to date, 806 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 4,323 applicators. Information about chemigation applicator training dates and certified applicators is available after the first of each year on the Department's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us).

The Department entered into two interagency agreements with the University of Nebraska concerning the Chemigation program. The first intergovernmental agreement is to implement the chemigation annual training program for applicator certification. The second is to develop an internet-based chemigation training program. The internet-based chemigation training program is scheduled to be implemented in 2011.

**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 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 currently is drafting amendments to Title 198. On August 16, 2006, the U.S. Environmental Protection Agency (EPA) published final regulations that required secondary containment structures and loadout facilities for bulk storage of fertilizers and pesticides. The Department and the Nebraska Department of Agriculture (NDA) asked EPA to review the existing Title 198 regulations to determine equivalency with the EPA regulations. The Department has received the EPA review and comments, and developed modifications to Title 198 to address any deficiencies. The modified Title 198 will be presented to the Environmental Quality Council at the Council's December 2010 meeting.

Also, on June 25, 2010, the Department and NDA modified the existing cooperative agreement to clarify the procedure for coordinating inspection activities between the two agencies. The modified agreement enhances the communication between the agencies and provides specific protocols to be followed when investigating Title 198 complaints. In FY2010, Agriculture Section staff conducted a total of 9 inspections of chemical containment systems.

## Surface Water Assessment Programs

The Surface Water Unit collects physical, chemical, and biological water quality samples from streams and lakes, implements surface water improvement projects, and prepare surface water quality reports. Several monitoring programs collect stream and lake samples throughout the state; however, most monitoring is focused in two or three river basins each year in conjunction with a rotating basin monitoring strategy. 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 river basins in the state are intensively monitored. 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:

- 2010 -- Elkhorn and Missouri Tributaries River basins;
- 2011 -- White River-Hat Creek, North Platte and South Platte River basins;
- 2012 -- Big Blue, Little Blue and Republican River basins;
- 2013 -- Middle Platte and Loup River basins;
- 2014 -- Niobrara River basin; and
- 2015 -- Lower Platte and Nemaha River basins.

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 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 (NRDs), Nebraska Public Power District (NPPD), U.S. Army Corps of Engineers (USACE), Nebraska Game and Parks Commission, University of Nebraska-Lincoln, Central District Health Department, the City of Carter Lake, and U.S. Geological Survey.

A description of surface water programs conducted during 2010 follows.

**Ambient Stream Monitoring Program** — This program has a network of 97 fixed stations located on main stem and tributary streams across the state. The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 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 some herbicides and heavy metals. During 2010, a total of 1,160 water samples were collected for this program.

**Basin Rotation Monitoring Program** — The Basin Rotation Monitoring Program targets one to three river basins each year for intensive monitoring. In 2010, a total of 32 stream sites and 17 lake beaches in the Missouri Tributaries and Elkhorn Basins were sampled weekly from May through September. Both the lake and beach sites were sampled for the *E. coli* bacteria and the field measurements including temperature, pH, oxygen, conductivity and turbidity while the streams were also analyzed for physical/chemical parameters including the nutrients and some 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. During 2010, 704 stream samples plus 374 lake samples were collected for a total of 1,078 samples.

**Lake Beach Bacteria and Toxic Algae Monitoring** — *E. coli* bacteria and toxic blue-green algae (microcystin toxin) were monitored weekly during 2010 at 48 beaches on 45 different lakes during the recreation season from May through September. Over 1,000 samples were assessed for each parameter. Especially targeted were the major public lakes with designated swimming beaches. The microcystin toxin was added to the existing beach bacteria program in 2004 following the deaths of several dogs after they drank water from lakes with blue-green algae blooms. Microcystins are the most common toxins released by blue-green algae. Several monitoring partners assisted NDEQ in collecting these samples including NRDs, Game and Parks, NPPD, the Central District Health Department, the City of Carter Lake and USACE. The analysis procedures provide a quick-turnaround time, allowing the samples collected on Mondays to be posted on the NDEQ web-page by Thursday afternoon, and prior to each weekend's recreation activities. Levels of microcystin above 20 ppb resulted in public health alerts to be issued and signs posted recommending full body contact activities in the water be avoided. During 2010 health alerts were issued on six different lakes and the amount of time the lakes were on alert ranged from two to seven weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site [www.deq.state.ne.us](http://www.deq.state.ne.us).

**Fish Tissue Monitoring Program** — The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2010, a total of 50 fish tissue samples were collected from 25 streams and 25 lakes across Nebraska for analysis of pollutants. This compares to 62 samples from 14 streams and 34 lakes in 2009. 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 2009 data is expected to be completed by the end of 2010 and the 2010 data report is anticipated near the end of 2011.

The report "Findings of the 2006 to 2008 Regional Ambient Fish Tissue Program in Nebraska" and current list of advisory sites can be found at DEQ's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us). The report is located at Publications/Surface Water Monitoring/Reports. The direct URL is: [www.deq.state.ne.us/Publications/Pages/WAT155](http://www.deq.state.ne.us/Publications/Pages/WAT155). A summary of fish advisory information is located at DEQ's web site by going to the Topics of Interest category and selecting Fish Consumption Advisories; the direct URL is: [www.deq.state.ne.us/SurfaceWater/Pages/FCA](http://www.deq.state.ne.us/SurfaceWater/Pages/FCA).

Currently, Nebraska has 71 state-issued advisories. The primary contaminants of concern in fish tissue in Nebraska and most other states are mercury and polychlorinated biphenyl compounds (PCBs). Advisories are based on an average consumption rate of eight ounces of fish per week for an average-sized adult over a 70-year lifetime that would result in an additional risk of one in 10,000 for cancer or other health problems. 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 aquatic life populations and involves a unique randomized sample design that allows water quality status and trend assessments to be determined with a known level of confidence. During 2010, a total of 34 stream sites were sampled in the Elkhorn River and Missouri River Tributary basins. Since 1994, this program has been conducted using "state-of-the-art" fish, macroinvertebrate, and habitat sampling protocols and ecoregion-based reference sites.

Sampling is conducted in conjunction with the basin rotation monitoring strategy. Data from 2004 to 2008 were recently assessed and 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. A report entitled "Nebraska Stream Biological Monitoring Program 2004-2008" is near completion and will be available on DEQ's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us) located in Publications/Water Quality/Reports.

**Lake Monitoring Program** — Lake monitoring is currently conducted on 44 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 2010, a total of 220 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.

In 2006, NDEQ began partnering with the Center for Advanced Land Management Information Technologies (CALMIT) at the University of Nebraska-Lincoln on a remote sensing project. Remote-sensing techniques are increasingly being used to collect valuable, often unique information about water resources. In general terms, remote sensing involves gathering data and information about the physical "world" by detecting and measuring signals composed of radiation, particles, and fields emanating from objects located beyond the immediate vicinity of the sensor device(s). For lake assessments, aircraft flyovers are used to remotely sense and record the unique spectral reflectance of chlorophyll (which is a pigment produced by all plant growth in a lake) and phycocyanin (a pigment produced by blue green algae). The spectral reflectance data is then transferred to a map-like image of the lake to illustrate the presence and location of algae growth, and specifically blue-green algae. Remote sensing has been utilized to assess the magnitude, extent, and duration of algae blooms and document potential problems with blue green algae. Remote sensing data has also been used to evaluate the effectiveness of techniques implemented to reduce the growth of algae.

**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 24 fish kills were reported between July 1, 2009 and June 30, 2010. This compares to 14 during the same time period the year before. Most of the fish kills (16) were attributed to low dissolved oxygen levels from winter/summer kill and flooding. Four were attributed to disease/parasite issues, two were due to improper algaecide application, one to reservoir water release and abrasion and one was caused by an ammonia fertilizer release.

Between July 1, 2009 and June 30, 2010 the surface water unit received 21 notifications of complaints concerning surface water issues. The agency has incorporated a new electronic complaint notification tracking system so these numbers are non-comparable to past numbers. While many of these 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 2008 Integrated Report is available on NDEQ's web site [www.deq.state.ne.us](http://www.deq.state.ne.us), by selecting Publications, then selecting Water Quality. Or, the report's direct URL is: <http://www.deq.state.ne.us/Publica.nsf/Pages/WAT129>. The draft 2010 Integrated Report was submitted to EPA Region 7 in March. EPA approval was pending as of November 19, 2010. The draft information can be found in a Feb. 4, 2010 NDEQ News item on DEQ's web page; the direct URL is: <http://www.deq.state.ne.us/press.nsf/pages/NEWS100204>.

**Nebraska Water Monitoring Programs Report** — A report summarizing the monitoring programs performed or required by NDEQ called the “Nebraska Water Monitoring Programs Report” was prepared again in 2009. 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 2008 and 2009 Nebraska Water Monitoring Programs Reports are available on the NDEQ's web site [www.deq.state.ne.us](http://www.deq.state.ne.us), by selecting Publications, then selecting Water Quality. Or, the report's direct URL is: <http://www.deq.state.ne.us/Publica.nsf/pages/WAT141>.

**Big Blue River/Tuttle Creek Lake Interstate Targeted Watersheds Grant Project** — In April 2006, the U.S. EPA awarded an \$810,000 Targeted Watersheds Grant to NDEQ on behalf of the Big Blue River/Tuttle Creek Lake Watershed Partners. This was one of 12 grants awarded nationally to outstanding watershed coalitions as part of the EPA's third round of Targeted Watersheds grants (TWG). This watershed partnership involves a wide array of agricultural and water quality organizations in Nebraska and Kansas that have been working together for many years to coordinate monitoring, educational outreach, installation of Best Management Practices (BMPs), and improve water quality in the Big Blue River Basin and Tuttle Creek Lake. Tuttle Creek Lake is a large impoundment on the lower Big Blue River near Manhattan, Kansas; however, three-fourths of the lake's drainage area is in Nebraska. This project addresses multi-jurisdictional water quality problems involving excessive runoff of sediment, nutrients, herbicides, and bacteria. Most project activities will be focused in a critical four-county area near the Nebraska-Kansas state line. Much pre-project water quality data has been collected and presently, conservation measures are being installed, including no-till farming systems and riparian buffer strips. Cost share payments are being used to encourage and support landowner participation. Follow-up monitoring was conducted in 2010 with weekly samples from 13 sites April through September and run-off data was collected from 4 sites during periods of significant precipitation. This data will be used with models to assess the effectiveness of the BMP's implemented during this program.



## 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, [www.deq.state.ne.us](http://www.deq.state.ne.us). (Select Publications, then select Water Quality, then select 2009 Groundwater Quality Monitoring Report. Or, the report's direct URL is: <http://www.deq.state.ne.us/Publications/Pages/WAT150>). Statistics and maps showing nitrate-nitrogen groundwater monitoring results as well as four of the 42 pesticides sampled in the state are presented. The report uses data from the Quality-Assessed Agricultural 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, [www.dnr.state.ne.us](http://www.dnr.state.ne.us).

### Hydrogeologic Studies and Reviews

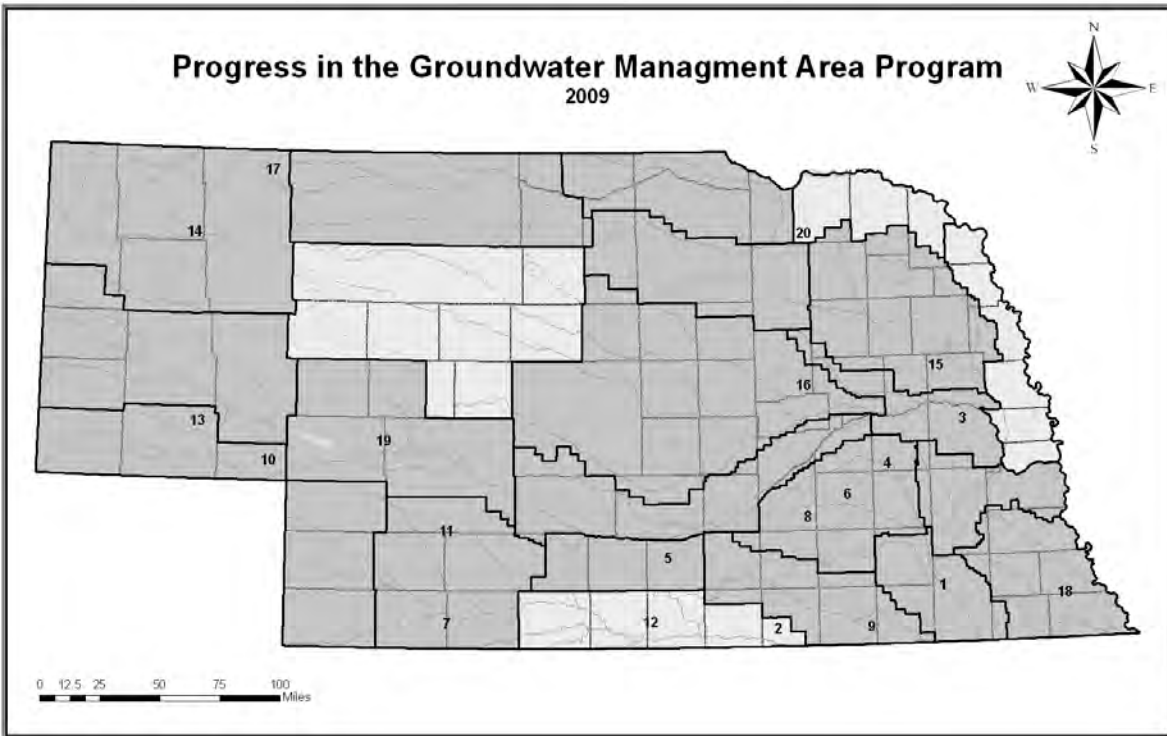
The Groundwater Unit is responsible for hydrogeologic review of various Department projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks and surface petroleum 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 Unit performs reviews 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(s) (NRDs) 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) and existing GWMAs (shaded areas).





NDEQ GWMA Studies

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1. Beatrice/DeWitt, 1988          | 11. N. Middle Republican, 1995       |
| 2. Superior, 1988                 | 12. Lower Republican, 1996 - 97      |
| 3. Fremont, 1988                  | 13. E. Cheyenne Co., 1996            |
| 4. E. Upper Big Blue, 1989        | 14. Box Butte Co./Mirage Flats, 1998 |
| 5. Wilcox/Hildreth, 1989          | 15. S. Lower Elkhorn, 1999           |
| 6. York/Polk Co., 1990            | 16. E. Lower Loup, 2000              |
| 7. Red Willow/Hitchcock Co., 1990 | 17. E. Sheridan Co., 2001            |
| 8. W. Upper Big Blue, 1991        | 18. Humboldt, 2001                   |
| 9. E. Little Blue, 1992 - 1994    | 19. Keith-Lincoln Co., 2002 - 2003   |
| 10. Deuel Co., 1992               | 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 is a category that has never been allowed in Nebraska.

Two 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. One Class I well is issued to the Crow Butte Resources uranium mine near Crawford and the other to the City

of McCook. Crow Butte has submitted an application for an additional Class I well at their current operation location.

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 3780 Class III wells as of October 1, 2009.

Injection wells not included in the other specific classes are considered to be Class V wells. The EQC revised *Title 122 - Rules and Regulations for Underground Injections and Mineral Production Wells* in 2002, prohibiting the following types of Class V wells: agricultural drainage wells, untreated sewage waste disposal wells, cesspools, radioactive waste disposal wells, motor vehicle waste disposal wells, and abandoned drinking water wells used for disposal of waste. The Underground Injection Control program is working to close these types of existing waste disposal systems. A common example of Class V wells would be those associated with heat pump systems.

### **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. Eighty-eight community water supplies have approved Wellhead Protection Plans.

## 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's latest triennial review was completed in FY2009 with the final proposed revisions being heard and approved by the Environmental Quality Council on November 13, 2008. Governor Heinemann approved these revisions and they became the official surface water quality standards regulation for the State of Nebraska on March 22, 2009. These revised Standards were submitted to EPA Region VII for approval under the Clean Water Act.

EPA notified NDEQ on September 30, 2009 that the majority of a Water Quality Standards revision package submitted in 2006 was approved under the Clean Water Act. The provisions not approved involve nutrient criteria for lakes and reservoirs. EPA stated in their approval letter that they would defer their decision on these provisions until additional scientific work was completed that would either justify them or form the basis for a revised proposal for nutrient criteria. This work is being conducted under contract with the University of Nebraska.

The standards are available on the department's web page at [www.deq.state.ne.us](http://www.deq.state.ne.us). In addition to developing the standards, the Planning Unit develops and implements procedures for applying the standards to surface water quality programs, such as NPDES permits.

### Section 401 Water Quality Certification

The 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 *Title 117 - 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. Three hundred eighteen Section 404 permit reviews were conducted during FY2010.

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 ux., 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 Title 117.

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. To maintain consistency between how NDEQ treats projects involving wetlands impacted by the court ruling and those proposed for jurisdictional wetlands, a series of checklists was developed. The checklists enable project sponsors to know what information they must provide, and allow NDEQ to deliver timely and consistent decisions on these wetlands. The checklists also provide documentation of the decision-making process for each project. Project sponsors are encouraged to contact NDEQ before implementing their project so that the plans can be discussed in light of Title 117 requirements.

### **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 Title 117. 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 the beneficial uses assigned to them via Title 117. 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 2008 Integrated Report is available on NDEQ's web site [www.deq.state.ne.us](http://www.deq.state.ne.us), by selecting Publications, then selecting Water Quality. Or, the report's direct URL is: <http://www.deq.state.ne.us/Publications/Pages/WAT129>. The draft 2010 Integrated Report was submitted to EPA Region 7 in March. EPA approval was pending as of November 19, 2010. The draft information can be found in a Feb. 4, 2010 NDEQ News item on DEQ's web page; the direct URL is: <http://www.deq.state.ne.us/press.nsf/pages/NEWS100204>.

In 2010, the Department prepared and submitted an *Integrated Report Category Change for Waters in the Big Blue, Lower Platte, and Niobrara River Basins Impaired by Selenium* to EPA Region 7. This report documents the natural occurrence of selenium in the basins' surface and groundwater and suggests selenium impairments in these basins be placed in category 4c (impaired but not by a pollutant) in the 2012 Integrated Report.

EPA approved TMDLs for the Elkhorn River Basin, Missouri Tributaries Basin, and Big Indian Reservoir on September 29, 2009. A TMDL for Mud Creek in the Loup River Basin was submitted to EPA and is awaiting approval. TMDLs in the draft stage for 2011 include the North Platte River Basin, Middle Platte River Basin and Conestoga Reservoir in Lancaster County.

### **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 this program, the department 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. Support for local awareness and demonstration projects has been reduced. Prioritization of eligible projects and activities will be refined.

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." Nonpoint source monitoring activities conducted during 2009 included investigative water quality evaluations, detailed watershed assessments, and effectiveness evaluations of implemented nonpoint source management measures.

The Nonpoint Source Management Program provides Section 319 grants to local sponsors of eligible projects in the following categories:

- 1) Large Competitive Projects (generally <\$300,000);
- 2) Small Projects Assistance (<\$15,000);
- 3) Community Lakes Restoration Assistance (negotiated);
- 4) Urban Run-off Management Assistance (<\$75,000);
- 5) Wellhead Protection Area Management Assistance (negotiated)

During 2010, 40 projects were ongoing among three of the five grant categories. These included 25 large competitive projects (totaling \$6,280,745), nine small projects (\$106,163), nine community lakes restoration projects (\$281,315), no urban run-off management projects and no wellhead protection area management assistance projects.

New projects funded by the Department during 2010 included 12 large competitive projects (totaling \$2,137,005). A total of 168 large projects have been funded through Section 319 grants since the beginning of the program in 1990. Of these, 98 have addressed surface water, 46 have addressed groundwater and 24 have focused on both surface water and groundwater problems.

### **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. Grants are given to units of government, education institutions, and non-profit organizations to carry out activities that address drinking water quality, quantity, security, or education are eligible for grant funding. To date, Source Water Protection funds have been distributed to 47 individual entities to complete 61 separate Source Water Protection projects throughout the state. In 2010, Source Water Protection funds were distributed to the following eight entities: Village of Allen, City of Beatrice, The Groundwater Foundation (2), The Hastings Museum of Natural and Cultural History, City of Hickman, Lower Big Blue Natural Resources District, City of Seward, and the Upper Niobrara White Natural Resources District. The total amount available in SFY2010, including unexpended funds from prior funding years was \$150,000.

### **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](http://www.epa.gov/storet). During FY2010, 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 Engineering Management

### Wastewater Construction Permit Program

The Wastewater Section administers the Department's construction permit program for new or modified wastewater works built in the state. Plans and specifications for municipal, industrial, and commercial wastewater facilities are reviewed by the Section's engineering staff to make sure that the facilities are designed to protect the public health and the environment from the effects of improperly handled or treated wastewater.

The State'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 design standards are updated periodically to keep Nebraska consistent with changes in national standards. The State's design standards are written to maintain 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 sanitary sewer systems and wastewater treatment facilities. It requires that Operation and Maintenance Manuals be prepared by utilities that describe the routine and emergency procedures that need to be followed by utility staff to assure that reliable sewer service is provided to the public. Title 123 also contains rules for the proper abandonment of wastewater facilities that have been removed from service. The abandonment rules are intended to protect the public from the threat of unsafe conditions or public health hazards.

For FY2010, a total of 175 wastewater projects were submitted to the Department for review and approval. Considerable time was spent working with communities that needed to upgrade their wastewater treatment facilities. The section also met with representatives of food processing industries, power generating plants, ethanol plants, and other industries to assure that they properly treat and dispose of their wastewater.

Engineers from the Department's Wastewater Section met with representatives of the City of Omaha on a monthly basis during 2009-2010 to discuss Omaha's plan to separate their combined sewer system. Omaha's project is expected to have about 80 separate construction projects over a 15-year period. Each of these individual projects will be submitted to NDEQ for review and approval. Engineers from the Wastewater Section contributed to the Department's review of the Long Term Control Plan that Omaha was required to prepare. The plan was finalized by Omaha and approved by the Department earlier in 2010.

### 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 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. As of October 2010, the wastewater operator certification program has 868 certified operators with municipal certificates and 83 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 2012. The Department has contacted a total of 229 facilities that may be eligible for the exemption and, of these, issued four-year exemptions to 199 facilities.

In 2010, the Department provided one half-day exam preparation class for operators or operator applicants, several Discharge Monitoring Report training sessions, and seven operator certification examination sessions. Testing of municipal and industrial wastewater treatment facility operators will continue in FY11.

### **Onsite Wastewater Treatment Facilities**

The onsite wastewater program covers septic tanks, holding tanks, small lagoons, and other engineered wastewater treatment systems typically not connected to a municipal wastewater treatment system. The majority of these systems are for single households, although there are onsite systems that provide wastewater treatment for multiple houses (these systems are sometimes called cluster systems), churches, camps, a variety of establishments (such as restaurants, butcher shops, and wineries), ethanol plants, 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. The Act was amended in 2007 by LB333, which provided for application fees for permits and subdivision approvals. LB 333 also 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 also amended, effective December 26, 2007, to incorporate the new fees.

The program focuses on protecting surface and groundwater in the area of proposed onsite systems through the use of standardized design requirements, the certification of onsite professionals, review of plans for subdivision development, and review of plans and permitting of 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, animal housing or veterinarian clinics, equipment shops, hair salons, water treatment facilities). 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 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 qualified and certified professionals who understand Title 124 and the proper practices of their trade.

A certification by examination is required for professionals to obtain initial certification. A total of 12 hours of approved continuing education in the two-year certification period is required for certificate renewal. Examinations for certification began in July of 2005. The Department has administered 25 exam sessions so far in 2010, and has held 158 exam sessions and administered nearly 1700 exams since the certification program began. As of October 2010, a total of 551 professionals have renewed their certificates or been certified by exam. Some professionals obtain certification in multiple categories. All current certificates expire December 31, 2011, unless renewed on or before that date.

The registration requirement provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, through September of 2009, over 10,000 systems have been registered. Of these, there were 1340 onsite wastewater treatment systems registered in FY10.

NDEQ has cooperative agreements with other governmental agencies (state and local) to help implement and coordinate the program. The government inspector fee waiver provision in LB333 helps with implementation locally. There are currently 20 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. NDEQ provides information to the public, industry practitioners, and local governments on the regulations for onsite systems through telephone calls, email, direct mail, meetings, and educational seminars. Staff meet with local government officials as well as providing compliance assistance to developers and their onsite professionals by discussing with them the subdivision requirements, necessary before any construction, and waste management plans and alternatives for subdivisions and housing developments located where municipal sewer systems aren't available.

Program staff received and responded to 90 complaints in FY10 and resolved a total of 84 complaints, which includes both old and new complaints. During this same time period, 32 Notices of Violation were issued, a request for a hardship certificate was denied, one certificate was revoked for non-compliance, an Emergency Order was issued to stop a surface wastewater discharge in a children's play area, seven cases were forwarded for enforcement action (NDEQ Administrative Order or request for enforcement to the Nebraska Attorney General), and program staff participated in two enforcement hearings.

The Private Onsite Wastewater Treatment System Advisory Committee advises the Department on administration of the Act and proposed rules and regulations. Title 124 was last amended in 2007 to increase the late registration fee, at the recommendation of the Advisory Committee, and to establish the application fees for permits and subdivision approvals to help cover the direct and indirect costs of administering the program, as required by LB 333.

Additional changes are being considered at the committee's recommendation. These potential changes deal with an endorsement provision and allowing for distance education for continuing education. The endorsement provision would provide for endorsement by examination for properly qualified certified installers to design mound systems. Mound systems are typically required in high ground water areas and currently require an engineer design and permit. Title 124 currently requires classroom based continuing education. A change to allow distance type continuing education could significantly enhance the educational opportunities for onsite professionals (reduced travel and related expenses, schedule on their own time schedule

with less impact on their business time). On-site professionals must obtain 12 contact hours of continuing education in the two-year certification cycle in order to renew their certification.

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 onsite systems. This allows the Department more time to focus resources on the certification of qualified professionals, education, complaint response, work with local governmental entities to address onsite wastewater issues, review of proposed subdivision developments, and review of permit applications which may include large systems or systems that receive non-domestic wastes.

Department staff review construction/operating permit applications for systems that do not meet requirements for Authorization by Rule. Title 124 also provides for Department approval of subdivisions prior to construction which contain lots less than three acres where onsite wastewater treatment is proposed. In the past year, the program received 29 applications for construction/operating permits and 10 applications for subdivision review and approval. The subdivision applications were for a total of 71 lots subject to approval.

Program staff work with many other organizations, including local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association (NOWWA), the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, 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. NOWWA has held annual conferences and produced other training seminars since its inception in March 2001. UNL Cooperative Extension has continued to develop and deliver a variety of training and continuing education programs. So far in 2010, program staff have reviewed and approved a total of 22 programs offering 170 professional development hours for continuing education. A schedule of continuing education programs is posted, along with other Onsite Program information, on the Onsite Program page on the Department website.

Staff also gave extra effort during FY10 to the further development of the Onsite Program webpage. New or revised Fact Sheets on permitting, system registration, professional certification, continuing education and subdivision review with links to relevant forms and documents have been provide to allow a quick and easy way for certified professionals, the public, and others to access, view, download, and print information about the Onsite Program. The webpage has been an unqualified success as it has proven to be a convenient way to access timely and relevant information about onsite wastewater issues affecting Nebraska citizens. An example of this occurred this past summer as the Onsite program provided information on the webpage directed to those affected by flooding about the signs to look for when assessing damage to septic systems.

## Water Permitting Programs

The Wastewater Section administers two permitting programs that regulate point source dischargers of water pollutants:

- 1) The National Pollutant Discharge Elimination System (NPDES), and
- 2) The Nebraska Pretreatment Program (NPP).

Activities include issuing permits to control pollutants in wastewater discharges and monitoring compliance with the permits and other applicable regulatory requirements of the programs.

The NPDES program 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. The Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

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. The "General Permits" category includes discharge authorizations issued to groundwater remediation sites, storm water discharges, and dewatering/hydrostatic testing.

### NPDES Permits

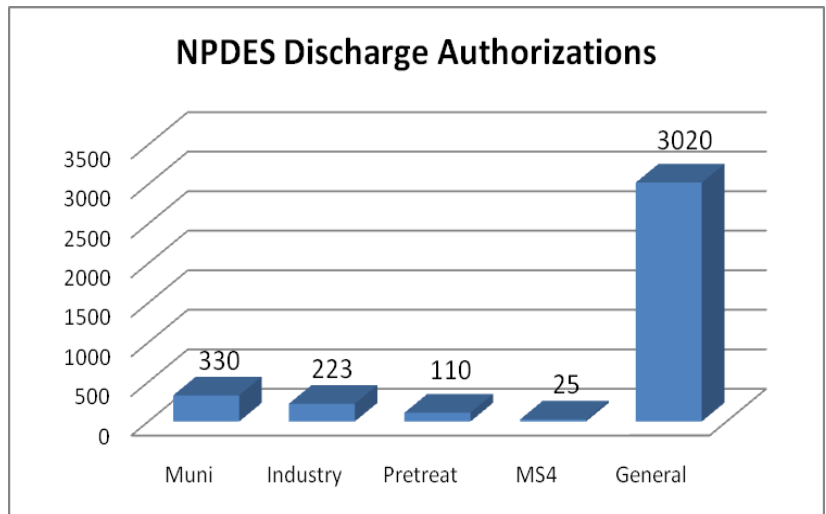
Most NPDES permits limit the discharge of pollutants by establishing effluent limitations for specific pollutants such as Carbonaceous Biochemical Oxygen Demand, total suspended solids, and ammonia among others. The permittee is then responsible for testing their wastewater discharge to ensure that the 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, 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. A statewide general permit for small MS4s was issued January 1, 2006, and currently covers 10 cities. Another 12 urbanized areas were permitted in 2005. The cities of Lincoln and Omaha were permitted in 2002 and 2003, respectively, bringing the total number of MS4 permittees to 24. On July 29, 2009, Washington County was designated as the 25th MS4 requiring coverage under an MS4 permit. The Construction Storm Water General Permit was reissued January 1, 2008. The draft of the Industrial Storm Water General Permit will be available for comment in the fourth quarter of 2010. This permit is planned for issuance January 1, 2011.



There are 3020 active facilities authorized to discharge under other general permits, 663 facilities with discharge authorizations under individual permits (municipal, industry and pretreatment), and 25 municipal storm water permits (MS4). The chart titled "NPDES Discharge Authorizations" provides a summary of this information. The general permits include 1556 active authorizations under the new construction storm water permit, 119 dewatering/hydrostatic testing, 1300 industrial storm water, and 45 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.

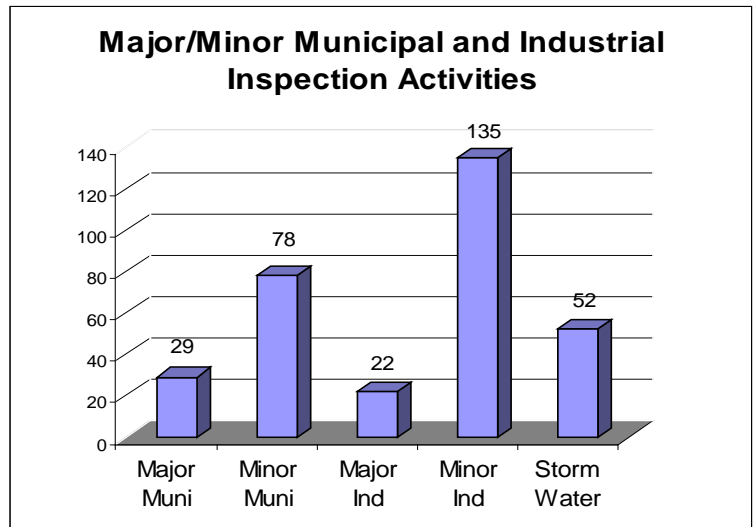
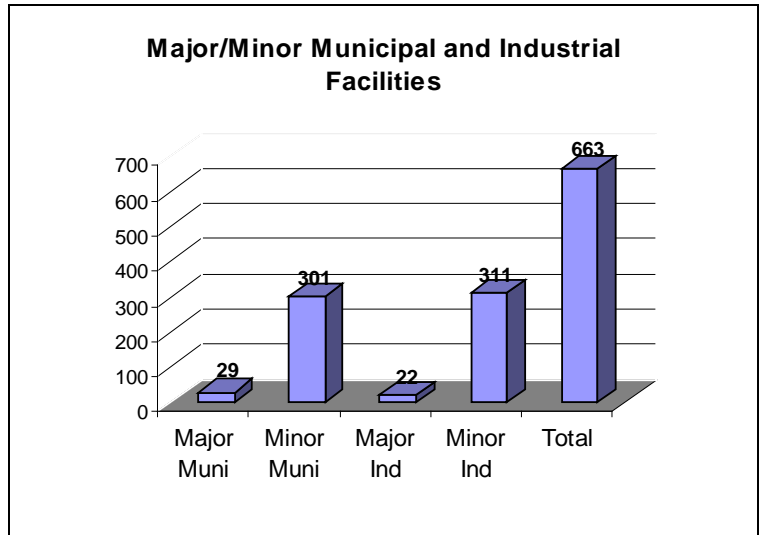
The Section verifies compliance through a variety of activities including reviewing discharge monitoring reports, following up on complaints and incident reports, conducting on-site inspections, and performing effluent monitoring inspections.

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 316 total inspections in Fiscal Year 2010. 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.

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.

**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. 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 for January 1, 2011. Dakota County, South Sioux City, and Dakota City will also be covered under this state wide permit when it becomes effective.

Nearly \$2.4 million in grant funds was awarded in FY2010 to MS4 permittees. This grant, established by Legislative Bill 1226 in 2006, is awarded annually to the development and 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 Draft NPDES General Permit for Storm Water Discharges from Industrial Activity, is available on the Department's website and is scheduled for issuance on January 1, 2011.

### **Combined Sewer Overflows**

The Combined Sewer Overflow (CSO) program addresses those municipalities that have combined storm water and wastewater sewer systems. These systems were built prior to the existence of secondary sanitary wastewater disposal standards. When storm or snow melt run-off 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 cities of Omaha and Plattsmouth have combined sewers that are subject to storm-induced bypasses.

The City of Omaha 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 requires Omaha to complete the long-term control plan projects by 2024. The projects included in the plan span 15 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 has finalized and submitted the Long Term Control Plan for their CSO. Final schedules were included in the City's modified NPDES permit in 2009. Plattsmouth has committed to separating their storm and sanitary sewer lines. Separation projects began on July 1, 2010 and the City's re-issued permit, effective October 1, 2010, includes a schedule for completion of this work in the next five years.

### **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 Kansas City, KS; however, the Department regulates the disposal of municipal and industrial sludges, both through the use of NPDES permit requirements and through the application of the NDEQ *Title 132 - Integrated Solid Waste Management Regulations*.

### **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.



## Financial Assistance Section

The 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 21 years of activity, the Fund Net Asset has reached \$210 million. Since its inception, the program has made loans totaling \$326 million to 195 municipalities. The American Recovery and Reinvestment Act (ARRA or stimulus), passed by the federal government on February 17, 2009, provided \$20,045,000 extra funding for the CWSRF program during FY2009 and FY2010. The added stimulus funding did not require the 20% state match, but did require that 50% of the ARRA funds be provided as principal forgiveness (similar to the small community grants) and that 20% of the funds go to green infrastructure. Almost all of the green infrastructure funds were allocated to complete retention lagoons (a categorically qualified green infrastructure project). ARRA funds were fully obligated to projects before the February 17, 2010 deadline. The following table shows the CWSRF Sources and Uses of Funds for the 2010 Intended Use Plan.

FY2010 IUP CWSRF Sources and Uses of Funds

<b>SOURCES OF FUNDS</b>	
Cash from Recoveries	1,887,865
EPA 2010 Capitalization Grant	12,122,400
NIFA/CWSRF Series 2010 B Match Bonds	1,939,584
Administration Fund Cash Match	484,896
December 15, 2009 Loan Payments	6,500,000
June 15, 2010 Loan Repayments	7,500,000
1-Year Projected Interest on Fund Balance	1,000,000
<b>TOTAL</b>	<b>31,434,753</b>
<b>USES OF FUNDS</b>	
Administration Expense	484,896
Match Bond Payment	2,000,000
Available to Loan	28,949,849
<b>TOTAL</b>	<b>31,434,753</b>

The CWSRF entered into 20 binding commitments and four loan amendments to existing funded communities which provided financial assistance to 20 new wastewater treatment projects totaling \$52,732,502. Twelve of the projects funded received \$16,239,991 in ARRA funds in FY2010. The program disbursed \$28 million for wastewater treatment project construction costs. The following chart shows the municipalities that received Clean Water State Revolving Fund loans in FY2010.

### Municipalities Receiving CWSRF Loans in FY2010

Municipality	Loan Date	Loan Amount	Prinicapal Forgiveness or Small Community Grant Amount
Malcolm ARRA	7/14/2009	750,000	250,000
Sidney ARRA	7/14/2009	4,125,000	1,375,000
Chadron ARRA	7/15/2009	3,000,000	1,000,000
Tekamah ARRA	7/20/2009	1,303,500	434,500
Dorchester ARRA	7/22/2009	774,750	258,250
Gosper Co. SID#1 amd#1	8/01/2009	734,961	
Western	8/14/2009	72,500	72,500
Cedar Bluffs ARRA	8/17/2009	750,000	250,000
Lincoln	8/27/2009	5,000,000	
Lincoln ARRA	8/27/2009	3,750,000	1,250,000
LPN-NRD (Lake Wanahoo amd#1)	9/02/2009	6,000,000	
South Sioux City ARRA	9/30/2009	1,725,000	575,000
Beatrice	10/08/2009	113,075	
Laurel	10/08/2009	160,000	
Creighton	12/01/2009	225,000	
Omaha	12/22/2009	7,500,000	
Omaha ARRA	12/22/2009	5,592,000	1,908,000
Pleasanton ARRA	1/17/2010	290,120	120,510
Red Cloud ARRA	1/22/2010	375,975	125,325
Chadron ARRA amd#1	2/01/2010	270,000	90,000
Platte Center ARRA	2/08/2010	140,793	76,743
Verdigre	3/31/2010	1,564,000	
Guide Rock amd#1	4/13/2010	25,000	
Filley	4/26/2010	245,000	185,000
Leigh	6/29/2010		250,000
<b>TOTAL</b>		<b>\$44,511,674</b>	<b>\$8,220,828</b>

The following 16 SRF wastewater projects initiated operation in SFY2010: Ainsworth, Arlington, Aurora, Bancroft, Beatrice, Coleridge, Concord, Elgin, Gothenburg, Kennard, Laurel, Lyons, Malcolm, Melbeta, Newman Grove and Western. Twenty eight projects are under construction: Allen, Bellevue, Broken Bow, Cedar Bluffs, Chadron, Dorchester, Filley, Guide Rock, Hartington, Indianola, Kearney, Leigh, Lincoln, Lower Platte North NRD (aka Lake Wanahoo), Oakland, Omaha, Osmond, Platte Center, Plattsmouth, Pleasanton, Red Cloud, Scottsbluff, Sidney, South Sioux City, Tekamah and Verdigre.

### **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 \$5.76 million in grant funding for 63 projects concurrent with a CWSRF loan during twenty 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 FY2010, up to \$850,000 was available for small community grants, and any one community could receive a maximum of \$250,000. The program provided a total of \$507,500 in small community grants to the communities of Leigh, Western and Filley with amounts as shown in the table above.

### **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 appropriations 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 the availability of loan forgiveness, and set-asides for program administration, technical assistance, wellhead protection, capacity development and operator certification. After 12 years of activity, the Fund capitalization level has reached \$140 million. The DWSRF program allocated a total of \$150 million plus loan forgiveness of \$7.6 million to 141 Public Water System (PWS) projects beginning with the program's inception through June 30, 2010. The American Recovery and Reinvestment Act (ARRA), passed by the federal government on February 17, 2009, provided \$19,500,000 extra funding for the DWSRF program. The added ARRA funding did not require the 20% state match, but did require that 50% of the ARRA funds be provided as principal forgiveness and that 20% of the funds go to green infrastructure. All of the green infrastructure funds were allocated to water meter projects, a categorically qualified green infrastructure project. ARRA funds were fully obligated to projects before the February 17, 2010 deadline.

Detailed capitalization funding uses, including planned set-aside options and anticipated levels of loan forgiveness, are shown in the following "DWSRF Sources and Uses of Funds" table. Section 1452 of the Safe Drinking Water Act authorizes states to set aside funds to implement provisions of the Act. Discussion on the planned utilization of these set-asides follows.

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 FY2010, under the Source Water Protection Implementation set-aside (15%), NDEQ and NDHHS-DPH reserved \$125,000 for preliminary engineering reports, and \$100,000 for source water protection project grants. The Nebraska Environmental Partnerships Program administers the grants provided for community assessments and preliminary engineering reports. The department's Source Water Program oversees the source water protection grants.

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 \$700,000. The state may use up to a total of 10 percent for this set-aside but must provide a one-to-one state match by Section 1452(g)(2). 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 amount.

The DWSRF provides loan forgiveness to disadvantaged communities to the extent funds are available, as outlined in the table below. Loan forgiveness funds are targeted to the highest priority projects on the Project Priority List until all designated funds are allocated.

## FY2010 IUP DWSRF Sources and Uses of Funds

<b>SOURCES OF FUNDS</b>	
ARRA Refinanced Project Recoveries	6,092,832
EPA 2010 Capitalization Grant	15,000,000
NIFA/DWSRF Series 2010A Match Bonds	3,000,000
December 15, 2009 Loan Payments	2,152,373
June 15, 2010 Loan Payments	3,202,813
1-Year Projected Interest on Fund Balance	600,000
<b>TOTAL</b>	<b>30,048,018</b>
<b>USES OF FUNDS</b>	
Small System Technical Assistance	300,000
Source Water Protection Implementation	700,000
Public Water System Program Administration	700,000
Future Loan Forgiveness	750,000
Available to Loan	27,598,018
<b>TOTAL</b>	<b>30,048,018</b>

The FY2010 DWSRF capitalization grant allocation totaled \$13.6 million from FY10 federal appropriations. The program disbursed \$32 million for drinking water project construction. The following chart shows the municipalities receiving Drinking Water State Revolving Fund loans in FY2010.

### Municipalities Receiving DWSRF Loans in FY2010

MUNICIPALITY	LOAN DATE	LOAN AMOUNT	PRINCIPAL FORGIVENESS and LOAN FORGIVENESS
Auburn ARRA	7/13/2009	4,504,500	1,501,500
Gering ARRA amd#1	7/14/2009	2,350,223	
Oakland	7/15/2009	125,000	
Bennet ARRA	7/16/2009	612,697	112,303
Sutherland ARRA	8/26/2009	1,081,321	340,348
Alda ARRA	9/04/2009	150,878	100,000
Alda	9/04/2009	697,000	
Schuyler ARRA	9/18/2009	1,599,000	533,000
Wymore ARRA	10/07/2009	1,552,500	517,500
Laurel ARRA	10/08/2009	357,266	119,089
Pleasant Dale ARRA	10/08/2009	120,143	15,857
Dalton ARRA	10/13/2009	163,110	145,000
Friend ARRA	10/15/2009	208,600	67,250
Osceola ARRA	10/16/2009	300,841	195,351
Phillips ARRA	10/08/2009	206,036	120,125
North Loup	10/21/2009	169,310	142,690
Shelby ARRA	11/03/2009	207,007	97,993
Bradshaw ARRA	11/04/2009	195,030	79,970
Clarks	11/12/2009	510,000	250,000
Plattsmouth	11/23/2009	1,096,000	
Bridgeport ARRA amd#1	6/30/2009	[11,830]	
Wayne ARRA	12/01/2009	800,000	250,000
Bellwood ARRA	12/07/2009	143,945	93,905
Alliance	12/17/2009	596,258	100,000
Alliance ARRA	12/17/2009	3,894,789	1,263,873
Wahoo ARRA	12/29/2009	305,392	101,798
Gering ARRA amd#2	7/14/2009	718,692	
York ARRA	1/22/2010	2,111,042	1,115,814
Gresham	2/18/2010	100,000	100,000
Bennet ARRA amd#1	7/16/2009	42,000	
Fullerton	4/20/2010	400,000	
Firth	6/01/2010	350,000	
<b>TOTAL</b>		<b>\$25,656,750</b>	<b>\$7,363,366</b>

The DWSRF entered into 28 binding commitments and 4 loan amendments, in order to provide financial assistance to Public Water Supply Projects totaling \$33,020,116. Of this amount, \$10,733,974 in ARRA funding was provided to 21 projects in FY2010. Disadvantaged communities received \$7,363,366, in forgiveness funding with \$6,913,366 being from the ARRA grant.

# CHAPTER 7:

## Field Services and Assistance Division

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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 relies on the Agency's Air Quality, Waste Management and Water Quality Divisions for direction. Many of the 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, SARA Title III Community Right-To-Know, Nebraska Environmental Partnerships (NEP), Release Assessment and 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 Nebraska Environmental Partnerships program has continued to explain and provide information on the Department's environmental regulations and requirements to small communities, to help them understand and comply with those requirements. One project under consideration is related to energy conservation at publicly owned wastewater treatment plants. This initiative is being pursued in conjunction with the Nebraska Public Power District/Department of Environmental Quality Environmental Partnership
- The Small Business and Public Assistance Program has devoted significant resources to the coordination of the review and response to submissions pursuant to the National Environmental Protection Act. The purpose of the reviews is to ensure related projects are conducted in an environmentally responsible manner.
- The Community Right-to-Know program continues to work with Local Emergency Planning Committees in planning efforts as well as providing relevant information. The Program participated in several local emergency management agency meetings over the last year.
- The Release Assessment 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 Immediate Response Team. Additionally the Release Assessment program serves as the Department's Complaint Coordinator. The Complaint Coordinator is implementing the first Department-wide complaint system. The system is designed to increase the effectiveness and bring consistency to the Department's response to complaints. Since the inception of the system a little over a year ago, over 600 complaints have been entered.
- The Division continues to coordinate environmental partnership efforts with the Nebraska Public Power District (NPPD.) The overall objective of the Partnership is to capitalize on the

strengths of each organization and make strides toward a sustainable Nebraska. Three of the primary efforts of the Partnership have been:

- Sponsorship of the “Power Summit” which brings those responsible for generation electricity together with environmental regulators for purposes of examining topics of mutual interest.
  - In cooperation with the United States Department of Agriculture – Rural Development and the EPA AgStar Program continuing the promotion of the capture and use of methane from concentrated animal feeding operation.
  - The Partnership is, as mentioned above, involved in the examination of energy conservation issues at publicly owned treatment works.
- The Environmental Assistance Division has provided assistance to the Waste Management Division in the conduct of the federal Brownfields program. The Brownfields program is intended to restore blighted and contaminated areas of the country to productive use. The Field Service and Assistance Division has been reviewing and providing comments to those organizations applying for Brownfield grants.
  - The Division is responsible for the Department's 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 FY2010, the Division has continued to provide leadership and facilitate focused improvement efforts to streamline regulatory processes, including National Pollution Discharge Elimination System permitting and Air Quality Inspections.

Following is a summary of the programs within the Field Services and Assistance Division:

### **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 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 and to 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. Yet another way to establish a local presence is through participation 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 to assist sources in complying with air quality regulations. The department realized the potential beneficial impact of the program and expanded the scope of the program to encompass all environmental media - air, waste and water.

The program is divided into four major components: the Small Business Compliance Advisory Panel, the Public Advocate (who serves as the ombudsman for the purposes of the Clean Air Act), the Small Business and Public Assistance program, and the One-Stop Permit Assistance program. The Small Business and Public Assistance program coordinator is involved with all four functions.

The Small Business Compliance Advisory Panel is comprised of seven members: two representatives from the general public (who are not owners or representatives of small business stationary sources of air emissions) selected by the Governor, four representatives from small business stationary sources of air emissions selected by the Legislature, and one department representative selected by the Director. The panel has three functions: 1) to evaluate the effectiveness of the Small Business and Public Assistance program and to identify any obstacles that may cause it to become less effective, 2) to provide feedback on outreach and education methods provided by the program, and 3) to review written documents developed by department programs to ensure the information is understood by the lay person. The panel was formed pursuant to the Nebraska Environmental Protection Act amendments of 1992.

Another component of the program is that of Public Advocate. The Public Advocate provides several services to the public by acting as a clearinghouse for department information. The Public Advocate receives requests for regulatory information or environmental complaints from the public, and either addresses the issue or ensures that the appropriate department employee follows up on the issue. This role of interfacing with the public ensures the department is accessible and responsive to public concerns.

The Assistance program includes site visits, development of outreach materials, workshops, and business and industry assistance in understanding their obligations under state law. The program also helps analyze outreach efforts and identifies additional rules or regulations that may affect future small business operations. In addition, the assistance program provides a directory of environmental engineers and consultants, which can be used by those seeking private environmental assistance.

The One-Stop Permit Assistance program was established to offer information and permit assistance related to the department's various permitting processes. This program's objective is to ensure that businesses and industry are aware of what permits they are required to apply for, what information they will need to provide in the permit application, and the permit process. The one-stop program coordinator doesn't personally address all inquiries, but brings together appropriate staff to address questions or concerns and ensure that inquiries receive a timely response. The one-stop program also coordinates activities with other state, federal or other assistance organizations and regulatory programs in an attempt to address questions and concerns in a timely and comprehensive manner. This provides the customer with one initial point of contact in the environmental permitting process.

### **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 EPA. In 2010, approximately 3,600 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This was consistent with the previous year.

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 85% of the facilities reported online in Nebraska in 2010. 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 2009, the Community Right-to-Know Coordinator attended 17 local meetings and assisted with local emergency exercises and provided information regarding chemicals at facilities in their communities. In 2010 the Community Right-to-Know Coordinator assisted with the planning of the "State LEPC Conference" in North Platte, NE. This event provided information and training to over 100 First Responders and Local Emergency Planning Committee members.

### **Nebraska Environmental Partnerships Program**

The Nebraska Environmental Partnerships (NEP) program is a unique state-coordinated program aimed at helping small towns comply with environmental regulations. Rather than establishing mandates and expecting citizens to comply, the program establishes partnerships with communities to find customized solutions. It is a consensus teamwork approach.

The Program typically works with communities of 1,000 people and fewer whose needs are as unique as the towns themselves. All work and recommendations made by the program are based on

the individual community's specific needs. Meetings are held at the request and convenience of local community leaders. The local leaders determine the extent of the NEP's involvement. Decisions remain in the hands of the local community leaders.

The Program devotes significant time assisting communities in finding solutions to a variety of issues. The most common include:

- Working with communities needing technical, financial, and/or managerial assistance
- Identifying communities that lack adequate sewer systems
- Assisting communities in meeting water quality standards
- Assisting communities that need to upgrade or construct new facilities
- Identifying critical public health needs associated with a natural or manmade disaster
- Identifying various other environmental issues or opportunities (i.e., waste reduction grants, open burning, etc.)
- Providing training throughout the state for wastewater operators, clerks, communities, board members, consultants, etc.

Because many communities face environmental infrastructure challenges, a good deal of NEP time is spent on two efforts:

- 1) Preliminary Engineering Reports are first steps towards drinking water project funding. NEP administers a Planning Grant program through the Drinking Water State Revolving Fund (DWSRF) that can assist in the procurement of a Preliminary Engineering Report. Since its inception in SFY2002, NEP, through the DWSRF, has awarded planning grants to 82 communities, for a total of \$949,000. Grants are provided for up to 90% of costs for eligible preliminary engineering report services, but cannot exceed \$15,000 per system. Grants for preliminary engineering report services for Regional Public Water Systems remain at \$25,000.
- 2) Facility Plans are first steps towards wastewater project funding. NEP also administers a Facility Planning Grant program through the Clean Water State Revolving Fund that can assist in the procurement of a Facility Plan. Since its inception in SFY2004, NEP, through the CWSRF, has awarded facility-planning grants to 47 communities, for a total of \$23,710. Grants are provided for up to 90% of the eligible facility plan project cost, but cannot exceed \$20,000.

In order to receive grant funds to develop either the Preliminary Engineering Report or Facility Plan, a community must be listed on the current Intended Use Plan and considered "high priority."

The program has increased efforts to ensure communities are aware, and take advantage, of the resources available in various NDEQ waste management grant programs. Those grant programs include: Waste Reduction and Recycling Incentive Grants; Litter Reduction and Recycling Grants; Illegal Dumpsite Cleanup; and the Landfill Disposal Fee Rebate Program. NEP assists in grant reviews and other areas as needed.

NEP organized presenters and presentations for Clerks' School that was held in North Platte in March. DEQ staff participated in two roundtable discussion groups: Deconstruction Grants and Open Burning / Burn Permits.

The program continues to participate on the Nebraska Agency Water /Wastewater Response Network (NeWARN) Steering Committee. The Committee is comprised of DHHS, DEQ, League of Municipalities, NeRWA, MAP, NEMA, and several communities. The Steering Committee is charged with helping Nebraska communities better utilize capital resources (equipment, etc.) when a disaster takes place in the community.

### **Release Assessment Program**

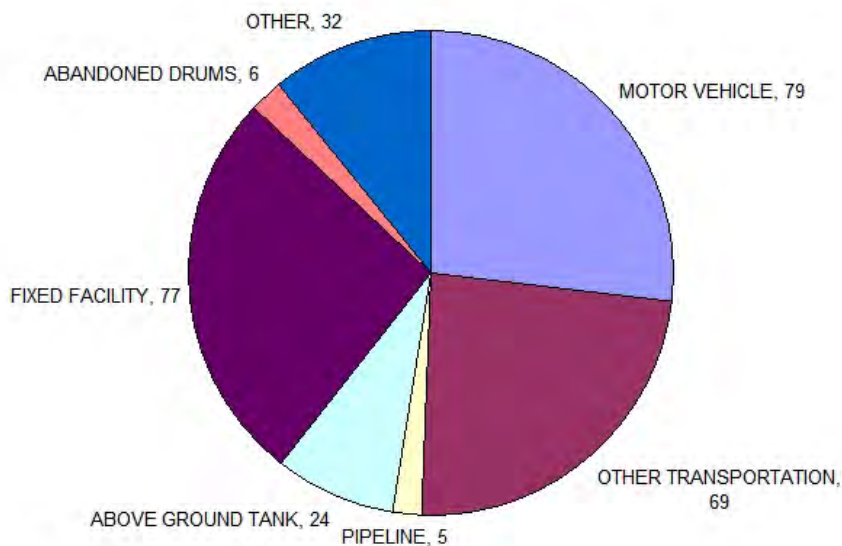
Through the Release Assessment program, NDEQ personnel provide technical and regulatory assistance to those responsible for spills, leaks and accidents that pose a hazard to either the environment or public health. Assistance is also provided to those at the local level that are the first on the scene at these releases; typically this is the local fire department.

The Release Assessment Coordinator is responsible for training, equipping and coordinating a group of personnel who, in addition to their responsibilities to other departmental programs, provide initial 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 Release Assessment 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 State Emergency Response Team (SERT) and coordinate closely with the local, state and federal agencies involved in emergency response situations.

The agency has implemented a department-wide electronic system for receiving information from the public and the regulated community related to complaints and spills. Ultimately the system will enable the public to submit some information on-line. Additionally the system will provide the department with a more effective manner to share the information submitted. The Release Assessment Coordinator will ensure that the information submitted is routed to the appropriate program and that the department provides a timely response to the information.

The chart on the next page shows the types of spills that occurred in FY10.

### Surface Spill Incident Types (July 1, 2009 to June 30, 2010 - 292 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 Leadership Group has directed appropriate state agencies to form the following teams: 1) Planning, 2) Exercise, 3) Training, and 4) Web/Information. The Release Assessment Coordinator serves as the overall team coordinator.

The NDEQ Homeland Security Exercise Team Coordinator and the Deputy Director of Programs participated in a statewide exercise, Terrex '10, hosted by the Nebraska Emergency Management Agency. The exercise involved multiple state agencies. Additionally the agency representatives participated in several exercises with County First Responders ranging from table-top exercises to full-scale enactments of emergency situations.

# CHAPTER 8:

## Expenditure and Budget Summary

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The following information summarizes department expenditures for fiscal year 2010 and outlines budget projections for fiscal year 2011. 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 FY10 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY10 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** is the proposed FY11 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** lists proposed FY11 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 Chapters 2 through 7 of this report.

### Chart A -- Actual Expenditure for Each Federal Grant for State Fiscal Year 2010

Grant Program / Title	Assistance ID #	Grant	Match	Total
ARRA Clean Diesel (Air)	2D97706001-01	1,221,795		1,221,795
ARRA Clean Water State Revolving Fund	2F97705601-01	10,569,303		15,503,706
ARRA Leaking Underground Storage Tanks	2L97705001-01	1,221,122		1,221,122
ARRA 604 B Water Quality Management	2P97706301-01	76,443		76,443
ARRA Drinking Water State Revolving Fund	2W97705101-01	15,503,706		10,569,303
Performance Partnership	BG997325-06	4,217,113	1,403,366	5,620,479
604 B Water Quality Management	C6007328-18	57,246		57,246
604 B Water Quality Management	C6007328-19	50,463		50,463
319 H Non-Point Source	C9007403-XX	4,210,635		4,210,635
NPDES E-Permitting	CP987719-01	89,560		89,560
Clean Water State Revolving Fund	CS310001-07		1,034,237	1,034,237
Clean Water State Revolving Fund	CS310001-08		444,718	444,718
Clean Water State Revolving Fund	CS310001-09	3,386,741	1,293,244	4,679,985
Clean Diesel	DS987972-01	80,873		80,873
Drinking Water State Revolving Fund	FS997805-XX	14,669,322	2,007,509	16,676,831
Section 106 Monitoring	I987678-XX	187,993		187,993
Leaking Underground Storage Tanks	LS987161-04	1,523,441	120,812	1,644,253
Department of Defense	NE-08	147,095		147,095
Pollution Prevention	NP977006-01	98,499		98,499
Network Challenge	OS832603-01	49,755		49,755
Exchange Network 07	OS833475-01	7,039		7,039
Heartland Emergency	OS834028-01	128,438		128,438
Node 2.0 Implementations	OS834029-01	1,000		1,000
Section 128 (a) State Response	RP987322-02	87,341		87,341
Section 128 (a) State Response	RP987322-03	342,126		342,126
Operator Training	T987936-01	12,684	4,611	17,295
Superfund UNL Mead	V987587-01	584		584
Superfund Management Assistance	V997531-06	19,275		19,275
Superfund Management Assistance	V997531-07	123,380		123,380
Superfund Site Assessment	V997532-04	31,090		31,090
Superfund Core	VC987267-04	12,170	1,820	13,990
Superfund Core	VC987267-05	179,550	19,232	198,782
Tuttle Creek Lake	WS987733-01	127,813		127,813
PM 2.5 Ambient Air Monitoring	XA987923-01	218,419		218,419
<b>Totals</b>		<b>\$ 58,652,014</b>	<b>\$ 6,329,549</b>	<b>\$ 64,981,563</b>

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of 319 H program, Underground Injection Control, and Mineral Exploration

319 H Non Point Source Match comes from the Groundwater Management Area Program (Subprogram 035)

A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

**Chart B - Actual Expenditure of State Funds for State Programs for Fiscal Year 2010 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	1,327,084	456,668	36,648		242,259	2,062,659	60,777	2,123,436
CLEAR / Environmental Trust	011	C					126,115	126,115		126,115
Ag - Livestock	016	G/C	1,343,404	86,286	54,708		7,876	1,492,274		1,492,274
Air Construction Permits	020	C	108,027	46,628	1,623		678	156,956		156,956
Superfund State Cost Share	023	G/C					1,176,683	1,176,683	908,298	2,084,981
Litter Reduction	024	C	94,385	175,899	602			270,886	1,815,443	2,086,329
Mineral Exploration	029	C	97,570	31,000	14,428		829	143,827		143,827
Private Onsite Wastewater Cert & Registration	030	C	221,054	77,548	4,723		314	303,639		303,639
Environmental Official Training	031	C	11,818	17,465	4,070		1,244	34,597		34,597
Emission Inventory - Title V	033	C	1,839,989	623,133	26,324	9,555	160,184	2,659,185		2,659,185
Chemigation	034	C	14,522	6,283	95		9,563	30,463		30,463
Groundwater Management Areas	035	G	64,061	2				64,063		64,063
Remedial Action Plan Monitoring Act	036	C	59,196	16,578	510		5,617	81,901		81,901
Private Onsite Wastewater Permit & Approval	037	C	19,741	5,682				25,423		25,423
Operator Certification	040	C	86,391	24,073	1,604		5,695	117,763		117,763
Community Right to Know	041	G	91,997	4,603	2,715		764	100,079		100,079
Petroleum Release Remedial Action Act	051	C	874,305	400,663	15,303		3,124,811	4,415,082	6,941,078	11,356,160
Emergency Response	057	C	238,454	87,953	8,142		342	334,891		334,891
Engineering Reviews	061	G	283,661	3,744	327		235	287,967		287,967
Stormwater Grants	067	G	6,941		116			7,057	2,434,878	2,441,935
Waste Reduction & Recycling	091	C	189,249	64,175	5,228		45,715	304,367	3,514,132	3,818,499
Agency Organizational Dues	099	G	6,846	17,581				24,427		24,427
<b>Totals</b>			<b>\$ 6,978,695</b>	<b>\$ 2,145,964</b>	<b>\$ 177,166</b>	<b>\$ 9,555</b>	<b>\$ 4,908,924</b>	<b>\$ 14,220,304</b>	<b>\$ 15,674,606</b>	<b>\$ 29,894,910</b>

FUND TYPE LEGEND

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds



### Chart C - Proposed Budget for Each Federal Grant Program for State Fiscal Year 2011

Grant / Program Title	Match	Grant	Total
Performance Partnership	1,296,557	4,045,565	5,342,122
Clean Water State Revolving Fund	700,000	3,415,700	4,115,700
Exchange Network		19,498	19,498
604 B Water Quality Management		114,690	114,690
319 H Non-Point Source	31,758	3,613,212	3,644,970
Drinking Water State Revolving Fund	1,629,200	8,146,000	9,775,200
Leaking Underground Storage Tanks	82,434	767,108	849,542
Section 106 Monitoring		75,000	75,000
Department of Defense		194,900	194,900
PM 2.5 Ambient Air Monitoring		191,719	191,719
Superfund UNL Mead		4,089	4,089
Superfund Core	17,707	217,047	234,754
Superfund Management Assistance		162,548	162,548
Superfund Site Assessment		197,368	197,368
Section 128 (a) State Response		575,333	575,333
Network Challenge		73,051	73,051
<b>Totals</b>	<b>\$ 3,757,656</b>	<b>\$ 21,812,828</b>	<b>\$ 25,570,484</b>

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of 319 H program, Underground Injection Control, and Mineral Exploration

319 H Non Point Source Match comes from the Groundwater Management Area Program (Subprogram 035)

A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

**Chart D - Proposed Budget of State Funds for State Programs for Fiscal Year 2011 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	1,089,498	3,939,415	44,675		77,322	5,150,910	100,000	5,250,910
Ag - Livestock	016	G/C	1,465,247	55,293	80,379		9,732	1,610,651		1,610,651
Air Construction Permits	020	C	98,128	55,871	500		1,306	155,805		155,805
Superfund State Cost Share	023	G/C						-	1,979,920	1,979,920
Litter Reduction	024	C	109,008	46,262	2,028		50,000	207,298	1,600,000	1,807,298
Mineral Exploration	029	C	91,576	38,458	9,882		600	140,516		140,516
Private Onsite Wastewater Cert & Registration	030	C	222,319	101,216	4,411		3,100	331,046		331,046
Environmental Official Training	031	C	25	3,260			297	3,582		3,582
Emission Inventory - Title V	033	C	1,937,900	2,403,209	28,701		89,950	4,459,760		4,459,760
Chemigation	034	C	17,593	8,724	162		10,332	36,811		36,811
Groundwater Management Areas	035	G	32,062		150			32,212		32,212
Remedial Action Plan Monitoring Act	036	C	79,264	34,420	15		5,009	118,708		118,708
Private Onsite Wastewater Permit & Approval	037	C	28,347	11,195	21			39,563		39,563
Operator Certification	040	C	55,377	24,239	4,073		8,246	91,935		91,935
Community Right to Know	041	G	74,506	4,553	4,597		1,700	85,356		85,356
Petroleum Release Remedial Action Act	051	C	924,279	10,184,787	26,336		6,711,404	17,846,806	9,411,118	27,257,924
Emergency Response	057	C	186,856	80,752	2,867		3,400	273,875		273,875
Engineering Reviews	061	G	228,323	2,373	1,614	1,175		233,485		233,485
Stormwater Grants	067	G	6,567					6,567	2,324,996	2,331,563
Waste Reduction & Recycling	091	C	303,804	144,031	7,465		50,000	505,300	4,219,584	4,724,884
Agency Organizational Dues	099	G	7,382	21,816				29,198		29,198
<b>Totals</b>			<b>\$ 6,958,061</b>	<b>\$ 17,159,874</b>	<b>\$ 217,876</b>	<b>\$ 1,175</b>	<b>\$ 7,022,398</b>	<b>\$ 31,359,384</b>	<b>\$ 19,635,618</b>	<b>\$ 50,995,002</b>

FUND TYPE LEGEND

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

# CHAPTER 9:

## Distribution of Aid

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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.

This chapter provides a summary of those aid activities for fiscal year 2010. It also provides information regarding the Litter Reduction and Recycling Grant Program as required by §81-1504.01.

### **Waste Management Grants**

Following is a summary of funds provided in FY 2010 through the waste grants programs managed in the Waste Planning and Aid Unit.

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 \$1.9 million was received in FY2010.

In FY 2010, 68 Litter Reduction and Recycling grants were awarded, totaling \$1,893,244. The grants were awarded in three categories: Public Education, \$547,595; Cleanup, \$76,575; and Recycling, \$1,269,074. These grants were awarded to both public and private entities.

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 FY 2010, 79 projects totaling \$2,442,902 were funded from the Waste Reduction and Recycling Incentive Grants Program.

The Illegal Dumpsite Cleanup Program, established in 1997, receives up to five percent of the total revenue from the disposal fee collected in the preceding fiscal year. This program provides funding for political subdivisions to clean up solid waste disposed of along public roadways or ditches. In FY2010, the program provided \$60,065 to 6 recipients.

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 FY2010, the program provided \$74,772 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 10 cent rebate from the \$1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

### **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 provided mostly by a fee on petroleum sold in Nebraska. Over \$152 million has been disbursed since the program began. The program provided \$6,680,783 to 301 sites for investigation and cleanup in FY2010.

### **Wastewater grants and loans**

There are three grant and loan programs administered by DEQ related to wastewater facilities, which are funded through the Clean Water State Revolving Loan program. They are:

I. The Clean Water State Revolving Loan Fund provides low interest loans to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems. The sources of funding for this program include federal grants (including ARRA funds), and funds from Nebraska Investment Financial Authority (NIFA) through bond issuance. In FY2010, loans totaling \$52.8 million was allocated, and \$28 million was disbursed.

II. Clean Water Small Community Matching Grants provides matching grants to eligible communities with populations of 10,000 or less. In FY2010, \$507,500 was allocated for these small town grants.

III. Facility Planning Grants provide initial planning assistance to eligible municipalities for wastewater treatment system improvement projects. Grants may be provided to municipalities with populations of 10,000 or fewer that are identified with a financial hardship. The Department did not provide any grants for studies during FY2010.

### **Drinking Water State Revolving Fund**

The Drinking Water State Revolving Fund provides low interest loans and loan forgiveness to owners of public water systems. In FY2010, loans totaling \$13.6 million were allocated, and \$32 million was disbursed.

The construction of wastewater and drinking water facilities is a multi-year process. There are projects which have been approved in previous fiscal years which may have received funds in fiscal year 2010. Conversely, projects approved in fiscal year 2010 may receive funds in future fiscal years.

Planning grants may be provided to publicly owned water supply systems serving 10,000 or fewer people. This includes any city, town, village, sanitary improvement district, natural resource district, or other public body having jurisdiction over a public water supply system. Privately owned water supply systems are not eligible for assistance.

### **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. Funds provided in FY2010 included: \$6,280,745 for large

competitive projects; \$106,163 for small projects; and \$281,315 for community lakes restoration projects.

### **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 with storm water permits to implement their local Storm Water Management Plans (SWMPs). In FY2010, approximately \$2.4 million was distributed to 19 cities and 3 counties, to be used to implement aspects 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.

### **American Recovery and Reinvestment Act (ARRA) Funding**

In fiscal year 2009, NDEQ received significant supplemental funding from the American Recovery and Reinvestment Act of 2009 (ARRA).

These are funds provided to Nebraska through the U.S. Environmental Protection Agency, and are being distributed by the state to local efforts that protect the environment and stimulate the economy.

The specific NDEQ programs that have received ARRA support include the Clean Water State Revolving Fund, the Drinking Water State Revolving Fund, the Leaking Underground Storage Tank Program, the Diesel Emission Reduction Act and 604b Water Quality Planning. In addition, \$25.3 million was allocated through the EPA Superfund program for the Omaha Lead Superfund site. For more information, refer to Chapter 1 of this report.

Information regarding this funding is updated periodically on NDEQ's web page, [www.deq.state.ne.us](http://www.deq.state.ne.us). Go to the "NDEQ Recovery Funds" tab in the right column of the web page for updated grant information.

# CHAPTER 10:

## Staffing

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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 department feels fortunate to have recruited excellent staff in 2009/2010.

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.

Reaching Affirmative Action goals also remains a challenge. The department monitors our goals 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 2009 are from October 1, 2009 through September 30, 2010.*

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Director/Deputy Director/Assistant Director/ Division Administrator	0	0	0	1	0	0	0	0	0	0
Section Supervisor, Records Manager, Budget Officer	0	2	0	0	0	0	2	0	4	0
Unit Supervisor	3	0	2	2	1	1	2	0	5	2
Human Resources	3	0	0	1	0	0	0	2	0	1
Federal Aid Administrator, Financial Assurance Coordinator, Accountant	0	2	1	2	2	0	0	0	0	2
Clerical/Accounting Clerk	4	5	1	5	0	4	6	4	9	3
Information Technology/Public Information/Research Analyst	1	0	1	1	1	0	3	2	3	0
Attorney	0	1	0	1	3	0	0	0	0	1
Environmental Engineer	3	3	2	2	6	3	5	2	4	0
Field Data Specialist	0	0	0	0	0	0	0	0	0	0
Compliance Specialist	0	0	0	1	0	0	0	1	0	0
Programs Specialist	6	6	7	2	12	7	12	13	17	8
Geologist, Groundwater	1	1	1	4	1	3	0	4	3	2
Environmental Assistance Coordinator			1	1	0	0	0	0	0	0
<b>TOTALS</b>	21	20	16	23	26	18	30	29	45	20

# CHAPTER 11:

## Financial Assurance Requirements

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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 Assurance Mechanism	Guarantor
<b>Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (Sanitary LF)</b>							
Alliance Landfill	Alliance	MSWDA	03/17/94	\$ 3,185,690	\$ 1,384,501	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	\$ 158,730	\$ 112,100	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$ 3,490,700	\$ 3,490,700	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	\$ 3,961,026	\$ 1,977,044	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$ 11,578,997	\$ 11,578,997	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	\$ 4,285,937	\$ 2,408,837	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$ 1,044,572	\$ 540,912	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$ 5,148,103	\$ 2,265,011	Trust Fund	Security Natl. Bank
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$ 8,293,080	\$ 3,785,262	Enterprise Fund	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	08/12/96	\$ 5,139,183	\$ 2,284,800	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$ 168,064	\$ 25,376	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$ 2,394,514	\$ 1,612,585	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$ 3,003,121	\$ 3,003,121	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	\$ 6,154,334	\$ 3,345,412	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	\$ 1,275,969	\$ 709,461	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$ 750,051	\$ 303,061	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$ 2,286,997	\$ 1,349,806	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	\$ 14,821,906	\$ 14,821,906	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$ 1,477,424	\$ 691,964	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	\$ 750,108	\$ 88,248	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	\$ 193,608	\$ 82,397	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	10/03/08	\$ 2,139,377	\$ 589,931	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$ 18,361,951	\$ 3,785,454	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$ 21,759,107	\$ 21,759,107	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$ 7,087,630	\$ 7,182,126	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$ 2,523,941	\$ 733,446	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	9/25/97	\$ 2,244,596	\$ 519,596	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	\$ 1,620,973	\$ 346,720	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	\$ 226,310	\$ 10,646	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$ 3,141,709	\$ 1,370,769	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.							
<b>Construction/Demolition Landfills (Construction/Demol.)</b>							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	\$ 212,723	\$ 212,723	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$ 123,461	\$ 33,359	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	10/19/98	\$ 509,275	\$ 509,275	Surety Bond	Employers Mutual Cas. Co.
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	\$ 34,468	\$ 14,024	Enterprise Fund	Village of Arnold
Benkelman C & D Landfill	Benkelman	Const/Demol.	10/15/06	\$ 63,221	\$ 7,584	Enterprise Fund	City of Benkelman

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Assurance Mechanism	Guarantor
Broken Bow C & D Landfill	Broken Bow	Const./Demol.	11/23/07	\$ 101,978	\$ 9,764	Enterprise Fund	City of Broken Bow
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$ 42,631	\$ 42,631	Letter of Credit	First Natl. Bank Newman Gr
Butler County C & D Landfill	David City	Const./Demol.	06/01/97	\$ 319,847	\$ 319,847	Surety Bond	Evergreen Ntl. Indemnity Co.
Eco-Storage C & D Landfill	Omaha	Const./Demol.	04/01/09	\$ 87,064	\$ 17,750	Trust Agreement	Security Natl. Bank
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	\$ 195,172	\$ 195,172	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction C & D	Omaha	Const./Demol.	3/9/96	\$ 258,612	\$ 258,612	Surety Bond	Hartford Fire Ins. Co.
Holdrege C & D Landfill	Holdrege	Const./Demol.	05/01/09	\$ 208,747	\$ 7,674	Enterprise Fund	City of Holdrege
KGP Services C & D	Norfolk	Const./Demol.	11/06/03	\$ 65,774	\$ 65,774	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$ 47,916	\$ 40,853	Enterprise Fund	City of Kimball
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	\$ 158,848	\$ 127,639	Enterprise Fund	Lexington Area SW Agency
Limited Fill C & D Landfill	Omaha	Const./Demol.	04/30/97	\$ 37,760	\$ 30,381	Trust Agreement	First Natl. Bank, Omaha
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$ 1,057,764	\$ 1,057,764	Financial Test	City of Lincoln
Loup Central C & D Landfill#1	Elba	Const./Demol.	1/28/2001	\$ 29,262	\$ 31,683	Trust Fund	Citizens Bank & Tr. St. Paul
Loup Central C & D Landfill#2	Elba	Const./Demol.	1/28/2001	\$ 87,228	\$ 1,826	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const./Demol.	04/09/96	\$ 93,735	\$ 18,621	Trust Fund	Security Natl. Bank
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$ 133,299	\$ 133,299	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$ 69,772	\$ 69,772	Enterprise Fund	City of O'Neill
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	\$ 154,512	\$ 154,512	Escrow Account	Five Points Bank
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	\$ 41,844	\$ 33,477	Enterprise Fund	City of Plainview
Rainwood Hill LLC C & D	Omaha	Const./Demol.	02/10/08	\$ 71,221	\$ 71,221	Surety Bond	Nationwide Mutual Ins. Co.
Schmader C & D Landfill	West Point	Const./Demol.	05/05/04	\$ 363,687	\$ 107,590	Letter of Credit	Charter West Ntl Bank
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	\$ 106,611	\$ 37,432	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	\$ 73,743	\$ 23,984	Enterprise Fund	City of Imperial
Three Rivers C & D Landfill	Indianola	Const./Demol.	02/24/10	\$ 71,540	\$ 71,540	Letter of Credit	McCook Ntl Bank
York C & D Landfull	York	Const./Demol.	12/01/07	\$ 233,594	\$ 21,584	Enterprise Fund	City of York
<b>Fossil Fuel Combustion Ash (Fossil Fuel), Industrial Waste Landfills, Monofills</b>							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$ 5,828,121	\$ 5,828,121	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$ 3,371,464	\$ 3,371,464	Insurance Policy	Steadfast Insurance Co.
Fremont Utilities	Fremont	Fossil Fuel	05/28/96	\$ 230,400	\$ 500,000	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	Fossil Fuel	2/1/01	\$ 1,507,200	\$ 590,445	Enterprise Fund	City of Hastings
NPPD Gerald Gentleman 4	Sutherland	Fossil Fuel	04/01/95	\$ 1,470,684	\$ 1,470,684	Financial Test	NPPD
NPPD Sheldon Station 3	Sheldon	Fossil Fuel	04/01/95	\$ 135,421	\$ 135,421	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	Fossil Fuel	07/01/01	\$ 603,511	\$ 603,511	Financial Test	NPPD
OPPD NE City 1	NE City	Fossil Fuel	04/04/95	\$ 1,725,570	\$ 1,725,570	Financial Test	OPPD
OPPD NE City 2	NE City	Fossil Fuel	06/30/09	\$ 796,130	\$ 796,130	Financial Test	OPPD
OPPD North Omaha	Omaha	Fossil Fuel	04/04/95	\$ 1,720,800	\$ 1,720,800	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$ 223,810	\$ 223,810	Financial Test	OPPD
Platte Generation	Grand Island	Fossil Fuel	08/25/97	\$ 206,646	\$ 206,646	Enterprise Fund	City of Grand Island

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Assurance Mechanism	Guarantor
Waste Management	Bennington	Indus. Waste	04/01/02	\$ 3,698,802	\$ 3,698,802	Surety Bond	Evergreen Ntl. Indemnity Co.
<b>Transfer Stations, Material Recovery Facilities, Compost Sites</b>							
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	\$ 3,937	\$ 3,937	Letter of Credit	First Natl. Bank, NG
Butler County MRF	David City	Mat. Recovery	08/15/03	\$ 6,900	\$ 6,900	Surety Bond	Evergreen Ntl. Indemnity Co.
Central Sanitation	Central City	Transfer Station	07/02/03	\$ 10,523	\$ 10,523	Surety Bond	Platte River Ins Co.
Custer Transfer Station	Broken Bow	Transfer Station	06/27/94	\$ 10,693	\$ 10,693	Letter of Credit	Great Western Bank
Doernamann Const. Co.	Clarkson	Compost Site	12/15/99	\$ 89,551	\$ 89,551	Letter of Credit	Clarkson Bank
E3 Biofuels Compost	Mead	Compost Site	04/01/07	\$ 174,975	\$ 178,477	Escrow Account	American Ntl Bank
Fremont CRD, Inc.	Fremont	Transfer Station	04/09/96	\$ 12,627	\$ 12,627	Surety Bond	American Guar & Liability Co
King Transfer Station	Walthill	Transfer Station	04/02/96	\$ 583	\$ 591	Escrow Account	First Natl. Bank, Walthill
J & J Sanitation	Ord	Transfer Station	09/22/00	\$ 6,813	\$ 6,813	Surety Bond	Capitol Indemnity Corp
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$ 41,176	\$ 45,474	Escrow Account	US Bank Ntl Assoc
Sanitation Systems	Wilber	Transfer Station	07/03/03	\$ 5,538	\$ 5,538	Surety Bond	Capitol Indemnity Corp
Seneca Sanitation	Dubois	Transfer Station	03/07/96	\$ 4,224	\$ 4,224	Letter of Credit	First Natl. Bank, Centralia
Saunders County San.	Wahoo	Transfer Station	07/02/03	\$ 5,917	\$ 5,917	Surety Bond	Capitol Indemnity Corp
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.
<b>RCRA Closure and RCRA Post-Closure (RCRA PC)</b>							
Agromac International	Gering	RCRA PC	12/11/07	\$ 7,578	\$ 7,912	Escrow Account	Platte Valley Ntl. Bank
Behlen Manufacturing Co.	Columbus	RCRA PC	08/30/94	\$ 149,200	\$ 149,200	Financial Test	Behlen Mfg. Co.
Clean Harbors Technology	Kimball	RCRA Closure	05/10/95	\$ 16,098,051	\$ 16,098,051	Insurance Policy	Steadfast Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$ 380,574	\$ 1,008,032	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
Tenneco Automotive Inc.	Cozad	RCRA PC	11/25/85	\$ 697,283	\$ 697,283	Letter of Credit	JP Morgan/Chase Bank
Safety Kleen	Grand Island	RCRA Closure	10/15/01	\$ 130,548	\$ 130,548	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$ 345,881	\$ 345,881	Insurance Policy	Indian Harbors Insurance Co.
Bosch Security Systems	Lincoln	RCRA PC	06/02/09	\$ 10,344	\$ 10,344	Letter of Credit	Bank of Montreal
Tetra Micronutrients	Fairbury	RCRA PC	04/10/09	\$ 603,769	\$ 603,769	Financial Test	Int. Mineral Technologies LLC
USA Tire Management	Dakota City	RCRA Closure	12/14/07	\$ 15,063	\$ 15,198	Escrow Account	Vantus Bank Sioux City IA
Valmont Industries	Valley	RCRA PC	10/30/85	\$ 137,000	\$ 137,000	Financial Test	Valmont Industries
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	\$ 1,397,550	\$ 1,463,334	Letter of Credit	1st State Bank Webster Cty IA
Van Diest Supply Zimmerman	McCook	RCRA Closure	05/19/10	\$ 2,711,612	\$ 2,711,612	Letter of Credit	1st State Bank Webster Cty IA
<b>Underground Injection Control (UIC)</b>							
Crow Butte Resources, Inc.	Crawford	UIC		\$ 28,902,051	\$ 28,902,051	Letter of Credit	Royal Bank of Canada

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Assurance Mechanism	Guarantor
		<b>Waste Tire Sites</b>					
ABC Tire LLC	Kansas C, KS	Waste Tire	12/08/08	\$ 10,000	\$ 10,000	Letter of Credit	Union Bank
Butler County Landfill	David City	Waste Tire	05/16/97	\$ 178,625	\$ 178,625	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 Salvage	Correctville, IA	Waste Tire	11/17/08	\$ 10,000	\$ 10,000	Surety Bond	Great American Ins.Co.
Don's New & Used Tires	Lincoln	Waste Tire	03/13/03	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Double A Trucking	Shelby	Waste Tire	06/05/06	\$ 10,000	\$ 10,000	Letter of Credit	Bank of the Valley
EnTire Recycling Inc	Brock	Waste Tire	04/21/96	\$ 10,000	\$ 10,000	Letter of Credit	The First National Bank
Gill Hauling Inc.	Jackson	Waste Tire	02/04/09	\$ 10,000	\$ 10,000	Letter of Credit	Dakota County State Bank
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.
Lee Pester	Lincoln	Waste Tire	07/01/96	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
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.
Resource Management Co	Brownell, KS	Waste Tire	06/08/99	\$ 10,000	\$ 10,000	Letter of Credit	First State Bank, Ness Cy, KS
River City Recycling	Omaha	Waste Tire	09/07/99	\$ 43,750	\$ 43,750	Letter of Credit	US Bank Ntl Assoc, Omaha
Tire Cutters	Centralia KS	Waste Tire	11/10/03	\$ 5,000	\$ 5,000	Letter of Credit	1st Natl. Bank, Centralia, KS
Tire Town, Inc.	Leavenworth, K	Waste Tire	03/15/96	\$ 5,000	\$ 5,000	Letter of Credit	First Commercial Bank
Verdant Environmental Services	Omaha	Waste Tire	08/25/09	\$ 5,000	\$ 5,000	Escrow Account	American Ntl Bank