



Nebraska Department of Environmental Quality

Annual Report to the Legislature 2011

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- Public Notices
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CHAPTER 1:

Agency Overview

The Nebraska Department of Environmental Quality was created pursuant to passage of the Nebraska Environmental Protection Act in 1971. Although the Department has grown and been given additional responsibilities over the years, its ongoing mission has remained the same — the protection of Nebraska's air, land and water resources. Presently, the Agency is authorized a staffing level of 215.25 full-time employees.

The Department has a total annual budget for FY12 of approximately \$68.2 million. This includes money collected from state taxes, fees and federal grants. Of that amount, \$33.5 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans).

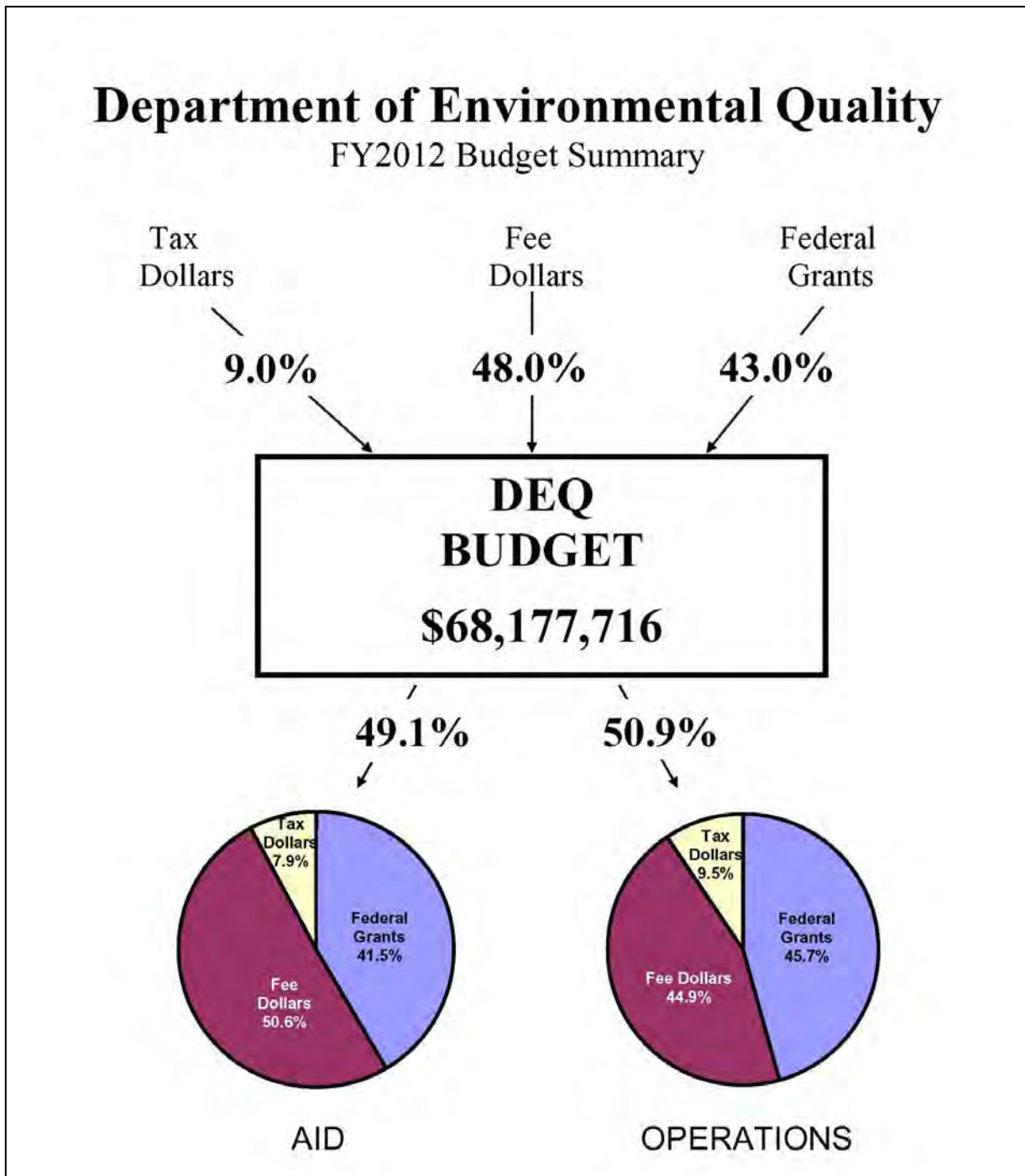
On the table below, the columns listed as aid represent the amount of the agency's budget that is redistributed to other entities as grants and loans. The operations columns represent the amounts used for the operation of the agency. However, the operations categories also include contracts where money 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:

| Funding Type | Operations: \$ Amount | Percent of Operations Budget | Aid: \$ Amount | Percent of Aid Budget |
|--|----------------------------------|---|---------------------------|----------------------------------|
| Federal Funds (Grants) | \$15.8 million | 45.7% | \$13.9 million | 41.5% |
| State General Funds (Tax \$) | \$3.3 million | 9.5% | \$2.6 million | 7.9% |
| Cash Funds (Fees) | \$15.6 million | 44.9% | \$17.0 million | 50.6% |
| Total | \$34.7 million | | \$33.5 million | |

Note: This table does not include ARRA grants.

The following graphic depicts the department's FY12 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 FY11.

This chapter provides: 1) a brief description of agency goals and related activities; 2) an overview of ARRA funding activities; 3) significant legislation of 2011 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. During the

fall of 2011, agency management is meeting with all of DEQ's programs to discuss priorities and highlight issues impacting the programs.

II. ARRA Funding and Expenditures

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 have been 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 that was 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 . More information about the national program can be found on the federal web site: 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 , 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. Nearly all funds have been expended.
- **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. More than 95% of funds received have been expended.
- **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. All funds have been expended.
- **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. All funds have been expended.
- **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. Work has been completed and the grant has been closed.

The table below provides an overview ARRA funds that were awarded to the agency, and the expenditures through June 30, 2011. 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, 2011

| Program | Amount Awarded | Funds Received | Number of Recipients | Expenditures as of June 30, 2011 |
|-----------------------------------|----------------|----------------|----------------------|----------------------------------|
| Clean Water SRF | \$20 million | April 10, 2009 | 16 projects | \$19,991,803 |
| Drinking Water SRF | \$19.5 million | April 10, 2009 | 22 projects | \$18,779,489 |
| Leaking Underground Storage Tanks | \$2.3 million | July 6, 2009 | 72 sites | \$2,233,399 |
| Diesel Emission Reduction Act | \$1.73 million | April 10, 2009 | 60 recipients | \$1,730,000 |
| 604B Water Quality Planning | \$202,500 | May 6, 2009 | | \$202,470 |

III. 2011 Legislative Summary

Five pieces of legislation passed in 2011 had an impact on the agency. They include:

LB 28 – The Nebraska Chemigation Act was amended to eliminate a number of annual reporting requirements that Natural Resource Districts (NRDs) provide to the Department of Environmental Quality. The bill eliminates the requirement that NRDs forward a copy of each approved chemigation application to NDEQ; instead, NRDs will preserve the information and provide to NDEQ upon request. Additionally, information NRDs prepare for annual reporting purposes no longer needs to list the individual permit holders and the location of each chemigation system. The NRD's annual report to the agency will report summary totals of applications received, applications approved, and inspections, and a list of all chemicals used in the chemigation systems within the district during the previous year.

LB29 – This bill modified the funding source for three department programs. Emergency Response program activities as it relates to petroleum spills will now be funded out of the Petroleum Release Remedial Action Cash Fund. Reimbursement of political subdivisions expenditures for the cleanup of illegal roadside dumps will be taken from the Waste Reduction and Recycling Incentive Cash Fund. And statutory authority was removed for the Department to pay for cleanup activities at livestock waste management facilities. All three programs previously had the authority to access the Integrated Solid Waste Cash Fund to pay for those expenses.

LB30 – This bill amended provisions of the Nebraska Environmental Protection Act regulating compost sites. First, the bill eliminated the requirement that compost sites be inspected semi-annually. Compost site operations are typically a low environmental risk and do not need as high a level of regulatory oversight. Second, the bill enables the department to issue permits for compost sites for up to 10 years, making the permit terms consistent with other permit terms specified in the Integrated Solid Waste Management Act. And finally, compost site permits can be transferred to new owners.

LB156 – Air Pollution Emission Fee provisions were amended to maintain a cap on emission fees for certain municipalities with mid-sized electric generation facilities. The change allows a mid-sized electric generation facility owned by a municipality to still be considered ‘mid-sized’ even if it gets permitted with a larger unit (more than 115 mw) under separate ownership. These types of facilities would not have to pay beyond the current emission fee based on a cap of 400 tons per year for a regulated pollutant.

LB 617 – This bill addresses a number of provisions relating to state agencies’ promulgation of regulations. A public hearing must be held on a rule or regulation that is being adopted, amended or repealed pursuant to a bill within 12 months after the effective or operative date of the bill. The Governor can extend the 12-month period for up to an additional six months upon a written showing of good cause. The entire regulation process has to be completed within one year after the public hearing. If the agency does not adopt and promulgate the rules and regulations within one year of the public hearing, a written explanation must be provided to the Executive Board and the standing committee with jurisdiction over the issue. Each state agency is also required to annually (on or by July 1) provide a report to the Legislative Performance Audit Committee on the status of any pending rules or regulations.

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).

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

2011 (215.25 FTE)**State Legislation/Not Federally Mandated**

- LB28 Nebraska Chemigation Act
- LB29 Emergency Response
- LB30 Integrated Waste Management (Compost)
- LB156 Clean Air Act (Emission Fee)

CHAPTER 2:

Administration/Legal/ Management Services

The Administration, Management Services and Legal Divisions provide administrative, legal and day-to-day support services to the Agency programs essential to the effective operations of the Department.

I. Administration

The Administration of the Department provides oversight and policy direction in all areas of the Department's activities. The Administrative staff includes the Director, Deputy Directors, Legal Counsel, Assistant Director, Associate Directors, Government Relations Program Manager, Division Administrators and the Administrative support staff. The Director and Deputy Directors are responsible for the overall function and coordination of Department activities. Generally, the Director is responsible for policy and the Deputy Directors for day-to-day management and administration. The Deputy Director of Administration serves as the manager of the Management Services Division. The Deputy Director of Programs, Assistant Director, Division Administrators, Associate Directors and the Program Manager are responsible for management, policy implementation, and coordination of activities in the various sections contained within their respective divisions.

Department Administration is responsible for coordination with other local, state and federal agencies. Staff serve on various committees within the state. The administration is also responsible for coordination and negotiations with the U.S. Environmental Protection Agency. A significant amount of the agency's funding 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 FY11, the Director issued 28 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled 16 civil judicial cases and judgments were entered for a total of \$141,750 in civil penalties with deferments possible in many cases for subsequent compliance. In addition, these judgments included \$71,750 for supplemental environmental projects 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 budgeting and finance functions to the Department, and manages Department spending, purchasing, receipting, accounting and auditing responsibilities. The section offers advice and assistance to programs on financial questions and conducts financial reviews of grantees.

The Section provides significant staff assistance and support to the Water Division regarding the State Revolving Fund Loan Program. Assistance includes receipting, collections, payment of loan disbursements, grant activity reconciliation and budgeting. The fiscal services section also coordinates bond activity with NIFA and the Trustee – issuance, retirement and interest payments. The SRF program requires annual Revenue Projection reports and financial statements to be audited. The Fiscal Services Section produces these reports, and coordinates the annual audit requirement.

The Fiscal Services Section serves as the financial liaison regarding grants with the EPA. A significant percentage of staff time is dedicated to meeting complex tracking requirements of the federal government. Given the substantial amount of grant funds the Department distributes, it is essential to dedicate staff time to reviewing financial activities of programs receiving grant funds.

The Fiscal Services Section also assists the Integrated Solid Waste Management and Livestock programs in collecting and reporting all applicable fees. This section is also responsible for tracking receipt of Title V air emission fees, and all other Department fees and permits.

With the advent of American Recovery and Reconstruction Act (ARRA) funding, many fiscal activities were segregated, to provide as much transparency as possible to transactions funded with ARRA money. Heightened federal oversight has caused the Fiscal Services Section increased contact with Federal EPA, Region 7, State Auditors and program staff.

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 monitoring the agency's diversity, monitoring diversity and ensuring equal employment opportunity is an integral part of the daily activities of the agency. Other activities include: providing of technical assistance to supervisors concerning performance management and investigations of conduct complaints; maintaining, communicating and developing agency policies; evaluating reasonable disability accommodations; and coordinating reporting requirements of the conflicts of interest provisions of the Nebraska Political Accountability and Disclosure. 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 200,000 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.

Last year, 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 positioned the agency for more efficient utilization of a document imaging system.

In April 2011, the Agency began implementation of the first Enterprise Content Management (ECM) project for facility related documents. The purpose of the project is to scan and image all facility related documents for the agency. Incoming mail is scanned and indexed in the ECM. Images are routed to agency staff through an electronic workflow process, eliminating the need to route paper documents. Outgoing mail documents are still provided to the Records group in paper format and then scanned and indexed. Staff can access current facility related documents on their desktop computer through the ECM or through the agency Integrated Information System (IIS) Document Tracking System (DTS). As of June 30, 2011 there are approximately 4,700 documents (57,000 images) stored in the ECM. We anticipate after 1 year of usage, that we will have approximately 60,000 documents (600,000 images).

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 1,400 records requests during FY2011.

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/location 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 is 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 is incorporating the ECM into existing business processes and operations. On April 11, 2011 the agency implemented the first project. This project is covered in more detail in the Records Management portion of the report. As support for the project, about two thirds (160) of the agency PC based computers were replaced between April and September. Additionally, about 170 nineteen inch monitors were installed as a second monitor so agency staff could better utilize the agency ECM application. And all but one of the agency field office locations is now connected to the state network. The last office is being worked on at this time.

The application development staff in cooperation with the NPDES water permitting program staff have been designing and developing a permit writing module. When completed the module will assist permit writers in developing quality permit documents based upon agency rules, standards, and water quality information.

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**. 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 site provides a wide array of information to the public relating to the agency, including:

| | | |
|---------------------------|-----------------------------|------------------------|
| Environmental Alerts | NDEQ News | Calendar of Events |
| Rules and Regulations | Publications | Requests for Proposals |
| Topics of Interest | Program Information | Public Notices |
| Enforcement Resolutions | Assistance | Cleanups |
| Compliance | Financial | Maps and Data |
| Permits and Authorization | Contact Us/Report a Problem | |

Another new feature of the site is an area titled *Your Environment*, which is designed to give an overview of Nebraska's environment. *Your Environment* contains an interactive map that divides the state into four regions, based generally on the ecology of the area. Clicking on any region in the map will link the viewer to a page that describes the region, and provides statistical information about water quality, air quality and waste management in that region.

An important component of the web site is to promote two-way communication. As part of those efforts, the agency's main e-mail address is provided at numerous locations on our web site. That e-mail address is: **NDEQ.moreinfo@Nebraska.gov** The Public Information Office coordinates responses to those e-mails. The site also features "Report a Problem," with a link to the e-mail

address to report an environmental issue of concern, at NDEQ.problem@nebraska.gov, The site also includes phone information and procedures relating to reporting a spill.

The agency is moving toward more standardized forms, including some that can be filled on-line or submitted electronically.

Grants/Contract Coordination

The Grant and Coordination Office assists with federal grant applications and compliance with grant conditions and requirements, particularly reporting requirements. In addition, the office assists with Requests For Proposals, contract development, tracking, management, and ensures contracts are kept current and contractors meet contract conditions. This office also provides assistance to the Fiscal Services Section.

Funding of Management Services

The Management Services Division provides essential administrative and technical support to the Department. Some activities in Management Services are program specific, but many are not. Funding for the Division is provided by two methods: 1) The majority of the staff salaries and activities are funded through an overhead charge to the Department's various programs; 2) Program specific staff time and activities are charged to those programs.

CHAPTER 3:

Environmental Quality Council

The Environmental Quality Council was established through the Nebraska Environmental Protection Act as the body that adopts rules and regulations which set air, water and land quality standards in order to protect the public health and welfare of the state. They adopt regulations that guide the activities and responsibilities of the Nebraska Department of Environmental Quality. In addition, the Governor appoints the Director of the Department of Environmental Quality based on candidates recommended by the Council.

The Council has 17 members who are appointed by the Governor to four-year terms. Appointments require legislative approval. Council members 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 tables. The first lists the council members, the second summarizes Council actions during FY2011.

Council Members

| Representing | Council member | Term expires |
|-------------------------------|------------------------------------|---------------------|
| Agricultural Crop Production | Rod Gangwish Shelton | June 22, 2013 |
| Ag Processing Industry | Douglas Anderson Aurora | June 22, 2015 |
| Automotive/Petroleum Industry | Mark Whitehead Lincoln | June 22, 2013 |
| Biologist | Mark Czaplewski Grand Island | June 22, 2013 |
| Chemical Industry | Donald E. Williams Orchard | June 22, 2015 |
| Conservation | John C. Turnbull York | June 22, 2015 |
| County Government | Earl McNutt McCook | June 22, 2015 |
| Food Products Manufacturing | Michelle Bucklin Omaha | June 22, 2013 |
| Heavy Industry | John Kinter Norfolk | June 22, 2015 |
| 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 | Vern Powers Hastings | June 22, 2015 |
| Municipal Government | Lance Hedquist South Sioux City | June 22, 2013 |
| Physician | Ronald Sheppard Callaway | June 22, 2015 |
| Power Generating Industry | Joseph Citta, Jr., Columbus | June 22, 2013 |
| Professional Engineer | John T. Baker Scottsbluff | June 22, 2015 |

**FY 2011
Environmental Quality Council Actions**

| Council Meeting Date | Regulation | Action |
|----------------------|--|----------|
| July 15, 2010 | Amendments to Title 129 – Nebraska Air Quality Regulations | Approved |
| | Amendments to Title 198 – Rules and Regulations Pertaining to Agricultural Chemical Containment | Approved |
| | State Revolving Fund Intended Use Plan | Approved |
| | Program Priority Systems for the Waste Reduction and Recycling Incentive Grants Fund | Approved |
| | Amendments to Program Priority Systems to Waste Reduction and Recycling Incentive Grants Fund for Deconstruction Applications | Approved |
| December 1, 2010 | Amendments to Title 129 – Nebraska Air Quality Regulations | Approved |
| | Amendments to Title 129 – Nebraska Air Quality Regulations, Greenhouse Gas Rule | Approved |
| | Amendments to Title 130 – Rules and Regulations Pertaining to Livestock Waste Control | Approved |
| | Amendments to Title 119 – Rules and Regulations Pertaining to the Issuance of Permits under the National Pollutant Discharge Elimination System (Permit by Rule) | Approved |
| | Amendments to Title 198 – Rules and Regulations Pertaining to Agricultural Chemical Containment | Approved |
| | 2011 Funding Percentage Allocations for the Litter Reduction and Recycling Grant Program | Approved |
| | Amendments to Title 199 – Waste Reduction and Recycling Incentive Grants Program | Approved |
| | Amendments to Title 132 – Integrated Solid Waste Management Regulations | Approved |
| June 23, 2011 | Amendments to Title 130 – Rules and Regulations Pertaining to Livestock Waste Control | Approved |
| | Amendments to Title 131 – Rules and Regulations for the Wastewater Treatment Facilities and Drinking Water Construction Assistance Program | Approved |
| | Amendments to Title 129 – Air Quality Regulations | Approved |
| | Fiscal Year 2012 Clean Water and Drinking Water State Revolving Funds Intended Use Plan | Approved |
| | Citizen Rulemaking Petition to Regulate Fossil Fuel Carbon Dioxide Emissions | Denied |

CHAPTER 4:

Air Quality Division

The objectives of the Air Quality Division are to achieve and maintain the ambient air quality standards, to protect the quality of the air in 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 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 primary air quality programs which help assure healthy air quality are: the construction permit program, operating permit program, emission inventory program, ambient air quality monitoring program, inspection and compliance program, 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 U.S. 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

During FY11, the NDEQ adopted regulations into Title 129 regarding greenhouse gases. These regulations were patterned after the Federal "Tailoring Rule" for greenhouse gases and impacted both the construction and operating permit programs. Due to the nature of greenhouse gases and the structure of the existing regulatory programs, the EPA "tailored" the Greenhouse Gases Program so that it would not cause an unnecessary administrative burden on sources of greenhouse gases and on permitting authorities. During FY11, the NDEQ did not feel the impacts of this program, because it was not fully implemented until July 1, 2011.

The NDEQ expects that the Greenhouse Gases Program could result in up to 20 sources that were previously minor under the operating permit program becoming major. Under the existing regulations, these sources have until June 30, 2012 to submit a major source operating permit application. However, they do have the option to remain minor if their actual emissions are below the thresholds. The NDEQ included a provision in its program for such sources to accept enforceable limits to remain minor sources. At this time, the NDEQ does not know how many of the 20 sources will request and be able to comply with minor source limitations.

The impact to the construction permit program thus far has been minimal. To date, there has only been one application submitted where greenhouse gases triggered the major source construction permit criteria. However, that project would have been subject to the major source construction permit program regardless of this new regulation.

Construction Permit Program

NDEQ has maintained 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:

| Pending June 2010 | Applications Received | Applications Processed | Pending June 2011 |
|-------------------|-----------------------|------------------------|-------------------|
| 37 | 52 | 37 | 52 |

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. The PSD program also ensures that visibility in nearby national parks and wilderness areas is protected. The NDEQ notifies federal land managers of pending PSD decisions. Lastly, the PSD program requires that permitting authorities advise nearby States and Tribes of pending PSD decisions so they may express any concerns they have with potential downwind impacts in their areas.

As a part of its state program, the NDEQ requires significant sources of hazardous air pollutants to control emissions with the best control technology available.

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.

During FY06-08, NDEQ received an increasing number of applications from business and industry for air quality construction permits to build new or expand current business ventures across the state, including ethanol plants, power plants, and grain processing facilities. That trend changed during FY09 and continued through FY11.

| | FY07 | FY08 | FY09 | FY10 | FY11 |
|--|------|------|------|------|------|
| Number of Construction Applications Received | 74 | 104 | 53 | 55 | 52 |

Operating Permit Program

The operating permit program is the result of the Federal Clean Air Act Amendments of 1990 and the passage of LB1257 (1992) by the Nebraska Legislature. The operating permits are reviewed and renewed every five years. Operating permits are issued for both large and small sources of air pollution.

The Nebraska operating permit program offers an innovative alternative for sources who have taken measures to keep their emissions very low. This program is called the low emitter program. NDEQ also has general permits and permits by rule available for certain source categories. The table below provides statistics relating to all applications received, processed and pending under the operating permit program:

| Pending June 2010 | Operating Permit Applications Received | Operating Permit Applications Processed | Pending June 2011 |
|-------------------|--|---|-------------------|
| 88 | 45 | 39 | 94 |

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 FY11 (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 | FY11 |
|--|------|------|------|------|------|------|
| Number of Operating Permit Applications Received | 21 | 47 | 44 | 52 | 20 | 45 |

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 have been established by the Environmental Protection Agency for the following six pollutants, to protect both public health and welfare:

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

Nebraska has an additional ambient air quality standard for Total Reduced Sulfur (TRS). The TRS standard was adopted by the Environmental Quality Council in 1997 and is a public health based standard. The Department currently monitors TRS in Dakota City/South Sioux City. The Department recently discontinued monitoring of TRS in Lexington due to the low levels being recorded. There have been significant reductions in TRS levels in both 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_{2.5}, PM₁₀, CO, SO₂, 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.

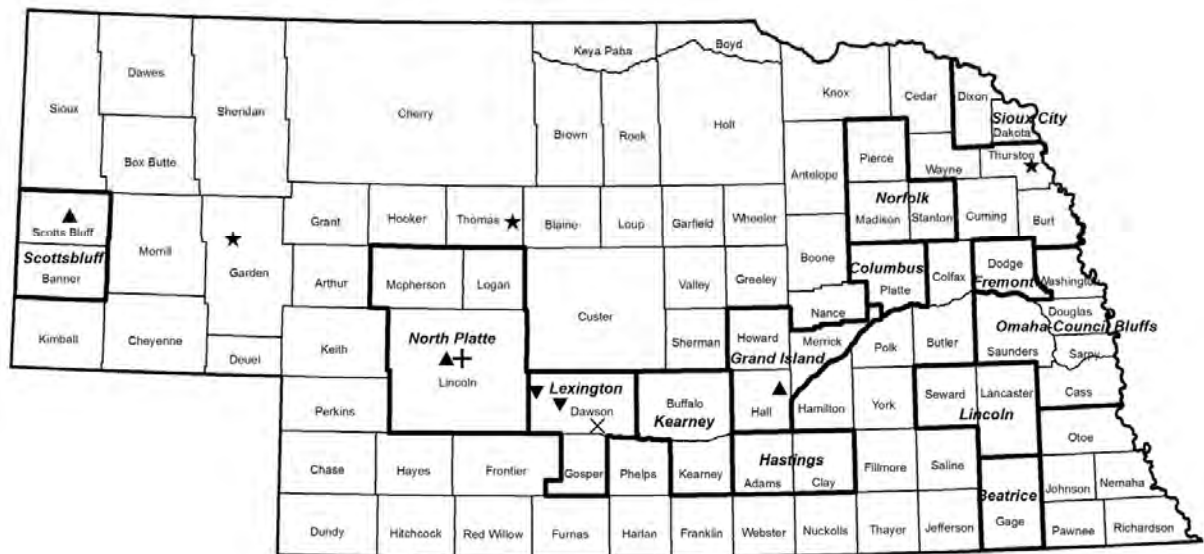
The National Trends Network (NTN) of the National Atmospheric Deposition Program (NADP) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride, and base-cations (e.g., calcium, 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. Both sites had been upgraded to include mercury (Hg) deposition monitoring and were part of the NADP/Mercury Deposition Network (MDN). The North Platte mercury monitoring was discontinued in 2010 upon completion of the Nebraska Environmental Trust Grant. Both sites maintain the NADP monitoring. The monitoring in Mead is made possible through cooperative efforts of the NDEQ and the University of Nebraska. Additional information about the NADP/NTN can be found at: <http://nadp.sws.uiuc.edu/nadpoverview.asp>.

Monitoring Information On-Line

Ozone and continuous PM_{2.5} data from Lincoln and Omaha is reported hourly to the EPA AirNOW system, which makes contemporaneous air quality information available to the public on web at <http://www.airnow.gov/>. The Douglas County Health Department also participates in the ENVIROFLASH program that allows members of the public to sign-up to receive air quality alerts via email.

Both the Douglas County Health Department and the Lincoln/Lancaster County Health Department also report daily Air Quality Index (AQI) evaluations on the Omaha and Lincoln web sites. The AQI is a numeric rating of the current air quality in each city, and provides the public with a quick and simple means to evaluate current air quality in each metro area.

Nebraska Monitoring Sites not in a Metropolitan Statistical Area



- ▲ PM_{2.5}
- ▼ PM₁₀
- ✕ TRS
- ★ IMPROVE
- + NADP/NTN

PM_{2.5}
 Grand Island, 2124 North Lafayette Avenue
 North Platte, 211 West 3rd Street
 (discontinued December 2005)
 Scottsbluff, 1809 3rd Avenue
PM₁₀
 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 below and on the next two pages show monitoring sites in the metropolitan areas of Lancaster County, Omaha-Council Bluffs, 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

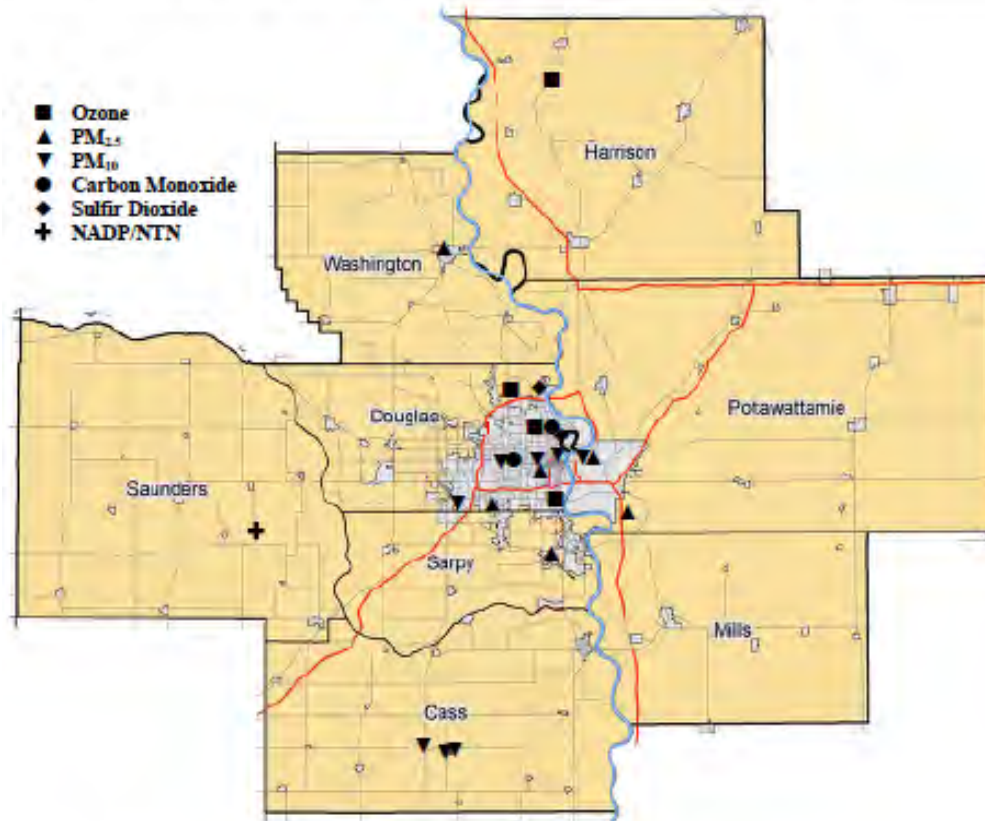
Lancaster County Monitoring Locations

- Ozone
- ▲ PM_{2.5}
- Carbon Monoxide

Carbon Monoxide
 2620 O Street
Ozone
 1st & Maple Street (Davey)
PM_{2.5}
 3140 N Street

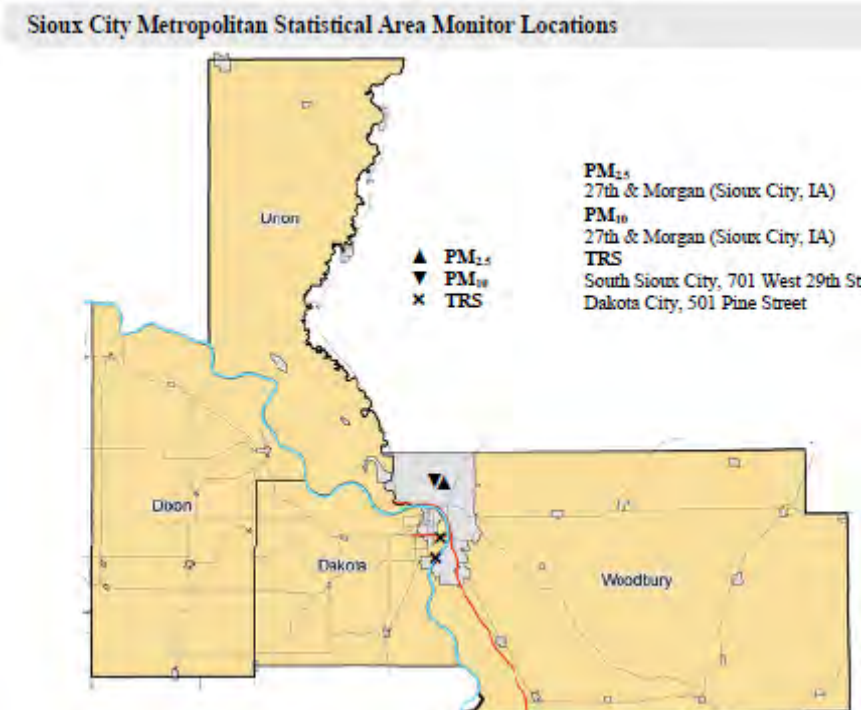


Omaha-Council Bluffs Metropolitan Statistical Area Monitor Locations



- PM_{2.5}**
 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**
 30th & Fort Streets
 11414 North 72nd Street
 2411 O Street
 1575 Highway 183 (Harrison County, IA)
- Carbon Monoxide**
 30th & Fort Streets
 (discontinued in December of 2007)
 7747 Dodge Street, Omaha

- PM₁₀**
 19th & Burt Streets
 7717 Dodge Street
 132nd & Q Streets
 46th & 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 | 148 | 111 | 35 |
| Facility Stack Tests Reviewed | 61 | 2 | 0 |
| On site observations conducted | 38 | 2 | 0 |
| Continuous Emission Monitoring Audits Reviewed | 31 | 2 | 1 |
| On-site observations conducted | 9 | 2 | 1 |
| Complaints Received | 67 | 3 | 91 |
| Burn Permits Issued | 143 | 47 | 65 |
| Burn Permits Denied | 3 | 1 | 1 |

Program Planning and Development Unit

The Air Quality Division's Program Planning and Development Unit provides support and training to permitting and compliance staff, provides outreach and training to the regulated and general public, and provides information and analyses to Department and other policy makers. The Unit includes the air dispersion modeling, emissions inventory and compliance assistance functions for the Air Division. It is also responsible for maintaining state air quality regulations, updating the state implementation plan, providing expert information on National Emissions Standards for Hazardous Air Pollutants (NESHAPS, also known as air toxics), New Source Performance Standards (NSPS) and National Ambient Air Quality Standards (NAAQS). The Unit coordinates local agency activities, as well as negotiates work plans with the EPA. The Unit also administers the Nebraska Clean Diesel Grant Program.

During 2010 and 2011, the Unit administered the special Clean Diesel Grant Program under the American Recovery and Reinvestment Act of 2009, providing grants for clean diesel technology to more than 50 public and private entities. The Unit also organized and participated in voluntary efforts to reduce ground-level ozone pollution in the Omaha-Council Bluffs area. The Air Toxics Notebook continued to be maintained as a valuable online resource for staff and regulated sources, and the similar New Source Performance Standards (NSPS) Notebook was recently brought online. The annual Air Updates Workshops were conducted in Lincoln and Grand Island in August of 2011.

A major state implementation plan revision was submitted to EPA on June 30, 2011, to address Nebraska's obligations under the Regional Haze and Best Available Retrofit Technology Program. The plan may be found on our website: <http://www.deq.state.ne.us/AirDivis.nsf/Pages/Haze>. This revision is currently under review by EPA.

The Greenhouse Gas program was also a state implementation plan revision and was submitted to EPA in early January 2011. The revision included long awaited updates to the new source review program. This revision has been approved by EPA.

Emission Inventory and Emission Fees

Each year, the Department conducts an inventory of emissions from major industrial sources and a representative sample of lower-emitting, minor industrial sources. Every three years, the Department assists the EPA to prepare a comprehensive national inventory of emissions. The emissions inventory is used to support the planning efforts for national rulemaking and to assess trends in emissions. Emission inventories are due on March 31st each year. The NDEQ also uses emission inventory to support the assessment of annual emission fees. Major sources of air pollution are required to pay emission fees for each ton of pollutant actually emitted during the calendar year. The maximum emission for which a fee is assessed is 4,000 tons per pollutant. For electrical generating facilities with a capacity of between 75 and 115 megawatts, the maximum emission is 400 tons per pollutant. The fees generated are used to support the administration of the permitting program.

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 NDEQ's website. The fee rate is determined in May of each year. The rate for 2010 emissions was \$66 per ton, down 5.7% from the 2009 emissions fee of \$70 per ton.

Future Air Issues for Nebraska

Under the federal Clean Air Act, the EPA issues National Ambient Air Quality Standards (NAAQS) for "criteria pollutants." These standards are intended to protect public health and the environment. States must determine whether they are in attainment of these standards and take corrective action if needed. The standards are reviewed and revised periodically, based on the most recent scientific information available.

Nebraska is currently in attainment of all the NAAQS. There is concern, however, that the Omaha-Council Bluffs area may not remain in compliance with the ozone and particulate matter NAAQS when these standards are expected to be revised in the future. During the past two years, the Air Division has participated in a community-based effort to educate the community about air quality issues and ways to voluntarily reduce pollution. The objective is to avoid nonattainment designation if at all possible. The Department is also taking steps to remain in compliance with revised SO₂, NO_x and lead standards.

In addition to maintaining the NAAQS, the Air Division has complied with new federal rules to reduce the emission of greenhouse gases. It is currently reviewing and responding to new requirements on the state and regulated industry related to interstate transport of air pollutants under the Cross-State Air Pollution Rule (CSAPR) issued in 2011. The Air Division continues to assist industry in complying with new and revised air toxics and New Source Performance standards.

For more information about the Nebraska air quality program, please refer to the annual Air Quality Reports and the Ambient Air Monitoring Network Plan, both of which are available on the agency's website at www.deq.state.ne.us under "Focus on Air."

CHAPTER 5:

Waste Management Division

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 hazardous waste (RCRA), Superfund, voluntary remediation, and integrated waste management programs. Several waste-related grant programs are administered by the Planning and Aid Unit. Following is a summary of Waste Management Division programs.

Resource Conservation and Recovery Act (RCRA) Program

NDEQ was authorized in 1985 by EPA to administer portions of the Resource Conservation and Recovery Act (RCRA) program. RCRA regulations are incorporated in NDEQ Title 128 - Nebraska Hazardous Waste Regulations, which is updated as the Federal RCRA regulations change. There were no regulatory changes made in fiscal year 2011 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 FY11.

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.

| Summary of FY2011 RCRA Activities | | |
|--|--------------|------------|
| Activity | State | EPA |
| Compliance Assistance | | |
| On-site Visits | 3 | 0 |
| Direct Assistance Contacts | 854 | * |
| Public Outreach Presentations (total 351 in attendance) | 10 | * |
| Inspections | | |
| Land Treatment Facilities | 1 | 0 |
| Treatment and Storage Facilities | 2 | 2 |
| Comprehensive Groundwater Monitoring Evaluations | 0 | 0 |
| Operation and Maintenance Inspections | 2 | 0 |
| Facility Self-Disclosure | 1 | 0 |
| Large Quantity Generator | 13 | 4 |
| Small Quantity Generator | 7 | 3 |
| Conditionally Exempt Small Quantity Generators | 19 | 3 |
| Transporters | 0 | 0 |
| Permitting | | |
| Closure Plans Finalized | 0 | 0 |
| Permits Issued/Renewed | 0 | 1 |
| Modifications | 3 | 0 |
| EPA Corrective Action Orders | 0 | 0 |
| Record Reviews | | |
| Financial Assurance | 16 | 1 |
| *Data not available | | |

Superfund Program

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) became federal law in 1980. CERCLA established what has commonly become known as Superfund to deal with known or suspected contamination at inactive commercial/industrial/military facilities or so called "uncontrolled hazardous waste or abandoned sites." The nation's most contaminated sites are listed on the National Priorities List (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 one site reassessment, two site investigations and one expanded site investigation. Completion of one other site investigation was delayed due to property access negotiations. In addition, the Department reviewed numerous site assessments conducted by EPA in the State and provided recommendations on the need for follow up action.

NPL Site Management Assistance — The Superfund Management Assistance program provides management and technical support to the EPA at priority sites in Nebraska. This assistance includes reviewing technical documents and participating in the Superfund remedy selection process. As the most heavily contaminated sites in the nation, Superfund National Priority List sites are generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The investigation and cleanup activities at these sites are organized into several phases including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. The Department also participates in public meetings with citizens and local officials in the development of cleanup plans. 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 16 formerly used defense sites. Military munitions response activities are being performed at 21 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 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, 35 sites have entered the voluntary cleanup program. Currently, 15 sites are active in the voluntary cleanup program. 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 has seen a significant increase in applications to the voluntary cleanup program over the last year. New applicants include the City of Lincoln on the West Haymarket Arena redevelopment, one current EPA brownfield grantee (City of Fremont Target Range), Hoover Manufacturing in Beatrice, Magnolia Metal Corporation in Auburn, Union Pacific Railroad leased property in Auburn, CVS Pharmacy in south Lincoln and two former manufactured gas plant (FMGP) sites in Blair and Plattsmouth. One current EPA brownfield grantee (Former PCS Nitrogen site in Sarpy County) and another FMGP site in Omaha are likely to apply to the program in the next year. The department also anticipates completing negotiations on a multi-site Memorandum of Agreement with the U.S. Department of Agriculture (USDA) to enter several former grain bin sites into the program. Significant cleanup activities have also been initiated this year at the West Haymarket Arena redevelopment, the former Nebraska Solvents Company site in Grand Island, the former Pfizer facility in Omaha and at the Archer Daniels Midland facility in Lincoln. Cleanup activities are also anticipated to commence next year at the City of Fremont Target Range, CVS Pharmacy in south Lincoln, Magnolia Metal Corporation in Auburn and the two FMGP sites in Blair and Plattsmouth.

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 ten 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 |
| CVS Pharmacy | Lincoln | Active | 10/13/10 |
| West Haymarket Redevelopment | Lincoln | Active | 10/27/10 |
| Izaak Walton Trap Range | Fremont | Active | 10/28/10 |
| Magnolia Metal Corporation | Auburn | Active | 3/9/11 |
| Dettmer Lease Property | Auburn | Active | 4/7/11 |
| Hoover Manufacturing | Beatrice | Active | 5/27/11 |
| Blair FMGP | Blair | Active | 6/28/11 |
| Plattsmouth FMGP | Plattsmouth | Active | 6/28/11 |

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:

| Total Permitted Facilities in FY 2011 | |
|--|------------|
| 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 | 29 |
| Delisted Waste Disposal Areas | 1 |
| Fossil Fuel Combustion Ash Disposal Areas | 8 |
| Total | 112 |

The following chart indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2011:

| Summary of Activities: FY2011 | |
|--------------------------------------|-----|
| Compliance | |
| Facility Inspections (General) | 99 |
| Facility Inspections (Construction) | 2 |
| Complaints Received | 155 |
| Complaints Investigated | 132 |
| Complaints Closed | 119 |
| Permitting | |
| New Permits Issued | 3 |
| Permit Renewals | 19 |
| Major Permit Modifications | 7 |
| Transferred Permits | 0 |
| Public Hearings | 0 |
| Financial Assurance Reviews | 115 |
| 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.

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.

| Waste Tire Permit Totals, FY2011 | |
|---|----|
| Permitting | |
| Renewed Hauler Permits | 21 |
| New Permits Issued | 3 |

The waste tire compliance assurance program includes facility inspections, complaint investigations and appropriate enforcement actions. Compliance activities are included in the summary of activities for the Solid Waste Program.

Planning and Aid

Waste Planning and Aid includes the following programs: the Waste Reduction and Recycling Incentive Grants Program; the Litter Reduction and Recycling Grant Program; the Illegal Dumpsite Cleanup Program; and the Landfill Disposal Fee Rebate Program.

Main responsibilities of Planning and Aid Unit include:

- Oversight and review – The Unit reviews grants submissions, performs compliance inspections, monitors the activities, budgets and equipment purchases of grantees, and conducts quarterly performance reviews.
- Outreach – The Unit promotes the availability of grant funding, coordinates the ranking process with the Citizen Advisory Committee, announces grant awards, provides integrated waste management information to the public, and contributes to the development of the Nebraska Recycling Resource Directory, which is located at DEQ's web site at www.deq.state.ne.us, under "Assistance."

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.

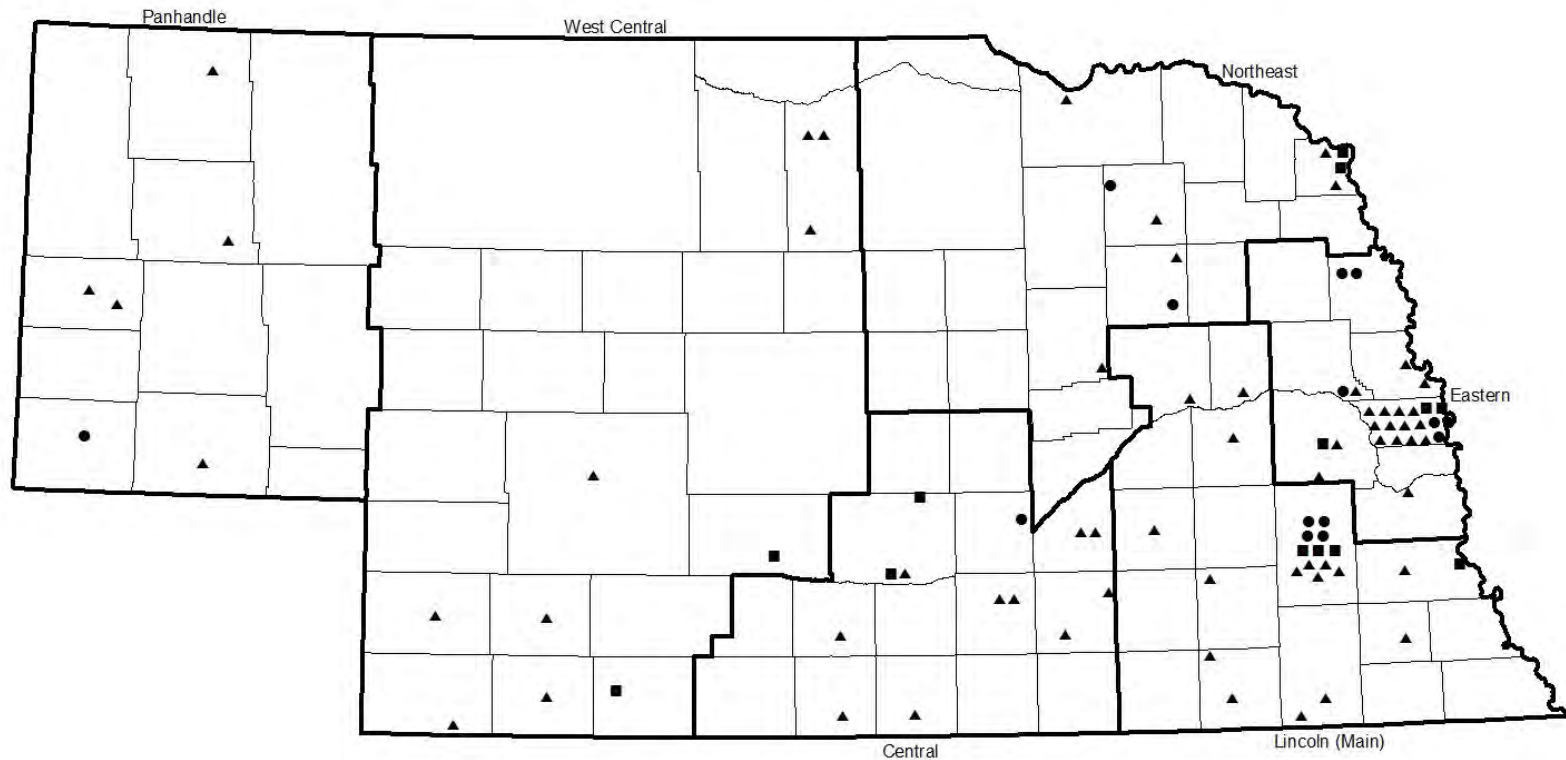
Fund Summary

Waste Reduction and Recycling Fund July 1, 2010 - June 30, 2011

| | | |
|-----------------------------------|-----------|------------------|
| Fund Balance June 30, 2010 | \$ | 3,695,654 |
| Revenues: | | |
| New Tire Fees | | 1,940,460 |
| Business Fees | | 474,323 |
| Solid Waste Disposal Fee | | 1,255,591 |
| Interest, Grant Returns | | 172,967 |
| Net Collections for Year | \$ | 3,843,341 |
| Expenditures: | | |
| Administration | | 377,463 |
| Grant Funds Expended | | 2,707,881 |
| Fund Transfer | | 1,517,501 |
| Total Expenditures FY 2011 | \$ | 4,602,845 |
| Fund Balance June 30, 2011 | \$ | 2,936,150 |

Summary of Activities - For FY2011, the Department awarded \$2,293,439 for Waste Reduction and Recycling Incentive Grants to 90 projects. Fourteen of these grants were awarded from the Business Fee category (\$349,395), 13 were awarded from the Disposal Fee category (\$791,488), and 63 received grants from the funds prioritized for scrap tire projects (\$1,152,556). The following map shows the locations across Nebraska that received funds.

Waste Reduction and Recycling Incentive Grants Program 2011 Grant Awards



| | | |
|-----------------|--------------------|----------------------------------|
| ■ Disposal Fee | \$791,488 | 13 grants, including 3 regional |
| ● Business Fee | \$349,395 | 14 grants, including 1 statewide |
| ▲ Tire Projects | \$1,152,556 | 63 grants |
| Total | \$2,293,439 | 90 grants |

September 2011

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:

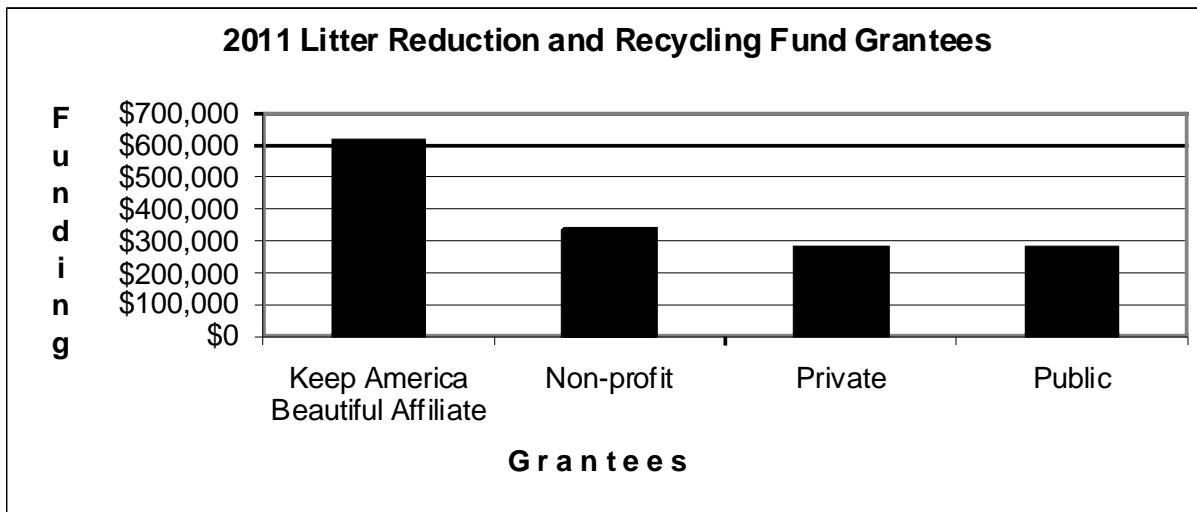
- Food for human consumption, beverages, soft drinks, carbonated water, liquor, wine, beer, and other malt beverages, unless sold by retailers solely for consumption indoors on the retailer's premises;
- Food for pet consumption;
- Cigarettes and other tobacco products;
- Household paper and household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

Fund Summary

Litter Reduction and Recycling Fund July 1, 2010 - June 30, 2011

| | | |
|--|-----------|------------------|
| Fund Balance June 30, 2010 | \$ | 336,321 |
| Revenues: | | |
| Litter Taxes Collected | | 1,624,444 |
| Interest, Grant Returns | | 51,291 |
| Net Collections for Year | \$ | 1,675,735 |
| Expenditures: | | |
| Department of Environmental Quality Administration | | 266,489 |
| Grant Funds Expended | | 1,375,879 |
| Total Expenditures FY 2011 | \$ | 1,642,368 |
| Fund Balance June 30, 2011 | \$ | 369,688 |

In FY2011, \$1,508,789 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 2011 grantees.



2011 Grant Allocations

Litter Reduction and Recycling Fund

In FY2011, the Department gave 59 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

| | | | |
|-------------------------|-------|-----------|--------------------|
| Public Education | (21%) | 19 grants | \$ 323,789 |
| Cleanup | (4%) | 6 grants | \$ 60,000 |
| Recycling | (75%) | 34 grants | <u>\$1,125,000</u> |
| | | | \$1,508,789 |

Public Education

In FY2011, 19 grants totaling \$323,789 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

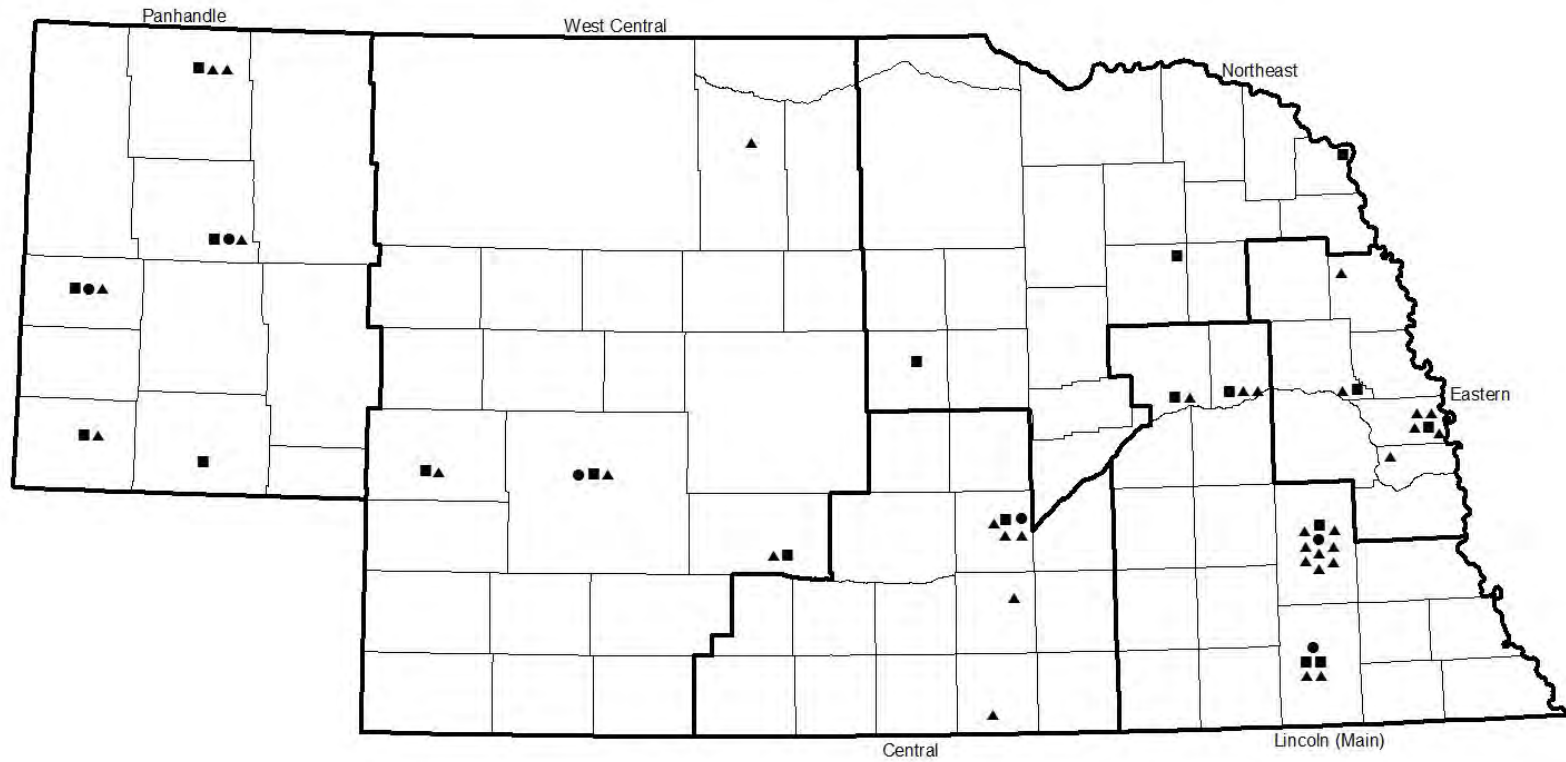
In FY2011, 6 grants totaling \$60,000 were awarded under the category of cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas, and other public use areas within the state. Not only are the 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 FY2011, 34 grants totaling \$1,125,000 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 2011 Grant Awards



| | | |
|--------------------|--------------------|---|
| ■ Public Education | \$323,789 | 19 grants, including 0 statewide and 1 regional |
| ● Cleanup | \$60,000 | 6 grants, including 0 statewide and 0 regional |
| ▲ Recycling | \$1,125,000 | 34 grants, including 3 statewide and 5 regional |
| Total | \$1,508,789 | 59 grants |

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 FY2011, the program provided \$85,533 to six 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 FY2011, the program provided \$82,723 to 11 recipients.

CHAPTER 6:

Water Quality Division

The goal of the Water Quality Division is to protect the surface and groundwater resources in Nebraska. This chapter describes the programs administered by the Water Quality Division, including: petroleum remediation programs, agriculture programs, surface water and groundwater monitoring and assessment programs, wastewater permitting and certification programs, and financial assistance programs.

Petroleum Remediation Program

NDEQ's activities regarding the Petroleum Remediation Program involve two interrelated program areas:

1. overseeing the **investigation and cleanup** of petroleum contamination resulting from leaking above-ground and underground storage tanks; and
2. administering a **financial assistance program** for persons responsible for investigation and cleanup costs due to petroleum releases from tanks.

Investigation and Cleanup

The first step in the Petroleum Remediation Program is the review of tank removal assessment reports or other documentation to determine whether potential contamination exists. After some initial indication that there may be petroleum contamination at a site, NDEQ decides whether more investigation and cleanup is required. The agency determines whether parties who caused the contamination are available and financially capable of assuming responsibility.

In the event these reports indicate a threat to health, safety, or the environment, NDEQ requires a detailed study of the affected groundwater and soil to discover the severity of the contamination, direction of groundwater flow, and potential water supplies or points of exposure that may be impacted. Program staff review these reports to determine if cleanup requirements are needed and issue a public notice of their decision. Staff review remedial actions throughout the project and determine when sufficient cleanup has been accomplished.

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 normally scheduled for cleanup.

Financial Assistance – Petroleum Release Remedial Action Reimbursement Fund

When contamination has been found at a site, and the NDEQ has determined that more investigation and/or cleanup 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 located or does not have the resources to pay for their share of cleanup costs), investigation and remediation costs are paid with federal and/or state funds. In FY11, 21 orphan sites were activated for investigation and/or cleanup. As of September 2, 2011, there were 528 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 36 Pay for Performance contracts since the program's inception. Of these projects, 10 have been successfully completed, 8 were terminated prior to completion, and 18 are still in the cleanup phase. This program saves the state time and money in getting these sites cleaned up.

Program Statistics

Since June 1999, through September 27, 2011, 2,436 Tier 1 site investigations have been initiated. Of the 1,929 Tier 1 field investigations completed, 1,102 (57%) were closed, and 827 (43%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 647 Tier 2 investigations have been completed; 457 (71%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, 305 (16%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

The revenue going into the cleanup fund in FY11 was about \$11.7 million. As of June 30, 2011, a total of \$158,852,641 has been disbursed since the program began. During FY2011, NDEQ reimbursed \$2,210,617 to 121 Tier 1 sites and an additional \$3,302,211 to 151 other active sites.

The 43 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.

| Responsible Person | City | Reimbursed amount as of June 30, 2010 | Has Statutory Limit Been Reached?* |
|---------------------------|--------------|--|---------------------------------------|
| BURLINGTON NORTHERN & SF | MC COOK | \$975,000.00 | yes |
| BURLINGTON NORTHERN RR | ALLIANCE | \$975,000.00 | yes |
| COOP FIRTH | FIRTH | \$975,000.00 | yes |
| KONECKY OIL | MEAD | \$975,000.00 | yes |
| BNSF | ALLIANCE | \$973,682.45 | yes |
| CORNER SERVICE | BANCROFT | \$973,000.00 | yes |
| BURLINGTON NORTHERN RR | ALLIANCE | \$972,578.98 | yes |
| ELKHORN VALLEY COOP | SNYDER | \$953,516.14 | no |
| MAGERS SERVICE | NORTH PLATTE | \$947,669.57 | no |
| NU STAR ENERGY LP | NORFOLK | \$939,761.89 | no |
| PETERSON OIL CO INC | DAVENPORT | \$910,066.53 | no |
| COBB MOTORS INC | STUART | \$902,581.26 | no |
| WORTMAN MOTOR CO. | DONIPHAN | \$899,386.26 | no |
| FORMER HERSHEY TRUCK STOP | HERSHEY | \$886,149.40 | no |
| WESTERN COOPERATIVE CO. | ALLIANCE | \$884,340.43 | no |
| TOMAHAWK TRUCK STOP | NORTH PLATTE | \$879,430.07 | no |
| AG VALLEY COOP | BARTLEY | \$875,597.48 | no |
| GORDON AIRPORT AUTHORITY | GORDON | \$865,512.06 | no |
| NEITZEL OIL CO. | SPRINGFIELD | \$851,693.57 | no |
| COOP PANHANDLE | MITCHELL | \$850,727.23 | no |
| DANKERTS INC. | CHAMBERS | \$845,466.63 | no |
| CONOCO PHILLIPS | SIDNEY | \$836,014.87 | no |
| BNSF | ALLIANCE | \$829,561.86 | no |
| IBP ATV(AT THE VERTICALS) | DAKOTA CITY | \$825,000.72 | no |
| UNOCAL CORPORATION | OGALLALA | \$824,659.06 | no |
| AMERITAS INVESTMENT CO | LINCOLN | \$764,604.93 | no |
| FOOTE OIL COMPANY | HASTINGS | \$726,923.66 | no |
| FARMERS COOP GRAIN SUPPLY | TRENTON | \$702,114.34 | no |
| CARPENTER OIL & PROPANE | STERLING | \$690,014.62 | no |
| AG VALLEY COOP | CURTIS | \$689,181.80 | no |
| LEIGH OIL CO | LEIGH | \$686,527.14 | no |
| SINCLAIR OIL CORP. | GRAND ISLAND | \$683,073.33 | no |
| WHITEHEAD OIL 33RD A | LINCOLN | \$675,885.30 | no |
| KLEPPER OIL | DU BOIS | \$672,530.00 | no |
| MAGELLAN PIPELINE CO | ROCA | \$668,009.71 | no |
| WYMORE OIL CO | WYMORE | \$667,538.35 | no |
| LOHR PETROLEUM CO | COLUMBUS | \$646,553.17 | no |
| ROESENER OIL CO | COOK | \$630,703.18 | no |
| CITY OF LINCOLN | LINCOLN | \$620,025.96 | no |
| BARNARD OIL COMPANY | BEATRICE | \$617,881.13 | no |
| MIDLAND COOP - AXTELL | AXTELL | \$609,185.03 | no |
| FLYING J INC | GRETNA | \$607,399.97 | no |
| FORMER FARMERS COOP | CEDAR BLUFFS | \$607,091.97 | no |

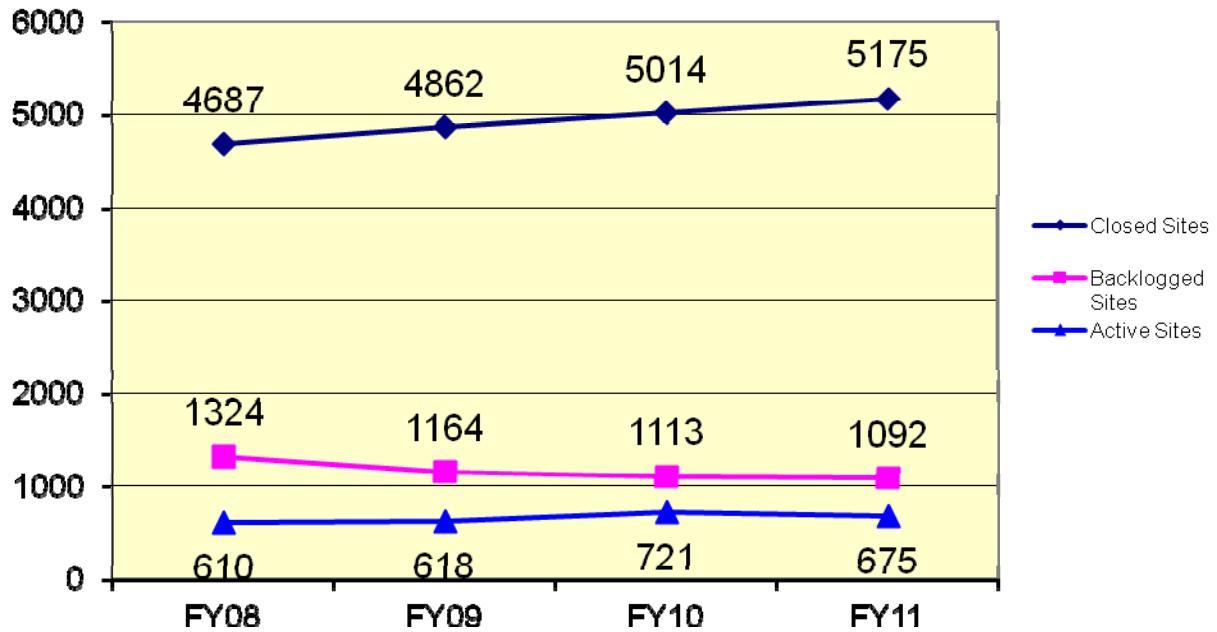
* Those with a yes indicate that the statutory limit was reached prior to June 30, 2011. The total reimbursed amount may have been reduced due to noncompliance reductions.

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 173 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:

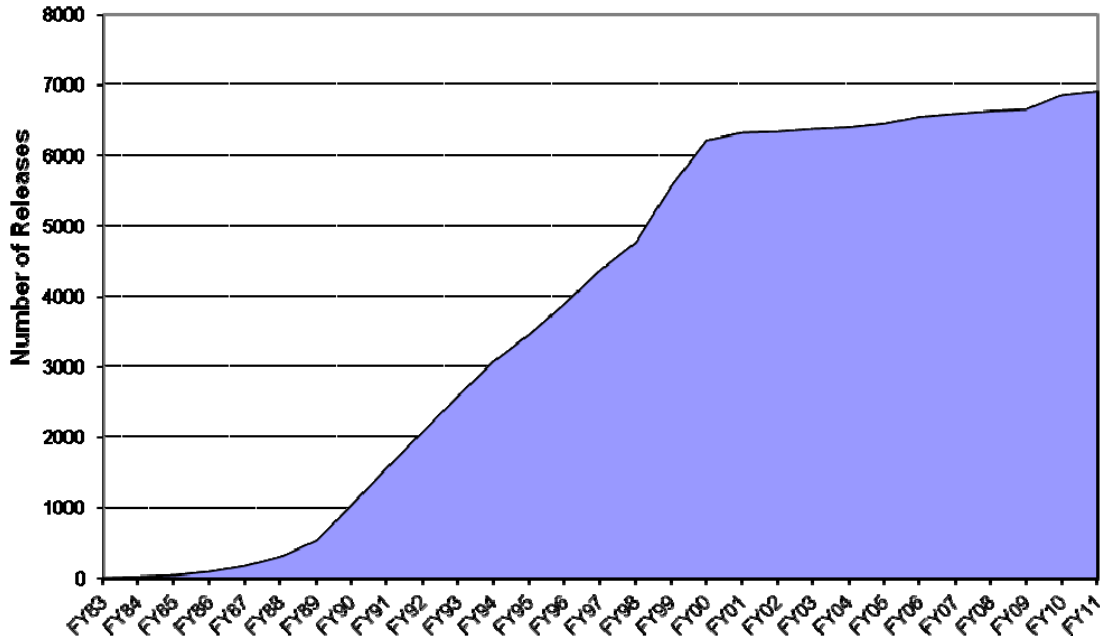
- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary
- **Backlogged Sites:** Sites identified as potentially needing cleanup, but are on a waiting list for further investigation
- **Active Sites:** Sites that are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

Petroleum Remediation Trends: End-of-Year Cumulative Totals, FY08-FY11

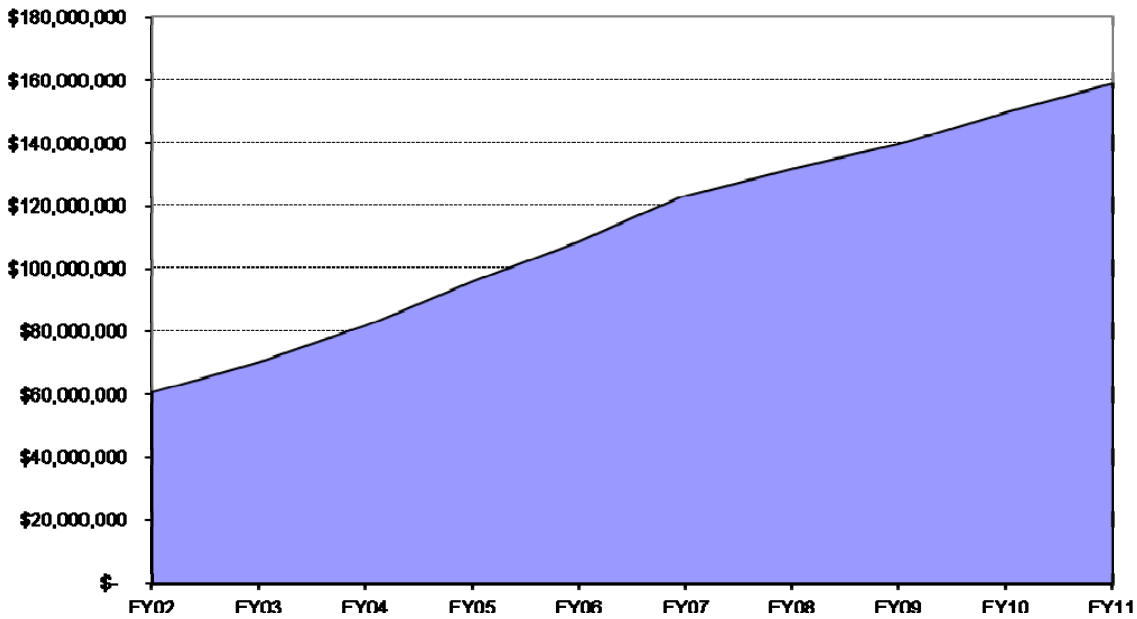


The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.

Cumulative LUST Release Totals (Through FY11)



Cumulative Title 200 Disbursements (last 10 years through FY11)



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

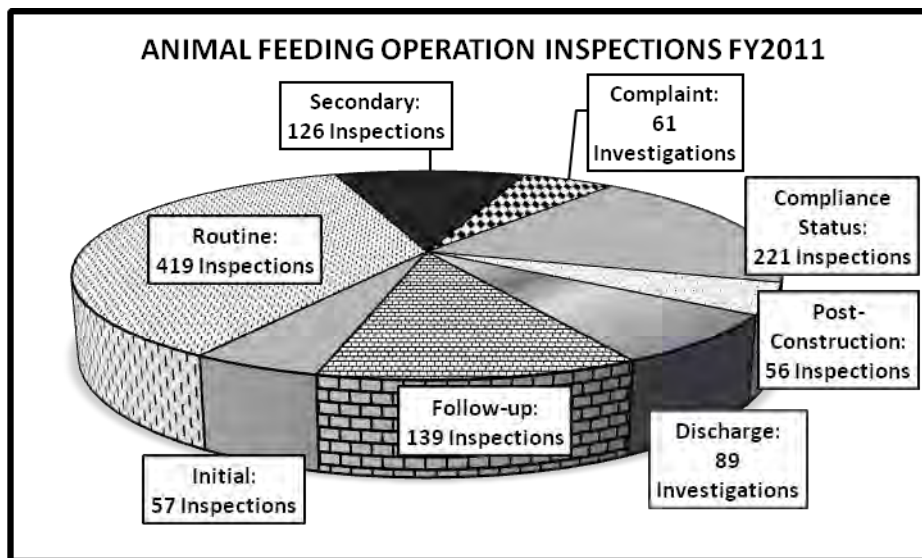
Overview

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 736 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,000 Medium AFOs. The LWC Program uses inspections, permitting, and periodic monitoring to fulfill this responsibility. The permitting includes administering the National Pollutant Discharge Elimination System (NPDES) program for CAFOs.

Title 130 was amended during the year to reflect changes in the U.S. Environmental Protection Agency (EPA) CAFO Rule for NPDES permitting, which primarily involved changes in the nutrient management plan requirements. The changes were necessary to ensure the Department could continue to administer the NPDES permit program for EPA. As a result, every application submitted to the Department must include a detailed nutrient management plan that ensures adequate waste storage, available disposal capabilities, and record keeping criteria. The nutrient management plan will also be available for public review.

Inspections



The LWC Program staff conducted a total of 1,168 livestock waste control inspections and investigations in FY2011 (including complaint and discharge investigations). The chart above illustrates the breakdown by type of inspection or investigation.

A short description of each type of inspection and investigation follows:

Initial Inspection. Before constructing a new operation or expanding an existing operation, all medium and large AFOs – whether or not the operation currently is permitted -- must request an initial inspection by 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 FY2011, the LWC Program received 74 complaints. When a complaint is received, LWC Program staff will investigate the complaint and may conduct an on-site complaint investigation. During FY2011, Program staff conducted 69 complaint investigations.

Secondary Inspections. Secondary Inspections are primarily conducted for training purposes and to assist the primary inspector in evaluating unusual or atypical AFOs.

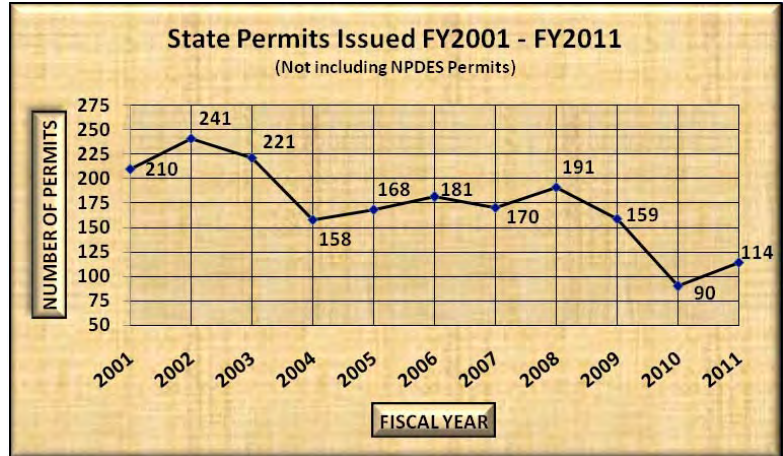
State Permitting

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

| Construction and Operating Permits – FY2011 | | |
|--|-----------------------|----------------|
| Type of Application or Permit | Applications Received | Permits Issued |
| New permits | 24 | 21 |
| Modified permits | 25 | 28 |
| Transfer permits | 64 | 65 |
| TOTAL | 113 | 114 |

The Department received a total of 113 permit applications and issued 114 permits during FY2011, as shown in the table above. The totals do not include applications received or permits issued for any NPDES permits. The chart below shows the total number of state permits issued for livestock waste control facilities for each year since FY2001.

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 FY2011, the Department gave approval to 71 AFOs for operation of their new or expanded LWC facilities.



National Pollutant Discharge Elimination System (NPDES) Permit

The LWC Program also oversees the NPDES permitting process for livestock, issuing coverage under 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 FY2011.

| NPDES PERMITS – FY2011 | | |
|-------------------------------------|-----------------------|----------------|
| Type of NPDES Application/Permit | Applications Received | Permits Issued |
| GENERAL PERMIT FOR OPEN LOTS | | |
| New Coverage | 20 | 20 |
| Modified or Transferred | 12 | 17 |
| Reissued | 0 | 2 |
| SUBTOTAL GENERAL PERMIT: | 32 | 39 |
| INDIVIDUAL PERMIT | | |
| New Coverage | 1 | 5 |
| Modified or Transferred | 3 | 2 |
| Reissued | 7 | 0 |
| SUBTOTAL INDIVIDUAL PERMIT: | 11 | 7 |
| NPDES TOTALS: | 43 | 46 |

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. For FY2011, the fee rate was adjusted to ensure that fees provide 20% of the Department's costs to administer the livestock waste control program, as required by statute. Based on the adjusted rate, the Department received \$329,205 in annual permit fees from 672 permitted AFOs. In addition, the Department received 52 initial inspection fees, 56 permit application fees, and one late payment fee.

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.

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. These regulations are contained in *Title 195 – Rules and Regulations Pertaining to Chemigation*.

The NRDs inspect systems and issue site permits for specific safety equipment that is required to be installed on irrigation systems that chemigate. 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 2010, the NRDs issued 19,529 chemigation permits, slightly less than the 19,539 permits issued in 2009.

In 2011 the legislature, through LB 28, amended the chemigation statutes. The significant change reflected in LB 28 is that the Department will no longer maintain a database of the chemigation permit information. The NRDs will maintain each application or the information contained in the application and provide such information to the Department upon request. Title 195 is in the process of being revised.

A chemigation applicator initially must be certified by the Department, and re-certified every four years. To receive certification, an applicator must complete training and testing, which is provided under contract with NDEQ by the University of Nebraska Cooperative Extension. Applicator certifications also are reported on a calendar-year basis. The application form for the Chemigation Applicator Certification includes the United States Citizenship Attestation Form required of individuals that receive State benefits.

In 2011, 2040 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 4,628 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.

The Department has 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. This agreement runs through 2012. The

second is to develop an internet-based chemigation training program. The internet-based chemigation training program is in the final stages of being implemented.

AGRICULTURAL CHEMICAL CONTAINMENT PROGRAM

The Agricultural Chemical Containment program regulates the construction and use of commercial and private facilities for the storage, loading, and rinsing activities of bulk liquid fertilizers and bulk liquid and dry pesticides. These regulations are contained in *Title 198 - "Rules and Regulations Pertaining to Agricultural Chemical Containment."*

The regulations administered by this program provide specific requirements for design by a Nebraska Registered Professional Engineer, construction materials, containment capacities and maintenance. Although no permit or registration is required, the operation must have a construction plan for the facility and a management program.

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 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 received the EPA review and comments, and developed modifications to Title 198 to address any deficiencies. The modified Title 198 was presented to the Environmental Quality Council at the Council's December 2010 meeting. On June 27, 2011 the modified Title 198 went into effect.

The Department and the Nebraska Department of Agriculture have a cooperative agreement that outlines the procedure for coordinating inspection activities between the two agencies. The agreement enhances the communication between the agencies and provides specific protocols to be followed when investigating Title 198 complaints. In FY2011, Agriculture Section staff conducted a total of four inspections of chemical containment systems.

Water Quality Monitoring and Assessment Programs

Surface Water Assessment Programs

In 2001, NDEQ completed a comprehensive study on water quality monitoring in response to LB 1234, and began implementing comprehensive, integrated surface water monitoring programs throughout the state by working with additional monitoring partners 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.

The Surface Water Monitoring and Assessment programs collect physical, chemical, and biological water quality samples from streams and lakes, implements surface water improvement projects, and 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.

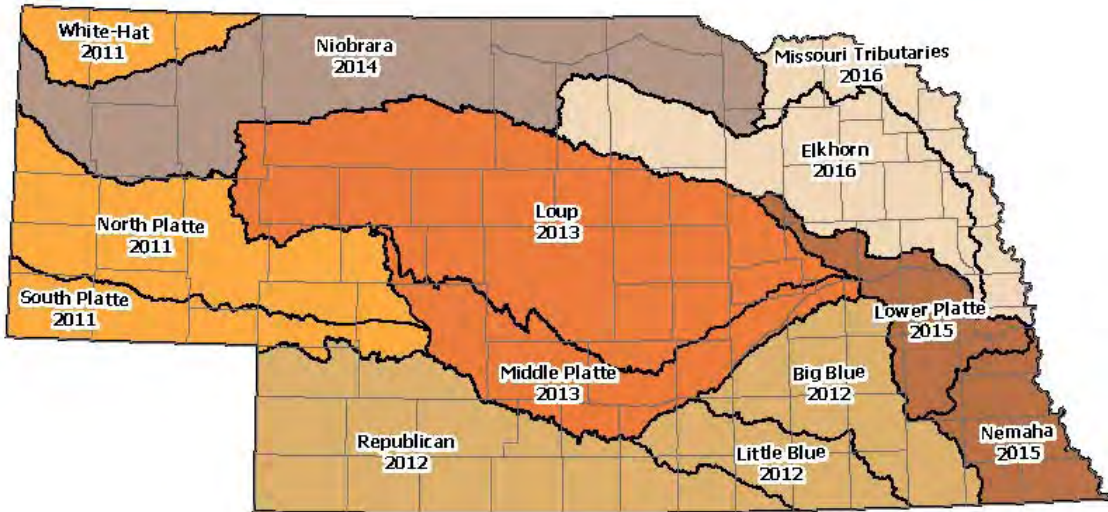
A brief description of the basin monitoring strategy, as well as other water implementation monitoring of assessment programs is provided below. Or, for a more detailed overview of the programs are provided in the agency publication [Nebraska Water Monitoring Programs Report](#).

Basin Rotation Monitoring Program — The Basin Rotation Monitoring Program targets one to three river basins each year for intensive monitoring. Targeting resources in this manner improves NDEQ's ability to identify and remediate water quality problems and allows resources to be focused where they can produce the greatest environmental results. During a six-year cycle, all 13 river basins in the state are intensively monitored (see map below for details). Monitoring data are used to document existing water quality conditions, assess the support of beneficial uses (such as aquatic life, recreation, and public drinking water supply), and prioritize water quality problems. The current six-year basin rotation monitoring cycle is:

- 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;
- 2015 -- Lower Platte and Nemaha River basins; and
- 2016 -- Elkhorn and Missouri Tributaries River basins.

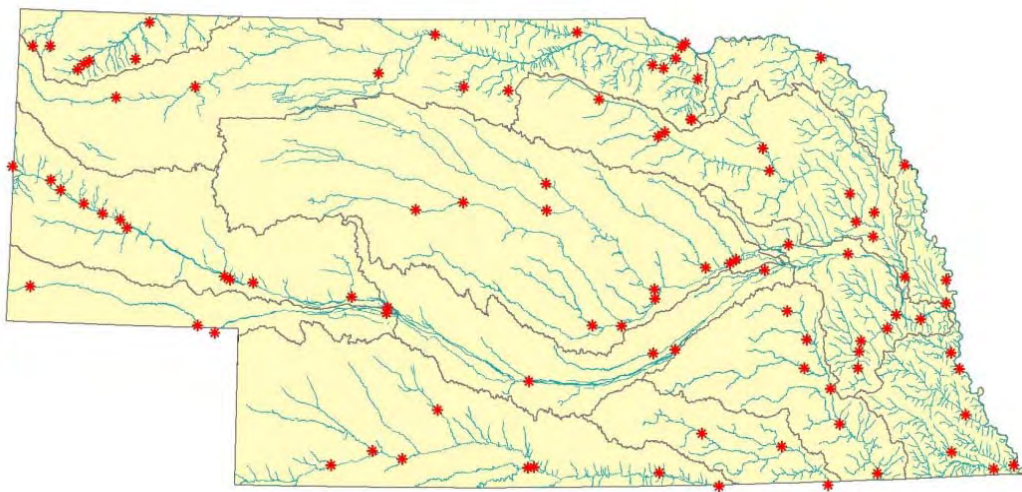
In 2011, a total of 34 stream and 8 lake sites in the White River-Hat Creek, North Platte and South Platte River Basins were sampled weekly from May through September. The lake sites were sampled for *E. coli* bacteria and field measurements including temperature, pH, oxygen, conductivity and turbidity and the stream sites also analyzed for physical/chemical parameters including the nutrients and select pesticides. The data is used to document existing water quality conditions, identify water quality problems, identify pollutant(s) of concern and their sources, and estimate pollutant loadings. During 2011, 748 stream samples plus 176 lake samples were collected for a total of 924 samples.

Six-year basin rotation monitoring schedule



Ambient Stream Monitoring Program — This program has a network of 97 fixed stations located on main stem and tributary streams across the state (see map below for details). The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 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 2011, a total of 1,160 water samples were collected for this program.

Locations of NDEQ ambient stream monitoring sites



Lake Beach Bacteria and Toxic Algae Monitoring — *E. coli* bacteria and toxic blue-green algae (microcystin toxin) were monitored weekly during 2011 at 49 beaches on 46 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, NPPD, the Central District Health Department, the City of Carter Lake and U.S. Army Corps of Engineers. The analysis procedures provide a quick-turnaround time, allowing the samples collected on Monday 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 2011 health alerts were issued on four different lakes and the amount of time the lakes were on alert ranged from two to five weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site www.deq.state.ne.us.

Fish Tissue Monitoring Program — The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2011, a total of 66 fish tissue samples were collected from 13 streams and 31 lakes across Nebraska for analysis of pollutants. This compares to 50 samples from 25 streams and 25 lakes in 2010. 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 2010 data is expected to be completed by the end of 2011 and the 2011 data report is anticipated near the end of 2012.

The report "Findings of the 2009 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. The report is located at Publications/Surface Water Monitoring/Reports. The direct URL is: www.deq.state.ne.us/Publications/Pages/WAT173. 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.

Currently, Nebraska has 85 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 population 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 2011, a total of 37 stream sites were sampled in the North Platte River, South Platte River and White River-Hat Creek 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 available on DEQ’s web site, www.deq.state.ne.us located in Publications/Water Quality/Reports.

Lake Monitoring Program — Lake monitoring is currently conducted on 53 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 2011, a total of 295 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 addition, reservoir volume surveys are conducted on priority lakes to evaluate historic sediment loads. In 2011, reservoir volume surveys were conducted at Conestoga Reservoir (Lancaster County), Hedgefield Reservoir (Lancaster County), Walnut Creek Reservoir (Sarpy County), Burchard Reservoir (Pawnee County), and Wildwood Reservoir (Lancaster County).

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 16 fish kills were reported between July 1, 2010 and June 30, 2011. This compares to 24 during the same time period the year before. Most of the fish kills (9) were attributed to low dissolved oxygen levels from winter/summer kill and decomposition of organic matter during flooding. Four were attributed to disease/parasite issues, one from thermal stress and two were from unknown causes.

Between July 1, 2010 and June 30, 2011 the surface water unit received 39 notifications of complaints concerning surface water issues. This compares to 21 notifications during the same time period the year before. (While many of these cases were referred to other agency programs that more closely relate to the problem, sometimes the surface water unit would assist by providing observations or samples to help document conditions.)

Integrated Report — Beginning in 2004, and every two years thereafter, states are required to prepare a biennial water quality report called the Integrated Report, which is a combination of the Section 305(b) and Section 303(d) reporting requirements of the Clean Water Act. The Integrated Report provides a comprehensive summary of the status and trends of surface water quality in Nebraska and includes a list of impaired surface waters that do not support their assigned beneficial uses. The 2010 Integrated Report, which was approved by the EPA in January 2011, is available on NDEQ’s web site 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/WAT166>

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 2010. 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 2010 Nebraska Water Monitoring Programs Report is available on the NDEQ's web site 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/WAT169>.

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 are focused in a critical four-county area near the Nebraska-Kansas state line. Cost share payments for BMP installation were used to encourage and support landowner participation. The majority of BMPs installed for this project included no-till farming systems, terraces, field borders, and riparian buffer strips. The monitoring data that was collected in 2010 is being assessed to determine post-project water quality conditions. The 2010 water quality conditions are being compared to the pre-project assessments in conjunction with models to assess the effectiveness of the BMPs installed during this project. The TWG project is being completed and a final report will be prepared to summarize the results.

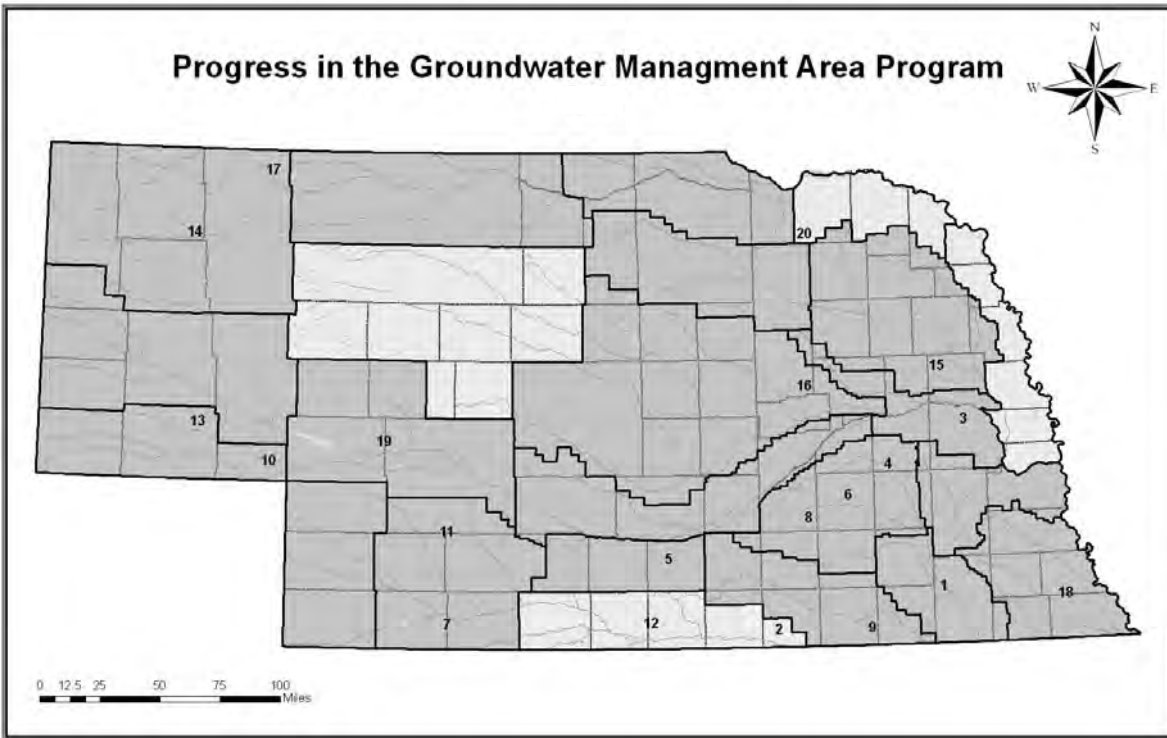
Groundwater Assessment Programs

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. (Select Publications, then select Water Quality, then select 2010 Groundwater Quality Monitoring Report. Or, the report's direct URL is: <http://www.deq.state.ne.us/Publications/pages/WAT160>). 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.

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 Groundwater 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 (NRD) within whose boundary the area is located throughout the investigation, designation and implementation stages. The NRDs are responsible for implementation of many aspects of this program. In fact, NRDs can designate Groundwater Management Areas acting on their own authority. In addition to the three NDEQ-designated areas, 20 NRDs have designated GWMA's 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 GWMA's (shaded areas). In addition, a study is under way in Cuming County. Data was collected in 2011, is currently being analyzed, and the final report on this study is expected to be completed in 2012.



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.

Three Class I injection wells are currently permitted within the state. The permits are issued for injection of wastewater below the lowermost underground source of drinking water. Two Class I wells are issued to the Crow Butte Resources uranium mine near Crawford and the other to the City of McCook.

Class III wells are used to inject fluids for the purpose of extracting minerals. The only Class III wells in the state are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources operates 4080 Class III wells as of October 1, 2011.

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.

Mineral Exploration Program — The Mineral Exploration program issues and reviews permits, conducts inspections, and performs compliance reviews for holes drilled, driven, bored, or dug for the purpose of mineral exploration. These permits are issued to persons exploring for potential mineral resources such as consolidated rock; sand and gravel; or material commingled, in solution, or otherwise occurring beneath the surface or in waters of the State, and are regulated under Title 135 – Rules and Regulations for Mineral Exploration Holes. This type of exploration specifically excludes oil and gas exploration, which is regulated by the Nebraska Oil and Gas Conservation Commission.

Wells that are drilled for the production of a mineral resource using in-situ leach technology are regulated as Class III injection wells, and are governed by Title 122 – Rules & Regulations for Underground Injection and Mineral Production Wells.

Wellhead Protection — The State Wellhead Protection program is a voluntary program, which assists communities and other public water suppliers in preventing contamination of their water supplies. State Wellhead Protection Program activities include delineating the zones of influence which may impact public supply wells, training communities on how to inventory all potential sources of pollution within these vulnerable zones, working with the local officials to identify options to manage these potential pollution sources, working on monitoring plans, and helping develop contingency plans to provide alternate water supplies and site new wells. All community public water supplies have a Wellhead Protection Area map as of October 1, 2009. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. Ninety 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 last triennial review was completed in FY2009. 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, 2010 that the majority of the FY2009 Water Quality Standards revision package was approved under the Clean Water Act. During FY2011, NDEQ developed proposed revisions to Title 117 for the next required triennial review. In addition to a number of criteria changes due to new science, the Department hopes to take care of the previously deferred EPA approval decisions, most notably nutrient criteria for lakes and reservoirs, with this triennial review. These revisions have been released for public review and are scheduled for hearing at the December, 2011 Environmental Quality Council meeting.

The standards are available on the department's web page at 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. The Department reviewed 384 Section 404 permit applications during FY2011.

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 2010 Integrated Report is available on NDEQ's web site 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/WAT166>. The 2010 Integrated Report was submitted to EPA Region 7 in March 2010 and was approved by EPA January 2011.

In 2010, the Department prepared and submitted to EPA Region 7 an Integrated Report Category Change for Waters in the Big Blue, Lower Platte, and Niobrara River Basins Impaired by Selenium. 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.

Total Maximum Daily Loads (TMDLs) for Mud Creek in the Loup River Basin and the North Platte River Basin were posted for Public Notice on 9/7/2011. TMDLs in the draft stage are in the Middle Platte River Basin, Conestoga Reservoir in Lancaster County, and Fremont State Lakes.

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. Because of the

program changes it was necessary to reduce financial support for local awareness and demonstration projects. 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 2011 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 2011, 119 projects were managed among the five grant categories. These included 63 large projects totaling \$12,481,207; 22 small projects totaling \$263,985; 13 community lakes projects totaling \$902,638; one urban run-off management project for \$60,000; and no wellhead area management assistance projects.

A total of 180 large projects, spending \$58,581,456, have been funded through Section 319 grants since the beginning of the program in 1990. Of these 180 projects, 107 have addressed surface water, 49 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 political subdivisions, in Nebraska, that operate a public water system serving a population of 10,000 or less. Eligible activities will address drinking water quality, quantity, security, and/or education within the source water protection area. To date, Source Water Protection funds have been distributed to 49 individual entities to complete 63 separate Source Water Protection projects throughout the state. In 2011, Source Water Protection funds were distributed to two public water systems: Village Paxton and City of Wayne.

Water Quality Data Handling and Storage

The department has implemented the STORET electronic storage system for water quality data. This will make Nebraska surface water quality information available to anyone who has an internet connection. The web site for this information is www.epa.gov/storet. During FY2011, the department continued to add monitoring results to the STORET database, monitoring results conducted on surface waters of the state. The end result will be the centralization of NDEQ's previous and current surface water quality monitoring information.

Wastewater Permitting and Certification Programs

There are a number of certification and permitting programs relating to wastewater treatment facilities, ranging from certification of those who work on septic systems to the permitting of large municipal facilities. These programs include:

- **Onsite Wastewater Treatment Facilities Program** – This certification program involves smaller systems, such as septic systems and private lagoons. Anyone doing work on these types of facilities must be certified.
- **Wastewater Treatment Facility Operator Certification Program** – This program administers the certification program for wastewater treatment facility operators, to ensure proper operation and maintenance programs at these facilities.
- **Wastewater Construction Permit Program** – This permit program is for communities that are constructing new wastewater facilities or are renovating or expanding existing facilities.
- **The National Pollutant Discharge Elimination System (NPDES) Program**, which is responsible for regulating discharges of pollutants to waters of the State so as to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. Other NPDES-related programs include:
 - **Combined Sewer Overflows**, which addresses those municipalities that have combined storm water and wastewater sewer systems.
 - **Wastewater Treatment Sludge and Biosolids Disposal**, which are requirements for treatment and disposal of municipal and industrial wastewater sludges and biosolids, and
 - **Storm Water Permit Program** – This permit programs involves: 1) Construction sites of a specific size; and 2) the Municipal Separate Storm Sewer System permits for medium and large municipalities.
- **The Nebraska Pretreatment Program**, which functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

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 held 178 exam sessions and administered nearly 1,800 exams since the certification program began, with 19 exam sessions in FY11. A total of 589 people currently hold onsite certificates. 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, over 11,000 systems have been registered, with 1,428 systems registered in FY11.

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 17 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 115 complaints in FY11 and resolved a total of 126 complaints, which includes both old and new complaints. During this same time period, 18 Notices of Violation were issued, four cases were forwarded for enforcement action (NDEQ Administrative Order or request for enforcement to the Nebraska Attorney General), and program staff participated in an enforcement hearing.

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 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).

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 30 applications for construction/operating permits and 17 applications for subdivision review and approval. The subdivision applications were for a total of 75 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. This past year program staff reviewed and approved a total of 17 programs offering 74 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 continue to give extra effort during FY11 to the further development of the Onsite Program webpage. New or revised Fact Sheets on floor drains, establishments, septic tank & lagoon closure and septic system maintenance with links to relevant forms and documents have been provided 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.

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. The wastewater operator certification program has 859 certified operators with municipal certificates and 75 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 232 facilities that may be eligible for the exemption and, of these, issued four-year exemptions to 203 facilities.

In FY11, the Department provided several Discharge Monitoring Report training sessions, and 10 operator certification examination sessions. Testing of municipal and industrial wastewater treatment facility operators will continue in FY12.

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. For FY2011, a total of 174 wastewater projects were submitted to the Department for review and approval.

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 national standards. The State's design standards are written to encourage the use of proven technologies, but have also allowed Nebraska communities to utilize innovative designs where they are appropriate.

Title 123 also contains basic rules for the operation and maintenance of 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 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.

Engineers from the Wastewater Section joined the state's emergency flood control efforts to keep municipal wastewater treatment facilities functioning during the Missouri River flooding in the summer of 2011. A tracking system was also maintained to update the status of flood threatened communities.

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 continued to meet every month with the City of Omaha during 2010-2011 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.

National Pollution Elimination System (NPDES) and Related Programs

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

- **The National Pollutant Discharge Elimination System (NPDES) Program**, which is responsible for regulating discharges of pollutants to waters of the State so as to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. Other NPDES-related programs include:
 - **Combined Sewer Overflows**, which addresses those municipalities that have combined storm water and wastewater sewer systems.
 - **Wastewater Treatment Sludge and Biosolids Disposal**, which are requirements for treatment and disposal of municipal and industrial wastewater sludges and biosolids, and
 - **Storm Water Permit Program** – This permit programs involves: 1) Construction sites of a specific size; 2) the Municipal Separate Storm Sewer System permits for medium and large municipalities; 3) Industrial facilities.
- **The Nebraska Pretreatment Program**, which functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

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

NPDES Permits

Anyone who directly discharges pollutants to waters of the state is required to obtain a permit. NPDES permits control pollutant discharges by establishing wastewater limitations for pollutants and/or requiring permittees to maintain certain operational standards or procedures. Permittees are required to verify compliance with permit requirements by monitoring their wastewater, maintaining records, and/or filing periodic reports.

The Department is responsible for developing and issuing NPDES permits, and for ensuring that permitted facilities comply with permit requirements. The regulatory basis for this program is through an EPA delegation agreement with the Department and NDEQ *Title 119 - Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System*. The Nebraska NPDES program encompasses a number of different types of discharges including: municipal, commercial and industrial wastewater discharges; livestock waste control; industrial discharges to public wastewater treatment systems (also known as the Nebraska Pretreatment Program); municipal combined sanitary and storm sewer overflows; and industrial and municipal storm water discharges. The graph on the next page titled "NPDES Discharge Authorizations" shows the distribution of permits issued to various types of NPDES dischargers, except Livestock. The "General Permits" category includes discharge authorizations issued to groundwater remediation sites, storm water discharges, and dewatering/hydrostatic testing.

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

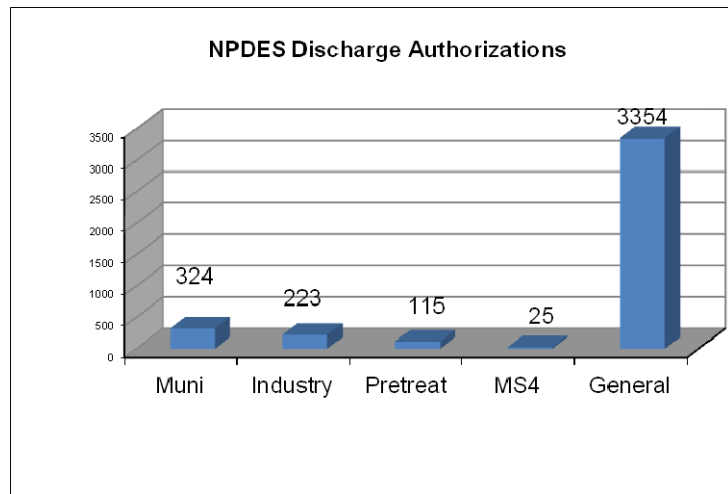
(e.g., daphnia or fathead minnows). The permit may also require development of Best Management Practices Plans to reduce or control pollutant discharges.

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. There currently are a total of 25 metropolitan areas and counties in Nebraska that have received MS4 permits. The Construction Storm Water General Permit was reissued January 1, 2008. A new Industrial Storm Water General Permit was issued on July 1, 2011 and allows 6 months for industrial activities regulated by the NPDES storm water program to apply.



There are 662 facilities with discharge authorizations under individual permits (municipal, industry and pretreatment), and 25 municipal storm water permits (MS4). There are 3354 active facilities authorized to discharge under other general permits. The graph titled "NPDES Discharge Authorizations" provides a summary of this information. The general permits include 1809 active authorizations under the construction general storm water permit, 159 dewatering/hydrostatic testing, 1335 industrial storm water, and 51 petroleum remediation sites.

Municipal and Industrial Facilities

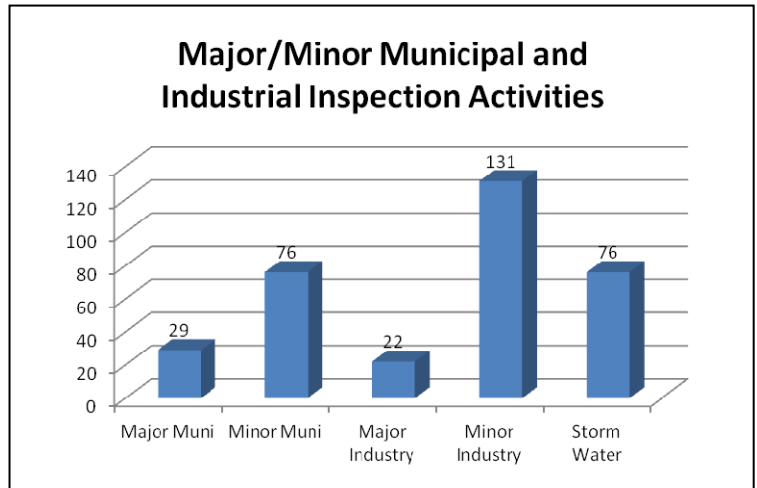
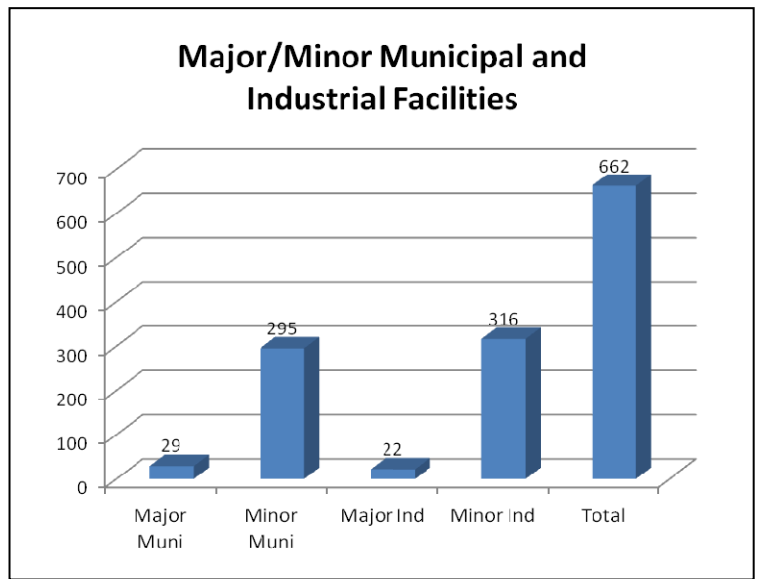
Industrial and municipal facilities are both grouped as major or minor facilities based upon their size and/or their potential to impact the receiving stream. The chart titled "Major/Minor Municipal and Industrial Facilities" provides a numeric break down of these types of facilities.

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 334 total inspections in Fiscal Year 2011. 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. Five facilities had effluent monitoring inspections in Fiscal Year 2011.

Data generated by facility monitoring and Department on-site and effluent monitoring inspections are reviewed and entered into the federal Integrated Compliance Information System (ICIS) computer database. This database is used to generate facility reports and review facility compliance history.



Combined Sewer Overflows

The Combined Sewer Overflow (CSO) program addresses 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.

Both the Cities of Omaha and Plattsmouth were severely impacted by the Missouri River Flood Event during the summer of 2011. This may impact the timing of CSO projects. Both cities are planning to send in revisions to schedules over the next 6 months.

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*.

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 2012. Dakota County, South Sioux City, and Dakota City will also be covered under this state wide permit when it becomes effective.

Nearly \$2.3 million in grant funds was awarded in FY2011 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 NPDES General Permit for Storm Water Discharges from Industrial Activity, NER900000, was issued July 1, 2011. Regulated industries have until December 31, 2011

to apply for coverage under this permit. The new permit requires benchmark monitoring for certain industrial activities. This monitoring must be in place by July 1, 2012.

Nebraska Pretreatment Program Permits

The Nebraska Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industrial dischargers. The pretreatment regulations are found in Title 119. The rules and regulations set forth prohibited discharge standards that apply to all industrial users of publicly owned wastewater treatment facilities and require permits for significant industrial users. The significant industrial users are determined by one of several means: 1) the existence of an industrial category for which pretreatment discharge standards are established in NDEQ Title 119, 2) the volume or strength of the wastewater discharged from the facility, or 3) the potential of the industrial user to adversely affect the wastewater collection or treatment facilities.

The authority for establishing the Pretreatment Program is derived from the NPDES program requirements set forth in Section 402 of the Federal Clean Water Act. The issuance procedures and general format of Pretreatment Program and NPDES permits are very similar. Permittees are required to carry out self-monitoring activities, maintain records and submit periodic reports. Compliance activities include report reviews, on-site inspections and compliance monitoring inspections. Compliance data are entered into ICIS to facilitate compliance review activities.

Although the Pretreatment Program is really a subprogram of the NPDES program, administration of this program requires more coordination and cooperation with local municipal officials. To accomplish this, the Department has entered into Memorandums of Agreement (MOAs) with 11 communities describing respective city and state responsibilities. The agreements vary in nature depending on the size and capabilities of the community. Omaha and Lincoln are the most active municipal partners, accepting responsibility for a large variety of activities including facility sampling, inspections, complaint investigations, permit reviews, and industrial user technical assistance. Other communities rely more heavily upon the State for compliance inspections and technical reviews. However, all cities with agreements conduct initial complaint or incident investigations, report significant incidents to the Department and assist in permit development by reviewing draft permits. The Department is working with communities throughout the State to get them more involved in the pretreatment program and to improve cooperative efforts in this program.

State Revolving Loan Fund Programs

The Water Quality Division's Financial Assistance Section administers distribution of state and federal assistance for the Clean Water State Revolving Loan Fund and the Drinking Water State Revolving Loan Fund.

Clean Water State Revolving Loan Fund

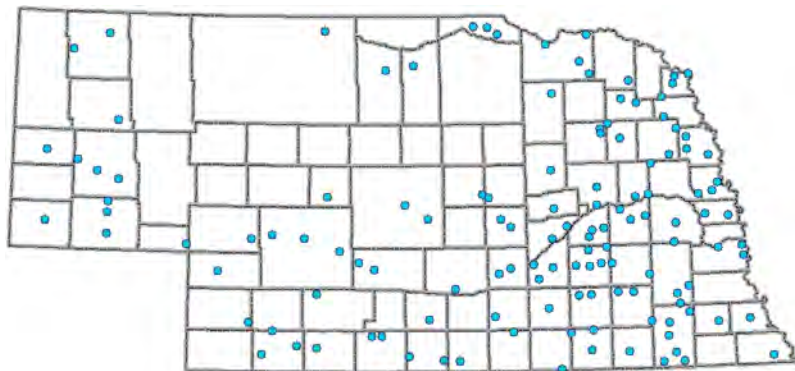
The Nebraska Clean Water State Revolving Loan Fund (CWSRF) program provides low interest loans and small community matching grants to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems to alleviate public health and environmental problems. The loan principal repayments go into new loans, and interest earnings on the Fund are used to pay off the state match bond issues and to make new loans.

The CWSRF program receives an annual federal EPA capitalization grant. A 20% state match, required to obtain the federal grant, is provided through Nebraska Investment Finance Authority (NIFA) bond issues. After 22 years of activity, the Fund Net Asset has reached \$226 million. Since its inception, the program has made loans totaling \$368 million to 160 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. All of the green infrastructure funds were allocated to land application facilities (a categorically qualified green infrastructure project). ARRA funds were fully obligated to projects before the February 17, 2010 deadline.

In FY2011, the CWSRF funded projects totaling \$47,258,725 in loans and \$3,795,934 in principal forgiveness and grant funds to the same projects.

The EPA awarded the 2010 capitalization grant, in the amount of \$10,422,000, in September 2010. A \$2,085,000 bond was used to match this federal grant.

The map below shows the locations of CWSRF projects over the 22 years of the loan program.



Municipalities Receiving CWSRF Loans in FY2011

| Municipality | Loan Date | Loan Amount | Principal Forgiveness and Small Community Grant Amount |
|--|--------------------|---------------------|--|
| Allen | 8/13/2010 | 157,500 | 65,709 |
| Aurora | 6/29/2011 | 3,400,000 | 250,000 |
| Blair | 4/1/2011 | 400,000 | 76,000 |
| Broken Bow (ARRA Amendment) | 7/19/10 | 1,695,000 | 0 |
| Brule | 2/10/2011 | 125,000 | 62,500 |
| Butler Co. SID #1 (Clear Lake) | 10/7/2010 | 134,000 | 20,300 |
| Carroll | 4/1/2011 | 500,000 | 375,000 |
| Cedar Bluffs (ARRA Amendment) | 1/20/11 | 150,000 | 50,000 |
| Clarkson (Green Project) | 5/25/2011 | 750,000 | 250,000 |
| Cozad | 1/17/2011 | 2,075,000 | 250,000 |
| Dorchester (ARRA Amendment) | 4/4/11 | 5,355 | 1,785 |
| Duncan (Green Project) | 10/4/2010 | 493,000 | 159,600 |
| Elm Creek (Green Project) | 11/30/2010 | 415,000 | 195,880 |
| Hartington | 8/2/2010 | 155,000 | 67,797 |
| Hayes Center (Green Project) | 3/22/2011 | 306,000 | 250,000 |
| Holdrege | 1/19/2011 | 460,000 | 159,298 |
| Kearney | 9/30/2010 | 1,250,000 | 0 |
| Lawrence | 3/21/2011 | 160,000 | 80,000 |
| Leigh & (Amendment #1) | 7/9/2010 3/8/11 | 630,000 | 155,000 |
| Lincoln | 3/17/2011 | 17,000,000 | 0 |
| Nebraska City | 4/1/2011 | 5,000,000 | 110,135 |
| Ogallala | 12/28/2010 | 673,000 | 250,000 |
| Osmond | 8/18/2010 | 214,000 | 107,000 |
| Paxton (Emergency Funding) | 11/10/2010 | 68,000 | 34,000 |
| Platte Center (ARRA Amendment) | 3/2/11 | 9,384 | 6,566 |
| Plattsmouth | 7/28/2010 | 1,249,810 | 250,000 |
| Polk Co. SID #1 (Duncan Lakes) | 6/30/2011 | 2,212,847 | 221,796 |
| Shelby | 3/23/2011 | 365,625 | 0 |
| Stuart | 2/17/2011 | 125,000 | 62,500 |
| Tekamah (ARRA Amendment – Green Project) | 5/1/11 | 30,204 | 10,068 |
| Wayne | 10/25/2010 | 7,000,000 | 250,000 |
| Wolbach | 3/25/2011 | 50,000 | 25,000 |
| TOTAL | | \$47,258,725 | \$3,795,934 |

Nineteen projects were under construction: Allen, Aurora, Blair, Brule, Butler Co. SID #1 (Clear Lake), Carroll, Cozad, Duncan, Elm Creek, Hartington, Holdrege, Kearney, Leigh, Ogallala, Osmond, Paxton, Plattsmouth, Stuart, and Wayne.

The following 24 SRF wastewater projects initiated operation in SFY2011: Allen, Brule, Butler Co. SID #1 (Clear Lake), Cedar Bluffs, Chadron, Dorchester, Duncan, Elm Creek, Filley, Guide Rock, Hartington, Holdrege, Indianola, Lincoln, Omaha, Paxton, Platte Center, Pleasanton, Red Cloud, Scottsbluff, Sidney, South Sioux City, Tekamah, and Verdigre (who had undertaken two projects simultaneously).

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 \$6.5 million in grant funding for 75 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 FY2011, 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 \$788,636 in small community grants to the communities of Carroll, Cedar Bluffs, Dorchester, Hayes Center, Platte Center, Polk Co. SID #1 (Duncan Lakes), and Tekamah.

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 14 years of activity, the Fund capitalization level has reached \$149.6 million.

DWSRF Set Aside Funds and Administration Cash Fund

Administrative costs are being paid out of the administrative cash fund and may include program operating costs for both NDEQ and NDHHS-DPH, including day-to-day DWSRF program management activities for both agencies. Also included are other costs associated with debt issuance, financial management, consulting, and support services necessary to provide a complete program.

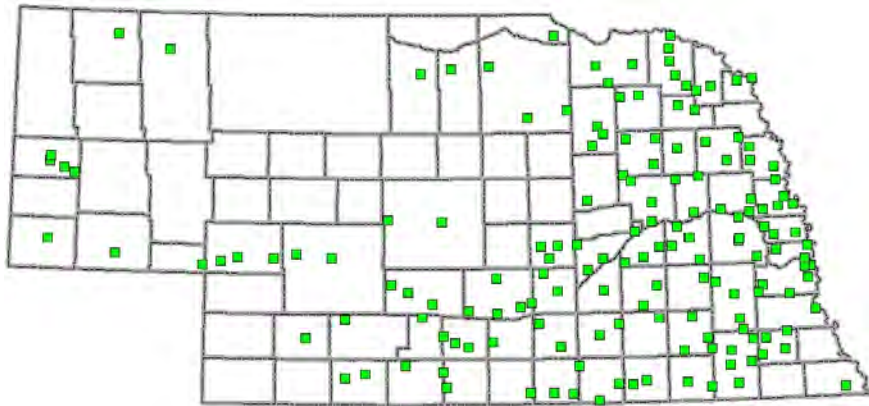
The Small System Technical Assistance set-aside (2%) provides technical assistance to Public Water Supply Systems serving 10,000 or fewer persons. This is accomplished through contracts with organizations with expertise in dealing with small systems and is coordinated by the NDHHS-DPH.

In FY2011, 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 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 \$750,000. The state may use up to a total of 10 percent for this set-aside but must provide a one-to-one state match. DHHS-DPH has determined the set-aside eligibility by using program overmatch dollars for federal fiscal years 1993 to 1997. No additional state dollars are required for the set-aside amount.

The FY2011 DWSRF capitalization grant allocation totaled \$13.6 million. The program disbursed \$32 million for drinking water project construction.

The map below shows the locations of DWSRF projects over the 14 years of the loan program.



Municipalities Receiving DWSRF Loans in FY2011

| Municipality | Loan Date | Loan Amount | Principal Forgiveness and Loan Forgiveness |
|----------------|------------|---------------------|--|
| Albion | 12/26/2010 | 352,500 | 70,500 |
| Blair | 8/12/2010 | 2,341,000 | 0 |
| Bridgeport | 7/7/2011 | 1,164,916 | 582,458 |
| Cairo | 8/10/2011 | 150,878 | 0 |
| Carroll | 4/13/11 | 154,440 | 30,888 |
| Cedar Knox RWD | 7/28/2010 | 134,090 | 66,978 |
| Dorchester | 8/18/2010 | 1,521,110 | 304,222 |
| Hickman | 7/1/2010 | 3,086,309 | 215,116 |
| Holstein | 4/12/2011 | 256,600 | 45,019 |
| Humboldt | 5/17/2011 | 2,570,500 | 514,100 |
| Humphrey | 6/27/2011 | 2,288,242 | 457,648 |
| Kearney | 9/30/2010 | 240,000 | 0 |
| Osceola | 3/30/2011 | 1,284,550 | 256,910 |
| Pickrell | 1/10/2011 | 228,377 | 45,675 |
| Platte Center | 8/9/2011 | 212,500 | 42,500 |
| Rogers | 12/11/2010 | 96,600 | 19,320 |
| Shelby | 8/3/2010 | 1,196,600 | 150,920 |
| Stromsburg | 8/13/2010 | 1,594,448 | 96,724 |
| Wauneta | 4/12/2011 | 352,000 | 70,400 |
| Wausa | 6/6/2011 | 307,000 | 61,400 |
| TOTAL | | \$19,532,660 | \$3,030,778 |

The DWSRF funded projects totaling \$19,532,660 in loans and \$3,030,778 in grant funds to the same projects. Further, the capitalization grant required that a minimum of 30% (\$4,071,900) of the grant be reserved for additional subsidization (e.g., principal forgiveness) and 20% (\$2,714,600) for the Green Project Reserve (GPR) (e.g., water meters). Only 69% and 26% of these requirements were met before the end of the fiscal year, respectively. However, with several loan closings scheduled before September 2011, no problems are anticipated with meeting the required grant conditions.

CHAPTER 7:

Field Services and Assistance Division

The purpose of the Field Services and Assistance Division is to provide information and assistance to the public and the regulated community, as well as to conduct inspections, maintain monitoring programs and manage specific projects. With regard to performing inspections, operating monitoring programs and managing projects, Field Services staff coordinates all activities with the Agency's Air Quality, Waste Management and Water Quality Divisions. Many of the 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, Release Assessment, 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.

- A number of staff members were involved with response activities related to the summer floods. These activities included coordinating Department activities in the state Emergency Operations Center, conducting inspections of flood-impacted facilities, and providing flood-related advice to those impacted by or associated with flood response.
- 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. During FY2011, 91 notifications were received.
- 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 and provided information to Emergency Managers and the Nebraska Emergency Management Agency related to facilities impacted by the Missouri river flood.
- 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 operations.
 - The Partnership is involved in the examination of energy conservation issues at publicly-owned treatment works.

- 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 notification system. The system is designed to increase the effectiveness and bring consistency to the Department's response to notifications and complaints.
- 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 FY2011, the Division has continued to provide leadership and facilitate focused improvement efforts to streamline regulatory processes, which has included improving NDEQ's process for investigating potentially contaminated properties and working with the ethanol industry to review the compliance process.

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. Another way a local presence is established is by participating in environmental education events in their regions. Building a strong community presence helps NDEQ carry out the work of preserving the state's natural resources and serving the citizens of Nebraska.

Small Business and Public Assistance Program

The Small Business and Public Assistance (SBPA) 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 SBPA program, and the One-Stop Permit Assistance program. The SBPA program coordinator is involved with all four functions; as well as coordinating with other NDEQ personnel within the department's air quality, water quality and waste management divisions involved in compliance assistance activities.

The formation of the Small Business Compliance Advisory Panel resulted from amendments to the Nebraska Environmental Protection Act of 1992. The 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. Currently, vacancies exist on the panel, and nominees for panel member replacements are being sought. The panel evaluates the effectiveness of the Small Business and Public Assistance program, provides feedback on outreach and education methods provided by the program, and reviews written documents developed by Department programs to ensure the information is understood by the lay person.

The Public Advocate provides 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 Small Business 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 application process. The one-stop program coordinator 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 2011, approximately 3,200 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 87% of the facilities reported online in Nebraska in 2011. 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 2010, the Community Right-to-Know Coordinator attended 15 local meetings and assisted with local emergency exercises and provided information regarding chemicals at facilities in their communities. In 2011 the Community Right-to-Know Coordinator assisted with the planning of the "Regional LEPC Conference" in North Platte, NE. This event provided information and training to over 300 First Responders and Local Emergency Planning Committee members.

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.

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 '11, 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

The following information summarizes department expenditures for fiscal year 2011 and outlines budget projections for fiscal year 2012. 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 FY11 expenditures for each federal grant, including the state match.

Chart B lists actual FY11 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 FY12 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 FY12 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 2011

| Grant Program / Title | Assistance ID # | Grant | Match | Total |
|--|------------------------|----------------------|---------------------|----------------------|
| ARRA Clean Diesel (Air) | 2D97706001-01 | 507,143 | | 507,143 |
| ARRA Clean Water State Revolving Fund | 2W97705101-01 | 9,422,500 | | 9,422,500 |
| ARRA Leaking Underground Storage Tanks | 2L97705001-01 | 959,961 | | 959,961 |
| ARRA 604 B Water Quality Management | 2P97706301-01 | 126,027 | | 126,027 |
| ARRA Drinking Water State Revolving Fund | 2F97705601-01 | 3,275,783 | | 3,275,783 |
| Performance Partnership | BG997325-06 | 2,572,938 | 539,076 | 3,112,014 |
| Performance Partnership | BG997325-07 | 2,367,518 | 593,747 | 2,961,265 |
| 604 B Water Quality Management | C6007328-19 | 54,537 | | 54,537 |
| 604 B Water Quality Management | C6007328-20 | 74,249 | | 74,249 |
| 319 H Non-Point Source | C9007403-XX | 3,092,664 | | 3,092,664 |
| NPDES E-Permitting | CP987719-01 | 33,237 | | 33,237 |
| Clean Water State Revolving Fund | CS310001-07 | | | - |
| Clean Water State Revolving Fund | CS310001-08 | | 1,784 | 1,784 |
| Clean Water State Revolving Fund | CS310001-09 | 21,616 | 223,392 | 245,008 |
| Clean Water State Revolving Fund | CS310001-10 | 6,582,016 | 2,819,544 | 9,401,560 |
| Clean Diesel | DS987972-01 | | | - |
| Drinking Water State Revolving Fund | FS997805-XX | 2,298,970 | 1,082,868 | 3,381,838 |
| 106 Enforcement & Permitting | I977239-01 | | | - |
| Section 106 Monitoring | I987678-XX | 138,912 | | 138,912 |
| Leaking Underground Storage Tanks | LS987161-04 | (18,681) | 34,620 | 15,939 |
| Leaking Underground Storage Tanks | LS987161-05 | 742,034 | 104,221 | 846,255 |
| Leaking Underground Storage Tanks | LS987161-06 | 192,946 | | 192,946 |
| Department of Defense | NE-10 | 158,692 | | 158,692 |
| Pollution Prevention | NP977006-01 | | | - |
| Exchange Network 07 | OS833475-01 | 500 | | 500 |
| Heartland Emergency | OS834028-01 | 51,785 | | 51,785 |
| Node 2.0 Implementations | OS834029-01 | 24,585 | | 24,585 |
| Section 128 (a) State Response | RP987322-03 | 661,250 | | 661,250 |
| Operator Training | T987936-01 | 7 | | 7 |
| Superfund UNL Mead | V987587-01 | 1,972 | | 1,972 |
| Superfund Management Assistance | V997531-06 | (365) | | (365) |
| Superfund Management Assistance | V997531-07 | 135,906 | | 135,906 |
| Superfund Site Assessment | V997532-05 | 193,010 | | 193,010 |
| Superfund Core | VC987267-04 | 5 | | 5 |
| Superfund Core | VC987267-05 | 190,148 | 19,974 | 210,122 |
| Tuttle Creek Lake | WS987733-01 | 404,625 | | 404,625 |
| PM 2.5 Ambient Air Monitoring | XA987923-01 | 380,241 | | 380,241 |
| Totals | | \$ 34,646,731 | \$ 5,419,225 | \$ 40,065,957 |

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 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 | 927,372 | 373,363 | 26,269 | | 71,573 | 1,398,577 | 80,681 | 1,479,258 |
| CLEAR / Environmental Trust | 011 | C | | | | | - | - | | - |
| Ag - Livestock | 016 | G/C | 1,376,865 | 38,036 | 51,161 | 5,208 | 17,126 | 1,488,396 | | 1,488,396 |
| Air Construction Permits | 020 | C | 68,425 | 34,576 | 87 | | | 103,088 | | 103,088 |
| Superfund State Cost Share | 023 | G/C | | 995,089 | | | | 995,089 | 1,979,920 | 2,975,009 |
| Litter Reduction | 024 | C | 109,787 | 41,952 | 1,126 | | 113,625 | 266,490 | 1,375,879 | 1,642,369 |
| Mineral Exploration | 029 | C | 110,839 | 51,366 | 16,604 | | 318 | 179,127 | | 179,127 |
| Private Onsite Wastewater Cert & Registration | 030 | C | 222,885 | 99,005 | 3,903 | | 318 | 326,111 | | 326,111 |
| Environmental Official Training | 031 | C | 31 | 736 | | | 891 | 1,658 | | 1,658 |
| Emission Inventory - Title V | 033 | C | 1,741,472 | 690,409 | 34,940 | | 69,241 | 2,536,062 | | 2,536,062 |
| Chemigation | 034 | C | 8,399 | 5,953 | | | 52,043 | 66,395 | | 66,395 |
| Groundwater Management Areas | 035 | G | 14,858 | 1,250 | | | | 16,108 | | 16,108 |
| Remedial Action Plan Monitoring Act | 036 | C | 93,523 | 48,379 | 637 | | 6,039 | 148,578 | | 148,578 |
| Private Onsite Wastewater Permit & Approval | 037 | C | 46,363 | 15,696 | 21 | | | 62,080 | | 62,080 |
| Operator Certification | 040 | C | 53,185 | 24,915 | 879 | | 5,141 | 84,120 | | 84,120 |
| Community Right to Know | 041 | G | 67,508 | 2,301 | 1,695 | | 1,077 | 72,581 | | 72,581 |
| Petroleum Release Remedial Action Act | 051 | C | 847,985 | 441,314 | 12,715 | 2,136,802 | 2,873,738 | 6,312,554 | 3,901,903 | 10,214,457 |
| Emergency Response | 057 | C | 181,908 | 71,445 | 7,079 | 1,618 | 1,383 | 263,433 | | 263,433 |
| Engineering Reviews | 061 | G | 243,283 | 3,725 | 1,019 | | 65 | 248,092 | | 248,092 |
| Stormwater Grants | 067 | G | 6,141 | | 59 | | | 6,200 | 2,324,996 | 2,331,196 |
| Waste Reduction & Recycling | 091 | C | 260,998 | 108,682 | 6,010 | | 1,773 | 377,463 | 2,707,881 | 3,085,344 |
| Agency Organizational Dues | 099 | G | 10,950 | 25,542 | 45 | | | 36,537 | | 36,537 |
| | | | | | | | | - | | |
| Totals | | | \$ 6,392,777 | \$ 3,073,734 | \$ 164,249 | \$ 2,143,628 | \$ 3,214,351 | \$ 14,988,738 | \$ 12,371,260 | \$ 27,359,999 |

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 2012

| Grant / Program Title | Match | Grant | Total |
|-------------------------------------|---------------------|----------------------|----------------------|
| Performance Partnership | 1,163,194 | 4,322,598 | 5,485,792 |
| Clean Water State Revolving Fund | 1,980,811 | 5,299,648 | 7,280,459 |
| Exchange Network | | 19,498 | 19,498 |
| 604 B Water Quality Management | | 114,690 | 114,690 |
| 319 H Non-Point Source | | 3,614,867 | 3,614,867 |
| Drinking Water State Revolving Fund | 2,715,213 | 10,185,485 | 12,900,698 |
| Leaking Underground Storage Tanks | 82,756 | 767,110 | 849,866 |
| Clean Diesel | | 250,000 | 250,000 |
| Section 106 Monitoring | | 75,000 | 75,000 |
| Department of Defense | | 195,363 | 195,363 |
| PM 2.5 Ambient Air Monitoring | | 191,719 | 191,719 |
| Superfund UNL Mead | | 4,089 | 4,089 |
| Superfund Core | 18,015 | 217,331 | 235,346 |
| Superfund Management Assistance | | 162,820 | 162,820 |
| Superfund Site Assessment | | 197,504 | 197,504 |
| Section 128 (a) State Response | | 575,931 | 575,931 |
| Network Challenge | | 73,051 | 73,051 |
| Totals | \$ 5,959,989 | \$ 26,266,704 | \$ 32,226,693 |

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 2012 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 | 1,078,469 | 491,618 | 42,271 | | 69,000 | 1,681,358 | 100,000 | 1,781,358 |
| Ag - Livestock | 016 | G/C | 1,434,628 | 54,299 | 74,296 | | 9,105 | 1,572,328 | | 1,572,328 |
| Air Construction Permits | 020 | C | 93,663 | 55,871 | 500 | | 1,306 | 151,340 | | 151,340 |
| Superfund State Cost Share | 023 | G/C | | | | | | - | 813,400 | 813,400 |
| Litter Reduction | 024 | C | 106,776 | 46,239 | 1,898 | | 50,000 | 204,913 | 1,600,000 | 1,804,913 |
| Mineral Exploration | 029 | C | 89,008 | 38,102 | 9,331 | | 600 | 137,041 | | 137,041 |
| Private Onsite Wastewater Cert & Registration | 030 | C | 218,844 | 100,739 | 4,411 | | 3,100 | 327,094 | | 327,094 |
| Environmental Official Training | 031 | C | | | | | | - | | - |
| Emission Inventory - Title V | 033 | C | 1,894,268 | 820,093 | 26,875 | | 75,000 | 2,816,236 | | 2,816,236 |
| Chemigation | 034 | C | 17,581 | 7,386 | 163 | | 6,000 | 31,130 | | 31,130 |
| Groundwater Management Areas | 035 | G | 31,608 | | 150 | | | 31,758 | | 31,758 |
| Remedial Action Plan Monitoring Act | 036 | C | 77,478 | 34,420 | | | | 111,898 | | 111,898 |
| Private Onsite Wastewater Permit & Approval | 037 | C | 27,686 | 11,195 | | | | 38,881 | | 38,881 |
| Operator Certification | 040 | C | 53,895 | 24,116 | 4,073 | | 7,700 | 89,784 | | 89,784 |
| Community Right to Know | 041 | G | 73,857 | 4,553 | 4,341 | | 1,700 | 84,451 | | 84,451 |
| Petroleum Release Remedial Action Act | 051 | C | 953,247 | 460,483 | 24,678 | | 6,251,268 | 7,689,676 | 9,175,000 | 16,864,676 |
| Emergency Response | 057 | C | 185,571 | 84,854 | 1,617 | | 3,400 | 275,442 | | 275,442 |
| Engineering Reviews | 061 | G | 221,716 | 2,101 | 1,418 | 1,175 | | 226,410 | | 226,410 |
| Stormwater Grants | 067 | G | 6,298 | | | | | 6,298 | 1,824,996 | 1,831,294 |
| Waste Reduction & Recycling | 091 | C | 295,988 | 143,447 | 7,401 | | 50,000 | 496,836 | 2,500,000 | 2,996,836 |
| Agency Organizational Dues | 099 | G | | 21,816 | | | | 21,816 | | 21,816 |
| Totals | | | \$ 6,860,581 | \$ 2,401,332 | \$ 203,423 | \$ 1,175 | \$ 6,528,179 | \$ 15,994,690 | \$ 16,013,396 | \$ 32,008,086 |

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

The Department has a number of programs that distribute aid for specific activities. These range from funding for roadside cleanup to providing loans through the State Revolving Fund Loan Programs for construction of wastewater treatment facilities and drinking water systems.

WASTE MANAGEMENT AID PROGRAMS

Following is a summary of funds provided in FY 2011 through the waste grants programs managed in the Waste Planning and Aid Unit.

A. Litter Reduction and Recycling

The Litter Reduction and Recycling Grant Program provides funds to reduce litter, provide education and promote recycling in Nebraska. Funding for the program is an annual fee on manufacturers, wholesalers and retailers who have significant sales in categories of products that would generally be considered to produce litter. Approximately \$1.67 million was received in FY2011.

In FY 2011, 59 Litter Reduction and Recycling grants were awarded, totaling \$1,508,789. The grants were awarded in three categories: Public Education, \$323,789; Cleanup, \$60,000; and Recycling, \$1,125,000. These grants were awarded to both public and private entities.

B. Waste Reduction and Recycling

The Waste Reduction and Recycling Incentive Grants Program provides grants for various solid waste management activities. Revenues to the fund are provided by proceeds from various fees, including a one dollar fee on each new tire sold in the state, and a retail business fee on tangible personal property sold in the state. In addition, 50% of a fee collected on the disposal of solid waste going to landfills goes to this fund.

In FY 2011, 90 projects totaling \$2,293,439 were funded from the Waste Reduction and Recycling Incentive Grants Program.

C. Illegal Dumpsite Cleanup 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 FY2011, the program provided \$85,533 to six recipients.

D. Landfill Disposal Fee Rebate Program

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund. In FY2011, the program provided \$82,723 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.

Additional information about these programs can be found in the Planning and Aid portion of Chapter 5.

WATER QUALITY AID PROGRAMS

A. Petroleum Remediation

The Petroleum Remediation program provides aid through the Petroleum Release Remedial Action Fund to assist in paying the cost of cleanup of sites where petroleum has leaked from tanks, generally service stations. Funding to this program is provided mostly by a fee on petroleum sold in Nebraska. Over \$158 million has been disbursed since the program began. The program provided \$5,512,828 to 272 sites for investigation and cleanup in FY2011.

Additional information about this program can be found in the Petroleum Remediation portion of Chapter 6.

B. State Revolving Loan Fund Program

I. Clean Water (Wastewater) State Revolving Loan Fund Program -- Grant and loan programs administered by DEQ related to wastewater facilities, which are funded through the Clean Water State Revolving Fund program, include:

- The **Clean Water State Revolving Loan Fund** provides low interest loans 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 FY2011, the CWSRF funded projects totaling \$47,258,725 in loans and \$3,795,934 in grant funds.
- **Clean Water Construction Administration Small Community Matching Grants** provide matching grants to eligible communities with populations of 10,000 or less. In FY2011, \$788,636 was allocated for small town grants.

II. Drinking Water State Revolving Fund Program -- The Drinking Water State Revolving Fund provides low interest loans and loan forgiveness to owners of public water systems. In FY2011, the program disbursed \$32 million for drinking water project construction.

Additional information about these programs can be found in the State Revolving Loan Programs portion of Chapter 6.

C. Nonpoint Source Management

The Nonpoint Source Management program provides pass through funding for the prevention and abatement of nonpoint source water pollution and the restoration of watershed resources under Section 319 of the federal Clean Water Act. This funding is provided to units of government, educational institutions, and non-profit organizations, for projects that facilitate implementation of the state Nonpoint Source Management Plan. Funds provided in FY2011 included: \$12,481,207 for large competitive projects; \$263,985 for small projects; and \$902,638 for community lakes restoration projects and \$60,000 for urban run-off management projects.

Additional information about these programs can be found in the Water Quality Planning portion of Chapter 6.

D. Storm Water Grants

In 2006, the Nebraska Legislature passed LB1226, which established the Storm Water Management Plan Program. This grant program provides funding to cities and counties with storm water permits to implement their local Storm Water Management Plans (SWMPs). In FY2011, approximately \$2.3 million was distributed to communities 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.

Additional information about this program can be found in the NPDES and Related Programs portion of Chapter 6.

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 were 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. Go to the "NDEQ Recovery Funds" tab in the right column of the web page for updated grant information.

CHAPTER 10:

Staffing

This chapter consists of an assessment of the department's ability to hire and retain qualified staff with a chart showing turnover by job classification for the last ten years.

Because the department deals with a wide array of complex environmental issues, it is essential to our operations that technically competent people are hired for vacant positions. Without highly trained and experienced staff, the department would not be able to effectively carry out its mission of protecting Nebraska's environment.

Recruiting qualified and experienced employees for the more advanced positions that require extensive education and experience remains a focus. To assist with recruiting top talent, the agency's Human Resource Section worked closely with The Nebraska Department of Administrative Service to develop new classifications in the Environmental Quality Programs Specialist and the Groundwater Geologist series. With the creation of the Environmental Quality Programs Specialist I, Environmental Quality Programs Specialist II, Groundwater Geologist I and Groundwater Geologist II positions, the agency feels this will help significantly with agency competitiveness in the job market. The department feels very fortunate to have recruited excellent staff in 2010/2011.

Staff retention continues to be an important goal for the agency. Staff turnover impacts continuity in the department's programs and enforcement activities, and causes additional costs for training of replacement staff members. The department strives to foster and maintain an employee-friendly workplace by offering transfer and promotional opportunities for qualified internal applicants. In addition, training and tuition assistance are provided to interested staff.

The department monitors diversity to encourage the receipt of applications from qualified members of protected groups by seeking to recruit members of protected groups.

The chart on the following page shows hiring activity on specific job categories:

Employees Assuming Agency Positions

These figures include new hires, promotions, transfers and classification upgrades for a one-year period. Figures for 2011 are from October 1, 2010 through September 30, 2011.

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|------|------|------|------|------|------|------|------|------|------|
| Director/Deputy Director/Assistant Director/ Division Administrator | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Section Supervisor, Records Manager, Budget Officer | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 0 |
| Unit Supervisor | 0 | 2 | 2 | 1 | 1 | 2 | 0 | 5 | 2 | 0 |
| Human Resources | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 |
| Federal Aid Administrator, Financial Assurance Coordinator, Accountant | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 1 |
| Clerical/Accounting Clerk | 5 | 1 | 5 | 0 | 4 | 6 | 4 | 9 | 3 | 5 |
| Information Technology/Public Information/Research Analyst | 0 | 1 | 1 | 1 | 0 | 3 | 2 | 3 | 0 | 1 |
| Attorney | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 0 |
| Environmental Engineer | 3 | 2 | 2 | 6 | 3 | 5 | 2 | 4 | 0 | 3 |
| Field Data Specialist | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Compliance Specialist | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Programs Specialist | 6 | 7 | 2 | 12 | 7 | 12 | 13 | 17 | 8 | 9 |
| Geologist, Groundwater | 1 | 1 | 4 | 1 | 3 | 0 | 4 | 3 | 2 | 0 |
| Environmental Assistance Coordinator | | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | | | | | | | | | |
| TOTALS | 20 | 16 | 23 | 26 | 18 | 30 | 29 | 45 | 20 | 20 |

CHAPTER 11:

Financial Assurance Requirements

Section 81-1505(21) provides the statutory authority for the Department to develop, and the Council to adopt as regulations, requirements for all applicants to establish proof of financial responsibility. The requirements pertain to all new or renewal permit applicants regulated under the Nebraska Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act, unless a class of permittees is exempted by the Council. The purpose of financial responsibility is for an applicant to provide funds to be used in the event of abandonment, default or other inability of the permittee to comply with terms or conditions of its permit or license. State statutes also identify types of funding mechanisms that applicants can use to meet the requirements.

Following is a table which provides a comprehensive list of existing financial assurance requirements for each permittee. Financial assurance amounts are listed in two categories: the first is the obligated amount, which lists the total amount of financial assurance which must be provided by the time of closure of the facility. Second is the current amount demonstrated, which lists the amount of financial assurance which is currently accrued towards the obligated amount. The table lists the facility location, permit type, initial date financial assurance provided, method or type of financial assurance provided and the guarantor for each permittee.

NDEQ FINANCIAL ASSURANCE

| Facility Name | Location | Permit Type | Initial Date | Obligated Amount | Current Amount Demonstrated | FA Mechanism | Guarantor |
|--|------------|---------------|--------------|------------------|-----------------------------|------------------|------------------------------|
| Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (Sanitary LF) | | | | | | | |
| Alliance Landfill | Alliance | MSWDA | 03/17/94 | \$ 3,223,600 | \$ 1,444,465 | Enterprise Fund | City of Alliance |
| Beatrice Landfill | Beatrice | Sanitary LF | 07/12/00 | \$ 151,500 | \$ 151,500 | Financial Test | City of Beatrice |
| Beatrice Area SW Agency | Beatrice | MSWDA | 07/12/00 | \$ 3,523,900 | \$ 3,523,900 | Financial Test | City of Beatrice |
| Butler County Landfill | David City | MSWDA | 10/03/08 | \$ 6,135,310 | \$ 2,708,538 | Trust Fund | US Bank |
| Douglas County Landfill | Bennington | MSWDA | 03/28/00 | \$ 11,688,997 | \$ 11,688,997 | Surety Bond | Evergreen Ntl. Indemnity Co. |
| G & P Dev Landfill | Milford | MSWDA | 10/03/08 | \$ 4,326,654 | \$ 2,498,606 | Trust Fund | US Bank |
| Gering Landfill | Gering | MSWDA | 02/13/96 | \$ 1,057,003 | \$ 575,718 | Enterprise Fund | City of Gering |
| L.P. Gill Landfill | Jackson | MSWDA | 04/09/96 | \$ 5,487,040 | \$ 2,265,011 | Trust Fund | Security Natl. Bank |
| Grand Island Landfill | Grand Is. | MSWDA | 03/31/96 | \$ 8,371,880 | \$ 4,036,510 | Enterprise Fund | City of Grand Island |
| Hastings Area Landfill | Hastings | MSWDA | 08/12/96 | \$ 5,139,183 | \$ 2,284,820 | 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 | \$ 2,881,669 | \$ 1,671,867 | Enterprise Fund | City of Holdrege |
| J-Bar-J Landfill | Ogallala | MSWDA | 03/28/00 | \$ 3,031,651 | \$ 3,031,651 | Performance Bond | Evergreen Ntl. Indemnity Co. |
| Kearney Landfill | Kearney | MSWDA | 03/31/94 | \$ 6,212,798 | \$ 3,444,841 | Trust Fund | Wells Fargo Bank |
| Kimball Landfill | Kimball | MSWDA | 05/10/96 | \$ 1,529,511 | \$ 848,479 | Enterprise Fund | City of Kimball |
| Lexington Landfill | Lexington | Sanitary LF | 07/25/96 | \$ 868,014 | \$ 250,000 | Faith & Credit | City of Lexington |
| Lexington Area Agency | Lexington | MSWDA | 01/19/97 | \$ 2,308,724 | \$ 1,530,793 | Enterprise Fund | Lexington Area SW Agency |
| Lincoln Bluff Road Landfill | Lincoln | MSWDA | 04/01/96 | \$ 19,237,800 | \$ 19,237,800 | Financial Test | City of Lincoln |
| Loup Central Landfill | Elba | MSWDA | 04/09/96 | \$ 2,181,430 | \$ 729,309 | Trust Fund | Citizens Bank & Tr St. Paul |
| McCook Landfill | McCook | Sanitary LF | 03/04/96 | \$ 712,688 | \$ 89,086 | Faith & Credit | City of McCook |
| Minden Disposal Area | Minden | Sanitary LF | 11/18/96 | \$ 162,875 | \$ 83,428 | Faith & Credit | City of Minden |
| NE Ecology Landfill | Geneva | MSWDA | 10/03/08 | \$ 2,159,701 | \$ 640,850 | Trust Fund | US Bank |
| NNSWC Landfill | Clarkson | MSWDA | 04/09/96 | \$ 18,536,389 | \$ 4,151,143 | Enterprise Fund | NNSWC |
| Pheasant Point Landfill | Bennington | MSWDA | 08/01/03 | \$ 21,965,819 | \$ 21,965,819 | Surety Bond | Evergreen Ntl. Indemnity Co. |
| Sarpy County Landfill | Papillion | MSWDA | 03/31/96 | \$ 6,841,256 | \$ 7,182,126 | Enterprise Fund | Sarpy County |
| Sidney Landfill | Sidney | MSWDA | 02/11/97 | \$ 2,216,513 | \$ 791,757 | Enterprise Fund | City of Sidney |
| SWANN Landfill | Chadron | MSWDA | 9/25/97 | \$ 1,799,920 | \$ 559,876 | Enterprise Fund | SWANN |
| Valentine Landfill | Valentine | MSWDA | 04/09/96 | \$ 1,640,262 | \$ 384,138 | Enterprise Fund | City of Valentine |
| York Landfill | York | Sanitary LF | 05/14/96 | \$ 228,460 | \$ 10,978 | Faith & Credit | City of York |
| York Area SW Landfill | York | MSWDA | 05/14/96 | \$ 3,243,690 | \$ 1,493,668 | Enterprise Fund | City of York |
| *Municipal Solid Waste Disposal Areas are landfills that are operating under current solid waste management regulations. | | | | | | | |
| **Sanitary Landfills are closed facilities that have post-closure monitoring and maintenance. | | | | | | | |
| Construction/Demolition Landfills (Const./Demol.) | | | | | | | |
| Abe's Trash Service C & D | Blair | Const./Demol. | 03/30/98 | \$ 214,744 | \$ 214,744 | Escrow Account | Bank of Bennington |
| Alliance C & D Landfill | Alliance | Const./Demol. | 12/02/99 | \$ 139,424 | \$ 35,622 | Enterprise Fund | City of Alliance |
| Anderson Excavating C & D | Omaha | Const./Demol. | 10/19/98 | \$ 514,113 | \$ 514,113 | Surety Bond | Employers Mutual Cas. Co. |
| Arnold C & D Landfill | Arnold | Const./Demol. | 07/24/00 | \$ 34,796 | \$ 18,049 | Enterprise Fund | Village of Arnold |
| Benkelman C & D Landfill | Benkelman | Const./Demol. | 10/15/06 | \$ 63,221 | \$ 7,614 | Enterprise Fund | City of Benkelman |

NDEQ FINANCIAL ASSURANCE

| Facility Name | Location | Permit Type | Initial Date | Obligated Amount | Current Amount Demonstrated | FA Mechanism | Guarantor |
|--|--------------|---------------|--------------|------------------|-----------------------------|------------------|------------------------------|
| Broken Bow C & D Landfill | Broken Bow | Const./Demol. | 11/23/07 | \$ 102,947 | \$ 12,602 | Enterprise Fund | City of Broken Bow |
| Bud's Sanitary Service C & D | Newman Grove | Const./Demol. | 06/01/97 | \$ 43,035 | \$ 43,035 | Letter of Credit | First Natl. Bank Newman Gr |
| Butler County C & D Landfill | David City | Const./Demol. | 06/01/97 | \$ 343,245 | \$ 328,736 | 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 |
| Franklin C&D Landfill | Franklin | Const./Demol. | 11/08/10 | \$ 21,703 | \$ 2,830 | Enterprise Fund | City of Franklin |
| Gage County C & D Landfill | Beatrice | Const./Demol. | 02/23/98 | \$ 197,495 | \$ 197,495 | Letter of Credit | 1st Natl. Bank, Beatrice |
| Hawkins Construction C & D | Omaha | Const./Demol. | 3/9/96 | \$ 409,031 | \$ 264,176 | Surety Bond | Hartford Fire Ins. Co. |
| Holdrege C & D Landfill | Holdrege | Const./Demol. | 05/01/09 | \$ 286,234 | \$ 18,126 | Enterprise Fund | City of Holdrege |
| KGP Services C & D | Norfolk | Const./Demol. | 11/06/03 | \$ 67,743 | \$ 67,743 | Escrow Account | Elkhorn Valley Bank & Trust |
| Kimball C & D Landfill | Kimball | Const./Demol. | 04/01/01 | \$ 49,065 | \$ 45,222 | Enterprise Fund | City of Kimball |
| Lexington C & D Landfill | Lexington | Const./Demol. | 09/30/98 | \$ 160,357 | \$ 132,618 | Enterprise Fund | Lexington Area SW Agency |
| Limited Fill C & D Landfill | Omaha | Const./Demol. | 04/30/97 | \$ 38,119 | \$ 28,023 | Trust Agreement | First Natl. Bank, Omaha |
| Lincoln North 48th St. C & D | Lincoln | Const./Demol. | 04/01/96 | \$ 1,067,813 | \$ 1,067,813 | 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 | \$ 1,832 | 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 | \$ 235,065 | \$ 134,565 | 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 | \$ 157,168 | \$ 155,980 | Escrow Account | Five Points Bank |
| Plainview C & D Landfill | Plainview | Const./Demol. | 09/26/00 | \$ 42,242 | \$ 34,295 | Enterprise Fund | City of Plainview |
| Rainwood Hill LLC C & D | Omaha | Const./Demol. | 02/10/08 | \$ 71,897 | \$ 71,897 | Surety Bond | Nationwide Mutual Ins. Co. |
| Schmader C & D Landfill | West Point | Const./Demol. | 05/05/04 | \$ 115,599 | \$ 115,599 | Letter of Credit | Charter West Ntl Bank |
| Sidney C & D Landfill | Sidney | Const./Demol. | 11/23/99 | \$ 90,981 | \$ 38,732 | Enterprise Fund | City of Sidney |
| SW NE Solid Waste Agency | Imperial | Const./Demol. | 06/01/01 | \$ 67,538 | \$ 26,728 | Enterprise Fund | City of Imperial |
| Three Valleys C & D Landfill | Indianola | Const./Demol. | 02/24/10 | \$ 72,220 | \$ 72,220 | Letter of Credit | McCook Ntl Bank |
| York C & D Landfill | York | Const./Demol. | 12/01/07 | \$ 235,814 | \$ 27,423 | Enterprise Fund | City of York |
| Fossil Fuel Combustion Ash (Fossil Fuel), Industrial Waste Landfills, Monofills | | | | | | | |
| Ash Grove Cement Co. | Louisville | Indus. Waste | 03/01/03 | \$ 5,883,488 | \$ 5,883,488 | Financial Test | Ash Grove |
| Clean Harbors Technology | Kimball | Monofill | 08/01/95 | \$ 3,721,309 | \$ 3,721,309 | Insurance Policy | Steadfast Insurance Co. |
| Fremont Utilities | Fremont | Fossil Fuel | 05/28/96 | \$ 354,700 | \$ 500,000 | Enterprise Fund | City of Fremont |
| Hastings Utilities | Hastings | Fossil Fuel | 2/1/01 | \$ 1,508,500 | \$ 650,410 | Enterprise Fund | City of Hastings |
| NPPD Gerald Gentleman 4 | Sutherland | Fossil Fuel | 04/01/95 | \$ 1,484,655 | \$ 1,484,655 | Financial Test | NPPD |
| NPPD Sheldon Station 3 | Sheldon | Fossil Fuel | 04/01/95 | \$ 136,708 | \$ 136,708 | Financial Test | NPPD |
| NPPD Sheldon Station 4 | Sheldon | Fossil Fuel | 07/01/01 | \$ 609,244 | \$ 609,244 | Financial Test | NPPD |
| OPPD NE City 1 | NE City | Fossil Fuel | 04/04/95 | \$ 4,133,450 | \$ 4,133,450 | Financial Test | OPPD |
| OPPD NE City 2 | NE City | Fossil Fuel | 06/30/09 | \$ 803,205 | \$ 803,205 | Financial Test | OPPD |
| OPPD North Omaha | Omaha | Fossil Fuel | 04/04/95 | \$ 1,757,148 | \$ 1,757,148 | Financial Test | OPPD |
| OPPD Fort Calhoun (IW) | Ft. Calhoun | Indus. Waste | 04/04/95 | \$ 212,788 | \$ 212,788 | Financial Test | OPPD |

NDEQ FINANCIAL ASSURANCE

| Facility Name | Location | Permit Type | Initial Date | Obligated Amount | Current Amount Demonstrated | FA Mechanism | Guarantor |
|---|--------------|------------------|--------------|------------------|-----------------------------|------------------|-------------------------------|
| Platte Generation | Grand Island | Fossil Fuel | 08/25/97 | \$ 326,521 | \$ 326,521 | Enterprise Fund | City of Grand Island |
| Waste Management | Bennington | Indus. Waste | 04/01/02 | \$ 3,733,940 | \$ 3,733,940 | Surety Bond | Evergreen Ntl. Indemnity Co. |
| Transfer Stations, Material Recovery Facilities, Compost Sites | | | | | | | |
| 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 | 12/15/99 | \$ 89,551 | \$ 89,551 | Letter of Credit | Clarkson Bank |
| E3 Biofuels Compost | Mead | Compost | 04/01/07 | \$ 178,739 | \$ 179,906 | 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 | \$ 1,182 | \$ 636 | 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. |
| RCRA Closure and RCRA Post-Closure (RCRA PC) | | | | | | | |
| Agromac International | Gering | RCRA PC | 12/11/07 | \$ 8,019 | \$ 8,019 | Escrow Account | Platte Valley Ntl. Bank |
| Behlen Manufacturing Co. | Columbus | RCRA PC | 03/18/11 | \$ 132,350 | \$ 132,350 | Letter of Credit | Bank of America |
| Clean Harbors Technology | Kimball | RCRA Closure | 05/10/95 | \$ 16,250,983 | \$ 16,250,983 | Insurance Policy | Steadfast Insurance Co. |
| Douglas County Landfill | Omaha | RCRA PC | 03/08/85 | \$ 337,619 | \$ 1,008,148 | 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 | \$ 132,115 | \$ 132,115 | Insurance Policy | Indian Harbors Insurance Co. |
| Safety Kleen | Omaha | RCRA Closure | 10/15/01 | \$ 350,032 | \$ 350,032 | 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 |
| Agrium Advanced Technologies | Fairbury | RCRA PC | 07/11/11 | \$ 630,696 | \$ 630,696 | Letter of Credit | The Bank of Nova Scotia |
| USA Tire Management | Dakota City | RCRA Closure | 12/14/07 | \$ 15,063 | \$ 15,234 | Escrow Account | Vantus Bank Sioux City IA |
| Valmont Industries | Valley | RCRA PC | 10/30/85 | \$ 128,000 | \$ 128,000 | 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 | \$ 2,716,612 | \$ 2,716,612 | Letter of Credit | 1st State Bank Webster Cty IA |
| Underground Injection Control (UIC) | | | | | | | |
| Crow Butte Resources, Inc. | Crawford | UIC | | \$ 35,248,294 | \$ 35,248,294 | Letter of Credit | Royal Bank of Canada |

NDEQ FINANCIAL ASSURANCE

| Facility Name | Location | Permit Type | Initial Date | Obligated Amount | Current Amount Demonstrated | FA Mechanism | Guarantor |
|--------------------------------|------------------|-------------|--------------|------------------|-----------------------------|------------------|-------------------------------|
| Waste Tire Sites | | | | | | | |
| ABC Tire LLC | Kansas C, KS | Waste Tire | 12/08/08 | \$ 10,000 | \$ 10,000 | Letter of Credit | Union Bank |
| Beck's Tire Service, Inc. | Kansas C, MO | Waste Tire | 6/11/11` | \$ 5,000 | \$ 5,000 | Surety Bond | Merchants Bonding Company |
| 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 |
| Richard D. Morrical | Tabor, IA | Waste Tire | 12/15/10 | \$ 5,000 | \$ 5,000 | Letter of Credit | Glenwood State Bank, IA |
| 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 |