



# Nebraska Department of Environmental Quality

Annual Report to the Legislature  
2014

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# CHAPTER 1:

## Agency Overview

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The Nebraska Department of Environmental Quality was created pursuant to passage of the Nebraska Environmental Protection Act in 1971. Although the Department has grown and been given additional responsibilities over the years, its ongoing mission has remained the same — the protection of Nebraska's air, land and water resources. Presently, the Agency is authorized a staffing level of 216.75 full-time employees.

The Department has a total annual budget for FY15 of approximately \$67.7 million. This includes money collected from state taxes, fees and federal grants. Of that amount, approximately \$32 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans).

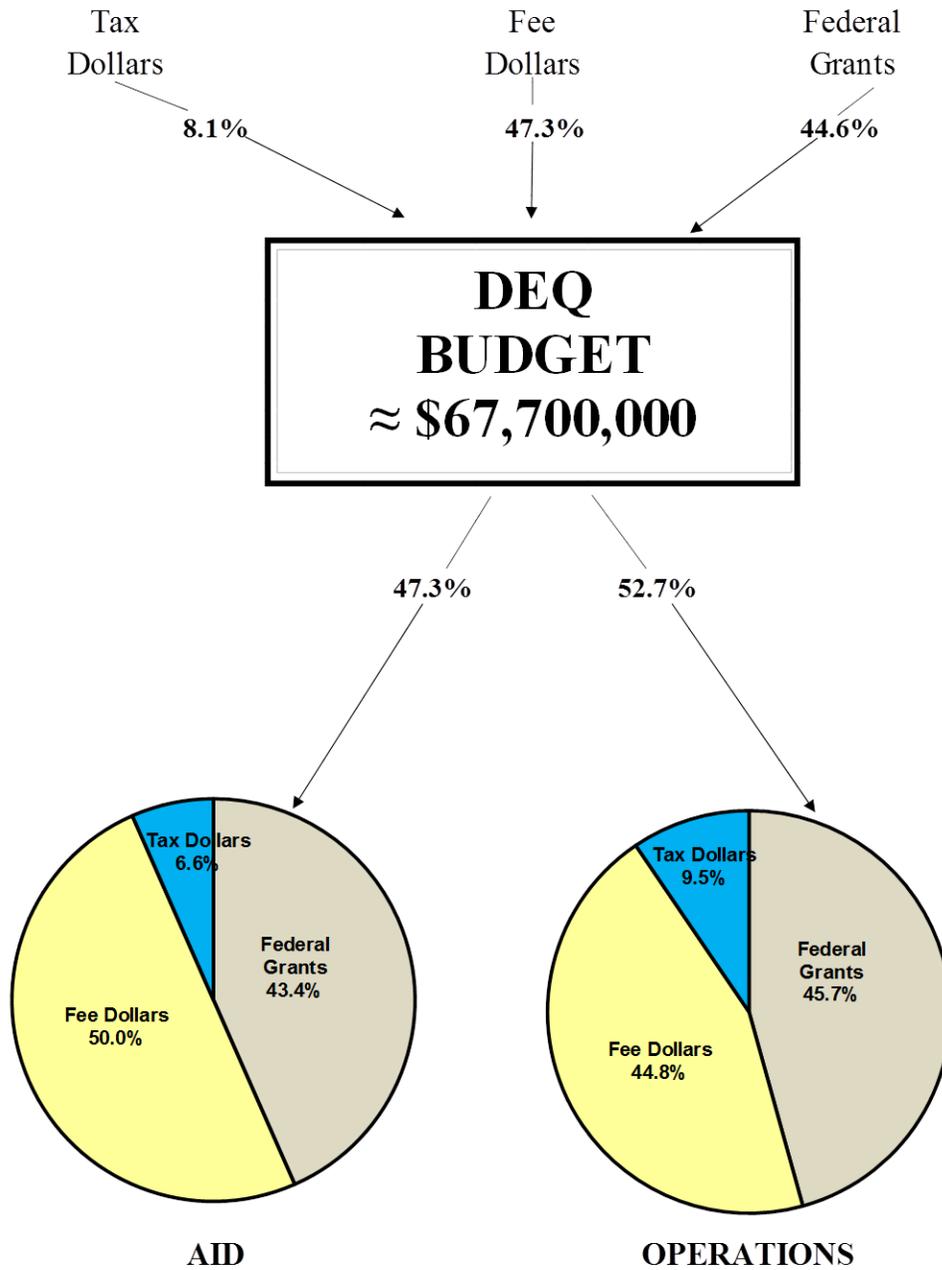
In the table below, the columns listed as aid represent the amount of the agency's budget that is redistributed to other entities as grants and loans. The operations columns represent the amounts used for the operation of the agency. However, the operations categories also include contracts where money is used on behalf of others, such as when the agency assigns a private contractor to investigate and clean up a petroleum remediation site.

This funding is derived from several sources. A major source of funding is the federal government. The state also contributes significant funding through fee revenue and tax dollars for Department activities, and certain programs are funded partially or totally by fees. A breakdown of funding by fund type is shown on the following table:

<b>Funding Type</b>	<b>Operations: \$ Amount</b>	<b>Percent of Operations Budget</b>	<b>Aid: \$ Amount</b>	<b>Percent of Aid Budget</b>
<b>Federal Funds</b> (Grants)	\$16.3 million	45.7%	\$13.9 million	43.4%
<b>State General Funds</b> (Tax \$)	\$3.4 million	9.5%	\$2.1 million	6.6%
<b>Cash Funds</b> (Fees)	\$16.0 million	44.8%	\$16.0 million	50.0%
<b>Total</b>	\$35.7 million		\$32.0 million	

The following graphic depicts the department's FY15 budget by funding source and percent anticipated to be expended by fund type and activity (aid or operations).

### DEPARTMENT OF ENVIRONMENTAL QUALITY FY 2015 Budget



FTE = 216.75

Several chapters of this report give the reader a more in-depth look at Department responsibilities. Other chapters address financial issues, staffing issues, aid programs, and financial responsibility requirements. Additionally, Chapter 3 lists actions of the Environmental Quality Council during FY2014.

This chapter provides: I) a brief description of agency goals; II) significant issues in 2014; III) significant legislation in 2014 and IV) a table that identifies initiatives over the past ten years that have impacted Agency resources.

## I. Agency Goals and Related Activities

In recent years, NDEQ Administration has established a list of agency goals. Staff from all programs were asked to identify goals consistent with the agency goals. Through a series of staff meetings, goals were discussed and specific program goals and activities to be reached and reported were identified. These goals meetings have been conducted periodically since the goals were established, to evaluate our progress and develop strategies for the future. These efforts provide greater accountability regarding work that is being accomplished and help programs and management monitor whether we are achieving the identified goals.

The main goals established by the Agency are:

- 1) **Effective work force.** The agency needs to structure and train its employees to be as effective as possible to offset declining resources.
- 2) **Timely permitting process.** Permit review and issuance needs to be streamlined and simplified to meet the needs of both the agency (effective work force) and those in need of a permit.
- 3) **Balanced enforcement.** Enforcement means compliance with the law and a balanced approach between compliance assistance and traditional enforcement tools needs to be reached.
- 4) **Simplify regulations.** Persons and entities affected or protected by our regulations need to be able to understand the requirements with as little difficulty as possible.
- 5) **Community presence and relations.** NDEQ needs to be present in the community that it serves - Nebraska. The agency also needs to open communications and relationships with citizens, those we regulate, and other governmental entities.
- 6) **"Back to the Basics."** We must excel at the fundamental things that the Legislature intends for us to do -- issue permits, inspect, assure compliance, and require remediation where necessary.
- 7) **Assistance.** We need to assist those who we regulate so they can meet or exceed minimum standards. We must make such concepts as pollution prevention and compliance assistance a natural way of doing our job.
- 8) **Measure Environmental Quality.** We need to collect information that enables us to do our job and to measure Nebraska's environmental quality. Information collected by NDEQ must measure any changes in the quality of Nebraska's environment over time and provide the information we need to make sound regulatory decisions.
- 9) **Meaningful Reporting.** NDEQ has a responsibility to the citizens of Nebraska to report our findings in an understandable and useful way.

- 10) **Assess Needs.** Meaningful information about the environment should be used by NDEQ to assess the needs of the citizens and environment of the State. That information, when shared with the public, will provide input opportunities on priority issues.

Through activity tracking and followup meetings with program staff, the agency continually evaluates whether goals are being achieved, and if they need to be modified.

## II. Significant Issues: Regulatory Development Outreach Process

In 2014, the agency expanded and improved its public outreach process relating to the development of new and amended regulations. The effect has been a positive one. A number of stakeholders (those who may be impacted by or have an interest in the development of regulation) had expressed that they were interested in earlier and more meaningful input in the development of regulations. The department listened to those needs and responded by expanding the existing outreach process. The expanded outreach occurs prior to the proposed regulations being scheduled before a hearing of the Environmental Quality Council, the public body appointed by the governor to adopt environmental regulations. (Chapter 3 of this report provides more detailed information regarding the Council.)

The department's regulatory development process now provides informal and formal outreach opportunities to the public and regulated community. At the informal outreach phase, stakeholders are involved and can provide input during the concept stage and initial development of regulatory proposals. This phase is followed by a formal outreach process where the near-final draft of the proposed regulation is discussed and suggestions received prior to completing the final regulatory package. The outreach meetings provide statewide access to accommodate in person, telephone conferencing and webinar attendance. The final regulatory package is then placed on public notice for the Environmental Quality Council hearing, in accordance with the Administrative Procedures Act. The enhanced stakeholder outreach process promotes better rulemaking, which results in positive outcomes for everyone involved.

## III. 2014 Legislative Summary

Four pieces of legislation passed in 2014 had an impact on the agency:

**LB 272** – This legislation gives each Natural Resources District the authority to set chemigation permit fees to help offset the costs of administering the permit program. The bill also changes the time period that a natural resources district has to review and decide on an emergency chemigation permit from 48 hours to two working days.

**LB 514** - Creates a linked deposit loan program under the Wastewater Treatment Facilities Construction Assistance Act to promote projects for water quality. The Department of Environmental Quality is authorized to create and regulate the linked deposit program and promote loans for the construction, rehabilitation, and enhancement of nonpoint source control systems. The bill authorizes the department to deposit a portion of the SRF loan funds with eligible financial institutions in low-yielding deposit accounts, certificates of deposit, or other agreed upon deposits per an agreement. The eligible financial institution can then make loans available at a rate lower than the prevailing rate for such loans.

Linked deposit program loans may be made to public or private owners by eligible financial institutions for the construction, rehabilitation, and enhancement of nonpoint source control systems including: (a) onsite wastewater and private septic systems; (b) local water protection projects,

including best management practices for nutrient controls; and (c) eligible nonpoint source activities under the Livestock Waste Management Act.

Finally, the legislation authorizes the department to refinance debt of municipalities for wastewater treatment works.

**LB 683** – This legislation amends the Storm Water Management Plan Program statute with an updated citation for the 2010 U.S. Census. The Storm Water Management Program provides grant funding to cities and counties in Nebraska that have duties, under the federal Clean Water Act, to manage storm water runoff. Eligible communities who apply for the grant are awarded dollars proportionally based on population and whether the census determined they are inside or outside an urbanized area.

**LB 844** - Extends the termination date of the Nebraska Litter Reduction and Recycling Act from October 30, 2015 to October 30, 2020.

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

The following is a breakdown of legislation over the past 10 years that has affected staffing requirements at the Nebraska Department of Environmental Quality. The required programs are broken into three categories: 1) programs required by the federal government which did not require additional state legislation to adopt (Federally Mandated); 2) state legislation in response to federal requirements (State Legislation/Federally Mandated); and 3) state legislation which was not federally mandated (State Legislation/ Not Federally Mandated).

##### **2005 (217 FTE)**

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

- Air Emission Fees
- Petroleum Release Remedial Action Act

##### **2006 (217 FTE)**

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

- Livestock Waste Management Act
- Stormwater Grants
- Emission Trading

##### **2007 (218 FTE)**

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

- Drinking Water State Revolving Fund
- Livestock Waste Management Act
- Wastewater Treatment Operator Certification
- Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act

##### **2008 (218 FTE)**

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

- Remedial Action Plan Monitoring Act
- Wastewater Treatment Facilities Construction Act
- Petroleum Release Remedial Action Act

**2009** (218 FTE)

**State Legislation/Not Federally Mandated**

- Livestock Waste Management Act
- Integrated Solid Waste Management Act (rebate fee schedule)
- Waste Reduction and Recycling Incentive Fund (deconstruction grants)
- Waste Reduction and Recycling Incentive Fund (scrap tire projects)

**2010** (215.25 FTE)

**State Legislation/Not Federally Mandated**

- LB1 Special Session

**2011** (215.25 FTE)

**State Legislation/Not Federally Mandated**

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

**2012** (216 FTE)

**State Legislation/Not Federally Mandated**

- Deficit Funding Bill 1 FTE

**2013** (216 FTE)

**State Legislation/Not Federally Mandated**

- LB203 Integrated Solid Waste Management Act
- LB242 Administrative Procedures Act
- LB549 Waste Reduction and Recycling Act

**2014** (216.75 FTE)

**State Legislation/Not Federally Mandated**

- LB514 Clean Water State Revolving Fund

# CHAPTER 2:

## Administration/Legal/ Management Services

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

### I. Administration

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

Department Administration is responsible for coordination with other local, state and federal agencies. Staff serve on various committees within the state. The administration is also responsible for coordination and negotiations with the U.S. Environmental Protection Agency. A significant amount of the agency's funding derives from the EPA, and substantial coordination is required. In addition, the agency coordinates certain activities with the U.S. Department of Defense and the Army Corps of Engineers.

The Director coordinates agency activities with the Governor's Office and the Nebraska Legislature. The Director is responsible for ensuring that the Agency effectively responds to state legislative activities and actions.

The Deputy Director of Administration is largely responsible for day-to-day administrative activities and Agency operations. The Deputy Director is also given responsibility on a case-by-case basis for coordinating special activities which cross the divisional lines of responsibility.

The Deputy Director of Programs coordinates the various agency programmatic activities.

### II. Legal Division

The Legal Division provides legal support to the Director and the Agency. Legal responsibilities of attorneys in the Division include:

- Preparing legal opinions interpreting federal and state laws and regulations,
- Advising the Director and Agency staff on duties and program responsibilities,
- Preparing administrative orders and other enforcement actions for the Agency,
- Representing the Agency in administrative proceedings,
- Preparing judicial referrals to the Attorney General,

- Serving as hearing officers for public and administrative contested case hearings,
- Drafting and reviewing proposed legislation, rules and regulations,
- Drafting and reviewing contracts, leases, and other legal documents,
- Reviewing other Agency documents, and
- Representing the Director and Agency as requested by the Director.

During FY2014, the Director issued 15 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled 17 civil judicial cases and judgments were entered for a total of \$280,500 in civil penalties with deferments possible in many cases for subsequent compliance. In addition, these judgments included \$82,500 for supplemental environmental projects which were: \$10,000 to Rushville Fire Department, \$4,000 to Keep Columbus Beautiful, \$8,500 to Wind for School Projects in Adams County, \$30,000 to Ravenna Public Schools, \$5,000 to McCool Junction Rural Fire Department, \$10,000 to Sutton Fire Department, \$7,500 to Holdrege Volunteer Fire Department and \$7,500 to Holdrege Area Recycling Center.

### **III. Management Services**

The Management Services Division provides administrative and technical support to Department programs. The Deputy Director of Administration heads the division. The division's staff is divided into six areas — Fiscal Services, Human Resources, Records Management, Information Technology, Public Information, and Grant and Contract Coordination.

#### **Fiscal Services**

The Fiscal Services Section provides budgeting and finance functions to the Department, and manages Department spending, purchasing, receipting, accounting and auditing responsibilities. The section offers advice and assistance to programs on financial questions and conducts financial reviews of grantees.

This Section is supervised by the agency's Budget Officer. The Budget Officer has direct contact with the State Budget Office in coordinating, compiling and submitting the agency's biennial budget to the Governor. Various reporting mechanisms are monitored throughout each year to keep the agency on track with budgeted expenditures and revenues, and to ensure there is adequate appropriations, grant and cash funding to cover agency expenses in the pursuit of its mission.

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

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

The Fiscal Services Section also assists the Integrated Solid Waste Management and Livestock programs in collecting and reporting all applicable fees. This section is also

responsible for tracking receipt of Title V air emission fees, and all other Department fees and permits.

### **Human Resources**

The Human Resources team assists supervisors to recruit, hire, develop, retain, and reward a high quality, diverse staff. The team supports agency efforts to provide a working environment that strengthens individual and organizational performance through:

- fiscally responsible compensation and benefits programs;
- progressive human resources policies; and
- targeted career and organizational development initiatives that support the agency's mission of protecting the environment.

Specifically, Human Resources consults with supervisors and employees to: process employee pay and benefits; coordinate hiring; conduct new employee orientation and employee exit interviews; coordinate the agency's medical monitoring program; participate in the Health & Safety Committee; manage the classification and compensation program; and coordinate employee recognition programs. In addition, Human Resources is responsible for monitoring the agency's diversity and ensuring equal employment opportunity is an integral part of the daily activities of the agency. Other activities include: providing technical assistance to supervisors concerning performance management and investigations of conduct complaints; maintaining, communicating and developing agency policies; evaluating reasonable disability accommodations; and coordinating reporting requirements of the conflicts of interest provisions of the Nebraska Political Accountability and Disclosure Act. The Human Resources Section is responsible for processing the agency's bi-weekly payroll.

### **Records Management/Database Administration**

The Records Management Section is responsible for managing the agency's paper and electronic records. The section also operates the agency's centralized mail-handling process and other support functions for the agency. This includes, but is not limited to, ordering supplies, staffing the main reception and switchboard area, and providing assistance in special projects or requests as needed.

Incoming mail is scanned and indexed into the Enterprise Content Management (ECM) System utilizing Onbase applications from Hyland Software. Images are routed to agency staff through an electronic workflow process, eliminating the need to route paper documents. Outgoing mail documents are still provided to the Records Section in paper format and then scanned and indexed. Staff can access current facility-related documents on their desktop computer through the ECM, the agency Integrated Information System (IIS) Document Tracking System (DTS), or the Agency's webpage. Between July 1, 2013 and June 30, 2014, there were 73,813 documents captured and stored in the ECM. Storing document images in the ECM has reduced the number of file folders and file labels purchased, causing a reduction in staff time spent labeling folders and filing documents.

The Records Management Section coordinates responses to requests for information from the public, government agencies, private consultants, and regulated entities that wish to research the history of environmental activities by the agency. These records requests involve a variety of topics such as landfills, leaking underground storage tanks, ethanol plants, wastewater treatment facilities, and hazardous waste sites. The Section responded to approximately 1,300 records requests during FY2014.

All facility-related document images residing in the ECM have been made available to the public through the agency's webpage since December 2012. The change in public accessibility to agency documents means staff increasingly fulfill requests for information by providing instructions to access the images from the Internet. Public records requests have declined as documents are scanned into the ECM. The section responded to approximately 1300 requests for information in FY2013 and approximately 1,000 in FY2014. Of those 1,000 requests, approximately 25% of the requestors were directed to the agency web page to view the requested information. Staff spends less time gathering and organizing files for review, disassembling and reassembling files, photocopying documents, and preparing invoices and packages to mail. The time to respond to public records requests is expected to decline as new documents are scanned into the ECM. Requests for historical information are handled on a case-by-case basis.

In 2012, an application was developed in the ECM System to support the records management process of the Supplemental Environmental Impact Statement to the Keystone XL Pipeline project. The final count of public comments and documents captured and stored in the ECM for this project is 2,207. These items are available for public viewing on the agency web site (<https://ecmp.nebraska.gov/deq-seis/>). Utilizing the ECM for the storage and presentation of project documents helped keep the project transparent and provided documents to the public in a timely manner.

Database Administration manages facility data for the agency's Integrated Information System (IIS), resolving discrepancies and providing accurate descriptive and locational information for a database of over 51,000 facilities. A new Geographic Information System (GIS) map application was deployed in late 2012 and is available from the agency web site (<http://deqims2.deq.state.ne.us/deqflex/DEQ.html>). Viewers have the ability to find facilities and to also view facility-related documents with this application.

### **Information Technology**

The Information Technology Section provides computer support and information management for all Agency locations. Four professional staff members offer guidance and technical support in the acquisition and maintenance of computer hardware and software. They provide support for about 250 desktop computers, about 20 printers, a midrange AS/400 computer, various network servers, about 30 mobile devices, and software. They also conduct training and oversee telecommunications for the Agency. Four professional staff design, develop, support, and provide training for computer programs in supporting the Agency's information management needs and the administration of the Agency's computerized databases. One professional staff person is responsible for managing all of the Information Technology staff, maintaining and updating the agency technology plan, and coordinating Information Technology Section activities.

The agency has developed an Integrated Information System (IIS) which is a centralized, shared data base containing descriptive, locational, program specific, and paper file information for all facilities and other items under the agency's jurisdiction. Nationally, NDEQ is among the leaders within state environmental agencies regarding information integration. Over the past 15 years, the program has implemented EPA grants to improve the network and information systems. These funds have been and continue to be used in efforts to integrate data that is shared among environmental agencies, to provide greater public access to this information, and to build additional information systems. In addition, the agency made available its first web-based reporting application at the end of 2003, to replace the more traditional paper-based reporting process.

In 2001, the agency successfully completed a pilot project with other states and EPA demonstrating the exchange of federally required information using eXtensible Markup Language

(XML). This was the first successful effort to exchange data using this process. The Agency continues to be involved in the EPA/State efforts to build a National Environmental Information Exchange Network (Exchange Network). When completed, the Exchange Network will provide a consistent method for obtaining environmental information from any participating agency or program in the country.

In 2006, NDEQ, in conjunction with the environmental agencies from Iowa, Kansas, Missouri and EPA Region VII, started work on a Homeland Emergency Response Exchange (HERE) project to share information with each of the respective state Emergency Management Agencies. This project utilizes the technology of the Exchange Network to make information available before a disaster or catastrophic event. The project was operational in November of 2007. Since going operational, the project has expanded to other states in the country and is also being utilized by local planners and emergency response staff. An improved and expanded version of the HERE application was deployed in the original four states in the fall of 2009.

Since late 2010, the agency has been participating in the Enterprise Content Management Shared Services project with Nebraska's Chief Information Officer and other state agencies. The purpose of the project is to create and store electronic images of the agency's documents, to improve management of and access to public records. A Request for Proposals (RFP) was issued, vendors evaluated, a vendor selected, and a contract has been signed. The agency was one of three partners working with the vendor during implementation to demonstrate and accept the requirements of the RFP. As part of the acceptance process, the agency incorporated the ECM into existing business processes and operations. On April 11, 2011 the agency implemented the first project. This project is covered in more detail in the Records Management portion of the report. As support for the project, about two thirds (160) of the agency's PC-based computers were replaced between April and September. Additionally, about 170 nineteen-inch monitors were installed as a second monitor so agency staff could better utilize the agency ECM application. In early 2013, the agency added the last field office to the state network, which provided staff with better access to the ECM.

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

During the last year, the agency web page was updated to make use of new software capabilities. As part of the process, static Excel files of information were replaced with applications to query the existing data in real time, providing users with better information and eliminating the need for agency staff to create the Excel files on a regular basis.

### **Public Information Office**

The Public Information Office serves as the Agency's initial source of communication with the public and media. The services of the Public Information Office are used by all divisions of the Agency.

A primary responsibility of this office is to handle questions from the public and media (newspaper, television and radio) regarding the Department's activities. Due to the increasing public awareness of environmental issues, the number of inquiries from both media and the general public has increased significantly in the past several years.

The Public Information Office is responsible for the writing and distribution of news releases on a wide range of environmental topics that are of importance to the public. The office is also involved in

the production of a number of other publications, including this annual report, brochures, fact sheets and guidance documents. These publications can be obtained by contacting the Public Information Office or by visiting our web site.

An increasingly important method of communicating with the public is the agency's web site: <http://deq.ne.gov>. The web site has grown considerably in recent years, and an agency-wide effort is ongoing to revise the site to make it more accessible and interactive for our customers.

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

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

An important component of the web site is to promote two-way communication. As part of those efforts, the agency's main e-mail address is provided at numerous locations on our web site. That e-mail address is: [NDEQ.moreinfo@nebraska.gov](mailto: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](mailto:NDEQ.problem@nebraska.gov). The site also includes phone information and procedures relating to reporting a spill or complaint.

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

### **Grants/Contract Coordination**

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

### **Funding of Management Services**

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

# CHAPTER 3:

## Environmental Quality Council

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

The Council has 17 members who are appointed by the Governor to four-year terms. Appointments require legislative approval. Council members are appointed to represent: the food manufacturing industry; conservation interests; the agricultural processing industry; the automobile or petroleum industry; the chemical industry; heavy industry; the power generating industry; crop production; labor; the livestock industry; county government; municipal government (two members, one of which represents cities not of the primary or metropolitan class); a professional engineer; a biologist; a representative of minority interests; and a doctor with knowledge about the human health aspects of air, water and land pollution.

The Council is required by statute to meet at least twice each year. The Department of Environmental Quality publishes notice of these meetings, together with an agenda and a description of proposed regulations to be considered. At these meetings, the Council holds public hearings on the proposed regulations. Any interested person may submit written comments on the proposed regulations and/or testify at the public hearing. The Council considers these comments and testimony prior to making a decision on whether to adopt, modify or deny new state environmental regulations and amendments to existing regulations. The Council can also consider rule-making petitions submitted by the public.

Although the Council is responsible for review and adoption of rules and regulations, it does not have involvement or oversight in the administrative functions or day-to-day responsibilities of the agency. The Acting Director of the Department of Environmental Quality is responsible for administration of the department and the rules and regulations adopted by the Council.

Following are two tables. The first lists the council members, the second summarizes Council actions during FY2014.

**Council Members**

<b>Representing</b>	<b>Council member</b>	<b>Term expires</b>
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2017
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2015
Automotive/Petroleum Industry	John Dilsaver Ralston	June 22, 2017
Biologist	Mark Czaplewski Grand Island	June 22, 2017
Chemical Industry	Donald E. Williams Orchard	June 22, 2015
Conservation	John C. Turnbull York	June 22, 2015
County Government	Earl McNutt McCook	June 22, 2015
Food Products Manufacturing	Michelle Bucklin Omaha	June 22, 2017
Heavy Industry	John Kinter Norfolk	June 22, 2015
Labor	Robert Hall Wahoo	June 22, 2017
Livestock Industry	Alden Zuhlke Plainview	June 22, 2017
Minority Populations	Mohamed Dahab Lincoln	June 22, 2017
Municipal Government	Vern Powers Hastings	June 22, 2015
Municipal Government	Lance Hedquist South Sioux City	June 22, 2017
Physician	Ronald Sheppard Callaway	June 22, 2015
Power Generating Industry	Joseph Citta, Jr., Columbus	June 22, 2017
Professional Engineer	John T. Baker Scottsbluff	June 22, 2015

**FY 2014  
Environmental Quality Council Actions**

<b>Council Meeting Date</b>	<b>Regulation</b>	<b>Action</b>
February 6, 2014	Amendments to Title 128, Nebraska Hazardous Waste Regulations	Approved
	Amendments to Title 132, Integrated Solid Waste Management Regulations	Approved
	Amendments to Title 199, Waste Reduction and Recycling Incentive Grants Program	Approved
	Amendments to Title 197, Rules and Regulations for Certification of Wastewater Treatment Operators in Nebraska	Approved
	Amendments to Title 129, Nebraska Air Quality Regulations	Approved as Amended
	Amendments to the 2014 State Revolving Fund Intended Use Plan	Approved
June 19, 2014	2015 Intended Use Plan and Project Priority List for the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund	Approved as Amended
	Litter Reduction and Recycling Grant Program 2015 Funding Percentage Allocations	Approved
	Amendments to Title 133, Litter Reduction and Recycling Grant Program	Approved

# CHAPTER 4:

## Air Quality Division

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The objectives of the Air Quality Division are to achieve and maintain the ambient air quality standards, to protect the quality of the air in the state, including areas that have air cleaner than the standards, and to implement federal and state air quality rules and regulations. Each year, thousands of tons of air pollutants are emitted into the air from industrial and other man-made activities. Many of these air pollutants affect human health, reduce visibility, cause property damage and harm the environment. The air pollutants of most concern are particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, ozone, lead, and 187 listed hazardous air pollutants.

The primary air quality programs which help assure healthy air quality are: the construction permit program, operating permit program, emission inventory program, ambient air quality monitoring program, inspection and compliance program, air toxics program, and planning and development program.

Three local agencies -- Lincoln/Lancaster County Health Department, Omaha Air Quality Control, and Douglas County Health Department -- have accepted, through agreement with NDEQ and direct delegation from the U.S. Environmental Protection Agency (EPA), responsibility for various facets of the air quality program. These responsibilities include air quality monitoring, permitting and enforcement within their areas of jurisdiction.

### **Permitting Section**

During FY14, the NDEQ continued to implement the greenhouse gas permitting rules previously adopted into Title 129. However, on June 23, 2014, the U.S. Supreme Court reversed the course of part of the rules, deciding that Prevention of Significant Deterioration (PSD) construction permits and Title V operating permits are not required solely due to emissions of greenhouse gases. Therefore, greenhouse gases are only regulated under these programs if a facility triggers permitting due to emissions of other pollutants (e.g., sulfur dioxide, nitrogen oxides, particulate matter). EPA issued a memorandum soon after the decision providing guidance to permitting agencies stating that it intends to act consistent with its understanding of the Supreme Court decision. EPA is considering what final actions to take in response to the Supreme Court ruling, and NDEQ will eventually need to revise its permitting regulations accordingly.

### **Construction Permit Program**

NDEQ has maintained a construction permit program for air contaminant sources since the 1970s. Facilities are required to obtain a construction permit before they construct, reconstruct or modify any air contaminant source or emission unit where there is a net

increase in the potential to emit above specified thresholds. The table below provides information relating to construction permit applications received, processed and pending:

Pending July 1, 2013	Applications Received	Applications Processed	Pending June 30, 2014
45	64	58	51

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). The purpose of the program is to protect areas of the state which are cleaner than the ambient air quality standards, while still allowing industrial and economic growth. The Prevention of Significant Deterioration program applies to sources that emit significant levels of certain types of emissions. If a source is regulated under the program, the NDEQ conducts additional, more rigorous reviews of their construction permit application to ensure that best available control technology will be used. Best available controls are employed to minimize impacts on the environment. Before issuing a permit, the NDEQ must also assure that the source will not cause or contribute significantly to any deterioration of air quality that could make the area potentially vulnerable to violations of the ambient air quality standards. The Prevention of Significant Deterioration program also ensures that visibility in nearby national parks and wilderness areas is protected. The NDEQ notifies federal land managers of pending PSD decisions. Lastly, the program requires that permitting authorities advise nearby States and Tribes of pending PSD decisions so they may express any concerns they have with potential downwind impacts in their areas.

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

During FY06-08, NDEQ received an increasing number of applications from business and industry for air quality construction permits to build new or expand current business ventures across the state, including ethanol plants, power plants, and grain processing facilities. From FY09 through FY12, a slower economy delayed or cancelled many capital projects at sources. In FY13 and FY14, more applications were received than had been received for several years.

	FY09	FY10	FY11	FY12	FY13	FY14
Number of Construction Permit Applications Received	53	55	52	54	61	64

### Operating Permit Program

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

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

Pending June 2013	Operating Permit Applications Received	Operating Permit Applications Processed	Pending June 2014
105	71	53	123

From 2002 through 2004, the operating program was successful in eliminating the majority of the permitting backlog created at the onset of the program. Operating permits, however, are issued for five-year terms. Consequently, that early success resulted in correspondingly wide year-to-year variations over the next five years due to the variation in the numbers of operating permits up for renewal each year. For example, the higher number of applications in FY14 was largely due to operating permit renewal applications received for operating permits from FY09.

The following table summarizes the applications received from FY08 through FY14 (applications for all application types, including applications for permit revisions, general permits, permit-by-rule, etc.).

	FY08	FY09	FY10	FY11	FY12	FY13	FY14
<b>Number of Operating Permit Applications Received</b>	92	75	61	32	43	60	71

### Compliance Section

#### Ambient Air Quality Monitoring Program

The State of Nebraska operates an ambient air-monitoring network to determine compliance with the National Ambient Air Quality Standards (NAAQS) and State Ambient Air Quality Standards (SAAQS). In addition, the Nebraska network includes two sites for

monitoring regional haze impacts that are part of a national program to help protect visibility in our National Parks and Monuments.

Three agencies are involved in the day-to-day operation of the network: NDEQ, Lincoln/Lancaster County Health Department, and Douglas County Health Department. The Omaha Air Quality Control (part of the Omaha Public Works Department) also provides technical support for network-related activities.

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

- Particulate Matter
  - With a diameter of 10 micrometers or less (PM<sub>10</sub>)
  - With a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>)
- Sulfur Dioxide (SO<sub>2</sub>)
- Nitrogen Dioxide (NO<sub>2</sub>)
- Carbon Monoxide (CO)
- Ozone (O<sub>3</sub>)
- Lead (Pb)

Nebraska has an additional ambient air quality standard for Total Reduced Sulfur (TRS). The TRS standard was adopted by the Environmental Quality Council in 1997 and is a public health based standard. The Department currently monitors TRS in Dakota City.

NDEQ evaluates the adequacy of its monitoring network in accordance with federal regulations each year. Changes may be made to the network due to monitoring regulation changes, updates to the ambient standards, perceived changes in pollution trends, and/or funding issues. Loss of site access is another consideration that occasionally affects the network. The Nebraska monitoring network includes sites at which air quality is monitored to evaluate attainment with the standards and other health and welfare associated priorities.

Most of the sites in the monitoring network evaluate pollutants for which standards are established (i.e., PM<sub>2.5</sub>, PM<sub>10</sub>, CO, SO<sub>2</sub>, Lead, Ozone or TRS). There are two additional types of sites in the network: Interagency Monitoring of Protected Visual Environments (IMPROVE), and National Atmospheric Deposition Program/National Trends Network (NADP/NTN) sites.

IMPROVE monitors provide information for studying regional haze that may impact the visibility in listed federal Class I National Park and Wilderness Areas. There are two IMPROVE monitoring sites in Nebraska at Halsey National Forest and Crescent Lake National Wildlife Refuge. These sites provide data on pollution trends and transport.

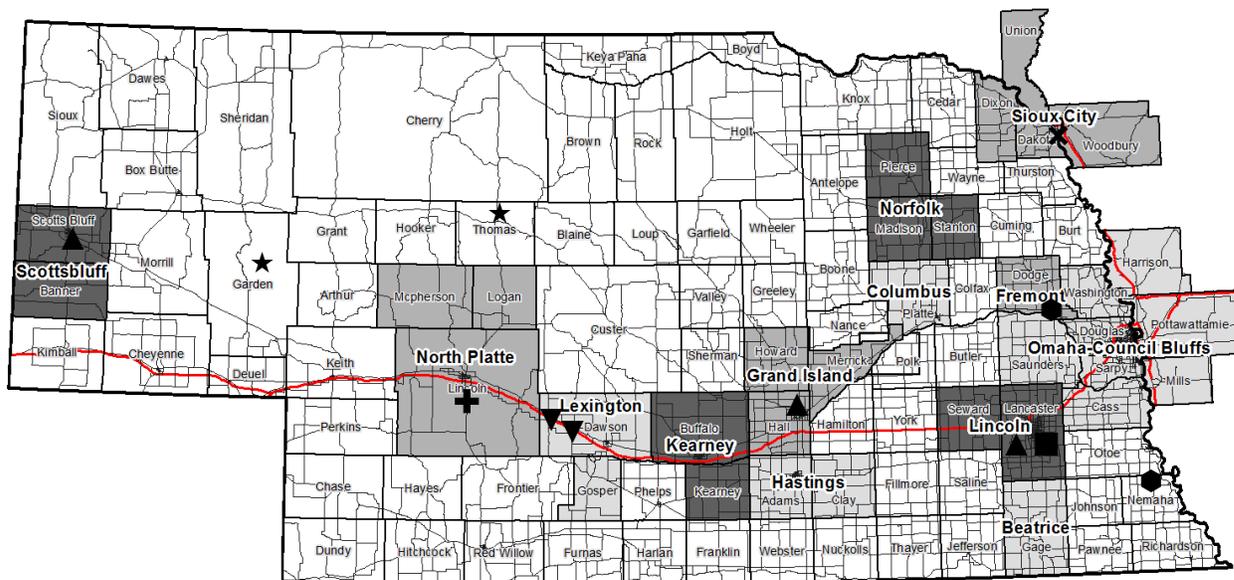
The National Trends Network (NTN) of the National Atmospheric Deposition Program (NADP) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride, and base-cations (e.g., calcium, magnesium, potassium and sodium). There are two NADP/NTN sites in Nebraska: one near Mead and one near North Platte. Both have been operational for over 20 years. These sites are operated by the University of Nebraska, with analytical and data development support from the NADP. The Mead site was upgraded to include mercury (Hg) deposition monitoring and was part of the NADP/Mercury Deposition Network (MDN). Both sites maintain the NADP monitoring. The monitoring in Mead is made possible through cooperative efforts of the NDEQ and the University of Nebraska. Additional information about the NADP/NTN can be found at: <http://nadp.sws.uiuc.edu/NADP/>

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

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

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

Nebraska Monitoring Sites Outside the Omaha Metropolitan Statistical Area



- ▲ **PM<sub>2.5</sub>**
- ▼ **PM<sub>10</sub>**
- **Ozone**
- × **TRS**
- **Lead**
- ★ **IMPROVE**
- ⊕ **NADP/NTN**

- PM<sub>2.5</sub>**  
Lincoln, 3140 N Street
- PM<sub>10</sub>**  
Grand Island, 2124 North Lafayette Avenue  
Scottsbluff, Highway 26 & 5th Avenue
- PM<sub>10</sub>**  
Cozad, 215 West 8th Street
- Ozone**  
Gothenburg, 9<sup>th</sup> Street
- Ozone**  
1st & Maple Street (Davey)
- TRS**  
Dakota City, 501 Pine Street

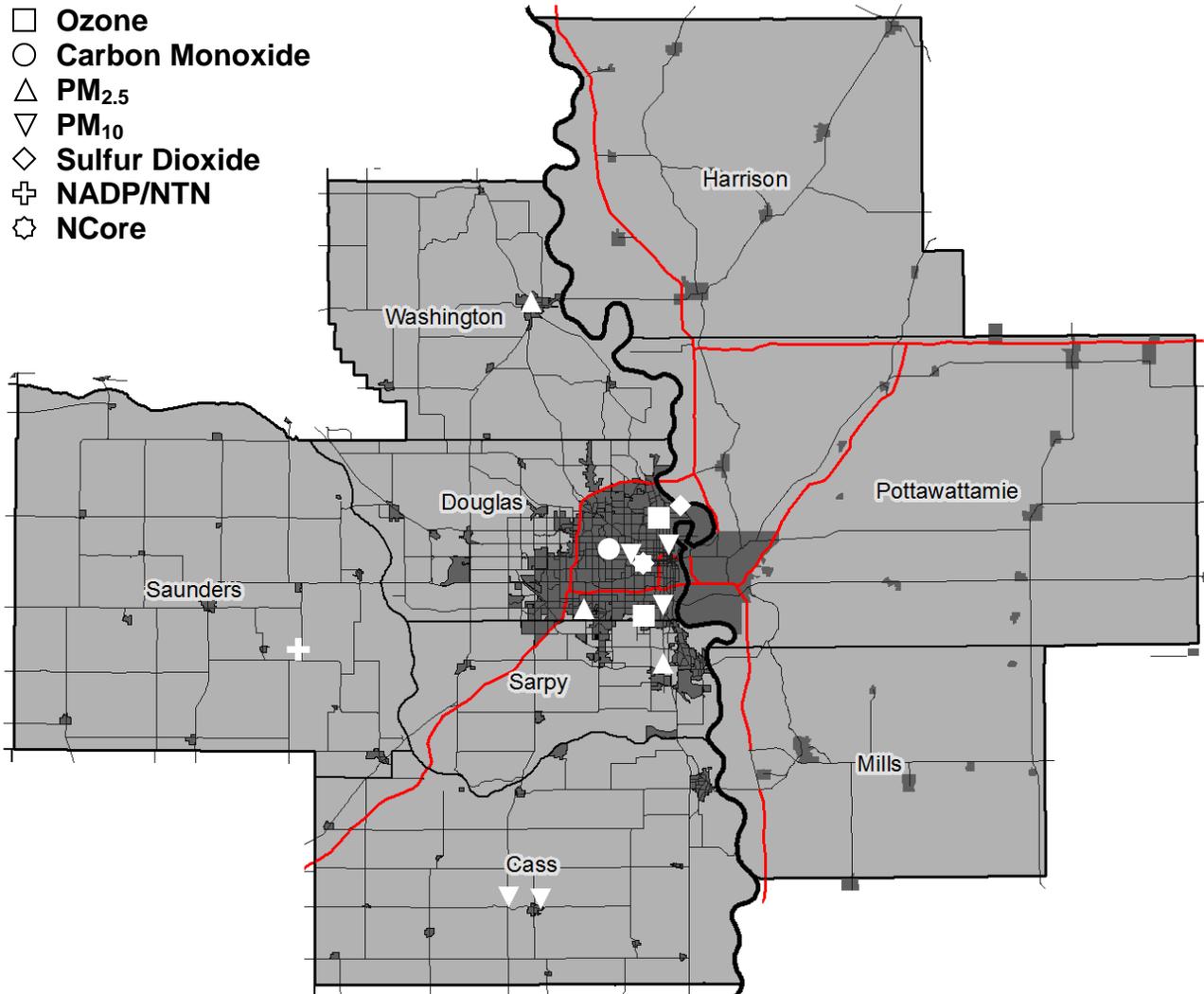
- Lead**  
Fremont  
Auburn
- NADP/NTN**  
Maxwell, North Platte Agricultural Experiment Station
- IMPROVE**  
Garden County, Crescent Lake Wildlife Refuge  
Thomas County, Nebraska National Forest

The state map above shows the 12 monitoring sites located outside of the Omaha Metropolitan Statistical Area. Nine of these sites are operated by the NDEQ, either directly or under contract. The two sites in Lancaster County are operated by the Lincoln-Lancaster County Health Department with NDEQ oversight. The National Atmospheric Deposition Program site near North Platte is operated by the University of Nebraska.

The Omaha Metropolitan Statistical Area map on the next page shows the location of the 14 monitoring sites located in the Nebraska portion of the Omaha Metropolitan Statistical Area. Eleven of these sites, located in Douglas, Sarpy and Washington Counties, are operated by the Douglas County Health Department with NDEQ oversight. The two PM<sub>10</sub> sites near Weeping Water in Cass County are operated by the NDEQ. The National Atmospheric Deposition Program site at Mead is operated by the University of Nebraska.

Omaha-Council Bluffs Metropolitan Area Monitor Locations

- Ozone
- Carbon Monoxide
- △ PM<sub>2.5</sub>
- ▽ PM<sub>10</sub>
- ◇ Sulfur Dioxide
- ⊕ NADP/NTN
- ⊛ NCore



- **Carbon Monoxide**  
4102 Woolworth Avenue (NCore Trace Monitor)  
7747 Dodge Street, Omaha
- ◇ **Sulfur Dioxide**  
4102 Woolworth Avenue (NCore Trace Monitor)  
1616 Whitmore Street
- ⊕ **NADP/NTN**  
Mead, Saunders County

- △ **PM<sub>2.5</sub>**  
4102 Woolworth Avenue (NCore)  
9225 Berry Street  
2912 Coffey Avenue (Bellevue)  
2242 Wright Street (Blair)
- **Ozone**  
4102 Woolworth Avenue (NCore)  
30<sup>th</sup> & Fort Streets  
2411 O Street

- ▽ **PM<sub>10</sub>**  
4102 Woolworth Avenue (NCore)  
19<sup>th</sup> & Burt Streets  
46<sup>th</sup> & Farnam Streets  
2411 O Street  
102 P Street (Weeping Water)  
5102 Highway 2 (Weeping Water)
- ⊛ **NCore**  
4102 Woolworth Avenue

### Renewable Powered Monitoring Sites

The NDEQ operates two sites that are powered totally through renewable energy sources: a solar-powered site near Weeping Water, and a solar/wind turbine-powered site at the Scottsbluff High School. Both sites have successfully operated on renewable energy and are examples of energy conservation. The Scottsbluff site was designed to be portable so that it could be easily set up in any location within the state where sufficient solar and/or wind resources exist. The Scottsbluff site also allows an opportunity for NDEQ to partner with the local high school to educate the students about air quality and renewable energy.

### Inspections and Facility Compliance

The Compliance Program is responsible for conducting compliance inspections of air pollution sources, responding to citizen complaints, observing and evaluating emission tests, and the acid rain program.

Consistent with the Nebraska Environmental Protection Act, the Air Division attempts to obtain compliance with environmental regulations first through voluntary efforts. Voluntary compliance has helped bring about a better working relationship with the regulated community without sacrificing environmental quality. However, enforcement actions are pursued by the Agency when compliance issues are serious, chronic, or cannot otherwise be resolved. To further the Department's goals to protect and enhance public health and the environment, in certain instances, environmentally beneficial projects, or Supplemental Environmental Projects, may be part of an enforcement settlement.

### Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD	OACC
On-site Inspections	82	73	41
Facility Stack Tests Reviewed	93	4	0
On site observations conducted	55	4	0
Continuous Emission Monitoring Audits Reviewed	40	2	0
On-site observations conducted	18	1	0
Complaints Received	33	129*	81
Burn Permits Issued	48	106	56
Burn Permits Denied	2	5	0

\*-Includes LLCHD complaints re: noise, open burning, fugitive dust, and odors

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

### **Grants, Planning, and Outreach Unit**

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

The Air Toxics Notebook and the New Source Performance Standards NSPS Notebook continue to be valuable online resources for staff and regulated sources. The Grants, Planning, and Outreach Unit has also maintained the AirNews Page (<http://deq.ne.gov/AirDates.nsf/AirNewsMain.xsp>), which is designed to provide easy access to information about the NDEQ Air Division, including important dates and deadlines, access to the AirNews Listserv archive, and links to other important forms and documents on the NDEQ website.

### **Emission Inventory and Emission Fees**

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

The Department attempts to set the fee rate at the minimum level needed to pay reasonable direct and indirect costs of developing and administering the air quality permit program. An analysis detailing how the Department arrived at the fee rate is made available to fee payers and is on the NDEQ's website. The rate for 2013 emissions was \$67 per ton; the rate for 2012 emissions was \$65 per ton.

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

Under the federal Clean Air Act, the EPA issues National Ambient Air Quality Standards (NAAQS) for "criteria pollutants." These standards are intended to protect public health and the environment. States must determine whether they are in attainment of these standards

and take corrective action if needed. The standards are reviewed and revised periodically, based on the most recent scientific information available.

Nebraska is currently considered in attainment of all the National Ambient Air Quality Standards. In December, 2012, the EPA lowered the fine particulate matter (PM<sub>2.5</sub>) primary standard from 15 micrograms per cubic liter to 12 micrograms per cubic liter. At this time, all of Nebraska is in attainment with the new standard, but some metropolitan areas are approaching the standard.

The sulfur dioxide (SO<sub>2</sub>) standard was changed from a 24-hour and annual primary standard to a 1-hour standard in 2010. To determine attainment with the new standard, the EPA is developing an attainment demonstration that is expected to include monitoring and modeling exercises around large SO<sub>2</sub> emitters. This may require modeling or monitoring around several sources in Nebraska. In addition, the EPA is under a court-ordered schedule to review the ozone standard and is expected to issue a proposed revision to the standard in early December 2014 and finalize the revision in October 2015. The current standard is 75 parts per billion. Based upon recommendations EPA has received from its science advisory board, EPA may lower the standard to a level between 60 to 70 parts per billion. Depending upon the standard and the three-year ozone design value, portions of Nebraska may exceed the standard.

In June, 2014, the EPA proposed the Clean Power Plan. The proposed regulation is designed to limit emissions of carbon dioxide (CO<sub>2</sub>) from large existing fossil fuel power plants. Each state will be expected to develop its own plan on how it will meet the CO<sub>2</sub> limits specified in the regulation. As proposed, the state is expected to develop its plan utilizing four building blocks: heat rate improvements at coal plants, utilizing more natural gas units instead of coal units, utilizing more renewable energy sources, and reducing demand by implementing energy efficiency programs. The EPA is accepting public comment on the proposed rule until December 1, 2014 with the final rule expected to be issued in June, 2015. To understand the potential impact of the proposed rule, the NDEQ has held a series of discussions with affected entities. After the rule becomes final, NDEQ plans to continue those discussions and expand our outreach efforts to all interested stakeholders as we begin to develop the state plan.

For more information about the Nebraska air quality program, please refer to the annual Air Quality Reports and the Ambient Air Monitoring Network Plan, both of which are available on the agency's website at <http://deq.ne.gov/> under "Air."

# CHAPTER 5:

## Waste Management Division

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The Waste Management Division is comprised of two sections and one unit: the Waste Management Section, the Remediation Section, and the Planning and Aid Unit. Both Waste Management and Remediation sections share responsibilities for hazardous waste (RCRA), Superfund, voluntary remediation, and integrated waste management programs. Several waste-related grant programs are administered by the Planning and Aid Unit. Following is a summary of Waste Management Division programs.

### **Resource Conservation and Recovery Act (RCRA) Program**

NDEQ was authorized in 1985 by EPA to administer portions of the Resource Conservation and Recovery Act (RCRA) program. RCRA regulations are incorporated in NDEQ Title 128 - Nebraska Hazardous Waste Regulations, which is updated as the Federal RCRA regulations change.

The purpose of the RCRA program is to ensure proper management of hazardous wastes from the point of generation until final disposal. Activities performed under the RCRA program include:

- helping hazardous waste generators maintain compliance through a Compliance Assistance Program,
- performing compliance inspections and enforcement actions,
- investigating complaints,
- reviewing groundwater contamination monitoring and remediation systems,
- reviewing permit applications and determining whether permits should be issued for proposed treatment, storage, and disposal (TSD) facilities,
- reviewing/approving closure and post-closure plans for hazardous waste storage areas and disposal sites,
- maintaining data systems to support decision-making and making information available to the public.

The Compliance Assistance Program helps Nebraska businesses, governmental entities, and private citizens comply with hazardous and solid waste regulations in a non-enforcement mode. This program works with the regulated community in a partnership promoting hazardous waste minimization and pollution prevention to help waste generators actually reduce the amount of hazardous waste being generated in the state. An additional product of these efforts is to ultimately reduce the amount of regulatory requirements on our industries by helping to bring hazardous waste generators into lower RCRA threshold levels.

Compliance and enforcement activities include investigating complaints and the inspection of hazardous waste generators and transporters, hazardous waste treatment, storage and disposal facilities, and used oil marketers and burners. Other compliance and enforcement activities include conducting comprehensive groundwater monitoring evaluations, and operation and maintenance inspections of sampling and analysis procedures at RCRA sites to ensure that useful and representative data is being collected.

The RCRA program also conducts extensive permitting and closure activities to minimize and prevent the release of hazardous material into the environment. Closure actions are required for treatment, storage or disposal facilities that are discontinuing operations or that have operated without a permit. Permits are required for operating treatment storage and disposal facilities. Post-closure

permits are required for treatment storage and disposal facilities that have gone through closure and have remaining contamination.

There is one operating hazardous waste storage and treatment facility in Nebraska: the Clean Harbors Environmental Services, Inc. incinerator near Kimball. This facility has undergone annual performance test burns to demonstrate proper operation since hazardous waste treatment began in 1994. Operational and physical changes at the Clean Harbors incinerator, made to improve the performance of the facility and ensure compliance with applicable regulations, have resulted in numerous permit modifications. In addition, Nebraska oversees two active hazardous waste storage facilities which do not treat hazardous waste.

Corrective action is an important part of the RCRA program and addresses past and present activities at RCRA facilities that resulted in hazardous waste and hazardous constituents being released into soil, groundwater, surface water, and air. Corrective action requires investigation and remediation of the release of hazardous constituents from regulated facilities. These regulations make current and former owners of a property responsible for past mismanagement of hazardous waste. EPA presently operates the corrective action program in Nebraska, and is responsible for regulating cleanups at Nebraska facilities.

### **Program Funding**

Funding for RCRA program activities is provided by an EPA grant, which requires a 25% state match.

Additionally, the Department can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. No new facilities have been proposed in Nebraska since 1994, and that is the last time this fee was collected. There were no new facilities proposed in FY14.

The RCRA program collects a yearly fee from commercial hazardous waste treatment and disposal facilities. Currently, one facility in Nebraska performs hazardous waste treatment and disposal. The fees are based on the total yearly volume or weight of hazardous waste treated or disposed. Fees are due March 1, and are remitted to the state general fund.



<b>Summary of FY2014 Activities</b>		
<b>Activity</b>	<b>State</b>	<b>EPA</b>
<b>Compliance Assistance</b>		
On-site Visits	1	0
Direct Assistance Contacts	581	*
Public Outreach Presentations (total <u>650</u> in attendance)	4	*
<b>RCRA Inspections</b>		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	1	5
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	2	0
Facility Self-Disclosure	0	0
Large Quantity Generator	11	6
Small Quantity Generator	19	3
Conditionally Exempt Small Quantity Generators	5	4
Transporters	0	0
<b>RCRA Permitting</b>		
Closure Plans Finalized	1	0
Permits Issued/Renewed	0	1
Modifications	7	0
EPA Corrective Action Orders	N/A	0
<b>RCRA Record Reviews</b>		
Financial Assurance	25	2
*Data not available		

## Superfund Program

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) became federal law in 1980. CERCLA established what has commonly become known as Superfund to deal with known or suspected contamination at inactive commercial/industrial/military facilities or so-called "uncontrolled hazardous waste or abandoned sites." The nation's most contaminated sites are listed on the National Priorities List. Nebraska currently has fifteen sites on the National Priorities List. One site, the Waverly Groundwater Contamination Site, was removed from the NPL on November 20, 2006 as the cleanup goals for the site have been achieved. Twelve of the sites are in the cleanup phase and three sites (West Highway 6 & 281 in Hastings, York PCE/TCE Northeast Contamination site, and the York PCE Southeast Contamination site) are relatively new to the National Priority List and are in the site study stage. Numerous other non-National Priorities List sites with known or suspected releases of hazardous substances exist in the state, but are not being addressed through the federal Superfund process.

The investigation and remediation of contaminated sites are the primary responsibility under CERCLA of the EPA and other federal agencies. NDEQ participates in the Superfund process by serving as a technical support agency to the EPA and as the environmental representative for the State of Nebraska. Activities in the Superfund Program include:

**Site Assessment** — The Superfund Site Assessment program identifies, assesses and characterizes sites where hazardous substances are known or suspected to pose a threat to public health and/or the environment. Currently, the sites investigated in Nebraska consist primarily of areas where groundwater contamination has been detected in municipal and private drinking water supply wells or where there is a significant potential for groundwater contamination.

The first site assessment step is called a pre-screening assessment. This step is a review of existing information on a potential site to determine whether a release has occurred that should be evaluated further through the Superfund process. The next site assessment step is called an abbreviated preliminary assessment. This step involves the collection of background information such as property ownership, operational history and geology/hydrogeology, and performing a site reconnaissance. The third step is called a site investigation, which involves sampling environmental media, such as soil, soil gas and groundwater, and evaluating vapor intrusion into indoor air of building structures. In some situations, the preliminary assessment step and the site investigation step are combined. For large and/or complex sites, an expanded site investigation may also be performed to collect additional soil and groundwater samples to further define the extent of contamination. In addition, some sites that have been investigated in the past may be reassessed if new information is obtained that indicates that a threat to public health and/or the environment may exist.

During the past year, the Department has performed work on five pre-screening assessments, five abbreviated preliminary assessments, two site investigations, one vapor intrusion evaluation, one expanded site investigation, and one site reassessment. The EPA Region 7 Superfund program continues to investigate the Former Northwestern Metals site at 900 T Street in Lincoln that historically operated a lead smelter at the property. A decision on whether nearby residential yard cleanup is necessary is expected near the end of 2014. The Department also performed an abbreviated preliminary assessment at the other Former Northwestern Metals site at North 27<sup>th</sup> Street in Lincoln that also historically operated a lead smelter following decommissioning of the 900 T Street facility. Sampling of residential yards near the North 27<sup>th</sup> Street site will be performed by the Department in the near future. In addition, the Department reviewed numerous site assessments conducted by EPA in the state and provided recommendations on the need for follow up action.

**NPL Site Management Assistance** — The Superfund Management Assistance program provides management and technical support to the EPA at priority sites in Nebraska. This assistance includes reviewing technical documents and participating in the Superfund remedy selection process. As the

most heavily contaminated sites in the nation, Superfund National Priority List sites are generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The investigation and cleanup activities at these sites are organized into several phases, including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. The Department also participates in public meetings with citizens and local officials in the development of cleanup plans.

Below is a list of the 15 active NPL sites. Below each name is an EPA web address that provides more detailed information about the site. The first 12 sites listed below are currently in the cleanup phase. The West Highway 6 & 281 site in Hastings is currently in the removal action and site studies phases. The York PCE/TCE Northeast Contamination site and the York PCE Southeast Contamination site recently became final on the Superfund National Priority List and will commence the site studies phase in the near future.

### Active National Priority List Sites in Nebraska

- Cornhusker Army Ammo Plant (Grand Island)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ne2213820234.pdf](http://www.epa.gov/region07/cleanup/npl_files/ne2213820234.pdf)
- Hastings Groundwater Contamination (Hastings)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned980862668.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned980862668.pdf)
- Lindsay Manufacturing Co. (Lindsay)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned068645696.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned068645696.pdf)
- Nebraska Ordnance Plant (Mead)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ne6211890011.pdf](http://www.epa.gov/region07/cleanup/npl_files/ne6211890011.pdf)
- 10th Street Site (Columbus)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned981713837.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned981713837.pdf)
- Cleburn Street (Grand Island)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned981499312.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned981499312.pdf)
- Ogallala Groundwater Contamination Site (Ogallala)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned986369247.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned986369247.pdf)
- Bruno Coop Association (Bruno)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned981713829.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned981713829.pdf)
- Sherwood Medical (Norfolk)  
[http://www.epa.gov/region07/cleanup/npl\\_files/ned084626100.pdf](http://www.epa.gov/region07/cleanup/npl_files/ned084626100.pdf)
- Omaha Lead Site (Omaha)  
[http://www.epa.gov/region07/cleanup/npl\\_files/nesfn0703481.pdf](http://www.epa.gov/region07/cleanup/npl_files/nesfn0703481.pdf)
- Parkview Well Site (Grand Island)  
[http://www.epa.gov/region07/cleanup/npl\\_files/nen000704456.pdf](http://www.epa.gov/region07/cleanup/npl_files/nen000704456.pdf)
- Garvey Elevator (Hastings)  
[http://www.epa.gov/region07/cleanup/npl\\_files/nen000704351.pdf](http://www.epa.gov/region07/cleanup/npl_files/nen000704351.pdf)
- West Highway 6 & 281 (Hastings)  
[http://www.epa.gov/region07/cleanup/npl\\_files/nen000704738.pdf](http://www.epa.gov/region07/cleanup/npl_files/nen000704738.pdf)
- York PCE/TCE Northeast Contamination  
<http://www.epa.gov/superfund/sites/npl/nar1887.htm>
- York PCE Southeast Contamination  
<http://www.epa.gov/superfund/sites/npl/nar1886.htm>

**Federal Facilities** — The Superfund Federal Facilities program provides technical assistance and regulatory oversight to the U.S. Army Corps of Engineers in support of site assessment and cleanup activities and military munitions response activities at Department of Defense active facilities and formerly used sites. Active Federal installations include Offutt Air Force Base in Bellevue and Cornhusker Army Ammunition Plant in Grand Island. One hundred known formerly used defense sites exist in Nebraska that include small former defensive surface-to-air missile sites, bomber target sites, radar and communications sites and other formerly occupied Department of Defense properties. Under the current Defense-State Memorandum of Agreement, investigation and cleanup activities are being performed or planned to be performed at three active sites and 13 formerly used defense sites. Military munitions response activities are being performed at four sites. A military munitions response site is a site that may have the potential for unexploded ordnance, discarded military munitions, or munitions constituents in soil and groundwater that may pose an explosive hazard or threat to the environment.

## Nebraska Voluntary Cleanup Program

The Remedial Action Plan Monitoring Act (RAPMA), initially created in 1995, established the Nebraska Voluntary Cleanup Program (VCP). The Voluntary Cleanup Program provides property owners and parties responsible for contamination with a mechanism for developing voluntary environmental cleanup plans that are reviewed and approved by the Department. The voluntary cleanup program provides an avenue for businesses to proceed with cleanup of property and an opportunity for regulatory review and oversight that may not be available at the federal level. In addition, the program serves as an alternative cleanup program to the more traditional federal cleanup programs like Superfund or RCRA.

The Department has a Memorandum of Agreement with EPA Region VII which provides federal approval of voluntary cleanup programs. Under this agreement, any site that joins the voluntary cleanup program and successfully completes the cleanup action is assured that EPA will not pursue federal enforcement under CERCLA.

To date, 44 sites have entered the voluntary cleanup program. Currently, 18 sites are active in the voluntary cleanup program. Two sites have been deferred to the EPA Superfund program. Five sites withdrew from the program. Five sites have been terminated from the program due to lack of activity in completing the investigation and/or cleanup. Fourteen sites have successfully completed cleanup requirements and have received "No Further Action" letters from the Department.

The Department has seen a significant increase in applications to the voluntary cleanup program over the last several years. New applicants include Nebraska Machine Products in Omaha, the City of Omaha and Metropolitan Utilities District on the Lynch Park former manufactured gas plant (FMGP) site, Appleton Electric in Columbus, and the Magnus Farley facility in Fremont. It should be noted that the Magnus Farley facility is addressing its federal RCRA Corrective Action obligations by participating in the voluntary cleanup program through a deferral from the EPA Region 7 RCRA program. The Department anticipates other RCRA-type facilities may utilize the program in future years. Significant cleanup activities are ongoing at the West Haymarket Redevelopment Site South in Lincoln, the former Nebraska Solvents Company site in Grand Island, the former Pfizer facility in Omaha, the Archer Daniels Midland facility in Lincoln, the Vishay Dale Electronics site in Norfolk, and Hoover Manufacturing in Beatrice. Cleanup activities are anticipated to be completed in 2015 at CVS Pharmacy in south Lincoln, the West Haymarket Redevelopment Site North in Lincoln, and the two former FMGP sites in Blair and Plattsmouth. Cleanup activities are also anticipated to commence next year at the Dettmer Lease property in Auburn and the Lynch Park FMGP site in Omaha.

The application fee to participate in the program is \$2,000, and the initial deposit to pay for state oversight costs is \$3,000.

### Voluntary Cleanup Program Sites and Status

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

Site	Location	Date of Entry into RAPMA Program	Status
Archer Daniels Midland	Lincoln	11/3/08	Active
Plaza North Station LLC	Omaha	7/14/09	Completed 2/11/14
Former Pfizer Facility	Omaha	7/28/09	Active
CVS Pharmacy	Lincoln	10/13/10	Active
West Haymarket Redevelopment Site North	Lincoln	10/27/10	Active
Izaak Walton Trap Range	Fremont	10/28/10	Completed 4/6/12
Magnolia Metal Corporation	Auburn	3/9/11	Completed 10/31/13
Dettmer Lease Property	Auburn	4/7/11	Active
Hoover Manufacturing	Beatrice	5/27/11	Active
Blair FMGP	Blair	6/28/11	Active
Plattsmouth FMGP	Plattsmouth	6/28/11	Active
Former USDA CCC Grain Bin Sites	Multiple Sites	3/16/12	Active
Vishay Dale Electronics	Norfolk	4/2/12	Active
Lewis and Clark Landing	Omaha	4/20/12	Active
West Haymarket Redevelopment Site South	Lincoln	6/11/12	Active
Quality Analytical Services	Omaha	8/2/12	Withdrawn 6/3/14
Nebraska Machine Products	Omaha	9/18/12	Active
Lynch Park FMGP	Omaha	11/20/12	Active
Appleton Electric	Columbus	3/1/13	Active
Magnus Farley	Fremont	8/14/14	Active

**Brownfield Assessments and Cleanups** — A brownfield site is a vacant or under-used industrial or commercial property where expansion or redevelopment is complicated by unresolved contamination concerns. The voluntary cleanup program performs assessments and cleanups at brownfield sites in Nebraska. These assessments and cleanups are performed by NDEQ, typically with federal funds, at no cost to interested parties in Nebraska communities. A brownfield assessment is a preliminary investigation to evaluate the environmental conditions at a property, similar to a Phase I and Phase II Environmental Site Assessment. The brownfield assessment can also include surveys of existing building structures on the property for the presence of lead-based paint or asbestos. Cleanups can involve a variety of measures that are implemented to contain and reduce contamination at a site. During the past year, the Department has performed 11 Phase I assessments, one Phase II assessment, one lead-based paint survey, and five asbestos surveys.

## Solid Waste Program

Solid Waste regulations are incorporated in NDEQ *Title 132 - Integrated Solid Waste Management Regulations*. The purpose of the program is to ensure proper management of solid waste. Solid waste includes municipal solid waste typically collected and disposed in municipal landfills, and other non-hazardous waste. The regulations provide technical criteria for land disposal areas and solid waste processing facilities.

Duties assigned to this program include: 1) Permit issuance, renewal and modification; 2) Response to inquiries related to facility operations; 3) Compliance inspections and enforcement actions; 4) Investigation of citizen complaints; 5) Alternate waste management method approvals; 6) Groundwater investigations and groundwater/soil remediation projects for permitted and non-permitted facilities; 7) Gas emissions monitoring related to landfills and other permitted sites; 8) Closure inspections and monitoring of closure and post-closure activities; 9) Conducting public information sessions and hearings related to permits; 10) Financial assurance review and monitoring compliance; and 11) Assisting regulated facilities and the general public in recycling, re-use and proper management of waste-like materials.

The program regulates municipal solid waste disposal areas (landfills), construction and demolition disposal sites, fossil fuel combustion ash disposal sites, industrial and delisted hazardous waste sites, and land application sites for repeated disposal or treatment of special wastes. In addition, solid waste processing facilities, such as compost sites, material recovery facilities, and transfer stations, are regulated by this program.

Permit modification requests are regularly submitted by permitted facilities. Response to the modification requests are particularly time-critical since the facility may need to expand or construct new cells in order to meet their disposal capacity needs and continue operations.

The waste management program coordinates with other department divisions to ensure that permits issued include adequate protection of all environmental media. The requirements in solid waste permits include protection against excessive emissions of landfill gas to the atmosphere, storm water runoff controls, and restrictions on accepting hazardous waste for disposal at a landfill.

Currently, the Solid Waste Program oversees the following facilities, by type:

<b>Total Permitted Facilities in FY 2014</b>	
Municipal Solid Waste Disposal Areas (Landfills)	23
Solid Waste Compost Sites	8
Transfer Stations	38
Materials Recovery Facilities	5
Construction & Demolition Waste Disposal Areas	31
Delisted Waste Disposal Area	1
Processing Facility	1
Fossil Fuel Combustion Ash Disposal Areas	8
Emergency Carcass Disposal	1
<b>Total</b>	<b>116</b>

The following chart indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2014:

<b>Summary of Activities: FY2014</b>	
<b>Compliance</b>	
Facility Inspections (General)	145
Complaints Received	183
Complaints Investigated	183
Complaints Closed	145
<b>Permitting</b>	
New Permits Issued	2
Permit Renewals	14
Major Permit Modifications	1
Public Hearings	1
Financial Assurance Reviews	178
Facilities Closed	1

### **Assessment Monitoring and Remedial Measures**

All solid waste landfills accepting municipal solid waste, industrial waste, delisted hazardous waste and fossil fuel combustion ash are required to conduct groundwater monitoring. The purpose of the groundwater monitoring is to detect any release of contaminants from the facility that may impact groundwater quality. A phased approach is used from the initial detection of a potential release to making decisions on cleanup actions after groundwater contamination has been fully investigated.

The first phase is detection monitoring. During this phase, a landfill will monitor for a discrete number of contaminants that would be indicative of a potential release from the facility. If one or more of the parameters being monitored exceed background levels, the facility then begins assessment monitoring. During assessment monitoring, a landfill will monitor for a more extensive list of contaminants. If during the assessment monitoring phase contaminant concentrations are detected above a groundwater protection standard, the landfill may then be required to characterize the nature and extent of the release. In FY2014, nine active municipal solid waste disposal areas and two closed municipal solid waste disposal areas conducted assessment monitoring.

Following the assessment monitoring phase, a landfill may be required to assess and conduct remedial measures. In FY2014, remedial measures were conducted at two sites.

### **Title 118 Groundwater Investigations and Remedial Actions**

Several municipal solid waste disposal areas that closed prior to 1993 have conducted groundwater investigations and remedial actions pursuant to NDEQ *Title 118 – Groundwater Quality Standards and Use Classification*. In FY2014, groundwater investigations were conducted at three sites and remedial actions were conducted at six sites.

## Financial Assurance and Fees

All permitted solid waste landfills are required to provide financial assurance for closure and post-closure maintenance and monitoring. All privately-owned permitted solid waste processing facilities are required to provide financial assurance for closure.

## Program Funding

The Waste Management Section collects permit fees and annual operating fees for all solid waste management facilities. Quarterly disposal fees based on cubic yards or tonnage are collected from all municipal solid waste landfills and transfer stations moving waste for disposal out of state. Fifty percent of the quarterly disposal fees are redistributed as grants and for administration of the Waste Reduction and Recycling Incentives Grants Program and fifty percent of the quarterly disposal fees are utilized for costs of administering the solid waste program and for investigation and remediation of contamination from solid waste facilities and for other statutorily authorized activities.

## Waste Tire Management Program

The Department also administers the waste tire management program. Approved beneficial uses of waste tires are outlined in Department regulations. Waste tire haulers are required to obtain individual permits annually and are required to post financial assurance. Financial assurance is designed to provide adequate funds to clean up any waste tires that are illegally disposed by the transporter.

Waste tire management facilities (except tire dealers) are allowed to accumulate up to 500 tires without further requirements, other than mosquito control and fire prevention measures. Speculative accumulation of more than 500 waste tires is prohibited.

Compliance assistance is an important aspect of this program. Program activities include responding to telephone inquiries, letters, and contacts from other states, developing guidance documents, conducting site visits and providing technical advice. The Department has developed guidance documents to explain the proper use of waste tires for blow-out and bank stabilization. Direct financial assistance is also available through the Waste Reduction and Recycling Incentives Grant program, which is described later in this chapter.

<b>Waste Tire Permit Totals, FY2014</b>	
<b>Permitting</b>	
Renewed Hauler Permits	20
New Permits Issued	1

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

## Planning and Aid

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

Main responsibilities of the Planning and Aid Unit include:

- Oversight and review – The Unit reviews grants submissions; performs compliance inspections; monitors the activities, budgets and equipment purchases of grantees; and conducts quarterly performance reviews.
- Outreach – The Unit promotes the availability of grant funding, coordinates the ranking process, coordinates grant awards, provides integrated waste management information to the public, and contributes to the development of the Nebraska Recycling Resource Directory, which is located at DEQ’s web site at <http://deq.ne.gov>, under “Assistance.”

## New Online Processes

A major initiative has been undertaken to convert two waste grant programs from paper-based to online paperless processes. In FY2014, the applications for the Waste Reduction and Recycling Incentive Grants Program and the Litter Reduction and Recycling Grant Program were converted to an online process. Through this new process, applications are filled out and submitted on the agency web site. The reporting and reimbursement functions for these two grant programs will be converted to an on-line process in FY2015. These changes are intended to result in time and material savings to both the Department and the grant program recipients. Online information can be found by going to DEQ’s web site at <http://deq.ne.gov>. Select the “Land and Waste” tab, and then select the “Waste Planning and Aid Programs” tab.

## Expected Service Life

The Planning and Aid Unit grant programs utilize an expected service life procedure for grant-funded equipment. The expected service life determines how long the grantee is responsible for reporting equipment status to the Department and how long the Department maintains an interest in the equipment.

An expected service life is assigned to all equipment purchased with grant funds (in whole or in part) that has a value of \$1,000 or more per item. Equipment costing less than \$1,000 can be assigned an expected service life on a case-by-case basis. Purchase of equipment is documented at the time of purchase. When the grant is closed out, the grantee is provided a sticker to properly identify the equipment and is notified of the length of the expected service life.

## Waste Reduction and Recycling Incentive Grants Program

In 1990, the Nebraska Legislature passed Legislative Bill 163, the Waste Reduction and Recycling Act, which created the Waste Reduction and Recycling Incentive Grants Program.

There are three sources of revenue for this program:

- A business fee on sales of tangible personal property, which generates about \$500,000 annually.
- A \$1 per tire fee on the retail sale of new tires in Nebraska, which generates about \$1.9 million annually;

- Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.2 million annually for grant awards.

The Waste Reduction and Recycling Incentive Fund provides grants to assist in financing sound integrated waste management programs and projects. These programs and projects may include but are not limited to: recycling systems; market development for recyclable materials; intermediate processing facilities and facilities using recyclable materials in new products; yard waste composting and composting with sewage sludge; waste reduction and waste exchange; household hazardous waste programs; the consolidation of solid waste disposal facilities and use of transfer stations; and incineration for energy recovery. A portion of the grants is also obligated to fund scrap tire recycling or reduction projects and a portion of the grants are available to smaller cities and counties for abandoned building deconstruction.

## Fund Summary

### Waste Reduction and Recycling Fund

#### July 1, 2013 - June 30, 2014

<b>Fund Balance June 30, 2013</b>	<b>\$</b>	<b>5,145,946</b>
Revenues:		
New Tire Fees		2,008,237
Business Fees		471,294
Solid Waste Disposal Fee		1,312,013
Interest, Grant Returns		98,325
<b>Net Collections for Year</b>	<b>\$</b>	<b>3,889,869</b>
Expenditures:		
Administration		349,065
Grant Funds Expended*		2,859,583
<b>Total Expenditures FY 2014</b>	<b>\$</b>	<b>3,208,648</b>
<b>Fund Balance June 30, 2014</b>	<b>\$</b>	<b>5,827,164</b>

\* Because grants funds are expended on a reimbursement basis, total grant funds expended in a fiscal year will differ from the amount of grants awarded in that fiscal year.

**Summary of Activities** - For FY2014, the Department awarded \$4,296,581 for Waste Reduction and Recycling Incentive Grants to 161 projects. This is an increase of over \$700,000 granted from the previous year and an increase of 24 projects. Twenty six of these grants were awarded from the Business Fee category (\$1,107,888), 15 were awarded from the Disposal Fee category (\$1,012,371), and 120 received grants from the funds prioritized for scrap tire projects (\$2,176,322). The following lists indicate the locations across Nebraska that received funds.

**Waste Reduction & Recycling Grants for FY2014**

Business Fee \$ 1,107,888 26 grants, including, 2 statewide, 4 regional

Disposal Fee \$ 1,012,371 15 grants, including, 4 regional

**Business Fee**

Chadron	Lincoln, 5 grants, including 1 regional, 2 state
Columbus	Norfolk
David City	North Platte
Firth	Oakland, 2 grants
Fremont, 1 regional grant	Ogallala
Gretna	Omaha, 4 grants, including 1 regional
Hastings	Schuyler
Kimball	Scottsbluff
Lexington, 1 regional grant	Seward

**Disposal Fee**

Broken Bow	Omaha, 1 regional grant
Gering	Pilger
Hastings	Plattsmouth
Imperial, 2 grants, including 1 regional	Theford
Lincoln, 4 grants, including 1 regional	Wayne
McCook, 1 regional grant	

**Deconstruction Grants for FY2014**

There were no deconstruction grants applied for or granted in FY2014.

**Scrap Tire Grant Awards for FY 2014**

114 local grants and 6 regional grants for an award total of \$2,176,322.

Ainsworth	Kimball
Albion	Lewiston
Alliance, 2 local, 1 regional	Lincoln, 5 regional
Alma, 1 local, 1 regional	Loup City, 2 local
Arlington, 1 local, 1 regional	Madison
Atkinson	Madrid, 2 local
Auburn	Minden, 2 local
Aurora	NE City
Bassett	Neligh
Beatrice, 2 local	Nelson, 2 local
Bellevue	North Bend
Benkelman	North Platte
Bennet	Omaha, 8 local
Broken Bow, 2 local	Ord, 1 local, 1 regional
Cedar Bluffs	Osmond
Cedar Rapids	Pawnee City
Center	Pender
Central City, 2 local	Peru, 2 local
Chadron, 2 local, 1 regional	Petersburg
Columbus, 2 local	Pierce
Davenport, 1 local, 1 regional	Plattsmouth
David City, 2 local	Ponca
Eagle	Ralston, 3 local
Elgin, 2 local	Ravenna
Elwood	Red Cloud
Emerald	Schuyler, 3 local
Fairbury	Seward
Falls City	Shelby
Firth	Shelton
Ft. Calhoun	S Sioux City
Fremont	St. Paul
Geneva	Stapleton
Gibbon	Tecumseh, 3 local
Grand Island	Tekamah
Gretna, 2 local	Wahoo
Hartington	Wayne, 3 local
Hastings, 2 local	Wilber, 2 local
Imperial	York
Kearney, 3 local	

### **Litter Reduction and Recycling Grant Program**

The Litter Reduction and Recycling Grant Program has been in existence since 1979. Its purpose is to provide funds to support programs to reduce litter, provide education, and promote recycling in Nebraska.

Funds from this program are provided from an annual fee assessed to manufacturers, wholesalers, and retailers having gross receipts of at least \$100,000, on products that commonly contribute to litter. For manufacturers, the annual litter fee is equal to \$175 for each million dollars of products manufactured. The annual litter fee for wholesalers and retailers is equal to \$175 for each million dollars of sales made in the state. Approximately \$1.8 million is received annually.

The annual litter fee is imposed on products in the following categories:

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

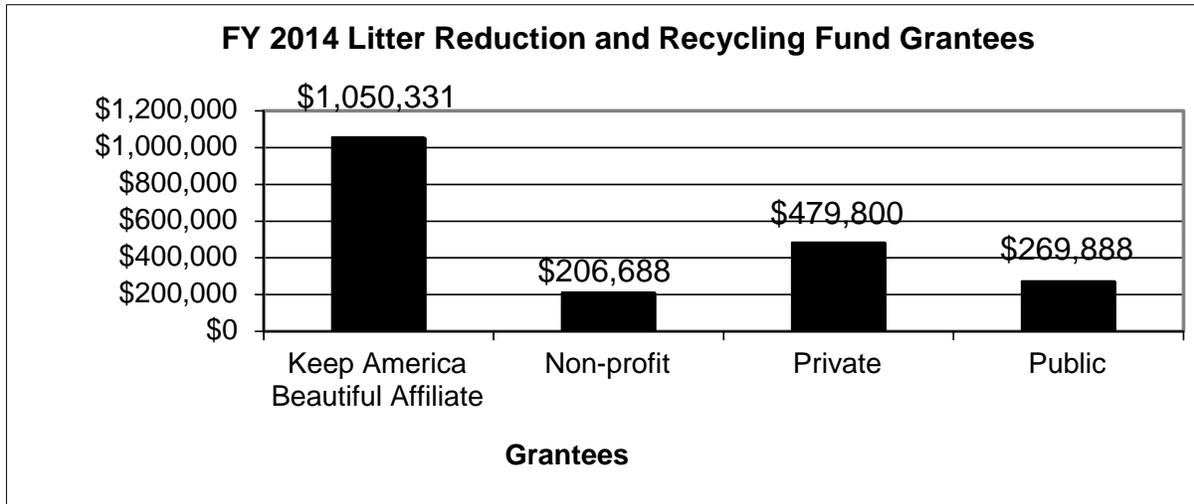
### **Fund Summary**

#### **Litter Reduction and Recycling Fund**

#### **July 1, 2013 - June 30, 2014**

<b>Fund Balance June 30, 2013</b>	<b>\$765,555</b>
Revenues:	
Litter Taxes Collected	\$2,008,388
Interest, Grant Returns	\$53,968
<b>Net Collections for Year</b>	<b>\$2,062,356</b>
Expenditures:	
Department of Environmental Quality Administration	\$260,277
Grant Funds Expended	\$1,898,228
<b>Total Expenditures FY 2014</b>	<b>\$2,158,505</b>
<b>Fund Balance June 30, 2014</b>	<b>\$669,406</b>

In FY2014, \$2,006,707 was awarded from the Litter Reduction and Recycling Grant Program. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling. Below is a chart reflecting FY2014 grantees.



**FY 2014 Grant Allocations**

**Litter Reduction and Recycling Fund**

In FY2014, the Department gave 51 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

<b>Public Education</b>	(44%)	21 grants	\$ 887,141
<b>Cleanup</b>	( 3%)	7 grants	\$ 67,164
<b>Recycling</b>	(53%)	23 grants	<u>\$ 1,052,402</u>
<b>Totals</b>	(100%)	51 Grants	\$ 2,006,707

**Public Education**

In FY2014, 21 grants totaling \$887,141 were awarded under the category of Public Education. The Public Education programs educate citizens in the areas of litter reduction, cleanup, and recycling through a variety of individual and community activities. The citizens of Nebraska are cultivating a greater awareness of their impact on the environment through their purchasing and disposal actions. The educational programs are an excellent means of providing information on proper waste disposal, recycling, and available products that contain recycled material. Priority is given to programs that promote markets for recycled materials or purchasing products made from recycled materials. The following list indicates the locations that received funds.

**FY 2014 Public Education Grant Awards**

Total Awarded - \$887,141	21 total grants
2 Regional Grant Awards	1 Statewide Grant Award
Alliance	Norfolk
Beatrice	North Platte
Burwell - Regional	Ogallala
Chadron	Omaha
Columbus	Plattsmouth
Fremont	Schuyler
Grand Island	Scottsbluff
Kimball	Sidney
Lexington	South Sioux City - Regional
Lincoln (2 grants)	Statewide

**Cleanup**

In FY2014, seven grants totaling \$67,164 were awarded under the category of Cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas, and other public-use areas within the state. Not only are the public areas improved through the removal of litter and debris, but also much of the material collected during the cleanups is recycled. The recycling proceeds are often utilized to benefit the respective programs. The following list indicates the locations that received funds.

**FY 2014 Cleanup Grant Awards**

Total Awarded - \$67,164	7 total grants
Beatrice	Omaha
Chadron	Schuyler
Lincoln	Steinauer
North Platte	

**Recycling**

In FY2014, 23 grants totaling \$1,052,402 were awarded under the category of Recycling. The recycling programs provide an alternative to the disposal of solid waste in Nebraska's landfills. The programs recycle more than just aluminum, paper, glass, and plastic. Materials such as electronic computer components, paint, aerosol cans, fertilizer, pesticides, and household hazardous waste are collected and either reprocessed to be used again or are disposed of in an environmentally friendly manner. Recycling conserves our natural resources, landfill space, and energy. Jobs are created and revenue is generated through the opportunities that recycling provides. Recycling efforts that promote the purchase of recycled content products continue to receive priority for funding. This support helps to "close the loop" and enhance the recycling efforts in Nebraska. The following list indicates the locations that received funds.

**FY 2014 Recycling Grant Awards**

Total Awarded - \$1,052,402	23 total grants
7 Regional Grant Awards	1 Statewide Grant Award

Alliance	Lancaster County
Beatrice	North Platte
Chadron	Ogallala - Regional
Columbus 2 grants (1 Regional)	Omaha 2 - Regional
Gering	Schuyler
Grand Island - Regional	Valentine - Regional
Gretna	Verdigre
Kimball	York - Regional
Lexington	Minatare
Lincoln, 3 grants (1 Statewide)	

**Illegal Dumpsite Cleanup Program**

The Illegal Dumpsite Cleanup Program, established in 1997, is a cleanup program that provides funding assistance to political subdivisions for the cleanup of solid waste disposed of along public roadways or ditches. Through this program, items such as household waste, white goods, construction and demolition waste, and furniture, are removed from the illegal site and disposed in a permitted facility or recycled.

Funding for this program is limited to five percent of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. Approximately \$140,000 is available annually. The Department is encouraging municipalities, counties, and other political subdivisions to submit applications for the reimbursement of cleanup efforts. The Department provided information to all of the counties in Nebraska in an effort to make the program known statewide and to utilize more of the available funds. In FY2014, the program provided 23 grants, totaling \$49,792, to eight recipients. In FY2014, funds were provided to:

Adams County	Omaha
Seward County	Lancaster County
Polk County	Harlan County
Gage County	Lincoln

**Landfill Disposal Fee Rebate Program**

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

Under the program, which was created in 1994, any municipality or county may apply for a rebate if they have a written purchasing policy requiring a preference for purchasing products, materials or supplies that are manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a 10-cent rebate from the \$1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

In FY2014, the program provided \$94,878 to five counties and six cities participating in the program. In FY2014, the Department offered to provide letters and forms to the participants through email instead of the postal service. Eight of the eleven participants chose this option furthering our waste reduction efforts and increasing efficiency.

David City	\$ 103.06	Jefferson County	\$ 1,105.59
Lincoln	30,303.25	Seward County	1,512.50
Omaha	47,333.93	Saline County	2,173.78
Grant	1 12.29	Buffalo County	4,253.00
South Sioux City	502.90	Butler County	3,815.10
North Platte	3,662.39		

# CHAPTER 6:

## Water Quality Division

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

### **Petroleum Remediation Program**

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

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

### **Investigation and Cleanup**

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

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

The program has developed risk-based corrective action (RBCA) regulations and accompanying guidance. The RBCA process allows evaluation of all petroleum release sites based on the risk they pose to human health and the environment. Those that pose no significant risk are closed; those that pose significant risk are prioritized for further work. Since 1999, the program has been initiating many new investigations to collect information needed for Tier 1, the first step in the RBCA process. The plan is to continue investigating additional sites until eventually the information necessary for a RBCA Tier 1 evaluation has been collected at all sites. Sites that fail Tier 1 are activated for Tier 2, which is a more detailed investigation and the next step in the RBCA process. If sites fail Tier 2, they are normally scheduled for cleanup.

### **Financial Assistance – Petroleum Release Remedial Action Reimbursement Fund**

When contamination has been found at a site, and the NDEQ has determined that more investigation and/or cleanup are required, the agency will also determine the "responsible person(s)." This term refers primarily to those who owned or operated the site when the leak

occurred. Those who are determined to be the responsible persons may be eligible for reimbursement through the Petroleum Release Remedial Action Reimbursement Fund.

This fund helps pay for investigation and cleanup costs for owners/operators of facilities that have leaking petroleum tanks. Costs for both underground and above-ground tank releases are eligible for reimbursement. The program's activities in this area include receiving and processing applications for reimbursement from the fund and subsequently initiating reimbursements for eligible costs. To assist applicants, the program developed guidelines entitled "Reasonable Rates Schedule and Reimbursement Guidance Manual."

### **"Orphan" Sites**

In situations involving "orphan" sites (sites where the person or business that caused the contamination either cannot be identified or located or does not have the resources to pay for their share of cleanup costs), investigation and remediation costs are paid with federal and/or state funds. In FY14, 14 orphan sites were activated for investigation and/or cleanup. As of August 31, 2014, there were 519 orphan sites on the inactive list.

### **Pay for Performance**

Some orphan sites are selected by the state to be cleaned up through a different process known as "Pay for Performance." Under the Pay for Performance program, pre-qualified contractors are invited to submit bids to clean up specific petroleum-contaminated sites. NDEQ has signed 36 Pay for Performance contracts since the program's inception. Of these projects, 10 have been successfully completed, 19 were terminated prior to completion, and 7 are still in the cleanup phase. This program saves the state time and money in getting these sites cleaned up.

### **Program Statistics**

Since June 1999, through July 31, 2014, 2,641 Tier 1 site investigations have been initiated. Of the 2,368 Tier 1 field investigations completed, 1,461 (62%) were closed, and 907 (38%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 784 Tier 2 investigations have been completed; 557 (71%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, 316 (13%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

The revenue going into the cleanup fund in FY14 was about \$11.5 million. As of June 30, 2014, a total of \$191,180,415 has been disbursed since the program began. During FY14, NDEQ reimbursed \$5,176,395 to responsible persons (or their designees) for work done at 233 different sites.

The 34 sites listed on the next page are all currently active sites that have received a total reimbursement of more than \$600,000 each. Once the statutory limit is reached, the responsibility of funding the remainder of cleanup necessary reverts to the responsible person. Some closed sites also reached the statutory limit but are not shown.

Responsible Person	City	Reimbursed amount as of June 30, 2014	Has Statutory Limit Been Reached?*
Burlington Northern & SFR	Alliance	\$975,000.00	yes
Burlington Northern & SFR	Mc Cook	\$975,000.00	yes
Konecky Oil	Mead	\$975,000.00	yes
Burlington Northern & SFR	Lincoln	\$974,300.47	yes
Conoco Phillips	Sidney	\$973,919.00	yes
Burlington Northern & SFR	Alliance	\$973,682.45	yes
Ag Valley Coop	Bartley	\$973,381.20	no
Burlington Northern & SFR	Alliance	\$973,302.50	yes
Burlington Northern & SFR	Alliance	\$972,578.98	yes
Elkhorn Valley Coop	Snyder	\$970,688.80	no
Western Cooperative Co.	Alliance	\$969,002.35	yes
Unocal Corporation	Ogallala	\$950,471.14	no
Magers Service	North Platte	\$947,669.57	no
Wortman Motor Co.	Doniphan	\$906,909.98	no
Neitzel Oil Co.	Springfield	\$851,686.82	no
IBP ATV(at The Verticals)	Dakota City	\$842,715.15	no
Coastal Refining & Market	Chester	\$827,364.08	no
Flying J Inc	Gretna	\$820,806.09	no
Foote Oil Company	Hastings	\$806,088.05	no
Western Cooperative Co.	Alliance	\$802,667.68	no
Leigh Oil Co	Leigh	\$776,204.69	no
City Of Lincoln	Lincoln	\$762,231.03	no
Ag Valley Coop	Curtis	\$744,026.73	no
Roesener Oil Co	Cook	\$743,946.93	no
Sandhill Oil	Thedford	\$732,983.95	no
Lohr Petroleum Co	Columbus	\$717,742.00	no
Indianola Oil Company	Indianola	\$709,640.19	no
Sinclair Oil Corp.	Grand Island	\$700,145.26	no
Lexington Coop Oil	Eddyville	\$645,923.78	no
I-90 Truck Haven	Norfolk	\$638,840.78	no
Shoemaker Truck Station	Lincoln	\$630,308.64	no
Farmers Union Coop	Dannebrog	\$609,703.28	no
Former Farmers Coop	Cedar Bluffs	\$607,091.97	no
Burlington Northern & SFR	Columbus	\$602,944.84	no

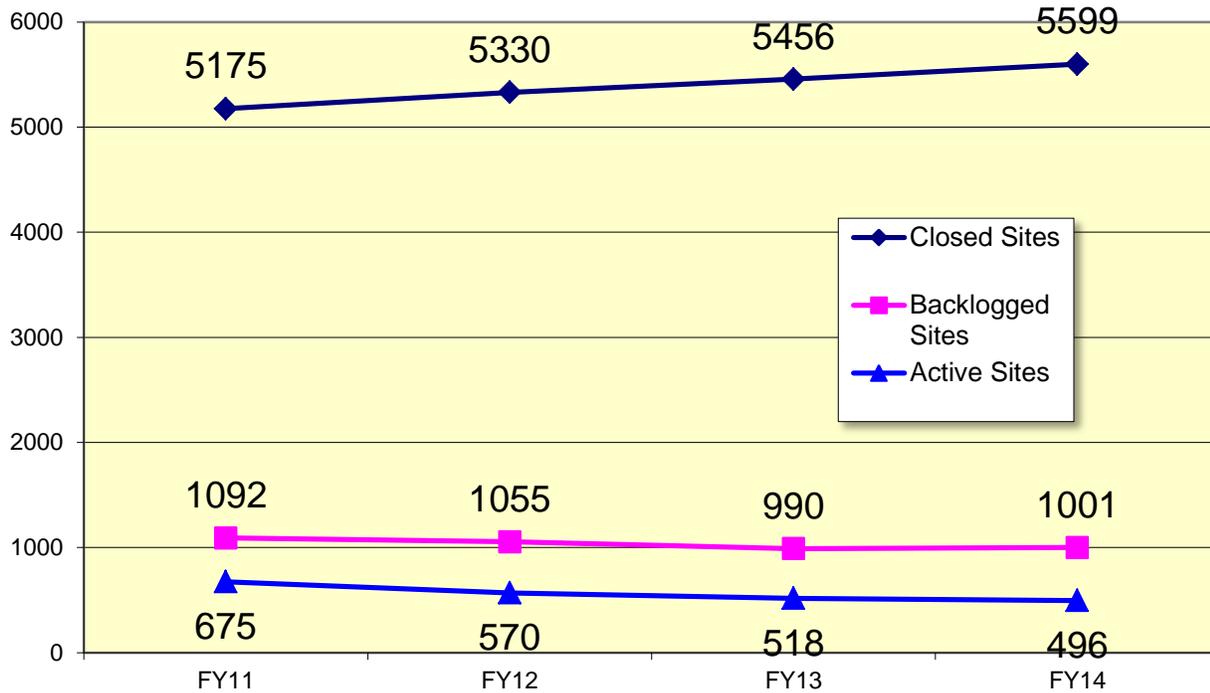
\* Those with a yes indicate that the statutory limit was reached prior to June 30, 2014. The total reimbursed amount may have been reduced due to noncompliance.

Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. To date, 223 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

The following is a chart of end-of-year totals for the past four years relating to Petroleum Remediation sites in Nebraska. The chart provides information relating to:

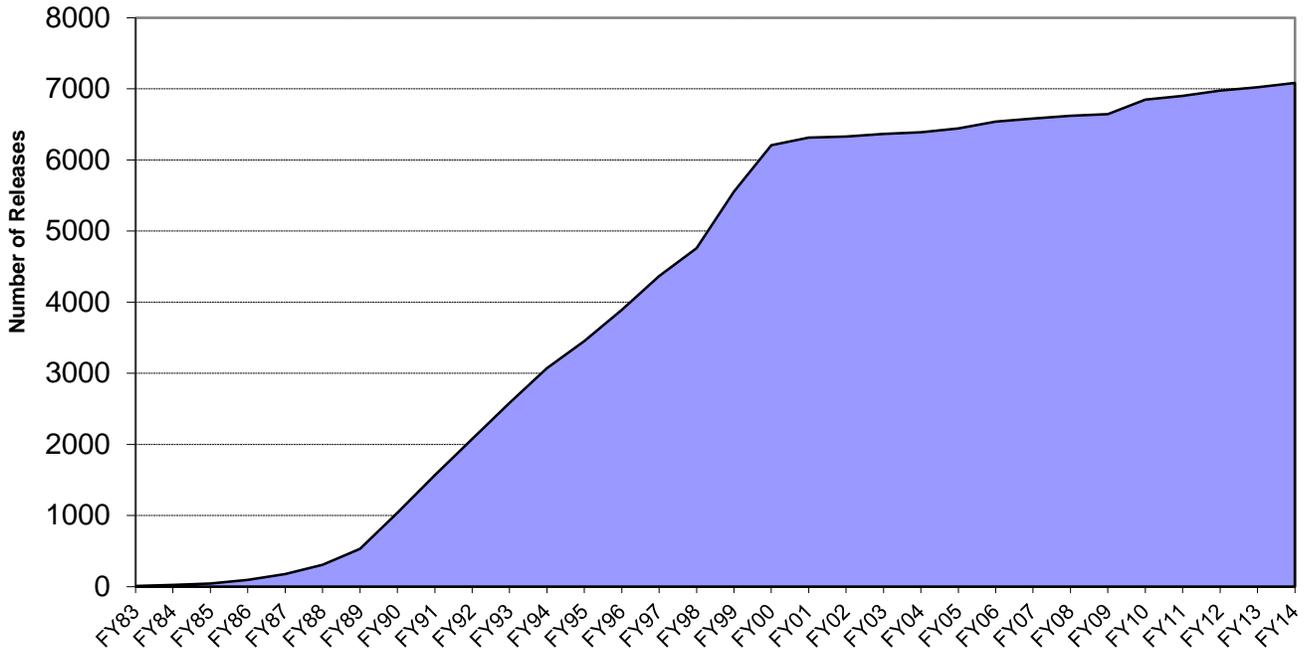
- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary.
- **Backlogged Sites:** Sites identified as potentially needing cleanup, but are on a waiting list for further investigation.
- **Active Sites:** Sites that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

**Petroleum Remediation Trends:  
End-of-Year Totals, FY11-FY14**

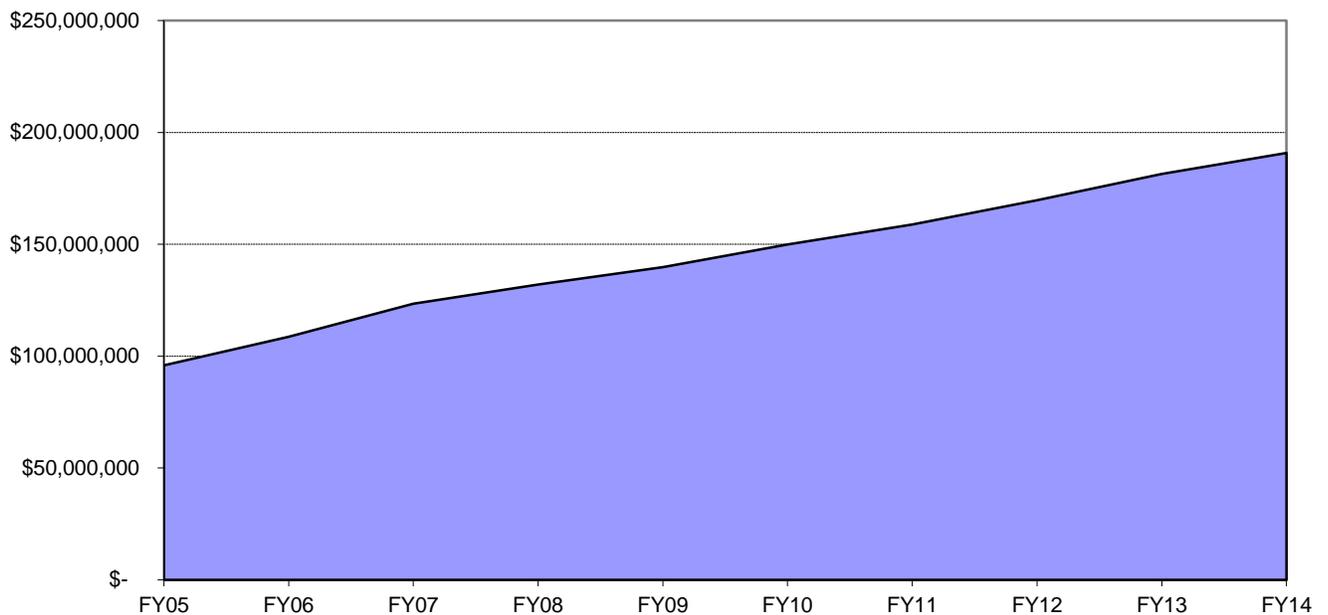


The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.

**Cumulative LUST Release Totals (Through FY14)**



**Cumulative Title 200 Disbursements (Last 10 years through FY14)**



## Agriculture Section

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

### Livestock Waste Control Program

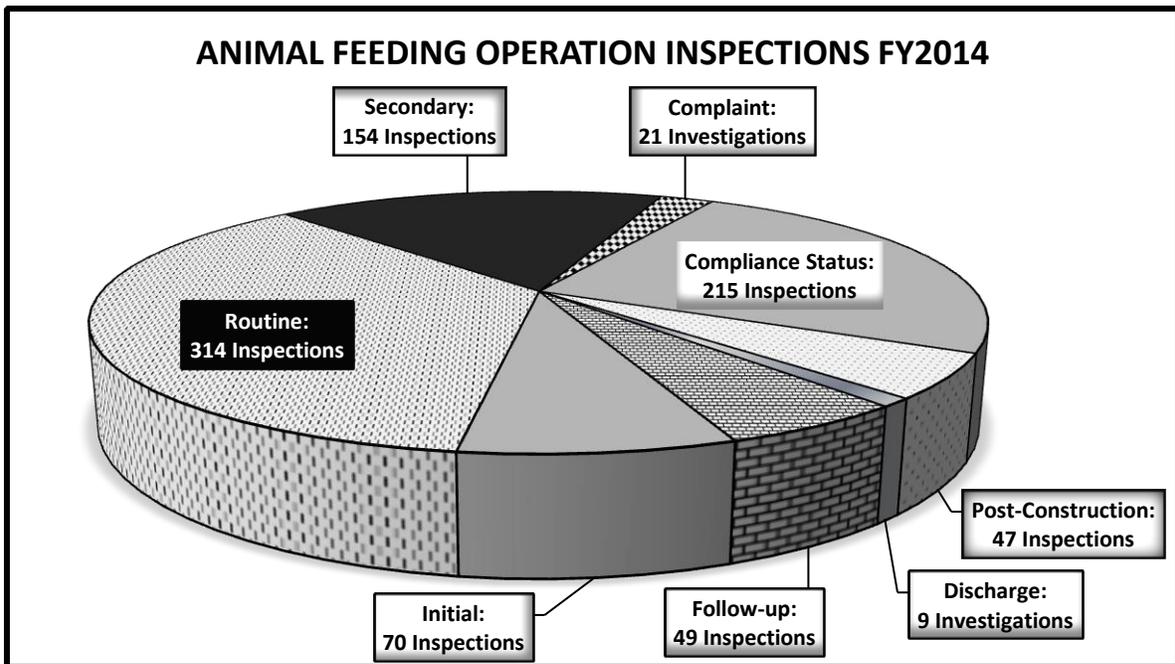
#### Overview

The Livestock Waste Control Program (LWC) is charged with the overall responsibility to protect Nebraska’s surface water and groundwater from discharge of livestock waste from any of the thousands of Animal Feeding Operations (AFOs) in Nebraska.

To accomplish this responsibility, the program administers *Title 130 - Livestock Waste Control Regulations*. The LWC program primarily focuses on the 769 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,000 Medium AFOs. The program uses inspections, permitting, and periodic monitoring to fulfill this responsibility. The permitting includes administering the National Pollutant Discharge Elimination System (NPDES) program for CAFOs.

Amendments to Title 130 became effective October 4, 2011 to reflect changes in the U.S. Environmental Protection Agency (EPA) CAFO Rule for NPDES permitting, which primarily involved who needs to apply for NPDES permit coverage. The changes were necessary to ensure the Department would continue to administer the NPDES permit program for EPA. As a result, only CAFOs that discharge are required to apply for NPDES permit coverage.

#### Inspections



The LWC Program staff conducted a total of 879 livestock waste control inspections and investigations in FY2014 (including complaint and discharge investigations). The chart above illustrates the breakdown by type of inspection or investigation. A concerted effort was made

during the fiscal year to revisit many medium sized operations to ensure that they were in compliance with Title 130 and the EPA CAFO Rule.

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

Initial Inspection. Before constructing a new operation or expanding an existing operation, all medium and large AFOs – whether or not the operation currently is permitted -- must request an initial inspection by program staff. The reason for this inspection is to determine if livestock waste control facilities must be constructed, expanded, or modified to prevent a discharge and to properly manage the livestock waste generated by the operation.

Post Construction Inspection. Upon completion of any required construction of a livestock waste control facility, program staff conduct a post-construction inspection to verify the waste control facility was constructed as approved by the Department.

Routine Inspections. Once a CAFO or an AFO has received a permit, and the Department has approved operation of the livestock waste control facility, program staff will conduct periodic, routine inspections to monitor operation of the livestock waste control facilities, management of the operation's livestock waste, and the records these CAFOs and AFOs are required to maintain. Routine inspections are regularly scheduled inspections of an AFO, involving a detailed, extensive inspection of the livestock waste control facility, recordkeeping, and waste management at the operation.

Follow-up Inspections. These are conducted in response to some specific activity, situation, or request by the operation. Follow-up inspections could be prompted by an operation's request for a "second opinion" on a requirement; or to monitor the AFO's progress on completing a construction or repair project; or to follow up after a complaint inspection or enforcement action, for example.

Compliance Status Inspections. Generally conducted to verify the AFO's operating status or level of compliance with a specific requirement; these inspections are usually less urgent, non-emergency situations.

Discharge Investigations. Discharge investigations are conducted when discharges of livestock waste from livestock waste control facilities are reported. Sometimes these discharges are not recorded as complaints because the AFO does self-reporting, as required by the regulations.

Complaint Investigations. When a complaint is received, program staff will investigate the complaint and may conduct an on-site complaint investigation.

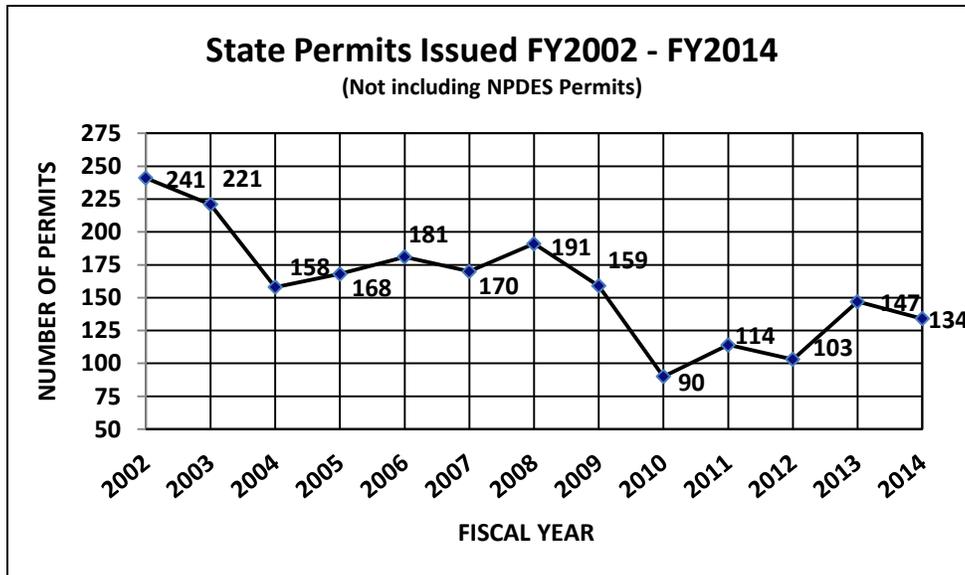
Secondary Inspections. Secondary Inspections are primarily conducted for training purposes and to assist the primary inspector in evaluating unusual or atypical AFOs.

**State Permitting**

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

The Department received a total of 99 permit applications and issued 134 permits during FY2014, as shown in the table to the right. The totals do not include applications received or permits issued for any NPDES permits. The chart below shows the total number of state permits issued annually for livestock waste control facilities since FY2002. There were more Construction and Operating Permits issued than applications received because the Department updated some existing Construction Permits, Construction Approvals and Operating Permits to Construction and Operating Permits if the Animal Feeding Operations updated their nutrient management plans to current Title 130 standards. The updates were mainly in conjunction with NPDES Permit renewals or transferred permits.

<b>Construction and Operating Permits – FY2014</b>		
<b>Type of Application or Permit</b>	<b>Applications Received</b>	<b>Permits Issued</b>
New permits	49	71
Modified permits	33	44
Transfer permits	17	19
<b>TOTAL</b>	<b>99</b>	<b>134</b>



Once a permitted AFO has completed its construction project, the Department conducts a post-construction inspection. If the post-construction inspection shows the construction was completed as approved, the Department notifies the AFO that operation of the new livestock waste control facility is approved. In FY2014, the Department gave approval to 144 AFOs for operation of their new or expanded Livestock Waste Control facilities.

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

The Livestock Waste Control Program also oversees the NPDES permitting process for livestock, issuing coverage under individual NPDES permits to CAFOs, as well as coverage under an NPDES General Permit for Open-Lot Cattle Operations. Both permits expire every five years,

and permittees are required to submit a reissuance application to continue NPDES permit coverage.

The table below summarizes the number of NPDES applications received and permits issued for livestock waste control facilities in FY2014.

<b>NPDES PERMITS – FY2014</b>		
Type of NPDES Application/Permit	Applications Received	Permits Issued
<b>GENERAL PERMIT FOR OPEN LOTS</b>		
New Coverage	39	214
Modified or Transferred	18	16
<b>SUBTOTAL GENERAL PERMIT:</b>	<b>57</b>	<b>230</b>
<b>INDIVIDUAL PERMITS</b>		
New Coverage	3	7
Modified or Transferred	3	1
Reissued	1	4
<b>SUBTOTAL INDIVIDUAL PERMIT:</b>	<b>7</b>	<b>12</b>
<b>NPDES TOTALS:</b>	<b>64</b>	<b>242</b>

### Fees

An annual fee is assessed on all permitted Large CAFOs and all CAFOs covered under an NPDES permit. The fee is determined based upon the number of head of livestock for which the operation has a permit. The fees provide 20% of the Department's costs to administer the livestock waste control program, as required by statute. The Department received \$231,669 in annual permit fees from 692 permitted operations. In addition, the Department received \$23,981 in initial inspection fees (70 inspections), \$23,600 in permit application fees (118 applications), and \$249 in late payment fees (one operation), for a total of \$279,499 in fees.

General information about the Livestock Waste Control Program, including application forms, fact sheets, guidance documents, copies of the NPDES General Permit and the four general permits, Title 130 regulations, and public notices of permit issuance or denial, can all be found on the Department's website at: <http://deq.ne.gov>.

## Chemigation Program

The Chemigation program, which functions in cooperation with Nebraska's 23 Natural Resources Districts (NRDs), works to ensure that users of irrigation systems applying fertilizers and pesticides do not contaminate the sources of irrigation water. These regulations are contained in *Title 195 – Chemigation Regulations*.

The NRDs inspect irrigation systems and issue site permits for specific safety equipment that is required to be installed on systems that chemigate. Chemigation permits for chemigation sites are issued annually, and are reported to the Department on a calendar year basis. Since permitting began in 1987, the total number of annual permits issued has followed an upward trend, with NRDs issuing 23,695 chemigation permits in 2013, a six percent increase over 2012 permits issued.

A chemigation applicator initially must be certified by the Department, and re-certified every four years. To receive certification, an applicator must complete training and testing, which is provided under contract with the University of Nebraska Cooperative Extension. Applicator certifications also are reported on a calendar-year basis.

In calendar year 2014, 981 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 5,163 applicators. Information about chemigation applicator training dates and certified applicators is available after January 1 of each year on the Department's web site, <http://deq.ne.gov>.

On February 14, 2014, the Governor approved Legislative Bill 272, which changed provisions related to the Nebraska Chemigation Act. Specifically, LB 272 requires that the Natural Resources Districts establish permit fees in the amount to pay the reasonable costs of administering the permit program. Title 195 -- Chemigation Regulations will be amended to become consistent with the Nebraska Chemigation Act, which was amended by LB 272. The Department anticipates bringing the proposed changes to Title 195 to the Environmental Quality Council at the February 2015 meeting.

## Agricultural Chemical Containment Program

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

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

The Department and the Nebraska Department of Agriculture have a cooperative agreement that outlines the procedure for coordinating inspection activities between the two agencies. The agreement enhances the communication between the agencies and provides specific protocols to be followed when investigating Agricultural Chemical Containment complaints. In FY2014, Agriculture Section staff conducted a total of eight complaint investigations of suspected releases related to agricultural chemical containment systems. Activities related to Agricultural Chemical Containment are funded from the Performance Partnership Grant.

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## Water Quality Monitoring and Assessment Programs

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### Surface Water Assessment Programs

In 2001, NDEQ completed a comprehensive study on water quality monitoring in response to LB 1234, and began implementing comprehensive, integrated surface water monitoring programs throughout the state by working with additional monitoring partners, in addition to program staff, to collect water samples. These programs use contractual and voluntary monitoring relationships to collect samples, which has significantly improved the efficiency and effectiveness of NDEQ's statewide monitoring networks. Current monitoring partners include the Natural Resources Districts, Nebraska Public Power District, U.S. Army Corps of Engineers, Nebraska Game and Parks Commission, University of Nebraska-Lincoln, Central District Health Department, National Park Service and United States Geological Survey.

The Surface Water Monitoring and Assessment programs collect physical, chemical and biological water quality samples from streams and lakes, implements surface water improvement projects, and prepares surface water quality reports. Some monitoring programs collect stream and lake samples throughout the state; however, most monitoring is focused in one to three major river basins each year in conjunction with a rotating basin monitoring strategy.

Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs are provided below. Additionally, a more detailed overview of the programs are provided in the agency's annual publication Water Quality Monitoring Report:

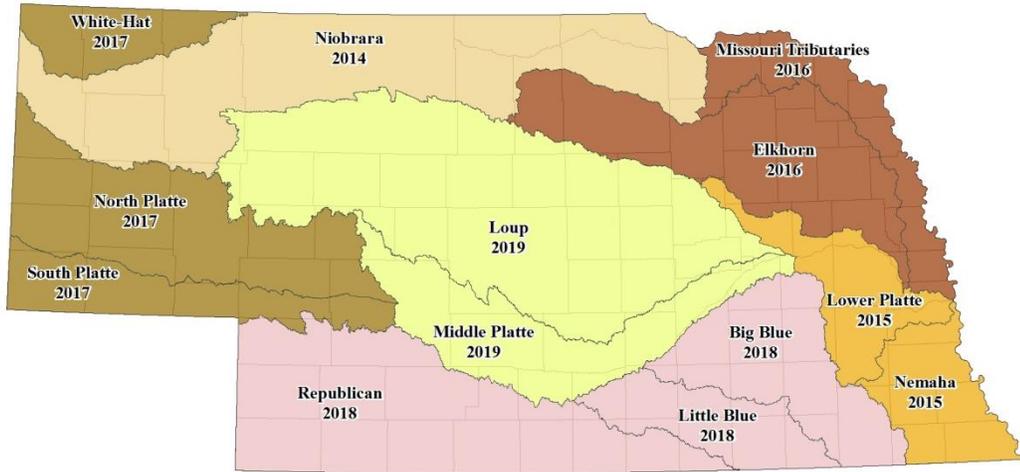
<http://deq.ne.gov/Publica.nsf/Pages/WAT212>

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

- 2014 -- Niobrara River basin;
- 2015 -- Lower Platte and Nemaha River basins;
- 2016 -- Elkhorn and Missouri Tributaries River basins;
- 2017 -- White River-Hat Creek, North Platte and South Platte River basins;
- 2018 -- Big Blue, Little Blue and Republican River basins; and
- 2019 -- Middle Platte and Loup River basins.

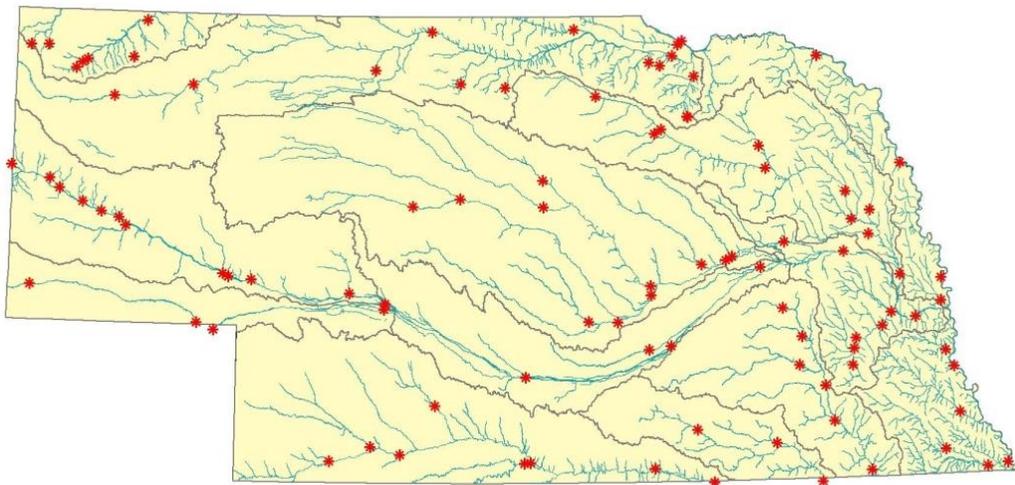
In 2014, a total of 41 stream sites in the Niobrara River Basin were sampled weekly from May through September, which resulted in 902 samples. The sites were sampled for *E. coli* bacteria, field measurements including temperature, pH, oxygen, conductivity and turbidity, and physical/chemical parameters such as nutrients, total suspended solids, chlorides and select pesticides. The data is used to document existing water quality conditions, identify water quality problems, identify pollutant(s) of concern and their sources and estimate pollutant loadings. Monitoring partners that assisted NDEQ in collecting water samples for the 2014 Basin Rotation Monitoring Program included Natural Resources Districts and the National Park Service.

**Six-year basin rotation monitoring schedule**



**Ambient Stream Monitoring Program** — This program has a network of 97 fixed stations located on main stem and tributary streams across the state (see map below for details). The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 major river basins and link assessments of status and trends with natural and human factors that affect water quality. Fifty-eight of the 97 sites are located on main stem streams. Ecoregion and land use considerations were used in selecting many of the stream locations. Samples are collected monthly and analyzed for traditional chemical and physical parameters and include select pesticides and heavy metals. During 2014, approximately 1,160 water samples were collected for this program.

**Locations of NDEQ Ambient Stream Monitoring Program sites**



**Public Beach Monitoring Program**—Since 2004, NDEQ has collected and tested water samples at public beaches statewide, for *E. coli* bacteria and the microcystin toxin. The microcystin toxin is a hepatotoxin that can be produced by blue-green algae also known as a harmful algal bloom. The risks to humans come from external exposure (prolonged contact with skin) and from swallowing the water. Symptoms from external exposure are skin rashes, lesions and blisters. Symptoms from ingestion can include headaches, nausea, muscular pains, central abdominal pain, diarrhea and vomiting. Severe cases could include seizures, liver failure and respiratory arrest. The severity of the illness is related to the amount of water ingested, and the concentrations of the toxins. Incidents in 2004 with dogs dying caused by drinking water from lakes that were undergoing a harmful algal bloom led NDEQ to begin monitoring public waters for the presence and concentration of microcystin.

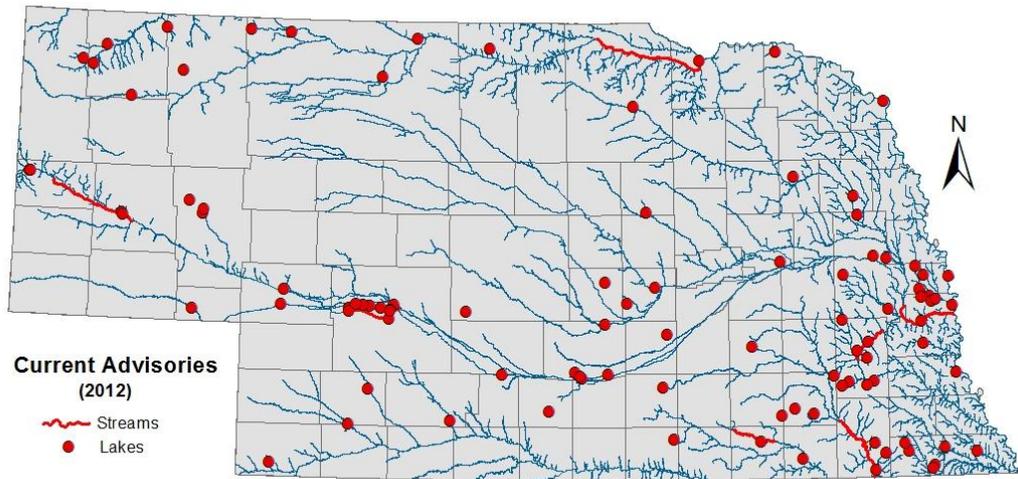
In 2014, monitoring occurred weekly at 53 beaches on 50 different lakes from May through September. Several monitoring partners assisted NDEQ in collecting these samples, including Natural Resources Districts, Nebraska Public Power District, Central District Health Department, and the U.S. Army Corps of Engineers. Over 1,200 samples were assessed for each parameter. Our collection protocols allow for samples to be collected, analyzed and reported to the public weekly before the weekend when lakes typically experience the most usage. Results are posted to the NDEQ website by Thursday afternoon with press releases on affected lakes being sent to area newspapers Friday morning.

Levels of microcystin above 20 parts per billion result in public health alerts being issued and signs are then posted recommending full body contact activities in the water be avoided. In 2014, health alerts were issued on eight different lakes and the amount of time the lakes were on alert ranged from two to eight weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site <http://deq.ne.gov>.

**Fish Tissue Monitoring Program** — The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2014, a total of 63 fish tissue samples were collected from nine streams and 26 lakes across Nebraska for analysis of pollutants. This information is used to assess pollutant trends, identify potential problem areas and to inform the public about health risk concerns identified through fish consumption advisories. Nebraska began issuing fish consumption advisories in 1990. The data is received from the EPA lab approximately one year after collections and therefore, the final report on the 2013 data is expected to be completed by the end of 2014 and the 2014 data report is anticipated in the spring of 2015.

The report “Regional Ambient Fish Tissue Program - 2012 Data Assessment Report” and current list of advisory sites can be found at NDEQ's web site, <http://deq.ne.gov>. The report is located at Publications/Water Publications/Water Publications by Type/Reports. The direct URL is: <http://deq.ne.gov/Publications/Pages/WAT173>. A summary of fish advisory information is easily located at DEQ's web site by entering “fish” in the box titled NDEQ Search, located on the right side of the Home page, or by selecting News and Announcements, Topics of Interest. The direct URL is: <http://deq.ne.gov/SurfaceWater/Pages/FCA>.

Currently, Nebraska has 98 state-issued fish tissue advisories. The primary contaminants of concern in fish tissue in Nebraska and most other states are mercury and polychlorinated biphenyl compounds (PCBs). See map on the following page for current advisory locations.



The NDEQ's Policy for Issuing Fish Consumption Advisories uses an 8-oz weekly meal portion combined with a consumer body weight of 70 kg (154 lbs.), an absorption factor of 1.0 and an exposure period of 30 years for calculating health risks. Carcinogenic effects are still averaged over a lifetime of 70 years because it is assumed cancer can develop at any time during one's lifetime, even after the exposure to the carcinogen has ended. Health advisories are not intended to discourage people from eating fish in moderation. Actually, fish are a high quality protein, low in saturated fat, and high in omega-3 fatty acid. It is a primary goal of the program to ensure that the public have as much information as possible regarding the water bodies that they use for fishing. An immediate health risk is unlikely from an occasional meal of fish from waters where fish consumption advisories have been issued; however, in order to reduce health risks that may result from long-term consumption, it is recommended that eating fish from advisory waters not exceed an average of eight ounces of fish per week.

**Stream Biological Monitoring Program** — This program is used to evaluate the health of streams by evaluating the composition and numbers of resident aquatic macroinvertebrate and fish communities. These biological communities display varying habitat requirements and water quality tolerances making them excellent indicators of stream health. In 1997, the Department added a probabilistic monitoring design that involved the sampling of randomly selected sites in order to address statewide and regional questions about water quality. Assessments are made by comparing the biological communities of "reference condition" streams where there are no significant disturbances, to the communities collected from randomly selected stream sites. During 2014, a total of 34 stream sites were sampled in the Niobrara River basin.

Sampling is conducted in conjunction with the basin rotation monitoring strategy. Data from 2012 and 2013 are being assessed and will be used to verify the biological criteria used in evaluating the health of aquatic life populations in Nebraska streams. The current approach allows evaluations of aquatic life health to be made with greater confidence even though fewer samples are collected.

**Lake Monitoring Program** — Lake monitoring is currently conducted on approximately 29 lakes across the state. Monitoring involves the collection of monthly water samples from May through September. These data are used to document existing water quality conditions, evaluate long-term trends, design watershed and lake restoration/protection projects and evaluate project effectiveness. Monitoring focuses on nutrients, sediment, pesticides, heavy metals, dissolved oxygen, pH, temperature, conductivity and water clarity. In 2014, approximately 145 samples

were collected at deep water locations with additional profiles collected from mid-lake locations. In addition, some inlet streams are sampled during periods of significant precipitation to provide information on nutrient, sediment and pesticide loadings to lakes during runoff events.

**Fish Kill and Citizen Complaint Investigations** — The Surface Water Unit responds to reports of fish kills and other environmental concerns of citizens related to surface water. On-site investigations are conducted, as needed, to document existing water quality conditions, surface water quality standards violations and identify pollution sources and responsible parties. A total of seven fish kills were reported between July 1, 2013 and June 30, 2014. This compares to 19 during the same time period the year before. Four of the reported fish kills were attributed to low dissolved oxygen levels within the waterbody, whereas three were the result of disease.

Between July 1, 2013 and June 30, 2014 the Surface Water Unit received 43 notifications of complaints concerning surface water issues. This compares to 30 notifications during the same time period the year before. While many of these cases were referred to other agency programs that more closely relate to the problem, sometimes the Surface Water Unit would assist by providing observations or samples to help document conditions.

**Integrated Report** — Beginning in 2004, and every two years thereafter, states are required to prepare a biennial water quality report called the Integrated Report, which is a combination of the Section 305(b) and Section 303(d) reporting requirements of the Clean Water Act. The Integrated Report provides a comprehensive summary of the status and trends of surface water quality in Nebraska and includes a list of impaired surface waters that do not support their assigned beneficial uses. The 2014 Water Quality Integrated Report, which was approved by the EPA in April 2014, is available on NDEQ's web site <http://deq.ne.gov>. The report's direct URL is: <http://deq.ne.gov/Publications/Pages/WAT214>.

**Nebraska Water Monitoring Programs Report** — A report summarizing the monitoring programs performed by NDEQ called the "Nebraska Water Monitoring Programs Report" was prepared again in 2013. This report describes the numerous monitoring programs NDEQ is involved with, its partners, and several highlights of recent monitoring efforts. Future enhancements to this report will include more in-depth examinations of what our monitoring programs are telling us, how we are using them to manage and improve water quality and to inform the public of the trends observed. The 2013 Nebraska Water Monitoring Programs Report is available on the NDEQ's web site <http://deq.ne.gov>, by selecting Your Environment (located in the center box of Home page) and then selecting Water Quality Monitoring Report. The report's direct URL is: <http://deq.ne.gov/Publications/Pages/WAT212>

## Groundwater Assessment Programs

**Groundwater Quality Monitoring Report** — Legislation passed in 2001 directed NDEQ to issue an annual report to the Legislature concerning the quality of the groundwater in Nebraska. The first of these reports was issued December 1, 2001. These reports summarize the water quality monitoring efforts of the Natural Resources Districts, NDEQ, and other state, local and federal agencies, and can be found on the agency's web site, <http://deq.ne.gov>. (Select Publications, then select Water Quality, then select 2013 Groundwater Quality Monitoring Report. Or, the Water Quality Division reports' index URL is: <http://deq.ne.gov/Publica.nsf/pages/WAT183>.) Statistics and maps showing nitrate-nitrogen groundwater monitoring results as well as four of the 241 agricultural chemicals in the state are presented. The report uses data from the Quality-Assessed Agrichemical Contaminant Database for Nebraska Groundwater, developed cooperatively by the Nebraska Department of Agriculture, University of Nebraska-Lincoln, and Nebraska Department of Environmental Quality using federal funding. These data are accessible to the public on the Nebraska Department of Natural Resources web site, <http://dnr.ne.gov>.

In 2002, a Statewide Groundwater Monitoring Network was developed to better evaluate the groundwater quality in the state. Data was first analyzed for trends in 2005 for this report. Approximately 1,400 water wells are in the Network, with the majority of them being irrigation wells. Utilizing irrigation wells to collect water quality information may not be as representative of the aquifer as dedicated monitoring wells due to screen lengths and other construction issues in irrigation wells. This year, the NDEQ had the opportunity to expand the Network utilizing Federal/State funds. General locations for new wells were determined utilizing a computer model to calculate the weighted averages of the locations of current Network wells, NRD dedicated monitoring wells, Wellhead Protection areas and Conservation and Survey Division (CSD) test holes. The map generated by this model was distributed to the NRDs and CSD to refine drilling/well locations. The NDEQ then contracted with CSD to drill and log a test hole at each proposed monitoring location. The information collected from each test hole was used to design the well(s) at that location. The NDEQ contracted a water well driller to construct dedicated monitoring wells at the test hole locations.

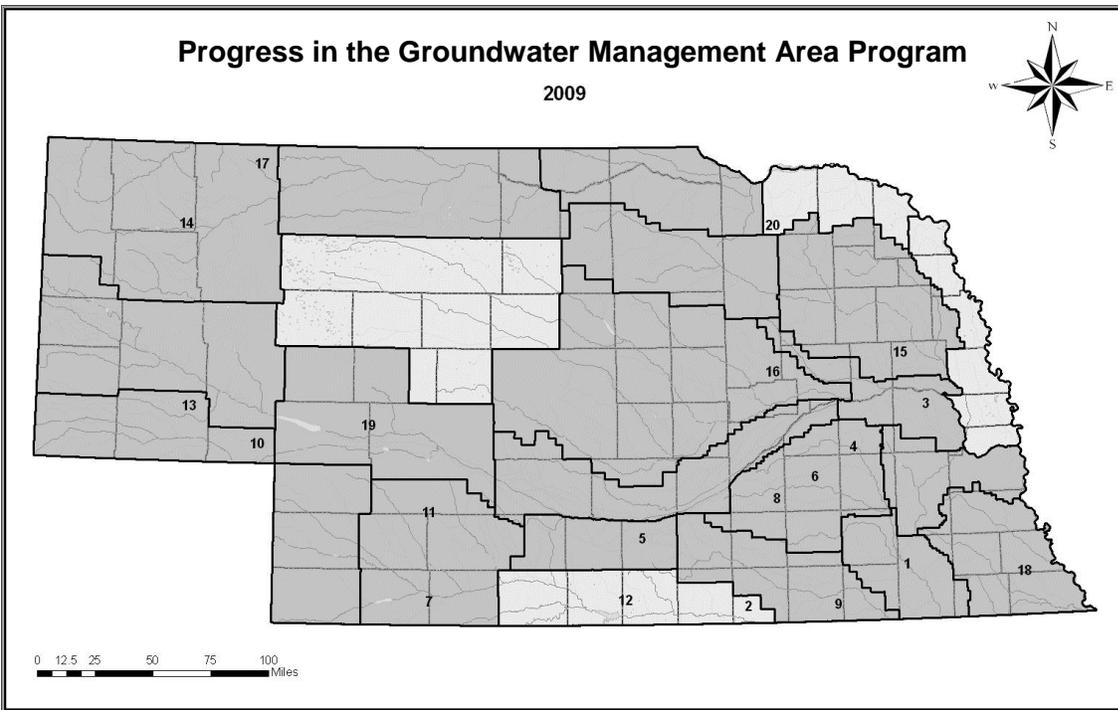
The most important aspect of the Network is the ability to sample the wells on regular basis. Utilizing irrigation wells requires the well to be running at the time the sampler arrives. If the well is not running the sampler must return another time, which in turn uses more resources. Monitoring wells with dedicated sampling equipment can be sampled any time, which reduces personnel costs. For that reason, NDEQ provided funds to the NRDs to purchase sampling equipment to be placed in active Network monitoring wells and the new wells added this year. The NDEQ worked with 13 NRDs for drilling 37 test holes and 29 dedicated monitoring wells. In addition, 15 NRDs were granted funds to purchase 143 pumps sampling devices. The addition of the dedicated monitoring wells and the equipment to sample them will greatly increase the data collection, reliability, and quality of data collected.

**Hydrogeologic Studies and Reviews** —The Groundwater Unit is responsible for hydrogeologic review of various Department projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks, surface spills, underground injection control, wastewater treatment facilities, septic systems, NPDES permits, livestock waste control facilities, the Natural Resources Districts' Groundwater Management Plans, and others.

In addition, the Groundwater Unit performs reviews and oversees remediation if a situation does not fall under another agency program and is of environmental significance. Unit personnel

continue to take responsibility under *Title 118 — Groundwater Quality Standards and Use Classification* for many site investigations, and have sampled and supervised site cleanups.

**Groundwater Management Areas** — The Groundwater Management Area (GWMA) program focuses on assessing areas where groundwater problems from nonpoint source contaminants (such as agricultural chemicals) exist or are likely to exist. The Agency carries out detailed field studies to collect groundwater data, assesses the data, and determines whether a correlation exists between land-use practices and any nonpoint contamination trends. The Department's conclusions and recommendations are presented at public hearings during which public comments on the study are also obtained. The Director makes a determination on whether or not to designate the study area as a Groundwater Management Area. The staff works closely with the Natural Resources District (NRD) within whose boundary the area is located throughout the investigation, designation and implementation stages. The NRDs are responsible for implementation of many aspects of this program. In fact, NRDs can designate Groundwater Management Areas acting on their own authority. In addition to the three NDEQ-designated areas, 20 NRDs have designated 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).



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 are illegal and have never been allowed in Nebraska.

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

Class III wells are used to inject fluids for the purpose of extracting minerals. The only Class III wells in the state are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources operates over 4800 Class III wells as of October 1, 2014.

Injection wells not included in the other specific classes are considered to be Class V wells. Common examples of Class V wells include: open-loop heat pump systems, large capacity septic systems, and sub-surface drip irrigation systems.

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

Wells that are drilled for the production of mineral resources are regulated as Class III injection wells, and are governed by Title 122 – Rules & Regulations for Underground Injection and Mineral Production Wells.

**Wellhead Protection** — The State Wellhead Protection program is a voluntary program, which assists communities and other public water suppliers in preventing contamination of their water supplies. State Wellhead Protection Program activities include delineating the zones of influence which may impact public supply wells, training communities on how to inventory all potential sources of pollution within these vulnerable zones, working with the local officials to identify options to manage these potential pollution sources, working on monitoring plans, and helping develop contingency plans to provide alternate water supplies and site new wells. All community public water supplies have a Wellhead Protection Area map as of October 1, 2009. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. One hundred three community water supplies have approved Wellhead Protection Plans as of October 1, 2014.

## Water Quality Planning

### Surface Water Quality Standards

NDEQ develops water quality standards that designate the beneficial uses to be made of surface waters and the water quality criteria to protect these assigned uses. Title 117 - Nebraska Surface Water Quality Standards forms the basis of water quality protection for all surface water quality programs conducted by the Department. The federal Clean Water Act specifies that states review their water quality standards and revise where appropriate once every three years. NDEQ presented proposed revisions to Title 117 as part of a triennial review package to the Environmental Quality Council on October 16, 2014. Proposed revisions included more stringent ammonia criteria, new criteria for carbaryl, addition of new lakes and reservoirs, and a number of housekeeping changes.

The most significant of these new proposals deal with water quality criteria for ammonia. The U.S. Environmental Protection Agency has adopted new Clean Water Act Section 304(a) criteria recommendations for ammonia based on new information about the toxicity of ammonia to aquatic life, specifically freshwater unionid mussels. EPA's new ammonia recommendations are lower than their previous criteria recommendation. The proposed revisions to ammonia criteria in Title 117 are consistent with EPA's recommendations and are lower than what is currently adopted in Title 117. Considerable outreach was conducted with permittees, wastewater treatment plant operators, consultants, and other affected parties regarding the proposed ammonia criteria revisions.

The proposed new criteria for carbaryl (a pesticide commonly known as Sevin®) are identical to EPA's newly recommended Section 304(a) criteria to protect aquatic life from both acute and chronic toxicity. Prior to 2012, EPA had no recommended criteria, thus Nebraska had not adopted criteria.

Three newly constructed reservoirs were proposed to be added to the list of lakes and reservoirs. Nine additional lakes or reservoirs that are under public management were also proposed to be added to the list of lakes and reservoirs.

The proposed revisions were adopted by the Environmental Quality Council at the October 16, 2014 meeting. The proposed revisions have been submitted to the Attorney General for review and, if approved, will be submitted to the Governor for approval.

The standards are available on the department's web page at <http://deq.ne.gov/>. In addition to developing the standards, the Water Division develops and implements procedures for applying the standards to surface water quality programs, such as NPDES permits.

### Section 401 Water Quality Certification

The Water Division Planning Unit administers the Water Quality Certification Program in accordance with Section 401 of the Clean Water Act. This program evaluates applications for federal permits and licenses that involve a discharge to waters of the state and determines whether the proposed activity complies with Nebraska Surface Water Quality Standards. If the activity is likely to violate the standards, conditions for complying with the standards will be issued with the certification, or certification will be denied. The U.S. Army Corps of Engineers Section 404 Dredge and Fill Permits and Federal Energy Regulatory Commission licenses are examples of federal

regulatory programs that require State Water Quality Certification before federal permits or licenses can be issued. The Department reviewed 433 Section 404 permit applications during FY2014.

On January 9, 2001 the U.S. Supreme Court issued a decision in the matter of Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers, No. 99-1178. The court decision eliminated the Corp's regulatory jurisdiction over isolated, non-navigable intrastate waters where the only link to interstate commerce was the use of the waters by migratory birds. Therefore no permit or other authorization by the Corps of Engineers is required for projects that might impact waters meeting those criteria. Following the SWANCC decision in 2001, the Supreme Court handed down a decision in Rapanos, et al. v. United States on June 19, 2006 that further limits the Corps of Engineers' jurisdiction over waters of the U.S. This had the effect of further reducing the number of projects that needed a Corps 404 permit. However, these waters of the state are still under the authority of the Department of Environmental Quality, because isolated wetlands are regulated by Nebraska Surface Water Quality Standards.

Although the department has no permitting mechanism to authorize projects in advance of their implementation, procedures have been developed to assist project sponsors who wish to avoid violating state water quality standards and potential enforcement actions. Project sponsors are encouraged to contact NDEQ before implementing their project so that the plans can be discussed in light of requirements of *Title 117 - Nebraska Surface Water Quality Standards*.

### **Impaired Waters and Total Maximum Daily Loads (TMDLs)**

The Federal Clean Water Act, Section 303(d) requires states to prepare a list of impaired surface waters. These are waters that do not support the assigned beneficial uses as listed in Nebraska Surface Water Quality Standards. From this list, states are to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters and remove the identified impairments so that these waters may meet their assigned beneficial uses. As in previous years, the Department has opted to combine the required CWA Section 303(d) list with the Section 305(b) report on the general status of water quality in the state. This combination is referred to as the Integrated Report. The 2014 Integrated Report is available on NDEQ's web site <http://deq.ne.gov>, by selecting Water, then selecting Water Quality Planning. Or, the report's direct URL is: <http://deq.ne.gov/Publica.nsf/Pages/WAT214>. The 2014 Integrated Report was submitted to EPA Region 7 in March 31, 2014 and was approved by EPA April 25, 2014.

Several TMDLs were prepared, submitted, and approved throughout the fiscal year. The table on the following page summarizes NDEQ's work in this area.

TMDL Name	# of Segments	Pollutant	Status
<b>Big Blue River Basin</b>			
Big Blue River Basin	10	<i>E. Coli</i>	Approved by EPA 12/17/2013
Big Blue River Basin	13	<i>Atrazine</i>	Approved by EPA 12/17/2013
<b>Lower Platte River Basin</b>			
Conestoga Reservoir	1	<i>Phosphorous</i>	Draft Under Review
Conestoga Reservoir	1	<i>Sedimentation</i>	Draft Under Review
<b>Missouri Tributaries River Basin</b>			
Bazile Creek	2	<i>E. Coli</i>	NDEQ & Santee Sioux Nation Developing Draft
<b>Nemaha River Basin</b>			
Buck and Duck Creeks	3	<i>E. Coli</i>	Draft Under Review
<b>White-Hat River Basin</b>			
White River Basin	3	<i>E. Coli</i>	NDEQ Developing Draft

### Nonpoint Source Management Program

The Nebraska Nonpoint Source Management Program is an integrated statewide effort to protect and improve water quality impacted by nonpoint source pollution. The program is of particular significance because nonpoint source pollution is the most prevalent, widespread cause of water quality degradation in Nebraska. Nonpoint source pollutants of particular concern in Nebraska include those associated with runoff and percolation from agricultural and urban areas. Initiated in 1990, the program is largely funded by the Environmental Protection Agency (EPA) through Section 319 of the federal Clean Water Act (CWA) and involves a multitude of federal, state and local agencies and organizations.

Through the Nonpoint Source Management Program, the Department has initiated major shifts in program activities, including increased emphasis on watershed and groundwater management area planning, targeting of 303(d)-listed impaired waters, community participation in project development and implementation, and installation of management practices in smaller areas of manageable size. Because of these program changes, it was necessary to reduce financial support for outreach and demonstration projects. Prioritization of eligible projects and activities were refined in the 2014 Section 319 request for proposals, which emphasized watershed planning, knowing that in future years, 319 funds would primarily be granted to projects which have an EPA-approved watershed or groundwater plan in place.

Major components of the nonpoint source management program include program administration, nonpoint source monitoring and assessment, and implementation of nonpoint source pollution management projects through Section 319 grant funding. Nonpoint source monitoring and assessment is an integral and crucial element for the successful implementation of the program. Water quality information is needed to identify and prioritize nonpoint source problem areas, develop watershed management plans and TMDLs, and evaluate the effectiveness of measures implemented to abate nonpoint source pollution. Currently identified nonpoint source problems and priorities are defined in the primary guidance document of the Nonpoint Source Management Program: "Strategic Plan and Guidance for Implementing the Nebraska Nonpoint Source Management Program 2000-2015." This guidance document is currently being updated and is slated for EPA approval by the end of the calendar year. While the updated guidance is written for the years 2015-2030, it is scheduled to be updated every five years per EPA requirements.

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

In the past year, the Nonpoint Source Management Program provided Section 319 grants to local sponsors of eligible projects in the two categories: 1) Large Competitive Projects (generally under \$300,000) and 2) Small Project Assistance (under \$15,000). Including the new 2014 funds, a total of 46 Section 319 projects were managed. All but one of these were large multi-year projects, with total funds of all projects equaling \$5,620,679. One small project was managed with total funds equaling \$15,000. To date, a total of 220 large projects, spending \$63,801,646, have been funded through Section 319 funds since the beginning of the program in 1990 and have addressed both surface water and ground water quality concerns.

### **Source Water Assessment and Protection**

When Congress amended the Safe Drinking Water Act in 1996, one of the amendments created the Source Water Assessment Program (SWAP) for public drinking water protection. Every state has developed a Source Water Assessment Program with the following basic components:

- 1) Delineate the source of each public drinking water system;
- 2) Identify potential contaminants in the source area;
- 3) Determine the drinking water source's susceptibility or vulnerability to contamination; and
- 4) Make the assessments available to the public.

NDEQ is implementing their EPA-approved program in cooperation with the Nebraska Health and Human Services System, Nebraska Rural Water Association, the Natural Resources Districts, and numerous other stakeholders. All assessments were completed and distributed by August 2003; however, delineations continue to be updated as needed upon receipt of new information about public water supply systems.

Beginning in SFY2004, funds were set aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide. Funds are provided to political subdivisions that operate a public water system serving a population of 10,000 or less. Eligible activities address drinking water quality, quantity, and/or education within the source water protection area. To date, Source Water Protection funds have been distributed to complete 79 separate Source Water Protection projects throughout the state. In SFY2014, Source Water Protection funds were distributed to the following public water systems: Cedar-Knox, Crete, Meadow Grove, Osmond, Prosser, and Wymore. The total amount available in SFY2014 was \$100,000.

### **Water Quality Data Handling and Storage**

The department has implemented the STORET electronic storage system for water quality data. This will make Nebraska surface water quality information available to anyone who has an internet connection. The web site for this information is [www.epa.gov/storet](http://www.epa.gov/storet). During FY2014, the department continued to add monitoring results to the STORET database, monitoring results conducted on surface waters of the state. The end result will be the centralization of NDEQ's previous and current surface water quality monitoring information.

## Wastewater Permitting and Certification Programs

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

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

The Department initiated the **Assessing Wastewater Infrastructure Needs (AWIN)** project to assist Nebraska communities with environmental compliance with existing or upcoming regulations. The project is based in NDEQ's Wastewater Division, but it can involve other NDEQ programs, as well as other state and local agencies.

Many communities in the Upper Great Plains States and other regions of the country have population declines, aging populations, declining median household income, and limited or no job availability, all of which lead to limited resources to operate their utilities. AWIN uses data from the latest census and other available data sources to generate a rating for communities using modeling tools. NDEQ uses this information, the communities' input, their consultants' input, and NDEQ observations to make adjustments in NDEQ's standard procedures and design conditions. A few examples of changes include better interest rates on loans, longer compliance schedules, and designs which take into account future declining population. A recent example of AWIN use is a village that will install a lagoon that is half the size of the normal design. The revised smaller design should better fit the community's predicted population 15 years from now. The facility will have a long-term compliance schedule and use temporary irrigation and limited discharges to

achieve compliance until the community achieves no discharge from the lagoon. This project is slated to save this community's 177 residents \$160,000 to \$200,000.

### **Onsite Wastewater Treatment Facilities**

The requirements administered by the Onsite Wastewater Program cover septic systems, wastewater holding tanks, individual household wastewater lagoons, and other decentralized wastewater treatment systems not connected to municipal wastewater treatment systems. The majority of onsite systems are for single households. However, there are onsite or decentralized systems that provide wastewater treatment for multiple houses (these systems are sometimes called cluster systems), mobile home parks, churches, recreational facilities, camper trailer parks, a variety of businesses with high strength wastes (such as restaurants, butcher shops, and wineries), equipment maintenance buildings, and other commercial or industrial facilities. The U.S. EPA estimates that nearly one in four households depend on onsite systems for wastewater treatment.

The *Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act* (Act) passed in 2003 required that anyone doing work associated with onsite wastewater systems be certified by the State of Nebraska. The Act provided for the registration of all onsite wastewater systems constructed, reconstructed, altered, or modified. The law also provided for certification and system registration fees to support the program.

Certification of onsite professionals covers design, installation, inspection, maintenance, and pumping of onsite systems. Subdivision review and approval requirements apply when onsite systems will be used on any proposed development lots that will have less than three acres suitable for building. Program staff work to make sure that the design, installation, modification, repair, and maintenance of onsite wastewater systems is performed by certified professionals who understand Title 124 and the proper practices of their trade.

The Act was amended in 2007 by LB333, which provided for application fees for permits and subdivision approvals and established a fee waiver provision for government inspectors. Nebraska Administrative Code *Title 124 – Rules and Regulations for the Design, Operation and Maintenance of Onsite Wastewater Treatment Systems* was last amended, effective August 11, 2012. Onsite or septic system regulations administered by the Department were first enacted in 1977.

The Onsite Program is focused on the protection of surface and groundwater in the area of proposed onsite systems through the use of standardized design requirements, the certification of onsite professionals, review and approval of plans for subdivision development, and review of plans and issuance of permits for large onsite systems, systems where other concerns have been identified (such as setback, soil limitations, shallow groundwater, design), or systems with non-domestic wastes (such as wineries, butchers shops, camping trailer parks, veterinarian clinics, equipment shops, hair salons, and drinking water treatment facilities).

A certification by examination is required for professionals to obtain initial certification. Currently, 525 people hold onsite certificates. Some professionals obtain certification in multiple categories. Current certificates expire December 31, 2015, unless renewed.

The registration requirement provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, nearly 17,800 systems have been registered, with 1,547 systems registered in FY14.

NDEQ has cooperative agreements with other governmental agencies (state and local) to help implement and coordinate the program. There are currently 16 certified Inspectors from local governments. NDEQ also works cooperatively with Nebraska Department of Health and Human Services personnel to resolve health-related onsite wastewater handling issues.

There were 280 new onsite-related complaints in FY14 and program staff resolved a total of 248 complaints, which includes both old and new complaints. Fifty-four Notices of Violation were issued and there were two enforcement resolutions in FY14.

The Private Onsite Wastewater Treatment System Advisory Committee advises the Department on administration of the Act and proposed rules and regulations.

The regulations set minimum design standards for all onsite wastewater treatment systems and include an "Authorization by Rule" provision which allows for the installation of typical onsite systems by a certified professional and subsequent operation by the owner without a site-specific construction or operating permit. These standard conforming systems constitute the vast majority of all new and replacement onsite systems.

Department engineers review construction/operating permit applications for systems that do not meet requirements for Authorization by Rule. Title 124 also provides for Department approval prior to construction of any subdivision with any lot less than three acres where onsite wastewater treatment is proposed. In the past year, the program received 46 applications for construction/operating permits and 10 applications (totaling 112 subject lots) for subdivision review and approval.

Program staff have worked and continue to work with many organizations, including local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association, the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, Nebraska Realtors, Nebraska Association of County Officials, and the Groundwater Foundation to educate the public about the importance of proper installation and maintenance of onsite wastewater treatment systems and to improve the knowledge and skills of the various practitioners who install and maintain onsite systems.

In FY14, Department staff continued the implementation of a new inspection program which began in FY13 and was encouraged by onsite professionals. The inspection program is focused on the evaluation of reporting and construction activities of certified installers to ensure that Title 124 requirements are met.

### **Wastewater Treatment Facility Operator Certification Program**

Competent and qualified operators are a critical component to ensure that wastewater treatment plants are well run and protect the environment. The life span of treatment facilities can be prolonged and proper operation and maintenance programs can protect the owner's substantial financial infrastructure investment. The Wastewater Treatment Facility Operator Certification Program was established to help accomplish this. The program administers the operator certification program, which includes administering certification exams, issuing certificates, evaluating continuing education programs, tracking certificate compliance, processing certificate renewals, and conducting facility ratings to determine operator needs, in addition to continuing to evaluate ways to help wastewater treatment facility operators obtain continuing education to maintain their certification and help them do their jobs.

This program administers nationally accredited certification exams to new wastewater operators, or to operators wishing to advance their credentials, and issues certification renewals for operators who have obtained the necessary Department-approved continuing education as provided for in *Title 197 – Rules and Regulations for the Certification of Wastewater Treatment Operators in Nebraska*. Staff will continue to monitor those facilities that are required to have certified operators and work with them to help them comply with the regulations. The wastewater operator certification program has 868 certified operators with municipal certificates and 74 operators with industrial certificates.

The Department also reviews applications and issues operator certification exemptions for towns and other entities that have full-retention non-discharging lagoon wastewater treatment facilities that may not require qualified operators due to very limited maintenance and operational needs. The exemption is for a fixed four-year period and the period under current review will end at the end of 2016. The Department contacted a total of 252 facilities potentially eligible for the exemption and, of these, issued four-year operator exemptions to 214 facilities.

In FY14, the Department provided 11 Discharge Monitoring Report training sessions, and seven operator certification examination sessions. Testing of municipal and industrial wastewater treatment facility operators will continue in FY15.

### **Wastewater Construction Permit Program**

The Technical Assistance Unit of the Wastewater Section administers Nebraska's construction permit program for wastewater works. Industries and municipalities are required to submit the engineering designs for their wastewater projects to the Department for review and approval. These plans are reviewed by the Section's engineering staff to assure that the designs meet the Department's standards for protecting the public health and the environment from the effects of improperly handled or treated wastewater.

Nebraska's design standards for wastewater facilities are found in NDEQ Title 123, *Rules and Regulations for the Design, Operation and Maintenance of Wastewater Works*. These standards are updated periodically to keep Nebraska consistent with national standards. The State's design standards are written to encourage the use of proven technologies, but have also allowed Nebraska communities to utilize innovative designs where they are appropriate.

Title 123 also contains basic rules for the operation and maintenance of collection systems and wastewater treatment facilities. It requires that Operation and Maintenance Manuals be prepared for pumping stations and wastewater treatment facilities. Title 123 also contains rules for the proper abandonment of wastewater facilities that have been removed from service. The abandonment rules protect the public from the threat of unsafe conditions or public health hazards.

For FY2014, a total of 200 wastewater projects were submitted to the Department for review and approval.

Considerable time was spent last year working with communities that need to upgrade their wastewater treatment facilities. Section engineers regularly met with municipal officials, funding agencies, and consulting engineers to develop affordable projects for Nebraska's communities. The section also met with food processing industries, power generating plants, ethanol plants, and other industries to assist them in planning their projects. Staff also worked with the owners of many privately owned wastewater facilities that were not properly built and do not function properly.

Engineers from the Section continued to meet with the City of Omaha to discuss their combined sewer separation project. These meetings have been valuable to both sides. Omaha's project is expected to have about 90 separate construction projects over an 18-year period. Each of these individual projects must be submitted to NDEQ for review and approval.

## National Pollution Elimination System (NPDES) and Related Programs

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

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

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

## NPDES Permits

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

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

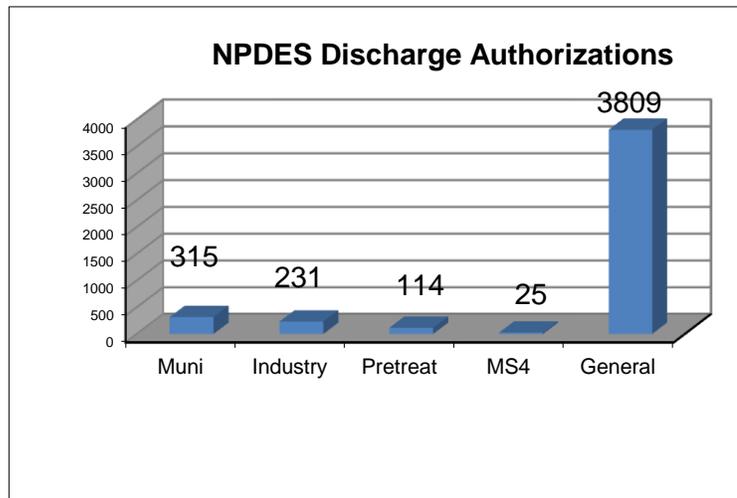
except Livestock. Information regarding Livestock NPDES permits is found on page 54 of this report.

Most NPDES permits limit the discharge of pollutants by establishing effluent limitations for specific pollutants such as carbonaceous biochemical oxygen demand, total suspended solids, and ammonia among others. The permittee is then responsible for testing their wastewater discharge to ensure that the limits are not exceeded. Permits may also limit toxicity in effluents and permittees may be required to demonstrate that their wastewater is not toxic to aquatic organisms (e.g., daphnia or fathead minnows). The permit may also require development of Best Management Practices Plans to reduce or control pollutant discharges.

The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology-based standards or water quality based standards. Technology-based standards reflect effluent quality that can be achieved using treatment technology that is available to the permittee. NDEQ Title 119 sets forth technology-based standards for municipal facilities and many types of industrial facilities. Technology-based standards can also be developed on a case-by-case basis when necessary.

Water quality based limits are the limits necessary to meet the in-stream water quality standards established in NDEQ *Title 117 - Nebraska Surface Water Quality Standards*. In some instances, where a surface water/groundwater interconnection may be of concern, NPDES permit limits may be based upon NDEQ *Title 118 - Groundwater Quality Standards and Use Classification*.

Permits may be developed and issued on an individual site-specific basis, or they may be developed and issued to apply to facilities with similar activities or effluent characteristics. These two types of permits are respectively referred to as individual permits and general permits. To date, the department has developed and issued general permits for the following activity categories: hydrostatic testing, dewatering, land application of concrete grooving/grinding slurry, pesticides applications to, over, and near Waters of the State, gasoline contaminated groundwater remediation projects, petroleum product contaminated groundwater remediation projects, construction site storm water, and industrial site storm water. Municipal Separate Storm Sewer System (MS4) permits have been issued to entities, including metropolitan areas and counties that meet the criteria of the NPDES Storm Water Program. There currently are 24 metropolitan areas and counties in Nebraska that have received MS4 permits, and one MS4 permit for the University of Nebraska-Lincoln. The Construction Storm Water General Permit was reissued January 1, 2008. It is currently under extension, and is expected to be reissued in Fiscal Year 2015. The Industrial Storm Water General Permit was issued on July 1, 2011.



There are 660 facilities with discharge authorizations under individual permits (municipal, industry and pretreatment), and 25 municipal storm water permits (MS4). There are 3809 active

facilities authorized to discharge under other general permits. The graph titled "NPDES Discharge Authorizations" provides a summary of this information. The general permits include 2831 active authorizations under the construction general storm water permit, 107 dewatering including Omaha, 30 hydrostatic testing, 772 industrial storm water, 39 pesticide, and 30 petroleum remediation sites.

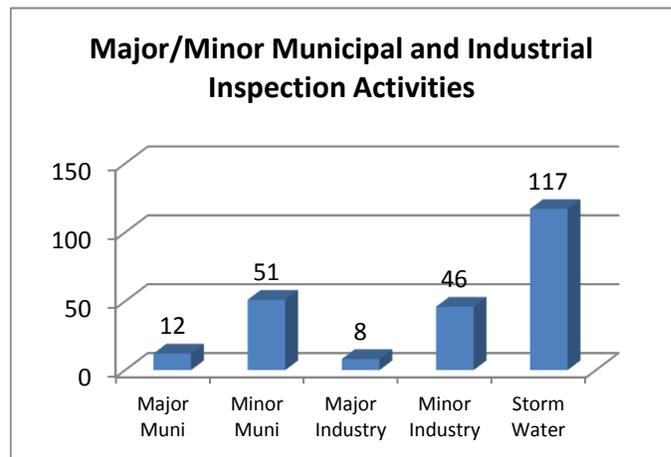
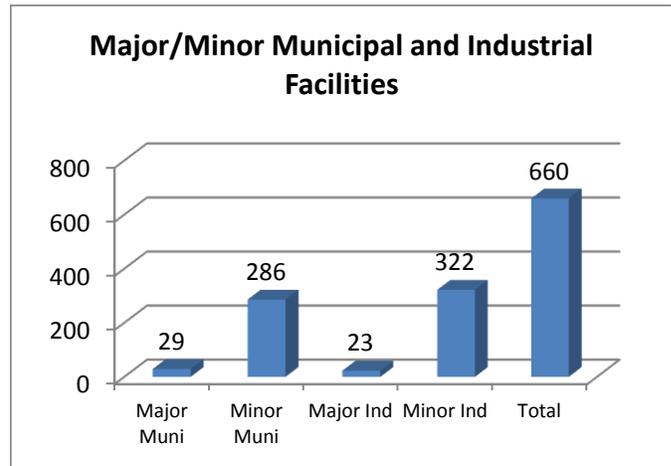
**Municipal and Industrial Facilities**

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

Municipal and industrial facilities are required to verify compliance with numeric permit limits by monitoring their effluents (i.e., self-monitoring). Monitoring frequency can vary from daily to annually depending upon the pollution and impact potential of the facility. The facility must report monitoring results to the Department; typically this is done on a quarterly basis. However, monitoring results that indicate non-compliance with permit requirements must be reported verbally within 24 hours. Records of all monitoring activities must be kept for a period of three years.

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

During on-site inspections, section personnel walk through the facility and review operational procedures and records. Major industrial and municipal facilities receive annual on-site inspections. The priority of minor facilities inspections is based on discharge compliance histories, incident reports and complaints. Inspectors performed 234 NPDES inspections in Fiscal Year 2014. A breakdown of those inspections is provided in the chart at right. In addition, the inspectors completed 102 pretreatment inspections and 41 inspections of non-discharging wastewater lagoons. During effluent monitoring inspections, effluent samples are collected and analyzed by the Department to compare with self-monitoring results. Facilities targeted for effluent monitoring inspections are chosen based upon pollution potential, past compliance or incident report histories, complaints, and/or Basin Management Approach priorities. One facility had an effluent monitoring inspection in FY14.



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

### **Combined Sewer Overflows**

The Combined Sewer Overflow (CSO) program addresses Omaha's combined storm water and wastewater sewer systems. Omaha's systems were built prior to the existence of secondary sanitary wastewater disposal standards. When storm or snow melt runoff is occurring, these systems may become hydraulically overloaded and excess water flows bypass the treatment system. When bypasses occur, untreated wastewater is discharged into the receiving stream.

The City of Omaha has combined sewers that are subject to storm-induced bypasses of untreated waste. The City submitted a substantively complete long-term control plan on October 1, 2007 in compliance with an Administrative Consent Order between the City and NDEQ. On September 25, 2009, the City submitted their Final Long Term Control Plan, also in compliance with the Administrative Consent Order. This order initially required Omaha to complete the long-term control plan projects by 2024. In 2012 the order was modified to add an additional three years due to the 2011 Missouri River flood. The projects included in the plan span 18 years and are estimated to cost \$1.5 billion. The goal of the projects is to reduce or eliminate combined sewer overflows and comply with State and Federal regulations.

The City of Omaha's CSO NPDES permit has been re-issued effective October 1, 2010 and includes a schedule for project implementation. This schedule utilizes the first five years of project implementation as defined by the Long Term Control Plan.

The City of Plattsmouth recently separated their storm and sanitary sewer lines. Separation projects began on July 1, 2010 and the City's re-issued permit, effective October 1, 2010, included a schedule for completion of this work in the next five years. As with Omaha, this schedule was modified due to the 2011 Missouri River flood. Separation work was completed on November 30, 2012. On or before September 1, 2016, the City of Plattsmouth is required to complete the Post Construction Compliance Monitoring Plan that will ascertain the effectiveness and completeness of the sewer separation project and send a final report to the NDEQ.

### **Wastewater Treatment Sludge and Biosolids Disposal**

Disposal requirements for municipal and industrial wastewater treatment sludges or biosolids can be incorporated into NPDES permits. These sludge disposal requirements assure that sludges or biosolids are treated and disposed in a manner that is environmentally sound and protective of human health. Beneficial use, such as land application of biosolids, is strongly encouraged.

On Feb. 19, 1993, the EPA published the federal sludge regulations. Under these regulations, an estimated 330 municipal facilities in the state have additional sludge monitoring requirements. These additional requirements include increased metal and nutrient content analyses; improved records for tracking the amount of sludge and metals applied to each disposal site, and cumulative disposal limits. The Department has not sought delegation of this program from the EPA. The program is managed out of the EPA Region 7 office in Lenexa, KS.

## Storm Water Program

In compliance with federal regulations, the NPDES Storm Water Phase I and Phase II Programs regulate the discharge of pollutants in storm water from certain construction sites, industrial facilities and municipal storm sewer outfalls. Phase II was promulgated by EPA in March of 2003. Storm Water Phase II federal regulations lowered the threshold for coverage of construction sites from five acres or more to one acre or more. And, sites that are less than one acre can also be regulated in Phase II, if they are part of a common plan of development or sale. The industrial facilities are defined to include a number of different types of facilities in addition to typical process industries (e.g., landfills, wastewater treatment sites, recycling centers, scrap yards, mining operations, transportation facilities, and hazardous waste facilities). These regulations also increase the number of municipalities and urban areas that are subject to the NPDES program for storm water discharges.

The cities of Omaha and Lincoln were subject to the Municipal Separate Storm Sewer System (also known as the MS4) Program with the implementation of Phase I. Lincoln was issued an MS4 Permit on September 1, 2002. This permit was reissued on July 1, 2008 and January 1, 2013. The Omaha MS4 Permit was issued on October 1, 2003 and was reissued in October 1, 2008. Phase II has expanded the areas requiring coverage under an NPDES MS4 Permit to include the urbanized areas in Douglas, Sarpy, Lancaster, Washington and Dakota Counties. An NPDES permit for Douglas, Sarpy and Washington Counties was issued effective August 1, 2004 and reissued October 1, 2009. The Dakota County MS4 permit was issued effective December 1, 2004.

The Department determined that the communities of Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Lexington, Norfolk, North Platte and Scottsbluff were exempt as of December 20, 2002. However, new approved Total Maximum Daily Loads and a review of the criteria for each municipality, made all subject to Phase II regulations for MS4s. A statewide general permit was issued January 1, 2006. The Storm Water Management Plans for all of these cities have been received, public noticed and each of these communities was authorized under this general permit. These permittees have entered into a cooperative agreement to form the Phase II Storm Water Cooperative. Their Storm Water Management Plans are being coordinated so that development work and implementation plans can be shared between them. The NDEQ is working closely with this group. The re-issuance of the statewide general permit for small MS4s is scheduled in Fiscal Year 2015. Dakota County, South Sioux City, and Dakota City will also be covered under this state-wide permit when it becomes effective.

Nearly \$1.825 million in grant funds was awarded in FY2014 to MS4 permittees. This program, established by Legislative Bill 1226 in 2006, is awarded annually for implementation of the MS4 communities' Storm Water Management Plans. The grant is distributed by population and requires a matching 20% from each of the grantees. Funds are distributed near the end of each calendar year.

Two general permits have been issued to provide coverage for industrial facilities and construction sites. Both of these general permits require the permittee to develop Storm Water Pollution Prevention Plans to control and reduce the discharge of pollutants. The NPDES General Permit for Storm Water Discharges from Construction Sites, NER110000 was issued with change on January 1, 2008. The NPDES General Permit for Storm Water Discharges from Industrial Activity, NER900000, was issued July 1, 2011. The new permit requires benchmark monitoring for certain industrial activities. This monitoring was to be in place by July 1, 2012.

### **Nebraska Pretreatment Program Permits**

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

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

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

## State Revolving Loan Fund Programs

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

### Clean Water State Revolving Loan Fund

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

The CWSRF program receives an annual federal EPA capitalization grant. A 20% state match, required to obtain the federal grant, is provided through Nebraska Investment Finance Authority (NIFA) bond issues. After 26 years of activity, the Fund's Net Assets have reached \$251 million. Since its inception, the program has made loans totaling \$432 million to 176 municipalities for 253 projects.

In SFY2014, the CWSRF funded projects totaling \$45,512,151 in loans and \$898,000 in principal forgiveness and grant funds.

The EPA awarded the 2013 capitalization grant, in the amount of \$6,798,000, in August of 2013. A \$1,360,000 bond was used to match this federal grant.

Initiatives in 2014 for the State Revolving Fund Program include:

- The Program is implementing Northbridge loan and grant tracking software purchased with the 4% set-aside funds from both CWSRF and DWSRF. Installation is being completed in phases. In July 2014 the first phase was completed and we started utilizing the financial tracking part of the software. It may take until the end of SFY15 to complete all the phases.
- In 2014, the Legislature passed LB514, which authorizes the creation of a Clean Water Linked Deposit Program. The bill authorizes a process of working with private lending institutions to provide low-interest loans for private uses associated with nonpoint source pollution control, such as: septic tank repair and replacement; certain livestock waste control facilities; and agricultural best management practices, among others.
- Also included in LB 514 is a provision for refinancing previous debt used for the construction of wastewater treatment facilities.
- NDEQ is currently revising Title 131 to include the LB 514 changes and plans on presenting these to the EQC in SFY15.
- The Preliminary Engineering Report Guide in the Intended Use Plan was updated with recommendations from USDA and EPA. It also includes steps to help communities assess options for sustainability, especially with those communities experiencing population decline.

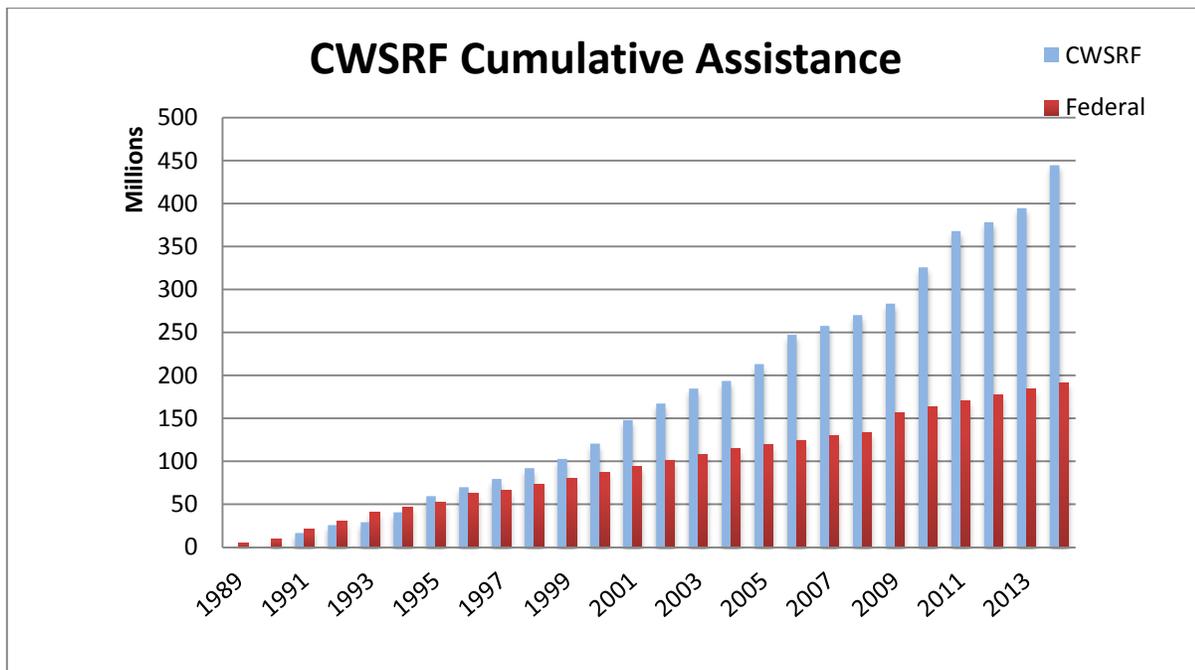
**Municipalities Receiving CWSRF Loans in SFY2014**

Municipality	Loan Date	Loan Amount	Principal Forgiveness Amount	Small Town Grant Amount	Total
Sprague (small town grant & principal forgiveness only)	6/26/2014		100,000	30,000	130,000
Winside (small town grant only)	6/20/2014			240,000	240,000
Bassett Amd #1	4/29/2014	135,000			135,000
Spencer	4/11/2014	78,000	78,000		156,000
Kearney	3/25/2014	1,200,000			1,200,000
Gothenburg	12/16/2013	2,133,400	100,000		2,233,400
Bruning Amd #1	12/11/2013	90,915			90,915
Mead	11/22/2013	976,836	100,000	250,000	1,326,836
Omaha Mo River Sch B	11/18/2013	40,000,000			40,000,000
<b>TOTAL</b>		<b>\$44,614,151</b>	<b>\$378,000</b>	<b>\$520,000</b>	<b>\$45,512,151</b>

Thirty-three projects were under construction during SFY 2014: Albion, Amherst, Ansley, Aurora, Bassett, Bertrand, Blair, Brainard, Bruning, Clarkson, Crawford, Denton, Dodge, Gothenburg, Gresham, Hickman, Jansen, Kearney, Lancaster County SID #5, Lexington, Lincoln, Maxwell, Mead, Nebraska City, Omaha, Osmond, Oxford, Plattsmouth, Polk County SID #1, South Sioux City, Spencer, Wakefield, and Wisner.

Ten SRF wastewater projects initiated operation in SFY 2014: Amherst, Oxford, Bruning, Crawford, Gresham, Clarkson, Dodge, Bertrand, Lexington, and Nebraska City.

The graph reflects the cumulative loan assistance of CWSRF.



### **Construction Administration Fund Small Community Matching Grants**

In addition to and concurrent with loans, the CWSRF provides small community matching grants to financially distressed municipalities with population of 10,000 or less. This program has provided \$7.9 million in grant funding for 70 projects concurrent with a CWSRF loan during the 26 years of the program. Many small municipalities find that needed projects are too costly without the additional grant subsidy provided concurrent with the CWSRF loan. During FY2008, legislation was passed providing the department with authority to allocate up to 65% of prior-year revenue from fees collected on CWSRF loans to the various grants. This legislation also increased the population level for eligible communities to 10,000 or less. The department intends to provide increased funding to as many qualifying projects as possible; therefore, for FY2014, up to \$593,167 was available for small community grants, and any one community could receive a maximum of \$250,000. The program provided a total of \$520,000 in small community grants to the communities of Mead, Winside, and Sprague.

In FY 2014, five planning grants for a total of \$100,000 from the Administrative Cash Fund were awarded to small communities. These communities identified wastewater treatment facility project needs. They were listed on the Project Priority List, have not received a planning grant in the previous five years and have 10,000 or fewer inhabitants.

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

The Nebraska Drinking Water State Revolving Loan Fund (DWSRF) program provides low-interest loans and loan forgiveness to owners of public water systems. The loan principal repayments go into new loans, and interest earnings on the Fund are used to pay off the state match bond issues and to make new loans. An agreement between the NDEQ and the Nebraska Department of Health and Human Services, Division of Public Health (NDHHS-DPH), effective on October 30, 1997, defined the authority of the two agencies in administering the DWSRF program.

The DWSRF is similar to the Clean Water State Revolving Fund in that both obtain the required 20% state match through Cash Funds or revenue bonds, give low interest loans, and will be self-sustaining. The DWSRF is unique in that loans may be awarded to privately owned public water supplies. Other program differences include set-asides for program administration, technical assistance, wellhead protection, capacity development and operator certification. After 17 years of activity, the Fund's Net Assets have reached \$153 million.

### **DWSRF Set Aside Funds and Administration Cash Fund**

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

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

In FY2014, under the Source Water Protection Implementation set-aside (15%), ten agreements for preliminary engineering reports totaling \$160,000 were awarded to high priority

ranked communities to address public health issues associated with public water supplies, and \$100,000 for source water protection project agreements. The NDEQ administers these programs.

The DHHS-DPH has determined eligibility for Public Water Supply program management, development and implementation of a capacity development strategy, and a water operator certification program set-aside of \$750,000. The state may use up to a total of 10 percent for this set-aside but must provide a one-to-one state match. DHHS-DPH has determined the set-aside eligibility by using program overmatch dollars for federal fiscal years 1993 to 1997. No additional state dollars are required for the set-aside.

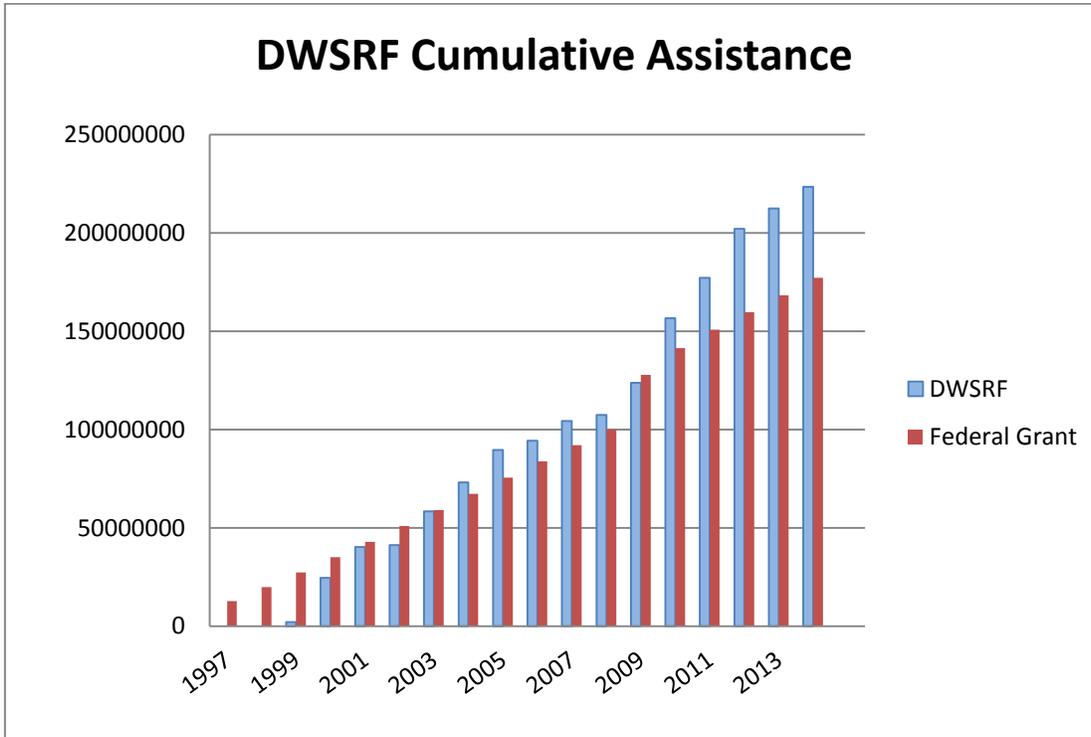
#### Municipalities Receiving DWSRF Loans in SFY2014

Municipality	Loan Date	Loan Amount	Principal Forgiveness
Ogallala	4/30/2014	2,719,119.00	543,824.00
Waverly	4/23/2014	4,610,000.00	-
McCook	4/9/2014	2,086,810.00	417,362.00
Kearney	4/1/2014	2,000,000.00	-
Wakefield (30 year loan)	12/23/2013	1,200,000.00	240,000.00
Utica	10/24/2013	1,370,000.00	274,000.00
Scribner (30 year loan)	9/30/2013	3,500,000.00	700,000.00
Haigler	9/23/2013	210,000.00	42,000.00
Lindsay	8/1/2013	618,850.00	188,502.00
<b>TOTAL</b>		<b>\$18,314,779.00</b>	<b>\$2,405,688.00</b>

The FY2013 DWSRF capitalization grant allocation totaled \$8,421,000 million. In FY2014, the DWSRF entered into nine binding commitments to communities in order to provide financial assistance to PWS projects totaling \$18,314,779, of which disadvantaged communities received \$2,405,688 in forgiveness funding. Further, the Federal Fiscal Year (FFY) 2013 capitalization grant required that a minimum of 20% of the grant be reserved for additional subsidization (e.g., principal forgiveness).

In addition, from the FFY 2013 capitalization grant \$2,385,520 was allocated to the 2% (\$168,420), 10% (\$1,492,100) and 15% (\$725,000) Set-Asides. More details on the programs associated with these Set-Asides can be found in the Drinking Water State Revolving Fund Annual Report for SFY 2014 on our website at <http://deq.ne.gov/>.

The graph reflects the cumulative loan assistance of DWSRF.



# CHAPTER 7:

## Field Services and Assistance Division

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The purpose of the Field Services and Assistance Division is to provide information and assistance to the public and the regulated community, as well as to conduct inspections, maintain monitoring programs, and manage specific projects. With regard to performing inspections, operating monitoring programs, and managing projects, Field Services staff coordinates all activities with the Agency's Air Quality, Waste Management, and Water Quality Divisions. Many of the agency's field activities occur out of the department offices located in Omaha, Norfolk, Chadron, Scottsbluff, North Platte, and Holdrege.

In addition to Field Services, the Division consists of the following programs: Small Business and Public Assistance, Community Right-To-Know, Emergency Response, Homeland Security, and Quality Assurance.

Over the last year, the programs within the Field Services and Assistance Division have devoted efforts to a number of significant projects. A short summary of some of those efforts follow.

- The Department played an active role in the response to the devastating tornadoes that hit Pilger and Beaver Crossing. The tornadoes also impacted large rural areas around the towns. The Norfolk Field Office responded and under the direction of the Nebraska Emergency Management Agency assisted in debris management and the identification of hazardous materials.
- The Field Services and Assistance Division devotes significant resources to the coordination of the review and response to submissions pursuant to the National Environmental Protection Act (NEPA). The environmental assessments are conducted by five NDEQ programs: Air Quality, Waste Compliance, Storm Water, Wastewater, and Water Quality. The purpose of the assessments is to ensure related projects are conducted in an environmentally responsible manner and to give the project sponsors an early awareness of any potential permits that will be needed for a successful project. During FY2014, NDEQ received 57 new project notifications for NEPA review.
- The Community Right-to-Know Program continues to work with Local Emergency Planning Committees in planning efforts, such as planning and participating in emergency response exercises. The program also participates in educational activities. The Program participated in 15 local emergency management agency meetings over the last year and participated on the State Emergency Response Commission Education/Outreach Committee.
- The Division continues to coordinate environmental partnership efforts with different organizations. With regard to one such organization, the Nebraska Public Power District (NPPD), both NDEQ and NPPD have been able to utilize the strengths of the other organization to better the understanding of power generation in Nebraska and its interaction with the local and regional environment. One of the principal efforts of the Partnership has been to organize an annual workshop, the "Power Summit," which brings those responsible for generating electricity together with environmental regulators for the purposes of examining topics of mutual interest. The Partnership also coordinated a meeting of the Nebraska Methane Workgroup. This meeting was held to learn of advancements made in technologies

associated with the capture and use of methane from livestock operations.

- The Emergency Response Program continues to enhance the Department's ability to respond to releases into the environment by securing equipment and coordinating and providing additional training for the Department's Emergency Response Team. Additionally, the Emergency Response Coordinator serves as the Department's Complaint Coordinator. The Complaint Coordinator implements the Department-wide notification system. The system is designed to increase the effectiveness and bring consistency to the Department's response to notifications and complaints.
- The Division, primarily through the efforts of the Small Business and Public Assistance Coordinator, is responsible for the planning of the Department's annual Environmental Update – a one-day conference held for the regulated community and environmental consultants to provide an opportunity for NDEQ programs to present updates and explain new developments.
- The Division, through the Small Business and Public Assistance Coordinator, arranges "One Stop Permit Meetings" with businesses, city representatives, or the Nebraska Department of Economic Development, to help facilitate any environmental regulatory permitting requirements an incoming business may have.
- The Environmental Assistance Division provides assistance to the Waste Management Division in the conduct of the federal Brownfields program. The Brownfields program's purpose is to restore blighted and contaminated areas of the country to productive use. The Field Service and Assistance Division has been reviewing and providing comments on grant applications to those organizations applying for federal Brownfields grants. In 2014, EPA selected the City of Gering to receive a \$200,000 grant to conduct 14 Phase I and six Phase II environmental site assessments. Grant funds also will be used for cleanup planning at four sites and community outreach activities.
- The Field Office Section Supervisor has continued one-on-one informal visits with small community Municipal Clerks. Clerks often receive requests for information associated with the Department's various programs and providing them with knowledge of the Department's programs, and letting the Clerks know who to contact in given situations, benefits the citizens of the state.

## Field Offices

The NDEQ Field Office Section is responsible for conducting compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency's Air Quality, Waste Management and Water Quality Divisions. The number of inspections and other duties performed by field office staff is incorporated in the charts and graphs provided by other divisions in the previous chapters. There are 15 employees in six field offices around the state. The field offices enable the agency to provide the public with greater access to NDEQ staff, to provide more timely responses to citizens. Additionally, field offices help the entire Department develop a better understanding of local issues because NDEQ staff live and work in the local community.

One of NDEQ's goals is to have a strong community presence and build relationships with the public and with local entities. This is accomplished in a number of different ways in the field offices. One way is by making personal one-on-one contacts with local governmental agencies that have

mutual needs or responsibilities. Another way to establish a local presence is to participate on local task forces, boards of directors and emergency planning organizations. The feedback that the agency receives is that the NDEQ representatives who participate in these local organizations add depth and insight which is highly valued. Another way a local presence is established is by participating in environmental education events in their regions. Building a strong community presence helps NDEQ carry out the work of preserving the state's natural resources and serving the citizens of Nebraska.

### **Small Business and Public Assistance Program**

The Small Business and Public Assistance program was created as a result of the Clean Air Act Amendments of 1990. Congress saw the need to create programs to assist small businesses comply with ever more complex air quality regulations. Similar to many state's environmental agencies, NDEQ expanded its scope to encompass all environmental media: air, waste management, and water.

Nebraska's Program is divided into four major components: the Small Business and Public Assistance (SBPA) program, the One-Stop Permit Assistance program, the Public Advocate, and the Small Business Compliance Advisory Panel. The Program Coordinator is involved with all four functions, as well as coordinating with other NDEQ personnel within the Department's Air Quality, Water Quality and Waste Management Divisions involved in compliance assistance activities on the NDEQ Compliance Assistance Team.

The Program includes site visits, development of outreach materials, workshops, and helping the regulated community to understand their obligations under state and federal law. The Program Coordinator answered questions from over 50 individuals regarding air, waste water, or solid and hazardous waste issues. The Program Coordinator is also responsible for the Department's annual Environmental Update held in Lincoln on May 15, 2014, with 150 individuals attending the workshop.

The One-Stop Permit Assistance Program was established to offer information and permit assistance related to the Department's various divisions, providing the customer with one initial point of contact in the environmental permitting process. This program's objectives are to ensure businesses are aware of the permits they are required to apply for, know information they will need to provide in the application process, and ensure that inquiries receive a timely response. The Program Coordinator conducted meetings with eight potential facilities between July 1, 2013 and June 30, 2014.

The Public Advocate serves as the ombudsman for purposes of the Clean Air Act requirements, receiving requests for regulatory information or environmental complaints from the public and ensuring the Department is accessible and responsive to public concerns. In this role, the Program Coordinator provided outreach to individuals to address specific questions or concerns they had.

The Small Business Compliance Advisory Panel resulted from the Clean Air Act Amendments of 1990 and amendments to the Nebraska Environmental Protection Act of 1992. The Panel is composed of seven members: two representatives from the general public selected by the Governor, four representatives from small businesses selected by the Legislature, and one representative selected by the Director. The panel evaluates the effectiveness of the Program, providing feedback on outreach and education methods and identifying program obstacles. The Panel members met with NDEQ staff to discuss several issues during a meeting in October 2013, and provided their annual report to the Governor regarding the SBPA Program.

### **Community Right-To-Know Program**

The Community Right-to-Know Program provides assistance to those subject to the Nebraska Emergency Planning and Community Right-To-Know Act and the related federal Emergency Planning and Community Right-To-Know Act. These acts are designed to: 1) increase the public's access to information concerning the presence and release of hazardous chemicals in their communities; 2) provide emergency planning and response information; and 3) provide information on toxic chemical releases to the environment. Compliance assistance is available to any persons or facilities requesting it through the division. The EPA enforces this program.

The Community Right-To-Know Program distributes outreach materials, responds to public requests for information, and receives and stores information required under this act. The information that facilities are required to provide the department includes: 1) a one-time report of an extremely hazardous substance at a facility that triggers the emergency planning process; 2) notification of any significant changes to a facility's emergency plans; 3) notification of the sudden release of a hazardous substance; 4) an annual report listing the hazardous chemicals present at 10,000 pounds or above the threshold planning quantity at the facility; 5) an annual quantitative report of the listed chemicals; and 6) an annual facility inventory report of toxic chemicals manufactured, stored or used, and the amounts released to the environment by the specific media.

A facility in Nebraska is required to submit a Tier II report if listed hazardous substances are present at any one time during the preceding calendar year at the facility in amounts either equal to or greater than amounts established by the EPA. In 2014, 2,780 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This was slightly down from the previous year. This information has been used to assist the Nebraska Hazardous Incident Team (NHIT) in responding to the aftermath of the Pilger, Nebraska tornado.

Facilities required to report information pursuant to the Community Right-to-Know Program are able to access, view, change and report their chemical information online. Approximately 96% of the facilities reported online in Nebraska in 2014. The information stored electronically is much more usable and enhances the ability of Local Emergency Planning Committees to access the data for use in their local emergency plans.

Additionally, the Community Right-To-Know Coordinator has been active in establishing relationships with the Local Emergency Planning Committees by attending their local meetings and making presentations at related conferences. In 2014, the Community Right-to-Know Coordinator attended 15 local meetings, assisted with local emergency exercises, and provided information regarding chemicals at facilities in their communities. In 2014 the Community Right-to-Know Coordinator assisted with the planning of the 2015 Regional LEPC Conference in Nebraska City, NE. These events provided information and training to over 200 First Responders and Local Emergency Planning Committee members.

### **Emergency Response Program**

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

The Emergency Response Program Coordinator is responsible for training, equipping and coordinating a group of personnel who, in addition to their responsibilities to other departmental programs, provide initial documentation, assistance and response to spills. These individuals have the responsibility of maintaining an emergency response system, which is on call 24 hours a day. The Emergency Response Program assists in arranging for the disposal of harmful and potentially hazardous materials. The Program represents the environmental interests of the state at the scene of a petroleum/chemical spill or other environmental emergency. All personnel are members of the Nebraska Hazardous Incident Team (NHIT) and coordinate closely with the local, state and federal agencies involved in emergency response situations. Over the past year the Emergency Response Program responded to 4 incidents and conducted 6 on-site visits to these incidents.

### **Homeland Security**

The Department has been actively involved in the state's Homeland Security efforts, which are directed by the Lieutenant Governor. The Department's Deputy Director of Programs represents the Department on the Lieutenant Governor's Homeland Security Leadership Group. The Field Services and Assistance Division has been active in planning for the annual Nebraska Infrastructure Protection Council Conference sponsored by the Lieutenant Governor. As has been the case in the past, Department staff, specifically the Community Right to Know Coordinator, have participated in a number of Local Emergency Response Committee exercises. Most significantly those exercises included incidents related to releases of anhydrous ammonia, pipeline releases, and responding to and mitigating spills of materials into the surface waters of our state.

### **Quality Assurance Program**

The function of the Quality Assurance Program is to ensure that environmental data used by the Department in regulatory and decision-making activities is properly documented and sufficiently reliable to meet Department needs. NDEQ is committed to ensuring that environmental data used by the Department are sufficiently precise, accurate, and complete to carry out NDEQ's responsibilities. In the last year, the Department's Quality Assurance Manager and Quality Assurance team members have reviewed 22 project plans to ensure adequate planning for environmental data collection. Additionally, the Quality Assurance Manager was successful in coordinating Department-wide Quality Assurance training, provided locally, for all DEQ staff. This training had not been available locally since 2009, and was attended by almost one-quarter of DEQ's staff. The cost savings for the Department for providing training locally, rather than at EPA's Region 7's offices in Kansas City, was over \$15,000.

# CHAPTER 8:

## Expenditure and Budget Summary

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The following information summarizes department expenditures for fiscal year 2014 and outlines budget projections for fiscal year 2015. The figures in the expenditure summaries were derived from the state accounting system. The budget projections were prepared by the Department. Some limited flexibility exists to adjust these numbers to meet unforeseen needs.

**Chart A** shows actual FY14 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY14 expenditures of programs funded by state general funds and/or cash funds. This chart lists expenditures by activity. Activity in this case is not considered a program activity, but is a category of expenditure. Activities listed in this chart are personal services, operating expenses, travel, capital outlay, contracting and distribution of aid.

**Chart C** outlines the proposed FY15 budget for each federal grant. Chart C also lists proposed match for each program for which a non-federal match is required. Additionally, match for the 319H grant is provided by in-kind services in the Groundwater Management Area program.

**Chart D** outlines proposed FY15 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. As in Chart B, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, contracting and distribution of aid.

Agency program activities are described in Chapter 2 and Chapters 4 through 7 of this report.

**Chart A -- Actual Expenditure for Each Federal Grant for State Fiscal Year 2014**

<b>Grant Program / Title</b>	<b>Assistance ID #</b>	<b>Grant</b>	<b>Match</b>	<b>Total</b>
Performance Partnership	BG997325-07	1,808,545	306,318	2,114,863
Performance Partnership	BG997325-08	3,211,567	826,461	4,038,028
604 B Water Quality Management	C6007328-22	57,944		57,944
604 B Water Quality Management	C6007328-23	72,286		72,286
319 H Non-Point Source	C9007403-XX	2,301,273		2,301,273
Clean Water State Revolving Fund	CS310001-XX	5,279,644	2,205,346	7,484,990
Clean Diesel	DS977423-01	24,630		24,630
Drinking Water State Revolving Fund	FS997805-XX	9,952,786	1,707,581	11,660,367
Section 106 Monitoring	I987678-XX	118,251		118,251
Leaking Underground Storage Tanks	LS987161-08	393,654	18,938	412,592
Leaking Underground Storage Tanks	LS987161-09	341,196	49,024	390,220
Exchange Network 07	OS833475-01	17,870		17,870
Department of Defense	NE-12	144,018		144,018
Section 128 (a) State Response	RP987322-04	479,591		479,591
Superfund UNL Mead	V977350-01	4,073		4,073
Superfund Management Assistance	V997531-08	157,823		157,823
Superfund Site Assessment	V997532-06	349,915		349,915
Superfund Core	VC987267-06	427,165		427,165
PM 2.5 Ambient Air Monitoring	XA977347-01	261,882		261,882
<b>Totals</b>		<b>\$ 25,404,113</b>	<b>\$ 5,113,668</b>	<b>\$ 30,517,781</b>

Administrative costs are negotiated with the EPA as a combined, per hour rate, and then charged back against each grant based on direct service hours worked

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

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

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses

**Chart B - Actual Expenditure of State Funds for State Programs for Fiscal Year 2014 Including Aid**

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,100,540	442,199	39,449		12,420	1,594,608		1,594,608
CLEAR / Environmental Trust	011	C						-		-
Ag - Livestock	016	G/C	1,393,963	97,570	55,399		4,134	1,551,065		1,551,065
Air Construction Permits	020	C	18,499	19,087	477			38,063		38,063
Superfund State Cost Share	023	G/C	3,426	1,367				4,793	269,272	274,065
Litter Reduction	024	C	102,347	38,983	979		117,968	260,277	1,898,228	2,158,505
Mineral Exploration	029	C	87,593	57,661	14,900		607	160,761		160,761
Private Onsite Wastewater Cert & Registration	030	C	246,773	120,373	8,013		1,894	377,053		377,053
Environmental Official Training	031	C		1,410	2,468			3,878		3,878
Emission Inventory - Title V	033	C	1,876,394	764,853	31,836	4,824	22,593	2,700,500		2,700,500
Chemigation	034	C	3,947	3,125	326		14,481	21,879		21,879
Groundwater Management Areas	035	G	30,110	364	491		1,694	32,659		32,659
Remedial Action Plan Monitoring Act	036	C	92,688	36,209	465			129,363		129,363
Private Onsite Wastewater Permit & Approval	037	C	33,643	11,870				45,513		45,513
Operator Certification	040	C	50,587	23,838	1,075		9,629	85,129		85,129
Community Right to Know	041	G	93,574	1,512	4,558			99,644		99,644
Petroleum Release Remedial Action Act	051	C	902,707	455,356	12,872	130,301	3,829,678	5,330,915	5,436,218	10,767,133
Emergency Response	057	G/C	76,548	34,015	1,258			111,821		111,821
Engineering Reviews	061	G	221,988	1,988	206		129	224,311		224,311
Stormwater Grants	067	G	6,734					6,734	1,824,996	1,831,730
Waste Reduction & Recycling	091	C	199,120	88,092	5,832		56,021	349,065	2,859,583	3,208,648
Superfund Special Projects	095	G	7,887	2,833	132		76,089	86,941		86,941
Agency Organizational Dues	099	G		15,162	683			15,845		15,845
<b>Totals</b>			<b>\$ 6,549,068</b>	<b>\$ 2,217,866</b>	<b>\$ 181,421</b>	<b>\$ 135,125</b>	<b>\$ 4,147,338</b>	<b>\$ 13,230,817</b>	<b>\$ 12,288,296</b>	<b>\$ 25,519,113</b>

FUND TYPE LEGEND

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses.

### Chart C - Proposed Budget for Each Federal Grant Program for State Fiscal Year 2015

Grant / Program Title	Grant	Match	Total
Performance Partnership	4,517,024	1,393,286	5,910,310
Clean Water State Revolving Fund	5,312,458	2,275,046	7,587,504
604 B Water Quality Management	100,000		100,000
319 H Non-Point Source	2,584,681		2,584,681
Drinking Water State Revolving Fund	11,182,882	1,752,227	12,935,109
Leaking Underground Storage Tanks	777,051	86,339	863,390
Clean Diesel	79,000		79,000
Section 106 Monitoring	209,500		209,500
Department of Defense	168,095		168,095
PM 2.5 Ambient Air Monitoring	230,359		230,359
Superfund UNL Mead	5,235		5,235
Superfund Core	126,531	14,059	140,590
Superfund Management Assistance	217,522		217,522
Superfund Site Assessment	231,699		231,699
Section 128 (a) State Response	564,176		564,176
<b>Totals</b>	<b>\$ 26,306,213</b>	<b>\$ 5,520,957</b>	<b>\$ 31,827,170</b>

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

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

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses.

**Chart D - Proposed Budget of State Funds for State Programs for Fiscal Year 2015 Including Aid**

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,304,168	507,937	39,000		14,997	1,866,102		1,866,102
Ag - Livestock	016	G/C	1,543,845	35,200	55,700		8,000	1,642,745		1,642,745
Air Construction Permits	020	C	61,146	34,431	350			95,927		95,927
Superfund State Cost Share	023	G/C	14,244				170,245	184,489	316,200	500,689
Litter Reduction	024	C	107,502	41,370	1,500		121,000	271,372	1,600,000	1,871,372
Mineral Exploration	029	C	144,717	83,581	16,785		1,500	246,583		246,583
Private Onsite Wastewater Cert & Registration	030	C	257,152	109,186	6,900		400	373,638		373,638
Emission Inventory - Title V	033	C	2,117,341	836,269	31,000		25,000	3,009,610		3,009,610
Chemigation	034	C	7,640	4,747	200		27,000	39,587		39,587
Groundwater Management Areas	035	G	31,203	1,650	300			33,153		33,153
Remedial Action Plan Monitoring Act	036	C	107,155	41,533	500			149,188		149,188
Private Onsite Wastewater Permit & Approval	037	C	26,457	9,341				35,798		35,798
Operator Certification	040	C	58,946	25,485	1,150		7,500	93,081		93,081
Community Right to Know	041	G	99,129	1,250	4,950		1,000	106,329		106,329
Petroleum Release Remedial Action Act	051	C	941,766	483,061	12,100	250,000	5,636,502	7,323,429	8,775,000	16,098,429
Emergency Response	057	C	126,602	52,063	2,716		560	181,941		181,941
Engineering Reviews	061	G	203,538	2,200	750		300	206,788		206,788
Stormwater Grants	067	G	17,243	400	800			18,443	1,824,996	1,843,439
Waste Reduction & Recycling	091	C	223,207	97,618	4,975		2,000	327,800	3,000,000	3,327,800
Agency Organizational Dues	099	G		11,000				11,000		11,000
<b>Totals</b>			<b>\$ 7,393,001</b>	<b>\$ 2,378,322</b>	<b>\$ 179,676</b>	<b>\$ 250,000</b>	<b>\$ 6,016,004</b>	<b>\$ 16,217,003</b>	<b>\$ 15,516,196</b>	<b>\$ 31,733,199</b>

FUND TYPE LEGEND

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

An indirect rate of 57.34% is negotiated with EPA and charged to programs against its direct payroll cost to cover agency administrative expenses.

# CHAPTER 9:

## Distribution of Aid

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

### **WASTE MANAGEMENT AID PROGRAMS**

Following is a summary of funds provided in FY 2014 through the Waste Grants programs managed in the Waste Planning and Aid Unit.

#### **A. Litter Reduction and Recycling**

The Litter Reduction and Recycling Grant Program provides funds to reduce litter, provide education and promote recycling in Nebraska. Funding for the program is an annual fee on manufacturers, wholesalers and retailers who have significant sales in categories of products that would generally be considered to produce litter. Approximately \$2.06 million was received in FY2014.

In FY 2014, 51 Litter Reduction and Recycling grants were awarded, totaling \$2,006,707. The grants were awarded in three categories: Public Education, \$887,141; Cleanup, \$67,164; and Recycling, \$1,052,402. These grants were awarded to both public and private entities.

#### **B. Waste Reduction and Recycling**

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

In FY2014, 161 projects totaling \$4,296,581 were funded from the Waste Reduction and Recycling Incentive Grants Program.

#### **C. Illegal Dumpsite Cleanup Program**

The Illegal Dumpsite Cleanup Program, established in 1997, provides funding for political subdivisions to clean up solid waste disposed of along public roadways or ditches. Potential funding is limited to five percent of the total revenue from the disposal fee collected in the preceding fiscal year. In FY2014, the program provided \$49,792 to eight recipients.

#### **D. Landfill Disposal Fee Rebate Program**

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund. In FY2014, the program provided \$94,878 to 11 recipients.

Any municipality or county may apply for a rebate if they have a written purchasing policy in effect requiring a preference for purchasing products, materials or supplies which are

manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a ten cent rebate from the \$1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

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

## **WATER QUALITY AID PROGRAMS**

### **A. Petroleum Remediation**

The Petroleum Remediation program provides aid through the Petroleum Release Remedial Action Fund to assist in paying the cost of cleanup of sites where petroleum has leaked from tanks, generally service stations. Funding to this program is primarily provided by a fee on petroleum sold in Nebraska. Over \$191 million has been disbursed since the program began. The program provided \$5,176,395 to 233 sites for investigation and cleanup in FY2014.

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

### **B. State Revolving Loan Fund Program**

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

- The **Clean Water State Revolving Loan Fund** provides low interest loans and loan forgiveness to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems. The sources of funding for this program include federal grants and funds from the Nebraska Investment Financial Authority (NIFA) through bond issuance. In FY2013, the CWSRF funded projects totaling \$25,516,744 in loans and \$1,455,578 in loan forgiveness and grant funds.
- **Clean Water Construction Administration Small Community Matching Grants** provide matching grants to eligible communities with populations of 10,000 or less. In FY2013, \$540,494 was allocated for small community grants.
- **Planning Grants** totaling \$100,000 were awarded to five small (under 10,000) communities in FY2014. These communities were listed on the Project Priority List and used the grants to identify wastewater treatment facility project needs.

**II. Drinking Water State Revolving Fund Program** -- The Drinking Water State Revolving Fund provides low-interest loans and loan forgiveness to owners of public water systems. In FY2013, the program provided financial assistance to public water system projects totaling \$10,381,166, of which disadvantaged communities received \$2,333,733 in forgiveness funding.

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

**C. Nonpoint Source Management**

The Nonpoint Source Management program provides pass-through funding for the prevention and abatement of nonpoint source water pollution and the restoration of watershed resources under Section 319 of the federal Clean Water Act. This funding is provided to units of government, educational institutions, and non-profit organizations, for projects that facilitate implementation of the state Nonpoint Source Management Plan. Including the new 2014 funds, a total of 46 Section 310 projects were managed. All but one of these were large multi-year projects, with total funds of all projects equaling \$5,620,679.

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

**D. Storm Water Grants**

In 2006, the Nebraska Legislature passed LB1226, which established the Storm Water Management Plan Program. This grant program provides funding to cities and counties to implement their local Storm Water Management Plans (SWMPs). In FY2014, nearly \$1.825 million was awarded to 25 communities for implementation of their Storm Water Management Plans. The grant recipients must provide a 20% cash match for any funds received and submit annual reports for the duration of the project.

# CHAPTER 10:

## Staffing

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

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

Recruiting qualified and experienced employees for the more advanced positions that require extensive education and experience remains a focus. The creation of the Environmental Quality Programs Specialist I, Environmental Quality Programs Specialist II, Groundwater Geologist I and Groundwater Geologist II positions in 2011 continues to help significantly with agency competitiveness in the job market. The department feels very fortunate to have recruited excellent staff in 2013/2014.

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

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

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

### Employees Assuming Agency Positions

*These figures include new hires, promotions, transfers and classification upgrades for a one-year period. Figures for 2014 are from October 1, 2013 through September 30, 2014.*

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Director/Deputy Director/Assistant Director/Division Administrator	0	0	0	0	0	0	0	0	0	0
Section Supervisor, Records Manager, Budget Officer	0	0	2	0	4	0	0	0	1	5
Unit Supervisor	1	1	2	0	5	2	0	2	1	1
Human Resources	0	0	0	2	0	1	0	0	0	0
Federal Aid Administrator, Financial Assurance Coordinator, Accountant	2	0	0	0	0	2	1	1	0	0
Clerical/Accounting Clerk	0	4	6	4	9	3	5	0	2	4
Information Technology/Public Information/Research Analyst	1	0	3	2	3	0	1	0	0	0
Attorney I, II & III	3	0	0	0	0	1	0	0	0	2
Environmental Engineer	6	3	5	2	4	0	3	2	2	7
Compliance Specialist	0	0	0	1	0	0	0	0	1	0
Programs Specialist I & II	12	7	12	13	17	8	9	11	10	7
Geologist, Groundwater I & II	1	3	0	4	3	2	0	2	4	2
Environmental Assistance Coordinator	0	0	0	0	0	0	1	1	1	0
<b>TOTALS</b>	<b>26</b>	<b>18</b>	<b>30</b>	<b>29</b>	<b>45</b>	<b>20</b>	<b>20</b>	<b>19</b>	<b>22</b>	<b>28</b>

# CHAPTER 11:

## Financial Assurance Requirements

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

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

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
<b>Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (Sanitary LF)</b>							
Alliance Landfill	Alliance	MSWDA	03/17/94	\$ 3,394,288	\$ 1,615,215	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	\$ 165,700	\$ 165,700	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$ 4,005,800	\$ 4,005,800	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	\$ 10,855,552	\$ 3,623,285	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$ 7,280,586	\$ 7,280,586	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	\$ 9,486,267	\$ 2,681,406	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$ 2,052,748	\$ 906,293	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$ 5,755,541	\$ 2,724,265	Trust Fund	Premier Trust
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$ 9,758,600	\$ 9,758,600	Financial Test	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	03/18/13	\$ 5,918,899	\$ 2,857,932	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$ 154,996	\$ 27,729	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$ 3,039,995	\$ 1,822,153	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$ 4,426,332	\$ 4,426,332	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	\$ 6,791,204	\$ 2,816,025	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	\$ 1,599,184	\$ 1,176,514	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$ 646,719	\$ 250,049	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$ 2,434,673	\$ 2,111,369	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	\$ 21,230,592	\$ 21,230,592	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$ 2,300,436	\$ 817,151	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	\$ 591,668	\$ 126,211	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	\$ 68,705	\$ 84,846	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	10/03/08	\$ 2,334,238	\$ 772,138	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$ 19,547,621	\$ 5,345,477	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$ 24,389,786	\$ 24,389,786	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$ 7,082,787	\$ 7,182,126	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$ 2,303,082	\$ 886,467	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	\$ 1,452,700	\$ 660,539	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	\$ 1,720,542	\$ 511,158	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	\$ 75,527	\$ 11,215	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$ 3,453,140	\$ 1,343,025	Enterprise Fund	City of York

\*MSWDAs are landfills that are operating under current solid waste management regulations.

\*\*Sanitary LFs are closed facilities that have post-closure monitoring and maintenance.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
<b>Construction/Demolition Landfills (Const./Demol.)</b>							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	\$ 239,862	\$ 239,862	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$ 146,247	\$ 42,119	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	10/19/98	\$ 906,763	\$ 906,763	Surety Bond	Employers Mutual Cas. Co.
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	\$ 36,696	\$ 31,105	Enterprise Fund	Village of Arnold
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	\$ 987,450	\$ 987,450	Financial Test	City of Beatrice
Benkelman C & D Landfill	Benkelman	Const/Demol.	10/15/06	\$ 63,897	\$ 15,576	Enterprise Fund	City of Benkelman
Broken Bow C & D Landfill	Broken Bow	Const/Demol.	11/23/07	\$ 108,563	\$ 21,778	Enterprise Fund	City of Broken Bow
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$ 35,657	\$ 35,657	Letter of Credit	First Natl. Bank Newman Gr
Butler County C & D Landfill	David City	Const./Demol.	06/01/97	\$ 34,974	\$ 34,974	Surety Bond	Evergreen Ntl. Indemnity Co.
Eco-Storage C & D Landfill	Omaha	Const./Demol.	04/01/09	\$ 90,140	\$ 70,951	Trust Agreement	Security Natl. Bank
Franklin C&D Landfill	Franklin	Const./Demol.	11/08/10	\$ 22,889	\$ 5,671	Enterprise Fund	City of Franklin
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	\$ 193,621	\$ 199,399	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction C & D	Omaha	Const./Demol.	01/03/02	\$ 371,604	\$ 371,604	Surety Bond	Hartford Fire Ins. Co.
Holdrege C & D Landfill	Holdrege	Const/Demol.	05/01/09	\$ 299,639	\$ 36,752	Enterprise Fund	City of Holdrege
KGP Services C & D	Norfolk	Const/Demol.	11/06/03	\$ 85,524	\$ 88,499	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$ 51,300	\$ 51,266	Enterprise Fund	City of Kimball
Lead Waste Mgmt C&D Landfill	Waterbury	Const./Demol.	05/28/14	\$ 36,877	\$ 36,877	Letter of Credit	Adrian State Bank
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	\$ 169,104	\$ 149,255	Enterprise Fund	Lexington Area SW Agency
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$ 1,009,115	\$ 1,009,115	Financial Test	City of Lincoln
Loup Central C & D Landfill#1	Elba	Const./Demol.	01/28/01	\$ 4,600	\$ 5,895	Trust Fund	Citizens Bank & Tr. St. Paul
Loup Central C & D Landfill#2	Elba	Const./Demol.	01/28/01	\$ 92,859	\$ 32,740	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const/Demol.	04/09/96	\$ 131,879	\$ 39,802	Trust Fund	Premier Trust
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$ 242,791	\$ 242,791	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$ 75,479	\$ 72,539	Enterprise Fund	City of O'Neill
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	\$ 165,744	\$ 165,744	Escrow Account	Five Points Bank
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	\$ 44,547	\$ 42,605	Enterprise Fund	City of Plainview
Rainwood Hill LLC C & D	Omaha	Const/Demol.	02/10/08	\$ 191,485	\$ 191,485	Surety Bond	International Fidelity Ins. Co.
Schmader C & D Landfill	West Point	Const/Demol.	07/27/12	\$ 135,819	\$ 135,819	Letter of Credit	Charter West Ntl Bank
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	\$ 95,434	\$ 41,194	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	\$ 140,274	\$ 41,936	Enterprise Fund	City of Imperial
Three Valleys C & D Landfill	Indianola	Const./Demol.	02/24/10	\$ 75,043	\$ 75,043	Letter of Credit	McCook Ntl Bank
York C & D Landfill	York	Const/Demol.	12/01/07	\$ 735,295	\$ 49,514	Enterprise Fund	City of York

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
<b>Fossil Fuel Combustion Ash (Fossil Fuel), Industrial Waste Landfills (Indus. Waste), Monofills</b>							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$ 4,398,452	\$ 4,398,452	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$ 3,924,707	\$ 3,924,707	Insurance Policy	Indian Harbors Insurance Co.
Fremont Utilities	Fremont	Fossil Fuel	05/28/96	\$ 374,050	\$ 500,000	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	Fossil Fuel	02/01//01	\$ 4,362,500	\$ 1,286,951	Enterprise Fund	City of Hastings & PPGA
NPPD Gerald Gentleman 4	Sutherland	Fossil Fuel	04/01/95	\$ 2,213,922	\$ 2,213,922	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	Fossil Fuel	07/01/01	\$ 640,990	\$ 640,990	Financial Test	NPPD
OPPD NE City 1	NE City	Fossil Fuel	04/04/95	\$ 4,358,946	\$ 4,358,946	Financial Test	OPPD
OPPD NE City 2	NE City	Fossil Fuel	06/30/09	\$ 847,542	\$ 847,542	Financial Test	OPPD
OPPD North Omaha	Omaha	Fossil Fuel	04/04/95	\$ 1,831,911	\$ 1,831,911	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$ 184,797	\$ 184,797	Financial Test	OPPD
Platte Generation	Grand Island	Fossil Fuel	08/25/97	\$ 347,606	\$ 347,606	Enterprise Fund	City of Grand Island
Waste Management of NE	Bennington	Indus. Waste	04/01/02	\$ 1,343,149	\$ 1,343,149	Surety Bond	Evergreen Ntl. Indemnity Co.
<b>Transfer Stations, Material Recovery Facilities (Mat. Recovery), Compost Sites, Processing Facilities (Processing Fac.)</b>							
AltEn LLC	Mead	Compost	04/01/07	\$ 188,466	\$ 188,508	Escrow Account	American Ntl Bank
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	\$ 3,937	\$ 3,937	Letter of Credit	First Natl. Bank, NG
Custer Transfer Station	Broken Bow	Transfer Station	12/23/08	\$ 10,693	\$ 10,693	Letter of Credit	Great Western Bank
Doernemann Const. Co.	Clarkson	Compost	12/15/99	\$ 101,013	\$ 101,013	Letter of Credit	Clarkson Bank
Edgetown Properties LLC	Madison	Transfer Station	06/27/12	\$ 7,500	\$ 7,500	Escrow Account	Frontier Bank
Fremont CRD, Inc.	Fremont	Transfer Station	07/02/03	\$ 12,627	\$ 12,627	Surety Bond	Capitol Indemnity Corp
King Transfer Station	Walthill	Transfer Station	04/02/96	\$ 1,182	\$ 1,187	Escrow Account	First Natl. Bank, Walthill
Recycling Enterprises of NE, Inc.	Lincoln	Mat. Recovery	08/30/12	\$ 60,390	\$ 60,390	Letter of Credit	CityBank & Trust Co.
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$ 55,920	\$ 55,920	Escrow Account	US Bank Ntl Assoc
Sarpy County	Papillion	Transfer Station	04/17/12	\$ 98,643	\$ 98,643	Surety Bond	Travelers Surety Co. of Amer.
Seneca Sanitation	Dubois	Transfer Station	02/01/04	\$ 4,224	\$ 4,224	Letter of Credit	First Natl. Bank, Centralia
Stericycle	Lincoln	Processing Fac	07/01/12	\$ 52,457	\$ 53,000	Surety Bond	Westchester Fire Ins. Co.
Waste Connections of NE	Bridgeport	Transfer Station	08/15/03	\$ 3,956	\$ 3,956	Surety Bond	Evergreen Ntl. Indemnity Co.
Waste Connections of NE	Gering	Transfer Station	08/15/03	\$ 10,076	\$ 14,740	Surety Bond	Evergreen Ntl. Indemnity Co.
Waste Connections of NE	Ord	Transfer Station	07/02/03	\$ 8,387	\$ 8,387	Surety Bond	Capitol Indemnity Corp
Waste Connections of NE	Wahoo	Transfer Station	07/02/03	\$ 7,190	\$ 7,190	Surety Bond	Capitol Indemnity Corp
Waste Connections of NE	Central City	Transfer Station	05/30/13	\$ 9,223	\$ 9,223	Surety Bond	Platte River Ins Co.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	Financial Mechanism	Guarantor
<b>RCRA Closure and RCRA Post-Closure (RCRA PC)</b>							
Agrium Advanced Technologies	Fairbury	RCRA PC	03/13/14	\$ 630,697	\$ 630,697	Letter of Credit	Royal Bank of Scotland
Agromac International	Gering	RCRA PC	12/11/07	\$ 8,209	\$ 8,209	Escrow Account	Platte Valley Ntl. Bank
Behlen Manufacturing Co.	Columbus	RCRA PC	02/29/12	\$ 96,720	\$ 96,720	Financial Test	Behlen Mfg
Bosch Security Systems	Lincoln	RCRA PC	06/02/09	\$ 10,344	\$ 10,344	Letter of Credit	Bank of Montreal
Clean Harbors Technology	Kimball	RCRA Closure	09/16/13	\$ 18,348,529	\$ 18,348,529	Insurance Policy	Indian Harbors Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$ 234,640	\$ 265,706	Trust Fund	First Natl Bank of Omaha
Eaton Corporation	Omaha	RCRA PC	06/08/09	\$ 4,463,158	\$ 4,463,158	Letter of Credit	JP Morgan/Chase Bank
Safety Kleen	Grand Island	RCRA Closure	10/15/01	\$ 138,690	\$ 138,690	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$ 367,453	\$ 367,453	Insurance Policy	Indian Harbors Insurance Co.
Tenneco Automotive Inc.	Cozad	RCRA PC	11/25/85	\$ 50,630	\$ 50,630	Letter of Credit	JP Morgan/Chase Bank
USA Tire Management	Dakota City	RCRA Closure	12/14/07	\$ 15,334	\$ 15,334	Escrow Account	Great Southern Bank
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	\$ 2,627,776	\$ 2,627,776	Letter of Credit	1st State Bank Webster Cty IA
<b>Underground Injection Control (UIC)</b>							
Crow Butte Resources, Inc.	Crawford	UIC		\$ 44,719,032	\$ 44,719,032	Letter of Credit	Royal Bank of Canada
<b>Waste Tire Sites and Haulers</b>							
ABC Tire LLC	Kansas C, KS	Waste Tire	06/24/13	\$ 10,000	\$ 10,000	Surety Bond	Nationwide Mutual Ins.
Butler County Landfill	David City	Waste Tire	05/16/97	\$ 50,000	\$ 50,000	Surety Bond	Travelers Casualty & Surety
Champlin Tire Recycling Inc	Concordia KS	Waste Tire	10/04/96	\$ 10,000	\$ 10,000	Letter of Credit	United Bank & Trust
David's Tire	Nevada, MO	Waste Tire	10/22/09	\$ 10,000	\$ 10,000	Surety Bond	Ohio Casualty Ins. Co.
D & B Enterprise LLC	Correctville, IA	Waste Tire	11/17/08	\$ 10,000	\$ 10,000	Surety Bond	Great American Ins.Co.
Don's Used Tires	Lincoln	Waste Tire	03/13/03	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
EnTire Recycling Inc	Brock	Waste Tire	04/18/13	\$ 10,000	\$ 10,000	Letter of Credit	Great Western Bank
Gill Hauling Inc.	Jackson	Waste Tire	02/04/09	\$ 10,000	\$ 10,000	Letter of Credit	Dakota County State Bank
Hoke Transport LLC	Gering	Waste Tire	04/04/12	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
J & M Steel	Hastings	Waste Tire	08/27/98	\$ 5,000	\$ 5,000	Letter of Credit	1st Bank & Trust,Clay Center
Kenny Frazier	Edmond OK	Waste Tire	05/26/04	\$ 5,000	\$ 5,000	Escrow Account	Bank of America, Inc.
Leo Porter	Oshkosh	Waste Tire	02/21/08	\$ 5,000	\$ 5,000	Escrow Account	Nebraska State Bank
Liberty Tire Services of Ohio	Savage, MN	Waste Tire	03/09/09	\$ 10,000	\$ 10,000	Surety Bond	Evergreen Ntl. Indemnity Co.
New Horizons Enterprises LLC	Lincoln	Waste Tire	05/11/12	\$ 5,000	\$ 5,000	Surety Bond	Granite Re, Inc.
Resource Management Co	Brownell, KS	Waste Tire	01/17/06	\$ 10,000	\$ 10,000	Letter of Credit	First State Bank, Ness Cy, KS
River City Recycling	Omaha	Waste Tire	04/05/12	\$ 43,750	\$ 43,750	Letter of Credit	Mutual of Omaha Bank
Russell Brandenburgh	Beaver Crossing	Waste Tire	02/25/13	\$ 10,000	\$ 10,000	Letter of Credit	Citizens State Bank
Tire Cutters	Centralia KS	Waste Tire	05/13/06	\$ 5,000	\$ 5,000	Letter of Credit	1st Natl. Bank, Centralia, KS
Tire Town, Inc.	Leavenworth,KS	Waste Tire	03/07/05	\$ 10,000	\$ 10,000	Letter of Credit	Enterprise Bank & Trust
Uribe Scrap Tires, LLC	Lincoln	Waste Tire	01/06/14	\$ 5,000	\$ 5,000	Surety Bond	Ohio Casualty Ins. Co.
Winnebago Tribe of Nebraska	Winnebago	Waste Tire	09/15/10	\$ 5,000	\$ 5,000	Letter of Credit	Charter West National Bank