



# Nebraska Department of Environmental Quality

## Annual Report to the Legislature 2008

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- News Releases
- Calendar of Events
- Job Listings
- Priority Issues
- Newsletters
- Report a Problem
- Rules and Regulations
- Fact Sheets and other publications
- Program information
- Public Notices
- Enforcement Resolutions

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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 218 full-time employees.

The Department has a total annual budget for FY09 of approximately \$81.8 million. Of that amount, \$46.1 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans). On the chart below, the columns listed as aid represent the amount of our budget that is redistributed elsewhere 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 distributed to others, such as when the agency assigns a private contractor to investigate and clean up a petroleum remediation site.

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

<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>	\$15.8 million	44.3%	\$13.9 million	30.1%
<b>State General Funds</b>	\$3.5 million	9.8%	\$4.7 million	10.2%
<b>Cash Funds<sup>1</sup></b>	\$16.4 million	45.9%	\$17.5 million	38.0%
<b>Trust Funds<sup>2</sup></b>			\$10.0 million	21.7%
<b>Total</b>	\$35.7 million		\$46.1 million	
<sup>1</sup> Cash Funds refer to fees collected for department activities.				
<sup>2</sup> Trust Funds refer to loan repayments received by the department.				

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 regulatory actions of the Environmental Quality Council during FY08.

This chapter provides: 1) a brief description of agency goals and related activities; 2) agency activities and significant issues for fiscal year 2008; 3) significant legislation of 2008 and 4) a table that identifies initiatives over the past ten years that have impacted Agency resources.

## I. Agency Goals and Related Activities

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

The main goals established by the Agency are:

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

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

## II. Significant Activities/Issues, Fiscal Year 2008

Among the significant issues that have occurred in 2008 are:

**Biofuel facility permitting and compliance** – Nebraska has experienced substantial growth in the ethanol industry in recent years. There are currently 23 ethanol plants operating in Nebraska, with a capacity to produce 1.7 billion gallons of ethanol annually. In addition, as of Sept. 29, 2008, there were four permitted plants under construction, which would produce an additional 780 million gallons a year. Since the number of ethanol facilities in operation has more than doubled in the past four years, NDEQ has increased its focus on oversight and compliance.

**Crow Butte expansion:** Crow Butte Resources, Inc., an in-situ uranium operation in northwest Nebraska, submitted a permit application and exemption petition to DEQ in August 2008. They propose to develop an additional in-situ uranium mining site north of Crawford. Their current site is southeast of Crawford and will continue to be in operation. The exemption petition, which needs both state and federal approval, would allow them to conduct in-situ mining in an aquifer at the new location. Prior to DEQ making a final permit decision, there will be a public comment period and opportunity for a hearing. "In situ" mining refers to a process where uranium is extracted from an underlying deep formation through a well injection and recovery process.

**Web redesign** – In 2007-2008, DEQ's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us), has undergone substantial revision as part of an on-going redesign effort. The purpose of the redesign is to provide more accessible and useful information, and to enhance communication with the public.

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

- Press Releases, Calendar of Events, NDEQ News, Environmental Alerts, Enforcement Resolutions and Public Notices provide up-to-date information about agency activities and environmental issues.
- Information about agency programs can be found either through the Programs link, or by going to specific program topic links, including Assistance, Cleanups, Compliance, Permits and Financial (grants and aid).
- The Contact Us portion of the web site provides the public the ability to contact the agency, report a problem, and request public records.
- A new Maps and Data link provides an interactive mapping that shows locations of sites that are regulated by NDEQ.
- NDEQ's publications and rules and regulations are also continuing to be updated regularly and are available through the web site.

Another new feature of the site is an area titled *Your Environment*, which is designed to give an overview of Nebraska's environment. *Your Environment* contains an interactive map that divides the state into four regions, based generally on the ecology of the area. Clicking on any region in the map will link the viewer to a page that describes the region, and provides statistical information about water quality, air quality and waste management in that region. *Your Environment* also provides statewide perspectives on these environmental issues. The site provides statistical information about such issues as: air emissions; nitrate levels in groundwater; rivers and lakes that are considered impaired; contaminated sites in Nebraska; and volumes of wastes being sent to Nebraska's landfills. *Your Environment* also contains a number of articles that focus on regional and statewide environmental topics, as well as links to agency reports regarding groundwater, surface water and air quality.

**Environmental Video:** DEQ has produced an educational video called "Nebraska Quality: Life in Your Environment." DEQ contracted with Nebraska Educational Television to produce the video,

which highlights the environmental features in four regions of the state, and discusses environmental challenges facing Nebraska. The agency has distributed this video to secondary schools across the state, and uses it in public presentations. Segments of the video will also be posted on the “Your Environment” area of our web site. To obtain a copy, please contact NDEQ at (402) 471-2186, or send an e-mail request to [moreinfo@ndeq.state.ne.us](mailto:moreinfo@ndeq.state.ne.us)

**Four State/EPA Water Quality Efficiency Effort:** Under the leadership of Nebraska, the environmental agencies of Nebraska, Iowa, Kansas and Missouri have been developing methods to improve efficiency in the working relationship between the states and EPA Region VII. The efficiency efforts, which started in 2007 and continued in 2008, focus on water quality standards review and approval process. In the summer of 2008, the group additionally began another efficiency effort, focusing on the National Pollutant Discharge Elimination System (NPDES) program.

### III. Legislation in 2008

Three pieces of legislation passed in 2008 which had an impact on the agency. They include:

**LB 724** — The state’s voluntary cleanup law, called the Remedial Action Plan Monitoring Act, was amended to reduce the up-front application fee and initial deposit costs to encourage increased participation in the program. The cost to enter the program had been among the highest in the nation. The bill cut the initial costs to enter the program in half. The application fee was reduced from \$5,000 to \$2,000 and the initial deposit required was reduced from \$5,000 to \$3,000. Any additional costs incurred during the review and oversight of the remedial action plan will be billed to the applicant on a quarterly basis.

**LB 726** — The Wastewater Treatment Facilities Construction Assistance Act was amended to provide more grant and loan funding opportunities for municipalities 10,000 or less in population. The legislation removed the annual limit on small town grants and provided the department the authority to use up to 65 percent of the revenue from administrative fees collected in the prior fiscal year to fund small town grants, planning grants and short-term emergency loans. The changes made to this Act are similar in nature to the changes made in the Drinking Water State Revolving Fund Act during the 2007 Legislative session.

**LB 1145** – Changed the date of June 30, 2009 to June 30, 2012 for reported releases to be eligible for reimbursement from the Petroleum Release Remedial Action Cash Fund.

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

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

**1999** (220 FTE)

**State Legislation/Not Federally Mandated**

- Livestock Waste Management

- Withdrawal from the Central Interstate Low-Level Radioactive Waste Compact

**2000** (215 FTE)**State Legislation/Not Federally Mandated**

- Water Quality Assessment Report
- Public Records Review Process

**2001** (209 FTE)**State Legislation/Not Federally Mandated**

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

**2002** (209 FTE)**State Legislation/Not Federally Mandated**

- Cash fund transfer legislation

**2003** (212 FTE)**State Legislation/Not Federally Mandated**

- On-site Wastewater Treatment Act (septic systems)

**2004** (217 FTE)**State Legislation/Federally Mandated**

- Livestock Waste Management Act

**State Legislation/Not Federally Mandated**

- Air Quality Permit Fees

**2005** (217 FTE)**State Legislation/Not Federally Mandated**

- Air Emission Fees
- Petroleum Release Remedial Action Act

**2006** (217 FTE)**State Legislation/Federally Mandated**

- Livestock Waste Management Act
- Stormwater Grants
- Emission Trading

**2007** (218 FTE)**State Legislation/Not Federally Mandated**

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

**2008** (218 FTE)**State Legislation/Not Federally Mandated**



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

# CHAPTER 2:

## Administration/Legal/ Management Services

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The Administration and 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, Low-Level Radioactive Waste Program Manager, Division Administrators and the Administrative support staff. The Director and Deputy Directors are responsible for the overall function and coordination of Department activities. Generally, the Director is responsible for policy and the Deputy Directors for day-to-day management and administration. The Deputy Director of Administration serves as the manager of the Management Services Division. The Deputy Director of Programs, Assistant Director, Division Administrators, Associate Directors and the Program Manager are responsible for management, policy implementation, and coordination of activities in the various sections contained within their respective divisions.

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

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

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

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

## II. Legal Division

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

- Preparing legal opinions interpreting federal and state laws and regulations,
- Advising the Director and Agency staff on duties and program responsibilities,
- Preparing administrative orders and other enforcement actions for the Agency,
- Representing the Agency in administrative proceedings,
- Preparing judicial referrals to the Attorney General,
- Serving as hearing officers for public and administrative contested case hearings,
- Drafting and reviewing proposed legislation, rules and regulations,
- Drafting and reviewing contracts, leases, and other legal documents,
- Reviewing other Agency documents, and
- Representing the Director and Agency as requested by the Director.

During FY08, the Director issued 29 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled 12 civil judicial cases and judgments were entered for a total of \$304,367 in civil penalties with deferments possible in many cases for subsequent compliance. In addition, these judgments included \$304,366 for supplemental environmental projects (\$50,000 to the Environmental Trust, \$75,000 to the City of Auburn for a nature trail, and \$179,366 to the Attorney General's Environmental Protection Fund). The State was awarded \$99,000 in penalties in two civil cases decided by a court and \$25,000 to the Petroleum Release Remedial Action Cash Fund.

## III. Management Services

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

### Fiscal Services

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

The Fiscal Services section serves as the financial liaison regarding grants with the EPA. A significant percentage of staff time is dedicated to meeting complex tracking requirements of the federal government.

As stated above, this section conducts financial reviews of the Department's various grant programs. Given the substantial amount of grant funds the Department distributes, it is essential to have staff reviewing financial activities of entities which receive funds. The Fiscal Services Section also assists the Integrated Solid Waste Management and Livestock programs in collecting and reporting all applicable fees. This section is also responsible for tracking receipt of Title V air emission fees.

## **Human Resources/Database Administration**

The Human Resources Section is divided into two organizational units that provide management services in the areas of Human Resources and Database Administration.

### **Human Resources**

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

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

Specifically, Human Resources consults with supervisors and employees to: process employee pay and benefits; coordinate hiring; conduct new employee orientation and employee exit interviews; coordinate the agency's medical monitoring program; participate in the Health & Safety Committee; manage the classification and compensation program; and coordinate employee recognition programs. In addition, Human Resources is responsible for developing the agency's Affirmative Action Plan, monitoring the plan's goals and ensuring equal employment opportunity is an integral part of the daily activities of the agency. Other activities include: provision of technical assistance to supervisors concerning performance management and investigations of conduct complaints; participation on the agency's policy management team; evaluation of reasonable disability accommodations; and coordination of reporting requirements of the conflicts of interest provisions of the Nebraska Political Accountability and Disclosure. The Human Resources Section is responsible for processing the agency's monthly payroll.

### **Database Administration**

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

## **Records Management**

The Records Management Section is primarily responsible for managing the agency's public records. Documents are indexed into the Agency's computerized database, the Document Tracking System, and placed in files. Document indexing provides a brief description of individual documents in a file folder, or bound documents. Non-print formats like compact discs, diskettes, audiotapes and videotapes are also described through indexing. Approximately 162,000 agency files have been centralized into the agency's Document Tracking System. Centralizing the agency's records has increased accessibility to agency files for both agency staff and the public.

The Records Management Section coordinates responses to requests for information from the public, private consultants, and regulated entities that wish to research the history of environmental activities at a specific property. These public 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 1,400 public records requests during FY2008.

This year, the agency's Records Retention and Disposition Schedule was revised, approved and published on the Nebraska Secretary of State's webpage. Agency-wide records management training is scheduled for the fall of 2008.

The Records Management Section also provides support services to the agency by distributing the agency's incoming and outgoing mail, ordering supplies and staffing the agency reception and switchboard area.

### **Information Technology**

The Information Technology Section provides computer support and information management for all Agency locations. Five 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, 20 printers, two midrange AS/400 computers, three network servers, and software support. They also conduct training and oversee data telecommunications for the Agency. Four professional staff design, develop, support, and provide training for computer programs in supporting the Agency's information management needs and the administration of the Agency's computerized databases. One professional staff member provides support and assistance with mapping/location information through a Geographical Information System. One professional staff person is responsible for managing all of the Information Technology staff, develops and updates the agency technology plan, and coordinates 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. In 1999, the agency received a grant from the EPA One Stop program to support our efforts towards and EPA's initiatives for data integration, burden reduction, public access, stakeholder involvement, and electronic reporting. NDEQ used the grant money during 2000 and 2001 to improve our network, desktop equipment, and information systems. In 2002 and 2003, the agency received Network Readiness grants from EPA and in 2004, the agency received a Network Implementation Grant from EPA to support the exchange of information between states and EPA. The agency is utilizing these grants to build additional information systems and to provide agency information to staff and the public in a more graphical or browser based presentation. In addition, the agency made available its first web based reporting application at the end of 2003, to replace the more traditional paper based reporting process.

In 2001, the agency successfully completed a pilot project with other states and EPA demonstrating the exchange of federally required information using eXtensible Markup Language (XML). This was the first successful effort to exchange data using this process. The Agency continues to be involved in the EPA/State efforts to build a National Environmental Information Exchange Network (Exchange Network). When completed, the Exchange Network will provide a consistent method for obtaining environmental information from any participating agency or program in the country. Currently the agency is participating, as members and co-chairs, in a number of the work groups for the development of the Exchange Network.

In 2006, the agency, in conjunction with the environmental agencies from Iowa, Kansas, Missouri and EPA Region VII, started work on a 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 has also being utilized by local planners and emergency response staff.

### **Public Information Office**

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

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

This Section is responsible for the writing and distribution of news releases on a wide range of environmental topics that are of importance to the public. The Section is also involved in the production of a number of other publications, including this annual report; brochures; Fact Sheets and Guidance Documents. These publications can be obtained by contacting the Public Information Office, or by visiting our web site.

An increasingly important method of communicating with the public is the agency's web site: **www.deq.state.ne.us**. The web site has grown considerably in recent years, and an agency-wide effort is on-going to revise the site to make it more accessible and interactive for our customers. (See page 3 for a summary regarding the web redesign efforts and the new *Your Environment* portion of the web site.)

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

### **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 and management, and ensures contracts are kept current and contractors meet contract conditions. This office also provides assistance to the Fiscal Services Section.

### **Funding of Management Services**

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

# CHAPTER 3:

## Environmental Quality Council

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

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

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

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

Following are two charts. The first lists the 17 council members, the second summarizes Council actions during FY2008.

**Council Members**

<b>Representing</b>	<b>Council member</b>	<b>Term expires</b>
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2009
Automotive/Petroleum Industry	Mark Whitehead, Chair Lincoln	June 22, 2009
Biologist	Mark Czaplewski Grand Island	June 22, 2009
Food Products Manufacturing	Vaughn J. Blum Schuyler	June 22, 2009
Labor	Robert Hall Wahoo	June 22, 2009
Livestock Industry	Alden Zuhlke Brunswick	June 22, 2009
Minority Populations	Lawrence Bradley Omaha	June 22, 2009
Municipal Government	Michael W. Bair Aurora	June 22, 2009
Power Generating Industry	Joseph Citta, Jr., Vice Chair Columbus	June 22, 2009
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2011
Chemical Industry	Donald E. Williams Orchard	June 22, 2011
Conservation	John C. Turnbull York	June 22, 2011
County Government	Leigh Hoyt McCook	June 22, 2011
Heavy Industry	John Kinter Norfolk	June 22, 2011
Municipal Government	Ronald Zeiger Syracuse	June 22, 2011
Professional Engineer	John T. Baker Scottsbluff	June 22, 2011
Physician	Dr. Lon Keim Omaha	June 22, 2011



**FY 2008  
Environmental Quality Council Actions**

<b>Council Meeting Date</b>	<b>Regulation</b>	<b>Action</b>
August 17, 2007 Lincoln	Title 124 - Rules and Regulations for Design, Operation and Maintenance of On-Site Wastewater Treatment Systems	Approved
	Title 129 - Nebraska Air Quality Regulations	Approved as Amended
	Title 129 - Nebraska Air Quality Regulations	Approved
	Title 130 - Rules and Regulations Pertaining to Livestock Waste Control	Approved as Amended
	Title 197 - Rules and Regulations for the Certification of Wastewater Treatment Operators in Nebraska	Approved as Amended
December 7, 2007 Lincoln	Title 123 - Rules and Regulations for the Design Operation and Maintenance of Wastewater Works	Approved
	Title 129 - Nebraska Air Quality Regulations	Approved
	Title 132 - Integrated Waste Management Regulations	Approved
March 13, 2008 Video Conference	Business Meeting Only	
June 30, 2008	No Business Conducted; Lack of Quorum	

# CHAPTER 4:

## Air Quality Division

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The objectives of the Air Quality Division are to achieve and maintain the ambient air quality standards, to protect the quality of the air in areas of the state that have air cleaner than the standards, and to implement federal and state air quality rules and regulations. Each year, thousands of tons of air pollutants are emitted into the air from industrial and other man-made activities. Many of these air pollutants can directly or indirectly affect human health, reduce visibility, cause property damage and harm the environment. The air pollutants of most concern are particulate matter, carbon monoxide, nitrous oxides, sulfur dioxide, ozone, lead, and 188 listed hazardous air pollutants.

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

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

### Permitting Section

#### Construction Permit Program

NDEQ has had a construction permit program for air contaminant sources since the 1970's. Facilities are required to obtain a construction permit before they construct, reconstruct or modify any air contaminant source or emission unit where there is a net increase in the potential to emit above specified thresholds. The table below provides information relating to applications received, processed and pending:

<b>Pending July 2007</b>	<b>Applications Received</b>	<b>Applications Processed</b>	<b>Pending June 2008</b>
<b>33</b>	<b>104</b>	<b>110</b>	<b>27</b>

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). The purpose of the PSD program is to protect areas of the state which are cleaner than the ambient air quality standards, while still allowing industrial and economic growth. The PSD program applies to sources that emit significant levels of certain types of emissions. If a source is regulated under PSD, the NDEQ conducts additional, more rigorous reviews of their construction permit application to ensure that best available control technology will be used. Best available controls are employed to minimize impacts on the environment. Before issuing a permit, the NDEQ must also assure that the source will not cause or contribute significantly to any deterioration of air quality, making the area potentially vulnerable to violations of the ambient air quality standards. NDEQ also requires significant sources of hazardous air pollutants to control emissions with the best control technology available.

The Legislature passed LB449 in 2004, which provides the Department the authority to assess construction permit application fees. Fees are fixed based upon the emissions potential of the

facility. This program began in January 2005. The fees generated through this program are used to pay a portion of the costs associated with processing construction permit applications.

In recent years, NDEQ has 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.

	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>
<b>Number of Construction Applications Received</b>	<b>69</b>	<b>74</b>	<b>104</b>

Processing the increased number of permits in a timely manner has been an ongoing challenge for the department. During 2005 and 2006 NDEQ committed resources to address these concerns in the Air Division. The NDEQ invited persons from government and industry to help it improve its internal air permitting processes. A key component of this process improvement initiative involved a review of existing procedures and permitting processes and a proactive analysis seeking ways to improve the process.

A week-long rapid process improvement event called Kaizen resulted in recommendations and work products being developed to improve the permitting process. In the following months, several of the Kaizen results have been implemented, are in progress, and new staff have been hired to fill key vacant positions. These activities have culminated in the NDEQ establishing the Fast Track Permitting Program, an innovative program to facilitate and expedite the processing and issuance of air quality construction permits.

These efforts have resulted in many improvements that allow the NDEQ to be more efficient in the processing of permit applications, conducting reviews in a shorter time period, and still maintain the same high level of technical and regulatory review. This NDEQ initiative has significantly improved the construction permitting process for the general public and the Department. Permitting timeframes have also significantly shortened.

Efforts to continually improve our permitting process and, ultimately, customer service are ongoing. Air Quality Division staff recently revised application forms (based on staff and stakeholder feedback). The NDEQ continues to develop new guidance documents and fully utilize the Agency's website.

### **Operating Permit Program**

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

The Nebraska operating permit program offers an innovative alternative for sources who have taken measures to keep their emissions very low. This program is called the low emitter program. NDEQ also has general permits and permits by rule available for certain source categories.

The table below provides statistics relating to all applications received, processed and pending under the operating permit program:

<b>Pending July 2007</b>	<b>Operating Permit Applications Received</b>	<b>Operating Permit Applications Processed</b>	<b>Pending June 2008</b>
<b>55</b>	<b>92</b>	<b>61</b>	<b>86</b>

## **Compliance Section**

### **Emission Inventory Program**

Each year, the Department conducts an inventory of emissions from major industrial sources and a representative sample of lower emitting, minor industrial sources. Every three years, the Department assists the EPA to prepare a comprehensive national inventory of emissions. The comprehensive inventory accounts for all other man-made sources such as vehicular emissions and for non-man-made sources such as wind-blown dust. The emissions inventory is a tool for determining emission trends and for supporting regulatory efforts. This comprehensive inventory involves lengthy review and interaction with EPA. The most recent year to be released is for calendar year 2002; the next comprehensive inventory has been compiled, but not yet released, focuses on the emissions from calendar year 2005.

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

In past years, the Department had carryover funds available to support the program, which were used to help offset the emission rate. However, for the 2007 inventory, which supports state fiscal year 2009, carryover funds were not available to the extent as in years past. The Department makes every attempt to set the fee rate at a minimal level needed to pay reasonable direct and indirect costs of developing and administering the air quality permit program. An analysis detailing how the Department arrived at the fee rate is made available to fee payers and is on the Agency's website. The rate for 2007 emissions was \$57 per ton, which was the same rate charged for the 2006 emissions inventory.

### **Ambient Air Quality Monitoring Program**

The State of Nebraska operates an ambient air-monitoring network to determine compliance with the National Ambient Air Quality Standards (NAAQS) and State Ambient Air Quality Standards (SAAQS). In addition, the Nebraska network includes two sites for monitoring regional haze impacts that are part of a national program to help protect visibility in our National Parks and Monuments.

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

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

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

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

Monitoring results indicate that all areas of the state are in compliance with the standards, with the exception of one short-term exceedance of the TRS standard in Dakota City (14 minutes on May 8, 2007). There have been significant reductions in TRS levels in the Lexington and the Dakota City/South Sioux City areas since 2000. The Department continues monitoring in these areas.

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, funding issues or we lose access to the site. The monitoring network to support the state and national ambient air quality standard for Nebraska includes 28 sites.

There are an additional two sites which support the Interagency Monitoring of Protected Visual Environments (IMPROVE) program. The IMPROVE monitors provide information for studying regional haze that may impact the visibility in listed federal Class I National Park and Wilderness Areas. While, there are no such areas in Nebraska, the two monitoring sites in Nebraska at Halsey National Forest and Crescent Lake National Wildlife Refuge provide data on pollution trends and transport.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride, and base-cations (e.g., calcium, magnesium, potassium and sodium). There are two NADP/NTN sites in Nebraska: one near Mead and one near North Platte. Both have been operational for over 20 years. These sites are operated by the University of Nebraska, with analytical and data development support from the NADP. In June 2007, the Mead site was upgraded so that it also began collecting mercury (Hg) deposition data, and became part of the NADP/Mercury Deposition Network (MDN). The North Platte site is scheduled to begin collecting mercury deposition data in calendar year 2008. These upgrades were made possible through cooperative efforts of the NDEQ, the University of Nebraska, and Nebraska Environmental Trust grant funding. Additional information about the NADP/NTN can be found at: <http://nadp.sws.uiuc.edu/nadpoverview.asp>.

**Nebraska's Air Monitoring Network - Summary Description  
As of June 2008**

**Omaha Metro Area** (Douglas and Sarpy Counties)

- 5 PM<sub>10</sub> monitor sites
- 3 PM<sub>2.5</sub> monitor sites
- 3 Ozone monitor sites \*
- 1 Carbon monoxide monitor site \*
- 2 Sulfur dioxide monitors sites

\* *The site at 30<sup>th</sup> & Fort Streets has both ozone and a carbon monoxide monitor.*

**Blair**

- 1 PM<sub>2.5</sub> Monitor site

**Lincoln Metro Area**

- 1 PM<sub>2.5</sub> monitor site
- 1 Ozone monitor site
- 1 Carbon monoxide monitor site

**Cozad**

- 1 PM<sub>10</sub> monitor site

**Dakota County**

- 2 TRS monitor sites

**Gothenburg**

- 1 PM<sub>10</sub> monitor site

**Grand Island**

- 1 PM<sub>2.5</sub> monitor site

**Lexington**

- 1 TRS monitor site

**Scottsbluff**

- 1 PM<sub>2.5</sub> monitor site

**Weeping Water**

- 3 PM<sub>10</sub> monitor sites

**IMPROVE monitor sites for the study of regional haze**

Two sites operated under contracts administered by the NDEQ:

- Nebraska National Forest in Thomas County**
- Crescent Lake Wildlife Refuge in Garden County**

One site operated by the Omaha Tribe of Nebraska and Iowa and administered by EPA:

- Omaha Indian Reservation in Thurston County**

**National Atmospheric Deposition Program/National Trends Network**

Two sites operated by UNL under contracts administered by the NDEQ:

- Saunders County near Mead, Nebraska**
- Lincoln County near North Platte, Nebraska**

### **Recent Air Monitoring Network Modernization**

Ozone and continuous PM<sub>2.5</sub> data is reported hourly to the EPA AirNOW system, which in turn makes air quality information available to the public on a contemporaneous basis. The AirNOW system may be accessed at [www.airnow.gov](http://www.airnow.gov).

All of the manually operated PM<sub>10</sub> monitors in rural Nebraska have been replaced with automated monitors. The automated monitors reduce on-site attendance needs. Operations can be checked remotely via telephone modem links.

Continuous PM<sub>10</sub> and PM<sub>2.5</sub> monitors: The Nebraska Air Monitoring Network contains two continuous PM<sub>10</sub> monitors (both in Weeping Water) and three continuous PM<sub>2.5</sub> monitors (Omaha, Lincoln, and Lexington). The data collected from continuous monitors is downloaded hourly, and can be used to issue pollution alerts. They also provide information on daily and hourly changes as they occur that cannot be obtained from the traditional filter monitors.

### **Future Air Monitoring Issues**

It is anticipated that, over the next several years, continuous PM<sub>2.5</sub> and trace gas monitors may replace some existing monitors. The establishment of multiple pollutant monitoring sites at one or two rural sites and one site in the Omaha Metro Area is anticipated sometime in the near future, dependent upon federal funding. The new monitoring locations will be part of the EPA's National Core (NCORE) multi-pollutant monitoring sites.

In October 2008, EPA lowered the ambient air quality standards for lead. The rule also contained lead monitoring requirements which require monitoring around facilities that emit lead above certain thresholds and in cities with populations above 500,000. Monitoring required by the rules must begin by January 2010. Therefore, it is anticipated that planning, site development and monitoring equipment procurement will need to occur in calendar year 2009.

Along with the changes to the rules described above, EPA revised the ozone and PM<sub>2.5</sub> ambient standards in 2007. EPA is reviewing the SO<sub>2</sub> and NO<sub>2</sub> ambient standards as well. The shifts in national air monitoring priorities have been accompanied by shifts in the federal funding support and this is anticipated to continue. The EPA provides the NDEQ with federal grant funding authorized under Section 103 and Section 105 of the Clean Air Act. Section 105 grant funding is used to support air monitoring to determine compliance with the National Ambient Air Quality Standards as well as other Air Program activities. Section 103 funding is used to fund monitoring conducted to evaluate air quality studies and new monitoring techniques. A significant difference is that Section 103 grants require no state match, while Section 105 grants require a 40% state match. Since PM<sub>2.5</sub> monitoring was initiated in 1999, it has been 100% funded by federal Section 103 grant funds. That funding was decreased in FY2006, and further decreases are anticipated. The President's Federal Fiscal Year 2009 Budget did not include any Section 103 funding for PM<sub>2.5</sub> and IMPROVE monitoring. Those activities were shifted to the Section 105 budget. The President's budget included only modest increases in Section 105 funding. The expectation would be that PM<sub>2.5</sub> monitoring will need to be funded using Section 105 and state match funds. EPA does not anticipate sufficient increases in Section 105 grant funding to accommodate the PM<sub>2.5</sub> monitoring. Rather, a reevaluation of monitoring priorities will likely be necessary to determine monitoring activities within the existing Section 105 funding framework.

For more information about the Nebraska monitoring program, including information about pollution trends, please refer to the Nebraska Air Quality Report, which may be found on the Agency's website, [www.deq.state.ne.us](http://www.deq.state.ne.us).

### Inspections and Facility Compliance

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

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

### Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD	OAQC
On-site Inspections	129	120	28
Facility Stack Tests Reviewed	65	1	1
On site observations conducted	25	1	1
Continuous Emission Monitoring Audits Reviewed	16	1	1
On-site observations conducted	7	1	1
Complaints Received	117	9	68
Burn Permits Issued	81	55	83
Burn Permits Denied	1	3	0

### Asbestos Program

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

### Asbestos Program Summary

Activity	NDEQ	LLCHD	OAQC
Asbestos Project Notifications	N/A*	44	198
Asbestos Site Inspections	N/A*	36	103

*\*NDEQ no longer conducts asbestos inspections or processes notifications.*



### **Program Planning and Development Program**

The Air Quality Division's Program Planning and Development Unit was expanded and reorganized during FY 2007 in order to provide better support to permitting and compliance staff, provide increased information and analyses to Department and other policy makers. This expansion has also allowed for added emphasis on compliance assistance, education and outreach to the regulated community and general public.

This year, the unit developed new training opportunities for Air Division staff. Two staff members have been designated to be subject experts on two sets of ever-evolving federal regulations to which regulated industry are subject. One staff member focuses on the New Source Performance Standards (NSPS), the other on Maximum Achievable Control Technology (MACT) Standards.

Over the last year, the unit continued to devote resources for assistance and outreach activities. It developed fact sheets and guidance documents to help Nebraska businesses understand and comply with air quality regulations. The NDEQ also provided a basic-level Air Quality workshop called Air Quality 101 across the state in April 2008. The Agency continued to sponsor annual Air Program Update Workshops in the summer 2008 for representatives from businesses, consulting firms, and industry. These half-day workshops are held across the state where general and technical information is provided on current events, regulations, permitting activities, and modeling activities pertaining to the Air Quality Program. Both sets of workshops were well attended and received by the participants.

The Program Planning and Development Unit also develops the state air quality regulations. During SFY08, several rules NDEQ had adopted from the EPA were repealed because the federal rules were challenged and vacated by the courts. Among the rules repealed from Title 129 Nebraska Air Quality Regulations were the Clean Air Mercury Rule program, the Boiler hazardous air pollutant standards, and several other hazardous air pollutant (MACT) standards.

In 1999, EPA promulgated the Regional Haze Rule, which requires state and federal agencies to work together to improve visibility in 156 national parks and wilderness areas. Emission sources determined to contribute to visibility in such areas must install Best Available Retrofit Technology (BART) to control their emissions. This year, two sources in Nebraska were determined to require the installation of BART. The NDEQ is still working with the sources and EPA on submittal of the state implementation plan.

# CHAPTER 5:

## Waste Management Division

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

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

NDEQ was authorized in 1985 by EPA to administer portions of the Resource Conservation and Recovery Act (RCRA) program. RCRA regulations are incorporated in NDEQ Title 128 - Nebraska Hazardous Waste Regulations, which is updated as the Federal RCRA regulations change. In fiscal year 2008, newly adopted Title 128 regulations became effective, as part of an ongoing effort to keep the RCRA program current.

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 make information available to the public.

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

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

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

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

Corrective action is an important part of the RCRA program that addresses past and present activities at RCRA facilities that resulted in hazardous waste and hazardous constituents being released into soil, groundwater, surface water, and air. Corrective action requires investigation and remediation of the release from regulated facilities. These regulations can make the former owner of a property responsible for mismanagement of hazardous waste if the current owner could not reasonably be expected to have actual knowledge of the presence of hazardous waste at the site. EPA presently operates the corrective action program in Nebraska, and is responsible for regulating cleanups at Nebraska facilities.

### **Program Funding**

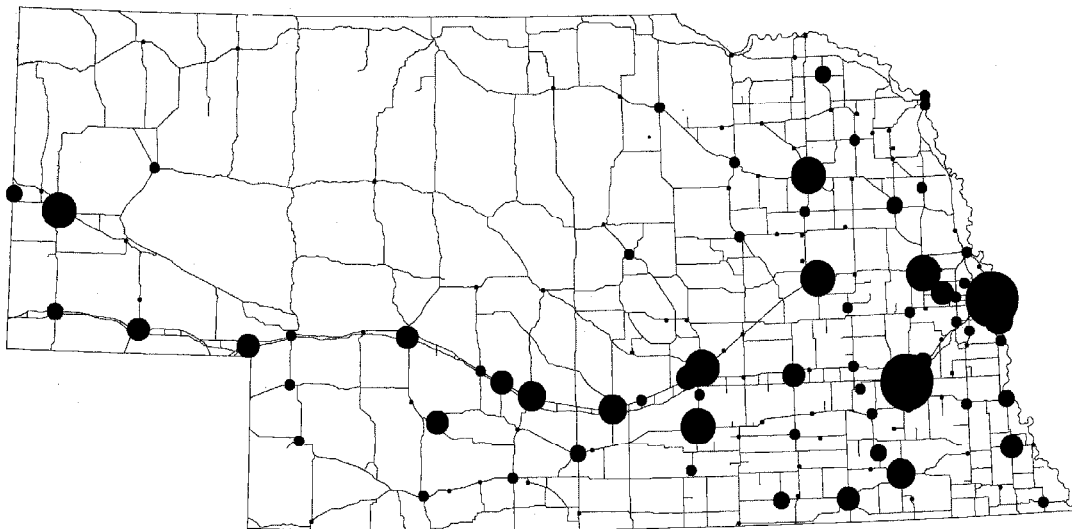
Funding for RCRA program activities is provided by an EPA grant, which requires a 25% state match. This match is met with state General Funds. Additionally, the Department can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. There were no new facilities proposed in FY08.

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

Currently, the RCRA Program oversees:

- 89 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month)
- 450 Small Quantity Generators (between 220 and 2200 pounds generated per month)
- 1157 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
- 1 Hazardous Waste Incinerator Facility
- 1 Federal Hazardous Waste Storage Facility
- 44 Treatment/Storage/Disposal Facilities (active and inactive)
- 11 Hazardous Waste Transporters

**Figure 1. Location of Facilities in Nebraska Regulated under RCRA**



- Size of the symbols indicate relative RCRA activity based on number of facilities and amounts of hazardous waste generated.

<b>Summary of FY2008 RCRA Activities</b>		
<b>Activity</b>	<b>State</b>	<b>EPA</b>
<b>Compliance Assistance</b>		
On-site Visits	6	1
Direct Assistance Contacts	869	*
Public Outreach Presentations (total 197 in attendance)	12	*
<b>Inspections</b>		
Land Treatment Facilities	0	0
Treatment and Storage Facilities	2	1
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	1	0
Large Quantity Generator	12	5
Small Quantity Generator	8	6
Conditionally Exempt Small Quantity Generators	11	3
Transporters	0	0
<b>Permitting</b>		
Closure Plans Finalized	3	0
Permits Issued/Renewed	0	0
Modifications	10	0
EPA Corrective Action Orders	0	0
<b>Record Reviews</b>		
Financial Assurance	33	0
* - Data not available		

## Superfund Program

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) became federal law in 1980. CERCLA established what has commonly become known as Superfund to deal with known or suspected contamination at inactive commercial/industrial/military facilities or so called "uncontrolled hazardous waste or abandoned sites." The nation's most contaminated sites are listed on the National Priorities List (NPL). Nebraska currently has thirteen sites on the National Priorities List. One site, the Waverly Groundwater Contamination Site, was deleted from the NPL on November 20, 2006 as the cleanup goals for the site have been achieved. Ten of the sites are in the cleanup phase; and three sites (Parkview Well Site in Grand Island, Garvey Elevator in Hastings, and West Highway 6 & 281 in Hastings) are relatively new to the National Priority List and are in either the site studies, remedy selected, or remedy design stages. Numerous other non-National Priorities List sites with known or suspected releases of hazardous substances exist in the state, but are not being addressed through the full Superfund process.

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

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

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

**NPL Site Management Assistance** — The Superfund Management Assistance program provides management and technical support to the EPA at priority sites in Nebraska. This assistance includes reviewing technical documents and participating in the Superfund remedy selection process. As the most heavily contaminated sites in the nation, Superfund National Priority List sites are generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The investigation and cleanup activities at these sites are organized into several phases including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. The Department also participates in public meetings with citizens and local officials in the development of cleanup plans. The table on the following page identifies completion of major phases of work at the proposed and final NPL sites in Nebraska.

### Cleanup Progress at NPL Sites in Nebraska

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

**Chart definitions:**

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

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

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

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

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

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

**Symbol key:**

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

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

**Federal Facilities** — The Superfund Federal Facilities program provides technical assistance and regulatory oversight to the U.S. Army Corps of Engineers in support of site assessment and cleanup activities and military munitions response activities at Department of Defense active facilities and formerly used sites. Active Federal installations include Offutt Air Force Base in Bellevue and Cornhusker Army Ammunition Plant in Grand Island. One hundred known formerly used defense sites exist in Nebraska that include small former defensive surface-to-air missile sites, bomber target sites, radar and communications sites and other formerly occupied Department of Defense properties. Under the current Defense-State Memorandum of Agreement, investigation and cleanup activities are being performed or planned to be performed at three active sites and fifteen formerly used defense sites. Military munitions response activities are being performed at eight sites.

## Nebraska Voluntary Cleanup Program

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

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

To date, 24 sites have entered the voluntary cleanup program. Currently, seven sites are active in the voluntary cleanup program. Two sites have been deferred to the EPA Superfund program. Four sites withdrew from the program. Three sites have been terminated from the program due to lack of activity in completing the investigation and/or cleanup. Eight sites have successfully completed cleanup requirements and have received "No Further Action" letters from the Department.

Over the last several years, this program has been directly involved in the extensive redevelopment activities associated with the City of Omaha Riverfront Redevelopment. The program's most recent involvement along the riverfront consisted of activities associated with construction of high-rise condominiums and a pedestrian bridge over the Missouri River.

**Brownfield Assessments** — A brownfield site is vacant or under-used industrial or commercial property where expansion or redevelopment is complicated by real or perceived contamination. The voluntary cleanup program performs assessments at brownfield sites in Nebraska. These assessments are performed by NDEQ at no cost to interested parties in Nebraska communities. A brownfield assessment is a preliminary investigation to evaluate the environmental conditions at a property, similar to a Phase I and Phase II Environmental Site Assessment. During the past year, the Department has performed twelve brownfield assessments.



## Voluntary Cleanup Program Sites and Status

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

## 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) Special waste characterizations; 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; and 10) Financial assurance review and monitoring compliance.

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

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

The Department assists landfill operators in making special waste characterizations for waste that requires special handling, treatment, or disposal methodologies in order to protect public health, safety, and the environment. While many of these requests are routine, others need to be evaluated by program staff to determine if the waste is acceptable at that particular landfill.

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 2008</b>	
Municipal Solid Waste Disposal Areas (Landfills)	23
Industrial Waste	1
Solid Waste Compost Sites	9
Transfer Stations	37
Materials Recovery Facilities	6
Construction & Demolition Waste Disposal Areas	24
Delisted Waste Disposal Areas	1
Fossil Fuel Combustion Ash Disposal Areas	7
<b>Total</b>	<b>108</b>

The following chart indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2008:

<b>Summary of Activities: FY2008</b>	
<b>Compliance</b>	
Facility Inspections (General)	100
Facility Inspections (Construction)	3
Complaints Received	148
Complaints Investigated	94
Complaints Closed	108
<b>Permitting</b>	
New Permits Issued	3
Permit Renewals	17
Major Permit Modifications	1
Transferred Permits	0
Public Hearings	1
Financial Assurance Reviews	150
Facilities Closed	1

### **Financial Assurance and Fees**

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

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

### **Waste Tire Management Program**

The waste tire management program is also regulated under Title 132. Waste tire processors are no longer required to obtain individual permits, but approved beneficial uses of waste tires are outlined in the regulations. Waste tire haulers are required to obtain individual permits annually and are required to post financial assurance. Financial assurance is designed to provide adequate funds to clean up any waste tires that are illegally disposed by the transporter.

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

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

<b>Waste Tire Permit Totals, FY2008</b>	
<b>Permitting</b>	
Renewed Hauler Permits	21
New Permits Issued	0

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

## Planning and Aid

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

### Staffing

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

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

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

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

### Review Process

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

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

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

### Expected Service Life

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

An expected service life is assigned to all equipment purchased with grant funds (in whole or in part) that has a value of \$500 or more per item. Equipment costing less than \$500 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:

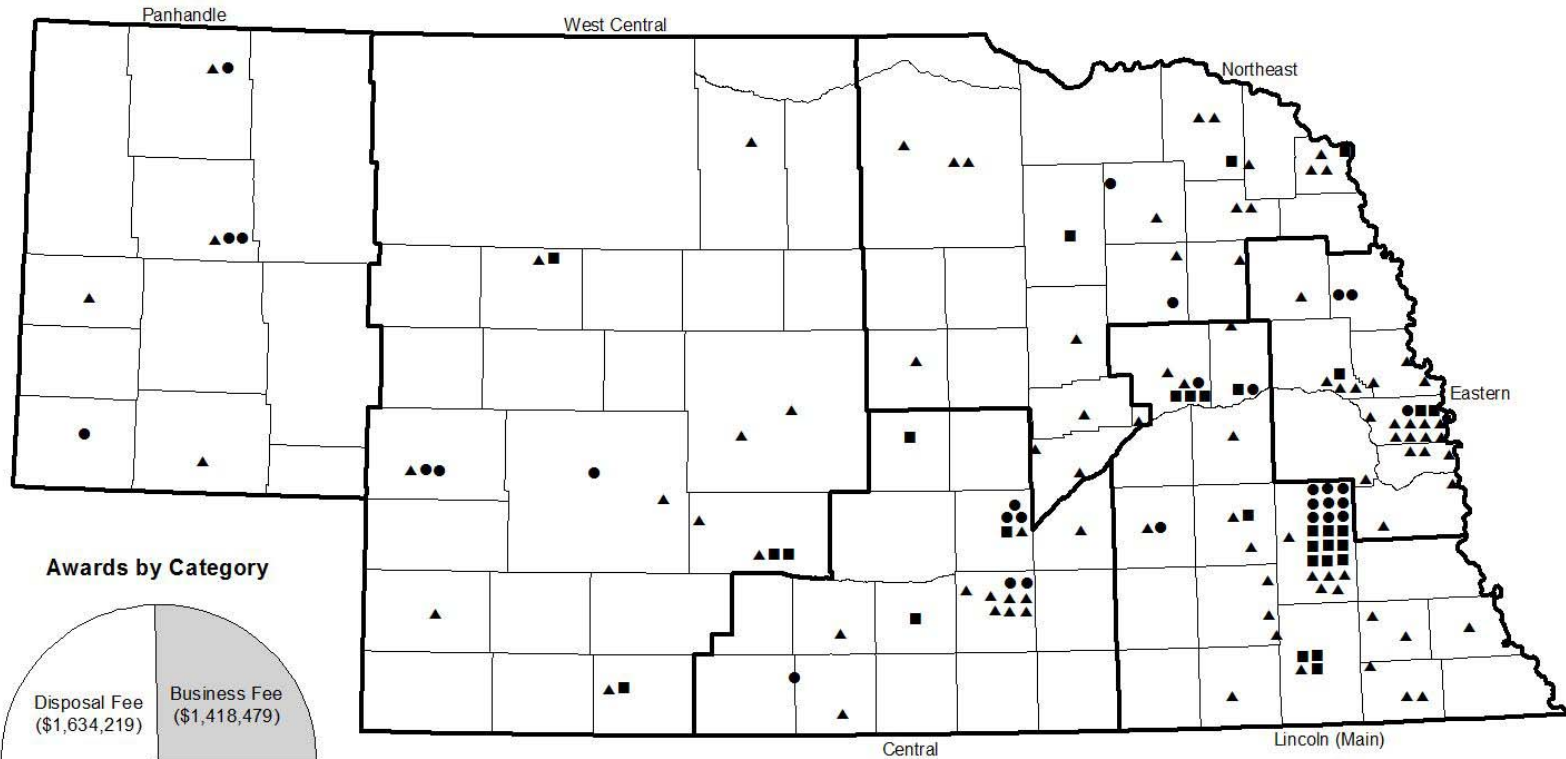
- A business fee on sales of tangible personal property, which generates about \$800,000 annually.
- A \$1 per tire fee on the retail sale of new tires in Nebraska, which generates about \$1.9 million annually;
- Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.3 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.

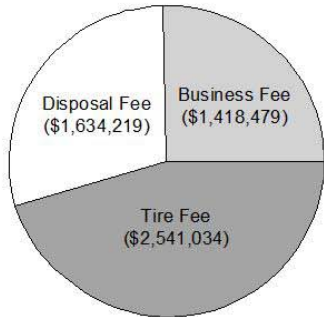
Part of the landfill disposal fee is awarded in the form of rebates to counties and municipalities through the disposal fee rebate program. LB 592, passed in 1999, provides for multi-year renewable grants to political subdivisions. Priority for multi-year grants is given to applicants who address the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

**Summary of Activities** - For FY2008, the Department awarded \$5,427,500 for Waste Reduction and Recycling Incentive Grants to 150 projects. Thirty of these grants were awarded from the Business Fee category (\$1,418,479), 30 were awarded from the Disposal Fee category (\$1,634,219), and 91 received grants from the funds set aside from the scrap tire funds (\$2,541,034). The following map shows the locations across Nebraska that received funds.

## Waste Reduction and Recycling Incentive Grants Program 2008 Grant Awards



**Awards by Category**



■ Disposal Fee	\$1,634,219	30 grants, including 1 statewide and 6 regional
● Business Fee	\$1,418,479	30 grants, including 2 statewide and 6 regional
▲ Tire Fee	\$2,541,034	91 grants, including 2 regional
<b>Total</b>	<b>\$5,593,732</b>	<b>151 grants</b>

## **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 \$1.3 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.

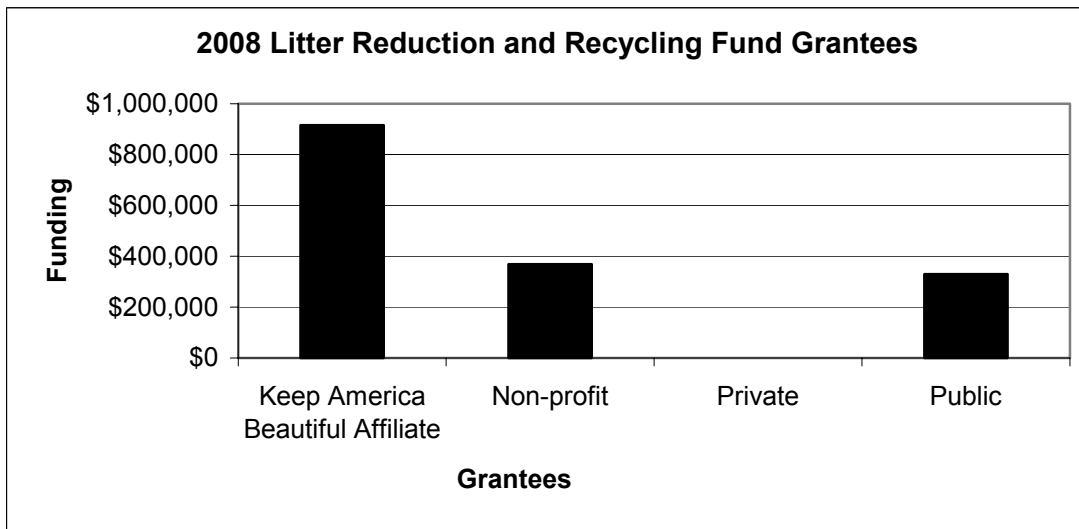
## **Fund Summary**

### **Litter Reduction and Recycling Fund July 1, 2007 - June 30, 2008 (FY 2008)**

<b>Fund Balance June 30, 2007</b> .....	<b>\$710,423</b>
Revenues:	
Litter Taxes Collected .....	1,600,728
Interest, Grant Returns .....	96,405
<b>Net Collections for Year</b> .....	<b>\$1,697,133</b>
Expenditures:	
Department of Environmental Quality Administration .....	168,358
FY 2008 Grant Funds Expended .....	1,532,284
<b>Total Expenditures FY 2008</b> .....	<b>\$1,700,642</b>
<b>Fund Balance June 30, 2008</b> .....	<b>\$706,914</b>



In FY2008, \$1,614,715 was awarded from the Litter Reduction and Recycling Grant Program. Grant funding is awarded to several types of programs; Keep America Beautiful affiliates, non-profits, private businesses, and public entities. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling. Below is a chart reflecting 2008 grantees.



**2008 Grant Allocations**

**Litter Reduction and Recycling Fund**

In FY2008, the Department gave 68 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

<b>Public Education</b>	(41%)	20 grants	\$ 659,977
<b>Cleanup</b>	( 8%)	16 grants	\$ 135,176
<b>Recycling</b>	(51%)	32 grants	<u>\$ 819,562</u>
			<b>\$1,614,715</b>

**Public Education**

In FY2008, 20 grants totaling \$659,977 were awarded under the category of public education. The Public Education programs educate citizens in the areas of litter reduction, cleanup, and recycling through a variety of individual and community activities. The citizens of Nebraska are cultivating a greater awareness of their impact on the environment through their purchasing and disposal actions. The educational programs are an excellent means of providing information on proper waste disposal, recycling, and available products that contain recycled material. Priority is given to programs that promote markets for recycled materials or purchasing products made from recycled materials.

**Cleanup**

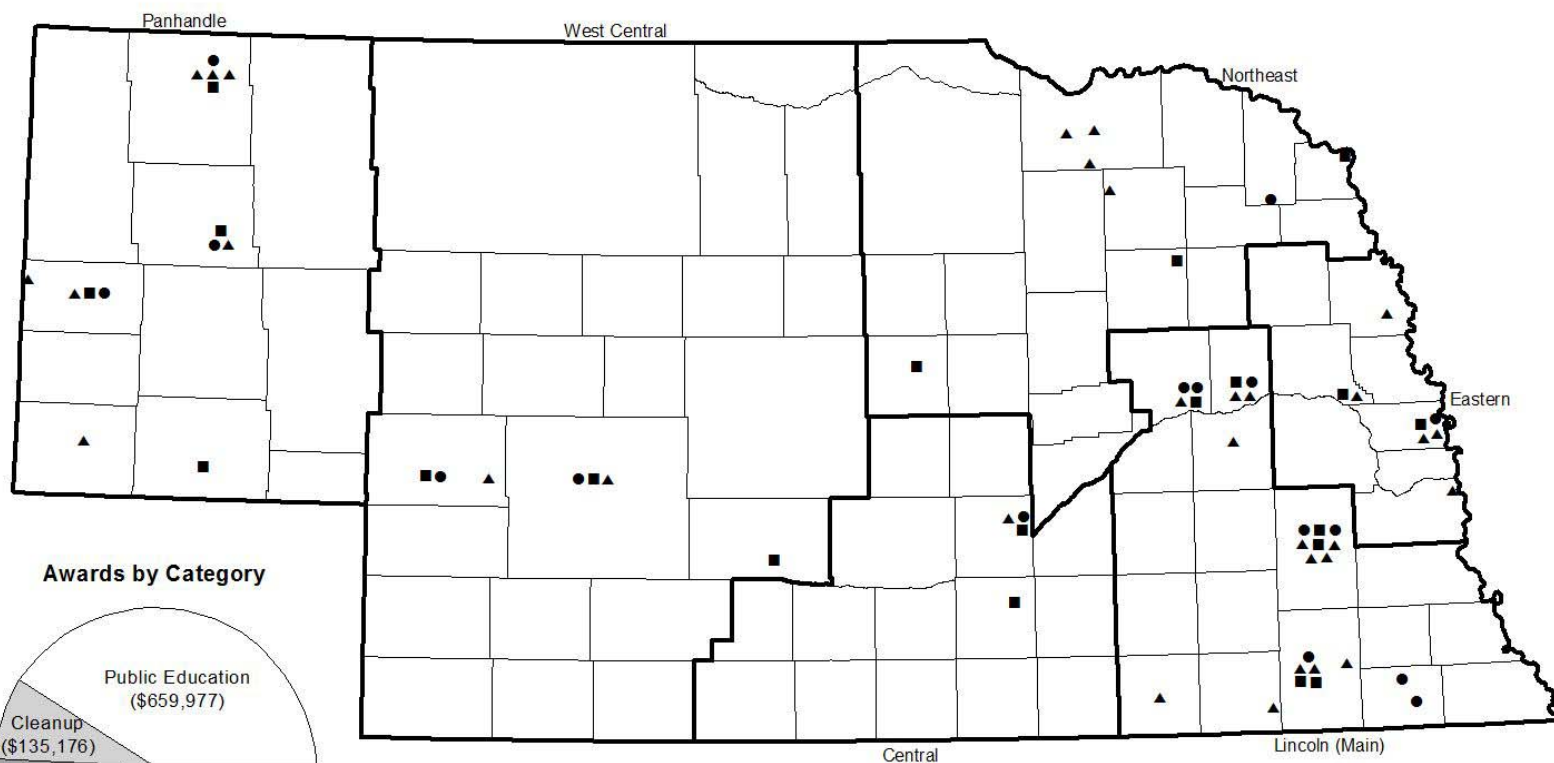
In FY2008, 16 grants totaling \$135,176 were awarded under the category of cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas, and other public use areas within the state. Not only are the public areas improved through the removal of litter and debris, but also much of the material collected during the cleanups is recycled. The recycling proceeds are often utilized to benefit the respective programs.

**Recycling**

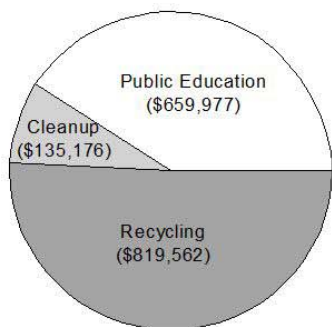
In FY2008, 32 grants totaling \$819,562 were awarded under the category of recycling. The recycling programs provide an alternative to the disposal of solid waste in Nebraska's landfills. The programs recycle more than just aluminum, paper, glass, and plastic. Materials such as electronic computer components, paint, aerosol cans, fertilizer, pesticides, and household hazardous waste are collected and either reprocessed to be used again or are disposed of in an environmentally friendly manner. Recycling conserves our natural resources, landfill space, and energy. Jobs are created and revenue is generated through the opportunities that recycling provides. Recycling efforts that promote the purchase of recycled content products continue to receive priority for funding. This support helps to "close the loop" and enhance the recycling efforts in Nebraska.

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

## Litter Reduction and Recycling Grant Program 2008 Grant Awards



**Awards by Category**



■ Public Education	\$659,977	20 grants, including 1 statewide and 1 regional
● Cleanup	\$135,176	16 grants, including 2 regional
▲ Recycling	\$819,562	32 grants, including 1 statewide
<b>Total</b>	<b>\$1,614,715</b>	<b>68 grants</b>

**Illegal Dumpsite Cleanup Program**

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

Funding for this program is limited to five percent of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. Approximately \$130,000 is available annually. The Department is encouraging municipalities, counties, and other political subdivisions to submit applications for the reimbursement of cleanup efforts.

**Landfill Disposal Fee Rebate Program**

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

Under the program, which was created in 1994, any municipality or county may apply for a rebate if they have a written purchasing policy in effect requiring a preference for purchasing products, materials or supplies which are manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a 10-cent rebate from the \$1.25 per ton disposal fee. Rebates are provided quarterly.

# CHAPTER 6:

## Water Quality Division

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

### **Petroleum Remediation Program**

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

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

#### **Investigation and Cleanup**

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

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

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

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

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

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

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

### **"Orphan" sites**

In situations involving "orphan" sites (sites where the person or business that caused the contamination either cannot be identified or does not have the resources to pay for their share of cleanup costs), investigation and remediation costs are paid with federal and/or state funds. As of September 12, 2008, there were 205 "orphan" sites in some stage of investigation/cleanup. There were also 716 orphan sites waiting on the inactive list.

### **Pay for Performance**

Some orphan sites are selected by the state to be cleaned up through a different process known as "Pay for Performance." Under the Pay for Performance program, pre-qualified contractors are invited to submit bids to clean up specific petroleum-contaminated sites. NDEQ has signed 24 Pay for Performance contracts since the program's inception, and three more are expected to be signed soon. Six of these projects have been successfully completed, five were terminated prior to completion, and 13 are still in the cleanup phase. These Requests for Proposals and related information are posted on the agency's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us).

### **Program Statistics**

Since June 1999, through September 19, 2008, 1,803 Tier 1 site investigations have been initiated. Of the 1,534 Tier 1 field investigations completed thus far, 892 (58%) were closed, and 642 (42%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 453 Tier 2 investigations have been completed; 334 (74%) of these have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, 240 (16%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

The revenue going into the fund is about \$12 million annually. As of June 30, 2008, a total of \$131,113,541 has been disbursed since the program began. During the past fiscal year, NDEQ reimbursed \$3,918,103 to 180 active sites and an additional \$2,410,622 to 157 Tier 1 sites.

The 30 sites listed on the next page, all but seven of which are active, have received a total reimbursement of more than \$600,000 each. Once the statutory limit is reached (either \$975,000 or \$985,000, depending on the applicable deductible/co-payment amount), the responsibility of funding the remainder of cleanup necessary reverts to the responsible person.

Site Name	City	Reimbursed amount (as of June 30, 2008)	Site Status (as of June 30, 2008)
Burlington Northern RR	Alliance	\$975,000.00 X	active
Burlington Northern & SF	McCook	\$975,000.00 X	active
Konecky Oil	Mead	\$975,000.00 X	active
Burlington Northern RR	Alliance	\$972,578.98 X	active
Coop Firth	Firth	\$961,873.38	active
Elkhorn Valley Coop	Snyder	\$953,516.14	active
Corner Service	Bancroft	\$952,962.42	active
Magers Service	North Platte	\$947,669.57	active
Peterson Oil Co Inc.	Davenport	\$910,066.53	closed
BNSF	Alliance	\$903,066.42	active
Tomahawk Truck Stop	North Platte	\$879,430.07	closed
Nu Star Energy LP	Norfolk	\$870,852.71	active
Gordon Airport Authority	Gordon	\$865,512.06	closed
Dankerts Inc.	Chambers	\$840,277.38	closed
Former Hershey Truck Stop	Hershey	\$839,589.58	active
Neitzel Oil Co.	Springfield	\$837,852.60	active
Wortman Motor Co.	Doniphan	\$800,063.16	active
IBP ATV (At The Verticals)	Dakota City	\$786,768.80	active
Coop Panhandle	Mitchell	\$784,024.80	active
Western Cooperative Co.	Alliance	\$752,803.21	active
Ameritas Investment Co.	Lincoln	\$743,449.29	active
Unocal Corporation	Ogallala	\$728,671.42	active
Ag Valley Coop	Bartley	\$703,382.52	active
Conoco Phillips	Sidney	\$694,031.32	active
Klepper Oil	Du Bois	\$672,530.00	closed
Sinclair Oil Corp.	Grand Island	\$662,103.95	active
Whitehead Oil 33 <sup>rd</sup> & A	Lincoln	\$660,445.55	active
Ag Valley Coop	Curtis	\$625,563.42	active
Barnard Oil Company	Beatrice	\$617,881.13	closed
Midland Coop – Axtell	Axtell	\$600,465.22	closed

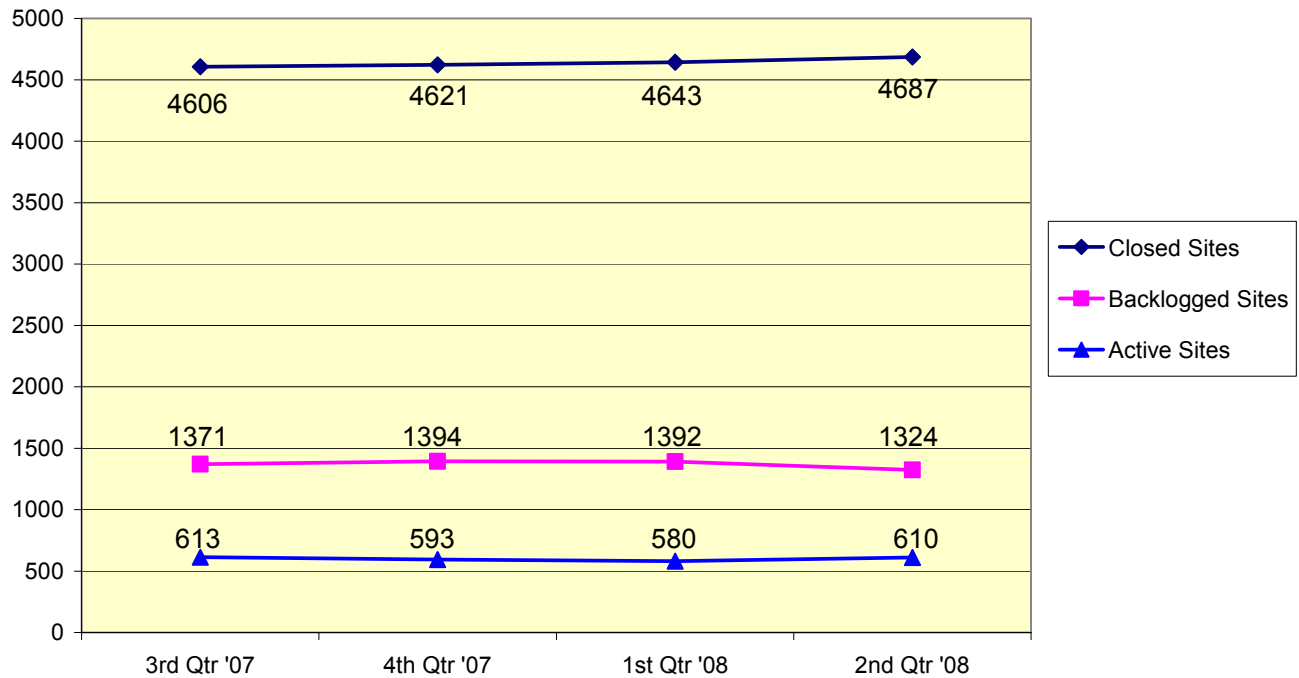
X: The statutory limit has been reached. The total reimbursed amount may have been reduced due to noncompliance reductions.

Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. Over 150 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

The following is a chart of quarterly activities for the last fiscal year 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

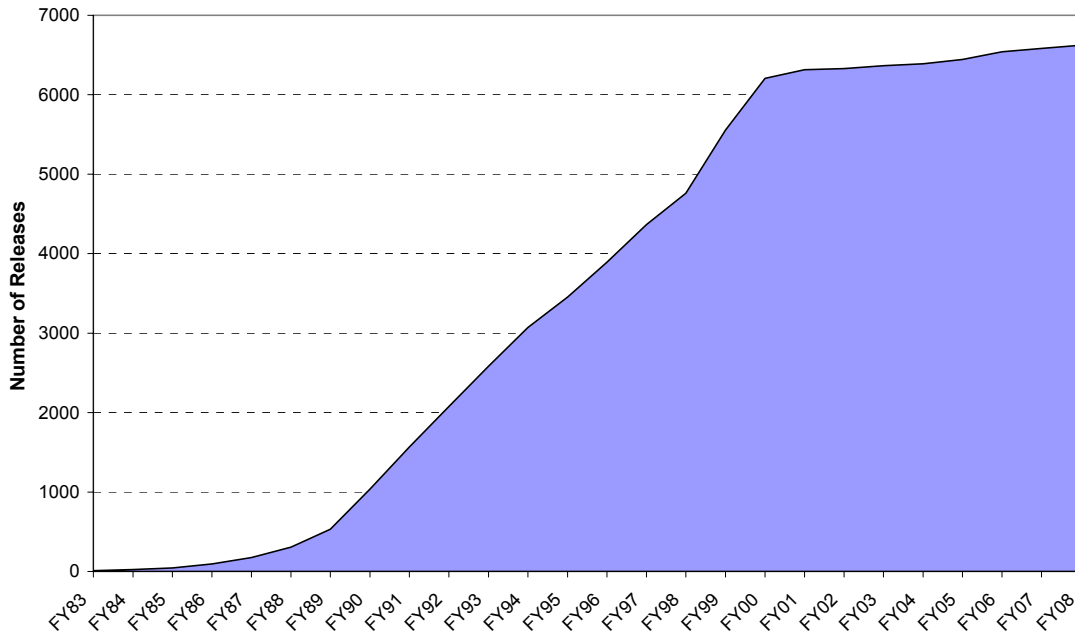
### Petroleum Remediation trends: July 1, 2007 to June 30, 2008



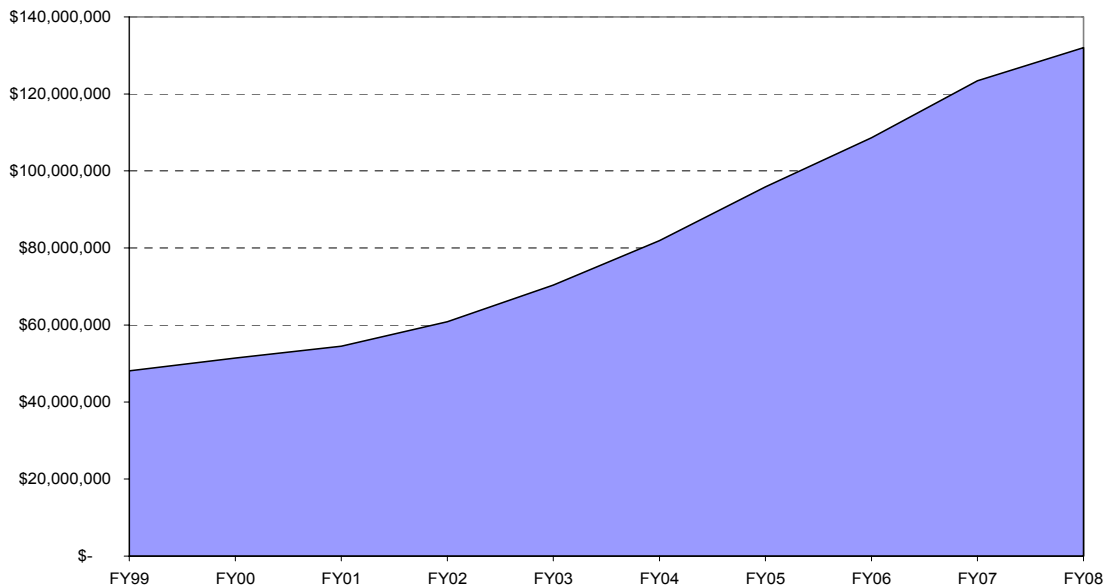


The chart below shows the cumulative number of sites that have had releases identified in the last several years. The second chart shows the cumulative amount that the program has spent on investigation and cleanup.

**Cumulative Release Totals  
(Through FY08)**



**Cumulative Title 200 Disbursements  
(last 10 years through FY08)**



## Agriculture Section

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

### LIVESTOCK WASTE CONTROL PROGRAM

#### Overview

FY2008 was again a year of significant changes for the Livestock Waste Control (LWC) Program, including major regulatory revisions, reduction in the annual permit fee rate, and expiration of the only General Permit administered by the LWC Program. In addition, an unusually wet spring resulted in a significantly higher number of complaint and discharge investigations.

The Title 130 "*Livestock Waste Control Regulations*," were revised to implement the FY2007 statutory amendments to the Livestock Waste Management Act. During FY2008, the revised Title 130 regulations were approved by the Environmental Quality Council, signed by the Governor, and took effect as of January 1, 2008. Major changes to the regulations included establishment of a new Construction and Operating Permit, and regulatory authority to assess certain concentrated animal feeding operations (CAFOs) an annual permit fee.

#### Fees

The annual permit fee is assessed on all permitted Large Concentrated Animal Feeding Operations (CAFO) and all animal feeding operations (AFOs) covered under a National Pollutant Discharge Elimination System (NPDES) permit. The fee is determined based upon the number of head of livestock for which the operation has a permit. The per-head fee rate had been set for the first two years the fee was assessed, but the Department was given the authority to change the rate annually or keep it the same. In FY2008, the Department reduced the per-head rate assessed the producers.

During FY2008, DEQ received and deposited \$108,796 in annual permit fees from 570 permitted AFOs. In addition, the Department received 195 inspection fees, 354 permit application fees and seven late payment fees.

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

The LWC Program oversees the NPDES permitting program, issuing individual NPDES permits to animal feeding operations, as well as coverage under a NPDES General Permit for Open-Lot Livestock Operations, both of which expire every 5 years. Permittees are required to submit a reissuance application for NPDES permit coverage.

As of March 31, 2008, the original NPDES General Permit for open-lot livestock operations expired. During the latter part of FY2008, program staff developed the new NPDES General Permit for Open-Lot Livestock Operations that complied with the newly effective Title 130 regulations, the amended Livestock Waste Management Act and revised federal CAFO laws. Program staff drafted the new permit, sent it for public notice, received and addressed public comments, obtained approval, and issued the permit within about a two-month time frame.

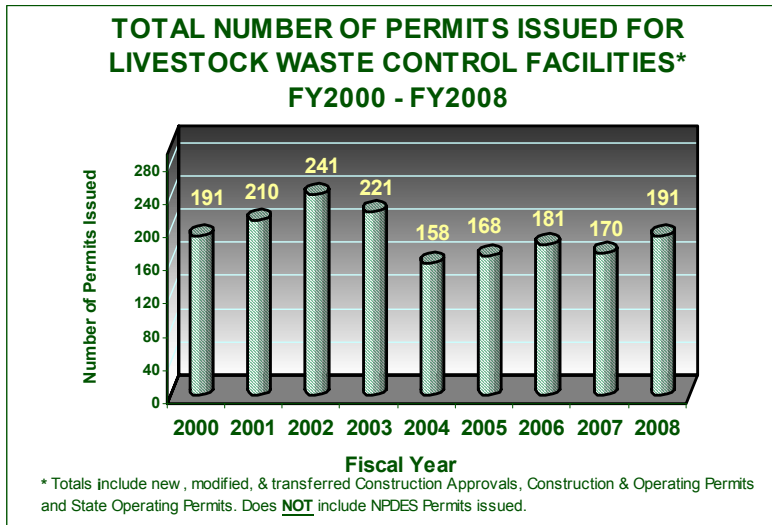
Upon issuance of the General Permit, program staff began addressing the backlog of reissuance applications from producers, having received 255 reissuance applications for NPDES General Permit coverage by the end of FY2008, in addition to 91 applications for new or modified General Permit coverage and 20 applications for individual NPDES permits. Excluding the reissuance applications, these figures represent a 44% increase from the previous fiscal year (51 requests) in the number of general permit coverage requests and a 20% increase in the number of individual permit applications from last year (16 applications).

By the end of the fiscal year, the program had reissued coverage under the new NPDES General Permit to 103 large CAFOs, more than 40% of the reissuance applications received. In addition to the reissuance permit coverage, the program issued 11 new or modified individual NPDES permits, and new or modified coverage under the NPDES General Permit to an additional 44 operations, all large CAFOs.

**State Permit Program**

The Department issues new, modified, and transferred Construction and Operating Permits, in addition to overseeing the NPDES Permit Program. Overall, the total number of applications received for state permits in FY2008 was about equal to the number received in FY2007 (160 applications versus 158 applications).

During FY2008, the LWC program received 103 applications for new, and 42 applications for modified, Construction and Operating Permits, and one application for a modified State Operating Permit. More than 80% of these applications were submitted by large animal feeding operations – the same percentage as last year.



This year saw an 11% increase from FY2007 in the total number of permits issued to AFOs under the state permitting program. The Department issued 140 new, and 47 modified or transferred, Construction and Operating Permits this year, compared to 126 new and 31 modified or transferred Construction and Operating permits or Construction Approvals in FY2007. Four

State Operating Permits were modified or transferred in FY2008, compared to 13 permits the previous year.

Of the total number of state permits issued this year, nearly three-quarters (73%) were issued to large AFOs, slightly less than the previous year's figure of 79%.

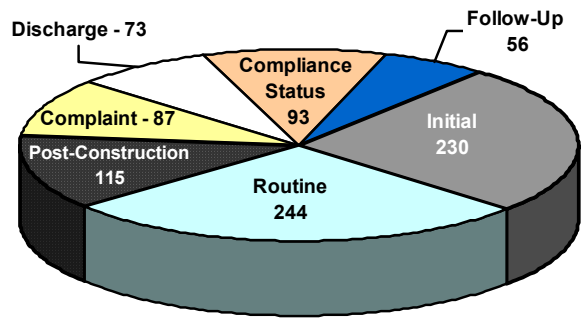
**Inspections**

Precipitation last fall and an unusually rainy spring caused the number of investigations of discharges from livestock waste control facilities to nearly triple in FY2008. Program staff conducted a total of 73 discharge investigations this year, compared to 26 such investigations in FY2007. The number of complaint inspections also increased by about one-third over last year's numbers. In FY2008, staff performed 87 complaint inspections, compared to last year's total of 55 complaint inspections.

The program received 240 requests for initial inspections this year, up nearly 37% over last year's total of 152 requests. However, nearly a quarter (24%) of the total number of requests received were from small AFOs – which were not required by regulations to submit an initial request. Program staff notified these operations that an initial inspection was not required and their inspection fees would be returned. If the requests received from small AFOs are subtracted from the total numbers, the LWC program still experienced a nearly 17% increase in the number of initial inspection requests received in FY2008 (183 requests), compared to last year's total of 152 requests received.

The number of inspections conducted by program staff also rose by 17% this year. Staff conducted a total of 898 inspections in FY2008, a significant increase from last year's total of 744 inspections.

**Inspections of Animal Feeding Operations in FY2008**



This year, more routine inspections were conducted than initial inspections, which is different than the past several years. The chart above provides the numbers of each inspection type for FY2008.

In addition, the number of complaints received was down by 12% from last year. In FY2007, the LWC program received 112 complaints, but in FY2008 – despite a greater number of discharges – 100 complaints were received about livestock waste control facilities.

General information about the Livestock Waste Control Program, fact sheets, forms, guidance documents, the NPDES General Permit, Title 130 regulations, and public notices of the Department's intent to issue or deny Construction and Operating Permits and NPDES permit coverage for animal feeding operations are available on the Department's web site <http://www.deq.state.ne.us>.

## **CHEMIGATION PROGRAM**

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

The NRDs inspect systems and issue site permits for specific safety equipment that is required to be installed on irrigation systems. The Chemigation Program and the NRDs monitor compliance with the Nebraska Chemigation Act and state regulations. Nebraska's applicators and irrigators have a high degree of compliance with the state laws and regulations.

Chemigation Permits for chemigation sites are issued annually, and are reported to the Department on a calendar year basis, rather than by fiscal year. Since permitting began in 1987, the total number of annual permits issued initially followed an upward trend, but leveled off in recent years. In 2007, 17,716 chemigation site permits were issued. During the first three quarters of calendar year 2008 (ending September 30, 2008), 2,150 annual site permits had been issued.

Chemigation applicators must be certified by the Department, and re-certified every four years. To receive certification, the applicators must complete training and testing, which is provided by the University of Nebraska Cooperative Extension. Applicator certifications also are reported on a calendar-year basis.

In 2008, 922 applicators were trained, tested and certified, bringing the current number of certified chemigation applicators to 4,057 applicators. Information about chemigation applicator training dates and certified applicators is available on the Department's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us).

## **AGRICULTURAL CHEMICAL SECONDARY CONTAINMENT PROGRAM**

The Agricultural Chemical Secondary Containment Program regulates the construction and use of commercial and private facilities for the storage, loading, and rinsing activities of bulk liquid fertilizer and pesticides.

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, including a management program.

## Surface Water Assessment Programs

The Surface Water Unit collects physical, chemical, and biological water quality samples from streams and lakes, implements surface water improvement projects, and prepares surface water quality reports. Several monitoring programs collect stream and lake samples throughout the state; however, most monitoring is focused in two or three river basins each year in conjunction with a rotating basin monitoring strategy. Targeting resources in this manner improves the 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 five-year cycle, all 13 river basins in the state are intensively monitored. Monitoring data are used to document existing water quality conditions, assess the support of beneficial uses (such as aquatic life, recreation, and public drinking water supply), and prioritize water quality problems. The current five-year rotating basin monitoring cycle is:

- 2008 --- Loup, Niobrara, and White River-Hat Creek river basins;
- 2009 --- Lower Platte and Nemaha river basins;
- 2010 --- Elkhorn and Missouri Tributaries river basins;
- 2011 --- Middle Platte, North Platte and South Platte river basins; and
- 2012 --- Big Blue, Little Blue and Republican river basins.

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

A description of surface water implementation, monitoring, and assessment programs conducted during 2008 follows.

**Ambient Stream Monitoring Program** — This program has a network of 97 fixed stations located on main stem and tributary streams across the state. The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 river basins and link assessments of status and trends with natural and human factors that affect water quality. Fifty-eight of the 97 sites are located on main stem streams. Ecoregion and land use considerations were used in selecting many of the stream locations. This network was expanded from 42 sites in 2001 to its current total of 97 sites in 2002. In 2004, sampling frequency was increased from monthly to bimonthly (twice a month) from April through September to better represent water quality conditions during runoff events although it was cut back to monthly again in 2008 as a cost saving measure. Samples are analyzed for traditional chemical and physical parameters and include some herbicides and heavy metals. During 2008, a total of 1,160 water samples were collected for this program.

**Basin Rotation Monitoring Program** — The Basin Rotation Monitoring Program targets two to three river basins each year for intensive monitoring. In 2008, a total of 37 stream sites and 46 lake beaches in the Loup, Niobrara, and White River-Hat Creek river basins were sampled weekly from May through September for a variety of physical, chemical, and biological constituents to document existing water quality conditions, identify water quality problems, identify pollutant(s) of concern

and their sources, and estimate pollutant loadings. Lake beaches and recreation-designated streams were sampled weekly for *E. coli* bacteria to assess the suitability of water quality for primary contact recreation activities such as swimming, skiing, tubing, rafting, and canoeing. In addition to the lake beach bacteria monitoring, in 2004, toxic algae (microcystin) sampling was added and the network was established at major public beaches across the state. (The toxic algae program is described in more detail below.) Weekly updates on the suitability of lake water quality for recreation activities are reported on the NDEQ's website. In 2008, over 1,000 lake beach samples were analyzed for *E. coli* bacteria and the microcystin toxin, and an additional 800 stream samples were analyzed for *E. coli* bacteria and other physical/chemical parameters. Several monitoring partners assisted NDEQ in collecting these stream and lake samples.

**Toxic Algae Monitoring Program** — This program was initiated in 2004 following the deaths of several dogs after they drank water from lakes with blue-green algae blooms. Microcystins, the most common toxins released by blue-green algae, are analyzed each week during the recreation season from May through September at select lakes to determine if unacceptable risks to the public exist and if health alerts should be issued. Especially targeted are public lakes with designated swimming beaches. Samples are analyzed by DEQ staff using the ELISA procedure, which provide a quick-turnaround time and allows public health alerts to be issued prior to each weekend's recreation activities. Microcystin sampling was combined with lake beach monitoring at lakes throughout the state to more effectively use state resources. During 2008, NDEQ analyzed over 1,100 samples for total microcystins at 51 beaches on 47 different lakes. Based on the results of these data, health alerts were issued on eight different lakes. The amount of time the lakes were on alert ranged from 2 to 12 weeks. Toxic algae results and health alerts are listed weekly on the NDEQ's web site ([www.deq.state.ne.us](http://www.deq.state.ne.us)).

Several special studies are being conducted to identify cause and effect relationships of toxic algae blooms and the extent of toxic algae problems in Nebraska.

- NDEQ contracted with UNL to conduct aircraft spectral imagery of lakes during 2007 through 2009 where remote sensing technology is used to identify and quantify concentrations of toxic algae and evaluate the potential of this technology for early detection of toxic algae problems. This information may be used to develop a predictive model for identifying lakes with a high potential for toxic algae blooms. While this study is on-going, initial results are promising.
- Fish fillets and organs from multiple fish species at three lakes, Carter Lake, Pawnee Lake, and Fremont Lake #20, which have most frequently been on health alerts for toxic algae, were analyzed for concentrations of total microcystins and Microcystin LR in 2006 and 2007. Detectable concentrations of both parameters were measured in the fillets and organs of three different fish species from Fremont Lake #20, but not in fish from the other two lakes.
- Groundwater monitoring wells were installed near Fremont Lake #20 in 2006 and were sampled monthly from 2006 through 2008. Low levels of the microcystin toxins have been detected from some of the wells at different times during this study.
- Samples from five sites are being split and analyzed by the UNL Water Lab during 2006 through 2008 to provide a comparison of results between two analysis methods as a quality assurance check on the data. This analysis is also providing information on the other neurotoxins and the different variants also present in those samples to gain a better understanding of this complex issue and potential health concerns.

- During 2008, additional samples were collected for field measurements (temperature, oxygen, pH and conductivity) and nutrients (kjeldahl nitrogen, nitrate-nitrite nitrogen and total phosphorus) at 10 sites bi-weekly May – September in an effort to help identify a cause for high toxic algae levels in certain waters.
- NDEQ, UNL, and the Nebraska Game and Parks Commission are participating in a research project, supported in part by Environmental Trust funds, studying the effectiveness of alum applications as a potential treatment for toxic algae at Fremont Lake # 20. This study is a multi-parameter project looking into several aquatic components including nutrients, fish and zooplankton communities as well as the algae. Preliminary results of this study are very promising in developing a potential cure for toxic algae occurrences.

**Fish Tissue Monitoring Program** — A total of 58 fish tissue samples were collected from 15 streams and 33 lakes across Nebraska for analysis of toxic pollutants during 2008. This information is used to assess toxic pollutant trends, identify potential problem areas, and to issue fish consumption advisories. While 2006 and 2007 data assessment is pending, 2005 data resulted in fish consumption advisories issued or reissued for 44 sites, including 20 streams or canals and 24 lakes. New advisories were issued for Verdon Lake near Verdon and Wagon Train Lake near Hickman (mercury in largemouth bass) and the Little Nemaha River near Auburn (PCBs and mercury in channel catfish). Advisories are based on an average consumption rate of eight ounces of fish per week for an average-sized adult over a 71-year lifetime that would result in an additional risk of one in 10,000 for cancer or other health problems. 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. The primary contaminants of concern in Nebraska fish are PCBs, mercury and dieldrin.

**Stream Biological Monitoring Program** — This program is used to evaluate the health of aquatic life populations and involves a unique randomized sample design that allows water quality status and trend assessments to be determined with a known level of confidence. During 2008, a total of 45 stream sites were sampled in the Loup, Niobrara, and White River-Hat Creek river basins. Since 1994, this program has been conducted using "state-of-the-art" fish, macroinvertebrate, and habitat sampling protocols and ecoregion-based reference sites.

Sampling is conducted in conjunction with the basin rotation monitoring strategy. Data from 1997 to 2001 were recently assessed and used to revise the biological criteria used in evaluating the health of aquatic life populations in Nebraska streams. The current approach allows evaluations of aquatic life health to be made with greater confidence even though fewer samples are collected. A report entitled "Nebraska Stream Classification Using Fish, Macroinvertebrates, Habitat, and Chemistry Evaluations from R-EMAP Data 1997-2001" was completed in 2005.

**Lake Monitoring Program** — Lake monitoring is currently conducted on 41 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 2008, a total of 205 samples were collected at deep water locations with additional profiles collected from mid-lake locations.

Some inlet streams are sampled during periods of significant precipitation to provide information on nutrient, sediment, and pesticide loadings to lakes during runoff events. During 2008, runoff water in 27 inlets to a total of 18 different lakes was collected.



**Fish Kill and Citizen Complaint Investigations** — A total of 44 fish kills and 18 surface water citizen complaints were reported between July 1, 2007 and June 30, 2008. Most fish kills were attributed to low dissolved oxygen levels, low flows, temperature stress, disease/parasites, or illegal discharges. On-site investigations were conducted, as needed, to document existing water quality conditions, surface water quality standards violations, and identify pollution sources and responsible parties.

**Integrated Report** — Beginning in 2004, and every two years thereafter, states are required to prepare a biennial water quality report called the Integrated Report, which is a combination of the Section 305(b) and Section 303(d) reporting requirements of the Clean Water Act. The Integrated Report provides a comprehensive summary of the status and trends of surface water quality in Nebraska and includes a list of impaired surface waters that do not support their assigned beneficial uses. The 2008 Integrated Report is available on NDEQ's web site ([www.deq.state.ne.us](http://www.deq.state.ne.us)).

**Nebraska Surface Water Quality Monitoring Report** — A more reader-friendly version of the Integrated Report called the Nebraska Surface Water Quality Monitoring Report was developed in 2006. This report is available on the NDEQ's web site. Future enhancements to this report will include more comprehensive trend assessments and in-depth examinations of surface water quality issues and special studies.

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

## Groundwater Assessment Programs

### Groundwater Quality Monitoring Report

Legislation passed in 2001 directed NDEQ to issue an annual report to the Legislature concerning the quality of the groundwater in Nebraska. The first of these reports was issued December 1, 2001. These reports summarize the water quality monitoring efforts of the Natural Resources Districts, NDEQ, and other state, local, and federal agencies, and can be found on the agency's web site, [www.deq.state.ne.us](http://www.deq.state.ne.us). Statistics and maps showing nitrate-nitrogen groundwater monitoring results as well as four of the 42 pesticides sampled in the state are presented. The report uses data from the Quality-Assessed 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, [www.dnr.state.ne.us](http://www.dnr.state.ne.us).

### Hydrogeologic Studies and Reviews

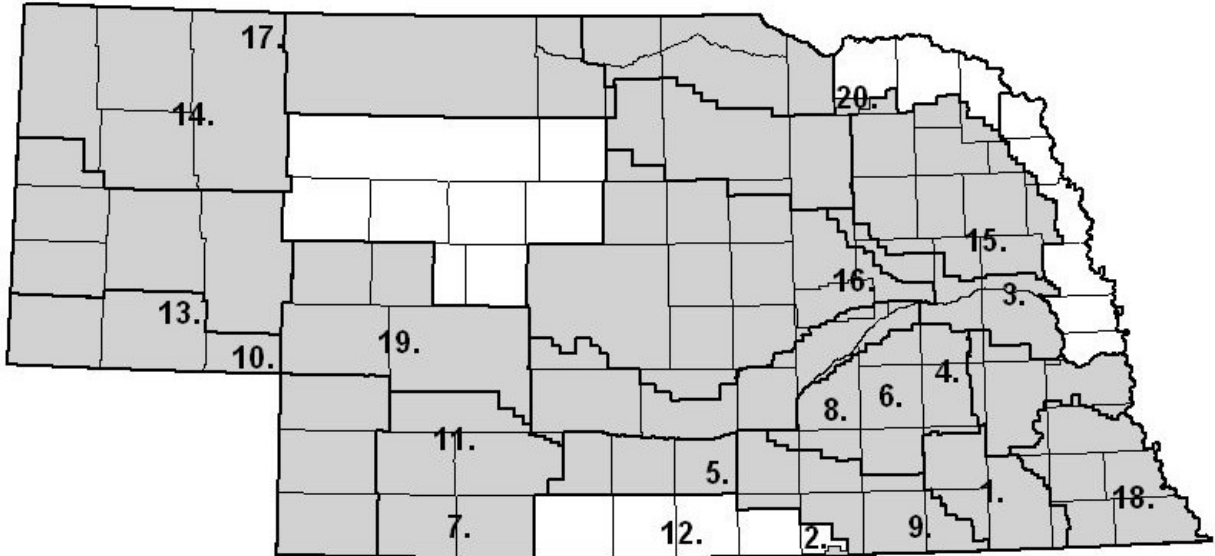
The Groundwater Unit is responsible for hydrogeologic review of various Department projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks and surface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

In addition, the Unit performs reviews if a situation does not fall under another agency program and is of environmental significance. Unit personnel continue to take responsibility under Title 118 — Groundwater Quality Standards and Use Classification for many site investigations and have sampled and supervised site cleanups.

### Groundwater Management Areas

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

**Progress in the Groundwater Management Area Program**



**NDEQ GWMA Studies**

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1. Beatrice/DeWitt, 1988          | 11. N. Middle Republican, 1995       |
| 2. Superior, 1988                 | 12. Lower Republican, 1996 - 97      |
| 3. Fremont, 1988                  | 13. E. Cheyenne Co., 1996            |
| 4. E. Upper Big Blue, 1989        | 14. Box Butte Co./Mirage Flats, 1998 |
| 5. Wilcox/Hildreth, 1989          | 15. S. Lower Elkhorn, 1999           |
| 6. York/Polk Co., 1990            | 16. E. Lower Loup, 2000              |
| 7. Red Willow/Hitchcock Co., 1990 | 17. E. Sheridan Co., 2001            |
| 8. W. Upper Big Blue, 1991        | 18. Humboldt, 2001                   |
| 9. E. Little Blue, 1992 - 1994    | 19. Keith-Lincoln Co., 2002 - 2003   |
| 10. Deuel Co., 1992               | 20. Bazile Triangle, 2004            |

**Underground Injection Control (UIC)**

The Underground Injection Control (UIC) program reviews and issues permits, conducts inspections, and performs compliance reviews for wells used to inject fluids into the subsurface. The program must ensure that injection activities are in compliance with state and federal regulations, and that groundwater is protected from potential contamination sources. Injection wells are classified by activity. Most wells are Class I, II, III, and V wells. Class II wells are associated with oil and gas production, and are regulated by the Nebraska Oil and Gas Conservation Commission. NDEQ has authority over and manages Class I, III and V wells. Class IV wells is a category that is prohibited and has never been allowed in Nebraska.

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

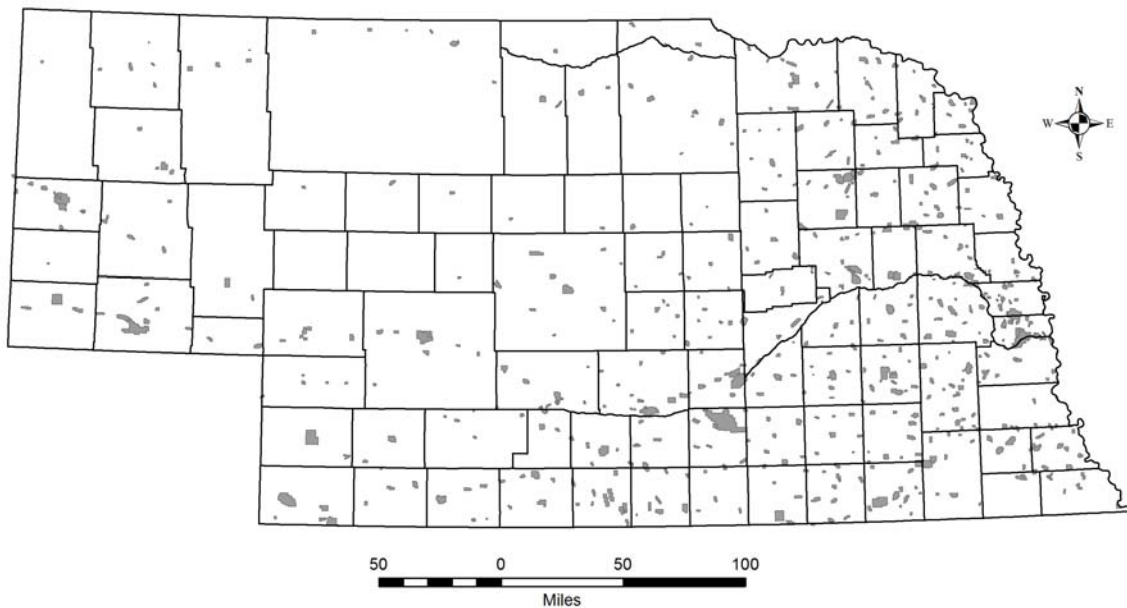
Class III wells are used to inject fluids for the purpose of extracting minerals. The only Class III wells in the state are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources operates 3544 Class III wells as of October 1, 2008.

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

### Wellhead Protection

The State Wellhead Protection program is a voluntary program, which assists communities and other public water suppliers in preventing contamination of their water supplies. State Wellhead Protection Program activities include delineating the zones of influence which may impact public supply wells, training communities on how to inventory all potential sources of pollution within these vulnerable zones, working with the local officials to identify options to manage these potential pollution sources, working on monitoring plans, and helping develop contingency plans to provide alternate water supplies and site new wells. All community public water supplies have a Wellhead Protection Area map as of October 1, 2004. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. Eighty-one community water supplies have approved Wellhead Protection Plans.

## Wellhead Protection Areas



## Water Quality Planning

### Surface Water Quality Standards

NDEQ develops water quality standards that designate the beneficial uses to be made of surface waters and the water quality criteria to protect these assigned uses. Title 117 - *Nebraska Surface Water Quality Standards* forms the basis of water quality protection for all surface water quality programs conducted by the Department. The federal Clean Water Act specifies that States review their water quality standards and revise where appropriate once every three years. NDEQ's last triennial review was completed in FY2006 with the final proposed revisions being heard and approved by the Environmental Quality Council on December 2, 2005. Governor Heinemann approved these revisions and they became the official surface water quality standards regulation for the State of Nebraska on July 31, 2006 (FY2007). The Standards were submitted to EPA Region VII for their approval under the Clean Water Act on August 17, 2006. As of the end of FY2008, the State was still awaiting action from EPA.

The current triennial review involves mainly housekeeping changes and utilization of a geographic information system to confirm referenced locations and produce new maps. Activities completed in FY2008 include the final development of the geographic information system, production of new maps, and initial drafting of proposed revisions to be heard by the Environmental Quality Council in November 2008. The current triennial review will be completed in the next fiscal year (FY2009).

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

### Section 401 Water Quality Certification

The Planning Unit administers the Water Quality Certification Program in accordance with Section 401 of the Clean Water Act. This program evaluates applications for federal permits and licenses that involve a discharge to waters of the state and determines whether the proposed activity complies with Title 117 - *Nebraska Surface Water Quality Standards*. If the activity is likely to violate the standards, conditions for complying with the standards will be issued with the certification, or certification will be denied. The U.S. Army Corps of Engineers Section 404 Dredge and Fill Permits and Federal Energy Regulatory Commission licenses are examples of federal regulatory programs that require State Water Quality Certification before federal permits or licenses can be issued. Four hundred eight Section 404 permit reviews were conducted by the unit during FY2008.

On January 9, 2001 the U.S. Supreme Court issued a decision in the matter of *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers*, No. 99-1178. The court decision eliminated the Corp's regulatory jurisdiction over isolated, non-navigable intrastate waters where the only link to interstate commerce was the use of the waters by migratory birds. Therefore no permit or other authorization by the Corps of Engineers is required for projects that might impact waters meeting those criteria. Following the SWANCC decision in 2001, the Supreme Court handed down a decision in *Rapanos et ux., et al. v. United States* on June 19, 2006 that

further limits the Corps of Engineers jurisdiction over waters of the U.S. This had the effect of further reducing the number of projects that needed a Corps 404 permit. However, these waters of the state are still under the authority of the Department of Environmental Quality, because isolated wetlands are included in Title 117.

Although the department has no permitting mechanism to authorize projects in advance of their implementation, procedures have been developed to assist project sponsors who wish to avoid violating state water quality standards and potential enforcement actions. To maintain consistency between how NDEQ treats projects involving wetlands impacted by the court ruling and those proposed for jurisdictional wetlands, a series of checklists was developed. The checklists enable project sponsors to know what information they must provide, and allow NDEQ to deliver timely and consistent decisions on these wetlands. They also enable documentation of the decision-making process for each project. Project sponsors are encouraged to contact NDEQ before implementing their project so that the plans can be discussed in light of Title 117 requirements.

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

The Federal Clean Water Act, Section 303(d) requires states to prepare a list of impaired surface waters. These are waters that do not support the assigned beneficial uses as listed in Title 117. From this list, states are to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters and remove the identified impairments so that these waters may meet the beneficial uses assigned to them via Title 117. As in previous years, the Department has opted to combine the required CWA Section 303(d) list with the Section 305(b) report on the general status of water quality in the state. This combination is referred to as the Integrated Report.

During 2008, the Department continued to work with EPA Region 7 to resolve issues surrounding the 2006 Integrated Report. Also, the 2008 Integrated Report, which includes the 303(d) list of impaired waters, was submitted to EPA Region 7 prior to the April 1 deadline. EPA has not taken any action on either Report, however, and staff has been corresponding with EPA, seeking resolution and approval.

No additional TMDLs were drafted or submitted for approval in FY2008. The TMDLs drafted in late 2007 for the Elkhorn River Basin, Missouri Tributaries Basin, and Big Indian Reservoir have been finalized and will soon be made available for public comment.

### **Nonpoint Source Management Program**

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

Through this program, the department initiated major shifts in program activities, including increased emphasis on watershed and groundwater management area planning, targeting of 303(d)-listed impaired waters, community participation in project development and implementation, and installation of management practices in smaller areas of manageable size. Support for local awareness and demonstration projects has been reduced. Prioritization of eligible projects and activities will be refined.

Major components of the nonpoint source management program include program administration, nonpoint source monitoring and assessment, and implementation of nonpoint source pollution management projects through Section 319 grant funding. Nonpoint source monitoring and assessment is an integral and crucial element for the successful implementation of the program. Water quality information is needed to identify and prioritize nonpoint source problem areas, develop watershed management plans and TMDLs, and evaluate the effectiveness of measures implemented to abate nonpoint source pollution. Currently identified nonpoint source problems and priorities are defined in the primary guidance document of the Nonpoint Source Management program: "Strategic Plan and Guidance for Implementing the Nebraska Nonpoint Source Management Program 2000-2015." Nonpoint source monitoring activities conducted during 2007 included investigative water quality evaluations, detailed watershed assessments, and effectiveness evaluations of implemented nonpoint source management measures.

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

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

During 2008, 47 projects were ongoing among the five grant categories. These included 25 large competitive projects (totaling \$6,596,919), nine small projects (\$129,099), 10 community lakes restoration projects (\$703,466), one urban run-off management project (\$60,000) and two wellhead protection area management assistance projects (\$165,600).

New projects funded by the Department during 2008 included seven large competitive projects (totaling \$2,427,247), four small projects (\$47,493) and three new community lake projects (\$213,150). A total of 151 large projects have been funded through Section 319 grants since the beginning of the program in 1990. Of these, 84 have addressed surface water, 42 have addressed groundwater and 24 have focused on both surface water and groundwater problems.

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

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

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

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

Annually since FY2004, source water protection grants have been given, utilizing Drinking Water State Revolving Funds (DWSRF). Grants are given to units of government, education institutions, and non-profit organizations to carry out projects that will help protect the state's drinking water sources. Ten grants were awarded in both fiscal years 2004 and 2005, 11 grants were awarded for FY2006, five for FY2007, eight for FY2008 and nine for FY2009. Source water protection activities that address drinking water quality, quantity, security, or education are eligible for grant funding.

### **Continuing Planning Process (CPP)**

Each state is required to establish and maintain a continuing planning process under Section 303(e) of the federal Clean Water Act. The department's concept of the Continuing Planning Process is that it should document processes and procedures used to make decisions relating to the Water Quality Division mission.

### **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 FY2008, 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.



## Water Permitting Programs

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

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

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

The NPDES program is responsible for regulating discharges of pollutants to waters of the State so as to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. The Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

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

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

### NPDES Permits

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

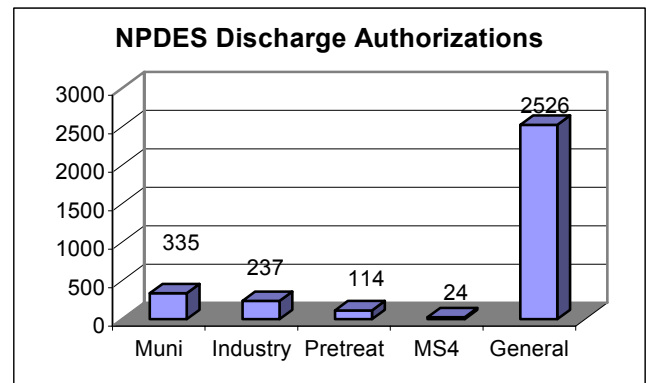
The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology based standards or water quality based standards. Technology based standards reflect effluent quality that can be achieved using treatment technology that is available to the permittee. NDEQ Title 119 sets forth

technology-based standards for municipal facilities and many types of industrial facilities. Technology based standards can also be developed on a case-by-case basis when necessary.

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

Permits may be developed and issued on an individual site-specific basis, or they may be developed and issued to apply to facilities with similar activities or effluent characteristics. These two types of permits are respectively referred to as individual permits and general permits. To date, the department has developed and issued general permits for the following activity categories: hydrostatic testing, dewatering, gasoline contaminated groundwater remediation projects, petroleum product contaminated groundwater remediation projects, construction site storm water, and industrial site storm water. Municipal Separate Storm Sewer System (MS4) permits have been issued to entities, including metropolitan areas and counties, that meet the criteria of the NPDES storm water program. A small MS4 state wide permit was issued January 1, 2006, and currently covers 10 cities. Another 12 urbanized areas were permitted in 2005. The cities of Lincoln and Omaha were permitted in 2002 and 2003, respectively, bringing the total number of MS4 permittees to 24. The Construction Storm Water General Permit was reissued January 1, 2008. The draft of the Industrial Storm Water General Permit will be available for comment in the near future and reissued in 2009.

There are 2526 active facilities provided discharge authority under general permits and 688 facilities with discharge authorizations under individual permits (not including storm water permits). The table titled "NPDES Discharge Authorizations" provides a summary of this information. The general permits include 1207 new authorizations under the new construction storm water permit, 62 dewatering/hydrostatic testing, 1235 industrial storm water, and 22 petroleum remediation sites.



### **Municipal and Industrial Facilities**

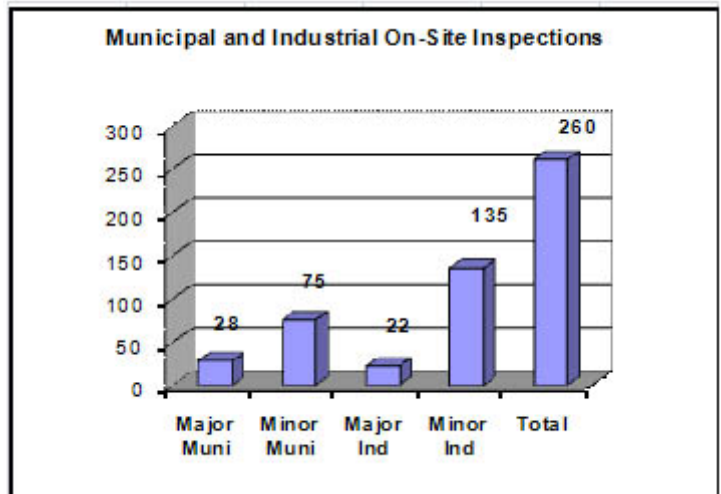
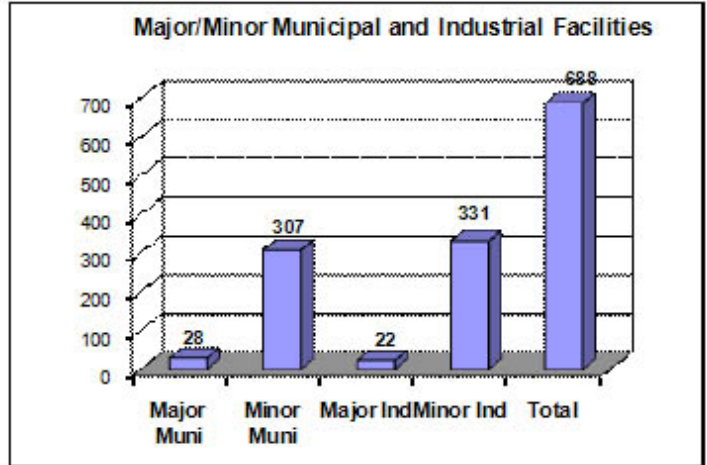
Industrial and municipal facilities are both grouped as major or minor facilities based upon their size and/or their potential to impact the receiving stream. The chart titled "Major/Minor Municipal and Industrial Facilities" provides a numeric break down of these types of facilities.

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 260 total inspections in Fiscal Year 2008. During effluent monitoring inspections effluent samples are collected and analyzed by the Department to compare with self-monitoring results. Facilities targeted for effluent monitoring inspections are chosen based upon pollution potential, past compliance or incident report histories, complaints, and/or Basin Management Approach priorities.

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

The Department effectively converted to this new Federal database from the Permits and Compliance System (PCS) in August of 2006.



## 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 now lower 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 with change on July 1, 2008. The Omaha MS4 Permit was issued on October 1, 2003 and was reissued in October 1, 2008. Phase II has expanded the areas requiring coverage under an NPDES MS4 Permit to include the urbanized areas in Douglas, Sarpy, Lancaster, Washington and Dakota Counties. An NPDES permit for Douglas, Sarpy and Washington Counties has been issued effective August 1, 2004. The Dakota County MS4 permit has been 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 the new general permit. These new 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.

Again available this year is nearly \$2.5 million in grant funds under Legislative Bill 1226 for any of the MS4 permittees. This grant is applied to the development and implementation of the MS4 communities' Storm Water Management Plans. The grant is distributed by population and requires a matching 20% from each of the grantees. Grant funds are awarded annually through FY2009. 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, NER000000 is scheduled for issuance with change within the next fiscal year.

### **Combined Sewer Overflows**

The Combined Sewer Overflow (CSO) program addresses those municipalities that have combined storm water and wastewater sewer systems. These systems were built prior to the existence of secondary sanitary wastewater disposal standards. When storm or snow run-off is occurring these systems may become hydraulically overloaded and excess water flows are bypassed. When bypasses occur, untreated wastewater is discharged into the receiving stream.

The cities of Omaha and Plattsmouth have combined sewers that are subject to storm-induced bypasses. Omaha's CSO and NPDES discharge permits were re-issued October 1, 2007. Plattsmouth's WWTF and CSO discharge permit was issued October 1, 2005. The long-term goal is total elimination of combined sewers in these locations, but this is a costly proposition. Federal regulations call for implementation of certain initial control measures and a long-term plan to reduce CSO discharge impacts.

The City of Omaha submitted a substantively complete long-term control plan on October 1, 2007 in compliance with an Administrative Consent Order between the City and NDEQ. This order requires Omaha to complete the long-term control plan by 2024. The projects included in the plan span 18 years and are estimated to cost \$1.5B. The goal of the projects is to reduce or eliminate combined sewer overflows and comply with State and Federal regulations.

The City of Plattsmouth is currently finalizing the long term control plan for their CSO. The Department is working closely with them to develop and finalize their schedules.

### **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 345 municipal facilities in the state have additional sludge monitoring requirements. These additional requirements include increased metal and nutrient content analyses; improved records for tracking the amount of sludge and metals applied to each disposal site, and cumulative disposal limits. The Department has not sought delegation of this program from the EPA. The program is managed out of the EPA Region 7 office in Kansas City, KS, however, the Department regulates the disposal of municipal and industrial sludges, both through the use of NPDES permit requirements and through the application of the NDEQ Title 132 - Integrated Solid Waste Management Regulations.

### **Nebraska Pretreatment Program Permits**

The Nebraska Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industrial dischargers. The pretreatment regulations can now be 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 PCS 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 to 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.

## **Wastewater Engineering Management**

### **Wastewater Construction Permit Program**

The Wastewater Section administers the Department's construction permit program for new and modified wastewater treatment facilities and collection systems built in the state. Construction permits for municipal, industrial, and commercial wastewater works are issued after department engineers review and approve the construction plans and specifications for the project. These reviews assure that wastewater facilities are correctly designed to protect the public health and the environment from the effects of improperly treated wastewater. In addition, the program maintains state regulations for the operation and maintenance of wastewater facilities, the abandonment of wastewater structures, and sets design standards for wastewater facilities.

For FY08, a total of 230 wastewater projects were submitted to the program for review and approval. Considerable time was spent last year working with communities that needed to upgrade their wastewater treatment facilities to keep up with growth in their communities. The section also continues to meet with representatives of ethanol plants and other industries to assure that they comply with state regulations.

In 2006, a major revision to *Title 123 - Rules and Regulations for the Design, Operation and Maintenance of Wastewater Works* went into effect. In 2007, ten amendments to the Rules and Regulations also became effective. These amendments keep the regulations current with national design standards for the Department's construction permit program.

### **104(g) Assistance (Operator Training)**

The 104(g) Assistance Program has been administered by NDEQ since 1983 and provides one-on-one training to operators of wastewater treatment facilities. The program has been mostly funded by an EPA grant through Sec. 104(g)(1) of the Clean Water Act. The Department received \$25,650 in grants and matched it with \$8,550 of state funds in FY08. This training is focused on assisting the operator to improve operation and maintenance of wastewater treatment plants.

The 104(g) Assistance Program provided diagnostic evaluation, initiated training, or assistance for operators at Cedar Bluffs, Columbus, Creighton, Hartington, Hebron, Logan View High School, Mead, Nehawka, Spencer, Springfield, and West Point. Program assistance was completed this year at Hartington, Hebron, and Spencer. Generally, training is completed at facilities in a two-year period. Staff presents the findings and accomplishments of the training to the village boards, city councils, or other appropriate body to complete the training assistance for facilities. The training program, paired with dedicated efforts from the communities involved, is a proactive effort that has yielded positive results. However, EPA has unexpectedly discontinued funding for the 104(g) program for the coming year, leaving the future of this valuable program uncertain.

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

Well-trained and competent 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 financial investment. The Wastewater Treatment Facility Operator Training and Certification Program was established to help accomplish this.

This program administers certification exams to new wastewater operators and issues certification renewals for operators who have obtained the necessary continuing education as provided for in Nebraska Administrative Code *Title 197 – Rules and Regulations for the Certification of Wastewater Treatment Operators in Nebraska*. Staff will continue to monitor and ensure compliance of those facilities that are required to have certified operators. As of October 2008, the wastewater operator training certification program has 824 certified operators with municipal certificates and 76 operators with industrial certificates.

Every four years 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. The exemption period under current review will end at the end of 2012. The Department has contacted a total of 193 facilities that may be eligible for the exemption and issued a total of 115 new four-year exemptions at this writing. Review of these applications will continue.

In calendar year 2008, the Department scheduled four five-day classroom training workshops for operators and 8 testing opportunities. Two one-day refresher courses were provided for operator certification applicants who need to retest. For 2009, the Department is scheduling four regular training sessions and seven examinations.

The Department will continue to work with operators of industrial wastewater treatment facilities on an as needed basis. Training and the mandatory testing of industrial operators will continue in FY08.

### **Onsite Wastewater Treatment Facilities**

The onsite wastewater program covers septic tanks, holding tanks, small lagoons, and other engineered wastewater treatment systems typically not connected to a municipal wastewater treatment system. The majority of these systems are for single households, although there are multiple houses, churches, camps, and establishments such as restaurants that use onsite systems. The U.S. EPA estimates that nearly one in four households depend on onsite systems for wastewater treatment.

The *Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act* (Act) passed in 2003 required that anyone doing work associated with onsite wastewater systems be certified by the State of Nebraska. The Act provided for the registration of all onsite wastewater systems constructed, reconstructed, altered, or modified. The law also provided for certification and system registration fees to support the program. The Act was amended in 2007 by LB333, which provided for application fees for permits and subdivision approvals. LB 333 also established a fee waiver provision for government inspectors. Nebraska Administrative Code *Title 124 – Rules and Regulations for the Design, Operation and Maintenance of Onsite Wastewater Treatment Systems* was also amended, effective December 26, 2007, to incorporate the new application fees.

The program focuses on protecting surface and groundwater in the area of proposed onsite systems through the use of standardized design requirements, the certification of onsite professionals, review of plans for subdivision development, and review of plans and permitting of large onsite systems, systems where concerns have been identified, or systems with non-domestic wastes. Certification of onsite professionals covers design, installation, inspection, maintenance, and pumping of onsite systems. Subdivision review and approval requirements apply when onsite systems will be used on any proposed lots that will have less than three acres suitable for building.



Program staff work to make sure that the design, installation, modification, repair, and maintenance of onsite wastewater systems is performed by qualified and certified professionals who understand Title 124 - Rules and Regulations for the Design, Operation and Maintenance of On-Site Wastewater Treatment Systems, and proper practices of their trade.

A certification by examination is required for professionals to obtain initial certification. As of October 2008, a total of 591 professionals have renewed or been certified by exam for the 2008 - 2009 certification cycle, some in multiple categories. A total of 12 hours of approved continuing education is required for certification renewal for the subsequent two-year certification cycle. Examinations for certification began in July of 2005. The Department has held 123 exam sessions and administered 1,365 exams since the certification program began.

The registration requirement provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, through September of 2008, there have been over 7,000 systems registered. 1,593 systems were registered in FY08.

NDEQ has cooperative agreements with several local governmental agencies to help implement and coordinate the program in their jurisdictions. The government inspector fee waiver provision in LB333 will help with implementation locally and there are currently 22 certified Inspectors from local governments. Nebraska Department of Health and Human Services personnel also routinely refer complaints or work in cooperation with NDEQ to resolve health related onsite wastewater handling issues. NDEQ provides information to the public, industry practitioners, and local governments on the regulations for new onsite systems through telephone calls, email, direct mail, meetings, and education seminars. Staff meets with local government officials and developers to discuss subdivision requirements, necessary before any construction, and waste management alternatives for subdivisions and housing developments located where municipal sewer systems aren't available. Program staff received and responded to 151 new complaints in FY08 and of the old and new complaints resolved 149. During this same time period, the program issued 19 Notices of Violation and forwarded nine cases for enforcement action (NDEQ Administrative Order or action request to the Nebraska Attorney General).

The Private Onsite Wastewater Treatment System Advisory Committee advises the Department on administration of the Act and proposed rules and regulations. Title 124 was amended in 2007 to increase the late registration fee, at the recommendation of the Advisory Committee, and to establish the application fees for permits and subdivision approvals to help cover the direct and indirect costs of administering the program, as required by the Act. Additional changes are being considered at the committee's recommendation. These proposed changes deal with an endorsement provision and allowing for distance education for continuing education. The endorsement provision would provide for endorsement by examination for properly qualified certified installers to design mound systems. Mound systems are typically required in high groundwater areas and currently require an engineer design and permit. Title 124 currently requires classroom based continuing education. A change to allow distance type continuing education would significantly enhance the educational opportunities for onsite professionals, who must obtain 12 contact hours of continuing education in the two-year certification cycle in order to renew their certification. This change would allow certified professionals to obtain needed continuing education on their own schedule and also greatly reduce or eliminate their travel expenses for this needed and required activity.

The regulations set minimum design standards for all onsite wastewater treatment systems and include an "Authorization by Rule" to allow the installation of typical onsite systems by a certified professional and subsequent operation by the owner without a construction or operating permit.

These standard conforming systems constitute the vast majority of all new onsite systems. This allows the Department more time to focus resources on the certification of qualified professionals, education, complaint response, work with local governmental entities to address onsite wastewater issues, review of proposed subdivision developments, and review of permit applications, which may include large systems or systems that receive non-domestic wastes. Department staff review permit applications for systems that do not meet requirements for Authorization by Rule. So far in calendar year 2008 the program has received 27 permit applications, and one new application with 17 subject lots for subdivision review and approval. For comparison, in 2007 there were 38 permit applications and 24 applications (with 250 subject lots) for subdivision review and approval. The recent significant drop in applications coincided with the addition of application fees (December 2007 amendment to Title 124) and recent severe downturns in new housing construction.

Program staff work with many other organizations, including local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association (NOWWA), the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, and the Groundwater Foundation to educate the public about the importance of proper installation and maintenance of onsite wastewater treatment systems and to improve the knowledge and skills of the various practitioners who install and maintain onsite systems. NOWWA has held annual conferences and produced other training seminars since its inception in March 2001. UNL Cooperative Extension has continued to develop and deliver a variety of training and continuing education programs. So far in 2008, Program staff have reviewed and approved a total of 22 programs offering 120 professional development hours for continuing education. A schedule of continuing education programs is posted, along with other Onsite Program information, in the Onsite Program page on the Department website.

## Financial Assistance Section

This 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 1) to pay off the state match bond issues and 2) 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 19 years of activity, the Fund capitalization level exceeds \$150 million. Since its inception, the program has made loans totaling \$268 million to 156 municipalities.

#### CWSRF Sources and Uses of Funds

<b>SOURCES OF FUNDS</b>	
Cash on Hand	\$29,504,845
EPA 2008 Capitalization Grant	\$3,415,700
NIFA/CWSRF Series 2008B Match Bonds	\$546,512
EPA 2009 Capitalization Grant	\$2,780,000
NIFA/CWSRF Series 2009 B Match Bonds	\$444,800
Administration Fund Cash Match	\$247,828
June 15, 2008 Loan Payments	\$6,156,236
December 15, 2008 Loan Payments	\$7,422,311
1-Year Projected Interest on Fund Balance	\$750,000
<b>TOTAL</b>	<b>\$51,268,231</b>
<b>USES OF FUNDS</b>	
Administration Expense	\$247,828
Match Bond Payment	\$1,040,000
Current Loan Obligations	\$16,738,353
Available to Loan	\$33,242,050
<b>TOTAL</b>	<b>\$51,268,231</b>

The FY08 program Funds consist of \$3.4 million CWSRF capitalization grant, \$ 546,512 NIFA bond match and about \$13.7 million in repayments and interest. The program disbursed \$15.1 million for wastewater treatment project construction costs. Loan contracts were signed with 9 communities and loan amendments were signed with 1 community for a total obligation of \$12.8 million. The program now has a high level of participation from small communities; however, marketing efforts are continuing to further encourage small community participation. The following chart shows the municipalities that received Clean Water State Revolving Fund loans in FY2008.

### Municipalities Receiving CWSRF Loans in FY2008

Municipality	Loan Date	Loan Amount	Small Community Grant Amount
Newman Grove	10/2/07	\$390,300	
Lower Platte No. NRD	11/14/07	\$6,000,000	
Lynch	1/9/08	\$174,300	
Wymore	2/28/08	\$402,800	
Big Springs Amd.#1	3/4/08	\$85,000	
Loomis	3/11/08	\$212,700	
Verdigre	5/12/08	\$200,000	
South Sioux City	5/23/08	\$5,000,000	
Melbeta	6/11/08		\$100,000
Guide Rock	6/12/08	\$300,000	\$100,000
Concord	6/24/08		\$42,000
Brock	6/27/08	\$75,000	
TOTAL		\$12,840,100	\$242,000

Seven SRF wastewater projects completed construction and initiated operation in SFY08: Big Springs, Chapman, North Platte, Omaha 7319, Palmer, Plainview, and Silver Creek. Thirteen projects are under construction: Arlington, Bancroft, Concord, Dwight, Gosper Co. SID#1 (aka Johnson Lake), Indianola, Kennard, Lower Platte North NRD (aka Lake Wanahoo), Lynch, Lyons, South Sioux City, Verdigre, and Wymore.

### Small Community Matching Grants

A subprogram of the CWSRF, the small community matching grants program provides matching grants to municipalities with population of 5,000 or less. This program has provided \$4.81 million in grant funding for 55 projects in conjunction with a CWSRF loan during the eighteen 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. Grant funding comes from the CWSRF's Construction Administration Fund. 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. 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 FY2009, up to \$650,000 is available for construction grants, and any one community can receive a maximum of \$200,000. The FY2008 legislation also expanded authority to provide financial assistance to communities for engineering studies, research and investigations to help communities comply with the federal Clean Water Act and to encourage wastewater reuse. The department provides CWSRF facility planning grants to communities

through the Nebraska Environmental Partnership Program. The department has \$200,000 available in FY2009 for studies.

### **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 1) to pay off the state match bond issues and 2) to make new loans. An agreement between the NDEQ and the Nebraska Department of Health and Human Services Division of Public Health (NDHHS-DPH), effective on October 30, 1997, defined the authority of the two agencies in administering the DWSRF program.

The DWSRF is similar to the Clean Water State Revolving Fund in that both obtain the required 20% state match through appropriations and revenue bonds, give low interest loans, and will be self-sustaining. The DWSRF is unique in that loans may be awarded to privately owned public water supplies. Other program differences include the availability of 30% loan forgiveness, and set-asides for program administration, technical assistance, wellhead protection, capacity development and operator certification.

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

The DWSRF Administration Expense set-aside (4%) is no longer being used for DWSRF program administration. 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 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 DHHS-DPH.

In FY2008, under the Source Water Protection Implementation set-aside (15%), NDEQ and NDHHS-DPH provided \$100,000 for preliminary engineering reports, and \$150,000 for source water protection project grants. The Nebraska Environmental Partnerships Program administers the grants provided for community assessments and preliminary engineering reports. The department's Source Water Program will oversee the source water protection grants.

The DHHS-DPH has determined eligibility for Public Water Supply program management, development and implementation of a capacity development strategy, and a water operator certification program set-aside of \$500,000. The state may use up to a total of 10 percent for this set-aside but must provide a one-to-one state match by Section 1452(g)(2). DHHS-DPH has determined the set-aside eligibility by using program overmatch dollars for federal fiscal years 1993 to 1997. No additional state dollars will be required for the set-aside amount.

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

#### DWSRF Sources and Uses of Funds

<b>SOURCES OF FUNDS</b>	
Cash on Hand plus balance of EPA 2007 Capitalization Grant	\$19,220,050
EPA 2008 Capitalization Grant	\$8,146,000
NIFA/DWSRF Series 2008A Match Bonds	\$1,629,200
EPA 2009 Capitalization Grant	\$8,146,000
NIFA/DWSRF Series 2009A Match Bonds	\$1,629,200
June 15, 2008 Loan Payments	\$1,767,515
December 15, 2008 Loan Payments	\$2,723,441
<b>TOTAL</b>	<b>\$43,261,406</b>
<b>USES OF FUNDS</b>	
Small System Technical Assistance	\$325,800
Source Water Protection Implementation	\$1,400,000
Public Water System Program Administration	\$1,000,000
Future Loan Forgiveness	\$800,000
Current Loan Obligations	\$5,034,123
Current Loan Forgiveness Obligations	\$99,405
Available to Loan	\$34,602,078
<b>TOTAL</b>	<b>\$43,261,406</b>

The FY2008 DWSRF capitalization grant allocation totaled \$8.15 million from FY08 federal appropriations. The program disbursed \$7.2 million for drinking water project construction. Loan contracts were signed with 4 communities, and loan amendments were signed with two communities for a total obligation of \$3.160 million, including Loan Forgiveness. The following chart shows the municipalities receiving Drinking Water State Revolving Fund loans in FY2008.

**Municipalities Receiving DWSRF Loans in FY2008**

<b>MUNICIPALITY</b>	<b>LOAN DATE</b>	<b>LOAN AMOUNT</b>	<b>LOAN FORGIVENESS</b>
Palisade	6/27/07	\$808,000	
Broadwater	11/5/07	\$79,000	
Scotia Amd. #2	3/4/08	\$50,000	
Broken Bow Amd. #1	6/9/08	\$500,000	
Madison Co. SID#3	6/27/08	\$411,850	\$100,000
Republican City	6/30/08	\$1,112,000	\$100,000
<b>TOTAL</b>		<b>\$2,960,850</b>	<b>\$200,000</b>

Nine DWSRF projects completed construction and initiated operation in FY08: Ainsworth, Ansley, Clarks, Cozad, Cuming Co. RWD#1, Fairmont, Louisville, Lyons, and Stratton. Ten projects are under construction: Broadwater, Broken Bow, Elba, Hardy, Kearney, Lyons, Madison Co. SID#3, Palisade, Republican City, and Scotia.

# CHAPTER 7:

## Field Services and Assistance Division

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In August 2008 the Field Office Section and the Division of Environmental Assistance were combined into the new Field Services and Assistance Division. This combination will enhance Field Office activities and the ability of the programs within the previous Division of Environmental Assistance, to conduct their activities in a more effective manner. As many of the issues addressed by Field Office staff are core activities associated with the programs in the Division of Environmental Assistance (such as, assisting small communities, responding to complaints and spills, assisting small businesses), bringing staff together under one organizational unit simply makes sense.

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, the Field Services Division will rely on the Agency's Air Quality, Waste Management and Water Quality Divisions for direction. The majority of the field activities occur out of the Field Services and Assistance Division offices located in Omaha, Norfolk, Chadron, Scottsbluff, North Platte and Holdrege.

In addition to Field Services, the division consists of the following programs: Small Business and Public Assistance, SARA Title III Community Right-To-Know, Nebraska Environmental Partnerships (NEP), Release Assessment and Homeland Security.

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

- The Nebraska Environmental Partnerships program has continued to explain and provide information on the Department's environmental regulations and requirements to small communities, to help them understand and comply with those requirements.
- The Small Business and Public Assistance Program, and particularly the One-Stop Permit Assistance program contained therein, has devoted a great deal of time to the biofuels industry. While the majority of this effort has revolved around ethanol plants, biodiesel facilities are requiring increased attention.
- The Community Right-to-Know program continues to work with Local Emergency Planning Committees in planning efforts as well as providing relevant information. The Program has participated in several local emergency management agency meetings over the last year.
- The Release Assessment program continues to enhance the Department's ability to respond to releases into the environment by securing equipment and coordinating and providing additional training for the Department's Immediate Response Team.
- The Division has been quite active in interacting with many entities involved in the biofuels industry, particularly ethanol facilities. The Division coordinates the activities of the multi-agency State Biofuels Roundtable. The Roundtable meets monthly to discuss various issues impacting the biofuels industry, and for the last two years has hosted a state-wide Biofuels Summit.



- The Division continues to coordinate environmental partnership efforts with the Nebraska Public Power District (NPPD.) The overall objective of the Partnership is to capitalize on the strengths of each organization and make strides toward a sustainable Nebraska. One of the primary efforts of the Partnership has been the sponsorship of the "Power Summit" where a broad range of environmental issues impacting the electric power generating industry are examined.
- The Environmental Assistance Division has been examining the federal Brownfields program in an effort to identify potential opportunities which will benefit Nebraska communities. The Brownfields program is intended to restore blighted and contaminated areas of the country to productive use. Typically, most Brownfield resources are devoted to heavily industrialized areas.
- The Division is responsible for the Department's Quality Assurance Program. The function of the Quality Assurance Program is to ensure that environmental data used by the Department in regulatory and decision-making activities are 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 FY2008, the Division provided facilitation for a team effort to streamline the water quality standards review and approval process. This effort involved representatives from the state environmental agencies in Nebraska, Iowa, Kansas and Missouri, and from EPA Headquarters and Region 7.

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

### **Field Offices**

The NDEQ Field Office Section is responsible for conducting compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency's Air Quality, Waste Management and Water Quality Divisions. There are 15 employees in six offices around the state. The field offices enable the agency to provide the public with greater access to NDEQ staff, to provide more timely responses to citizens and to develop a better understanding of local issues because NDEQ staff live and work in the local community.

One of NDEQ's goals is to have a strong community presence and build relationships with the public and with local entities. This is accomplished in a number of different ways in the field offices. One way is by making personal one-on-one contacts with local governmental agencies that have mutual needs or responsibilities. Another way is to participate on local task forces, boards of directors and emergency planning organizations. The feedback that the agency receives is that the NDEQ representatives who participate in these local organizations add depth and insight which is highly valued. Yet another way is through participation in environmental education events in their regions. Building a strong community presence greatly helps NDEQ carry out the work of preserving the state's natural resources and serving the citizens of Nebraska.

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

The Small Business and Public Assistance program was created as a result of the Clean Air Act Amendments of 1990 to assist sources in complying with air quality regulations. The department realized the potential beneficial impact of the program and expanded the scope of the program to encompass all environmental media - air, waste and water.

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

The Small Business Compliance Advisory Panel is comprised of seven members: two representatives from the general public selected by the Governor, four representatives from small business stationary sources of air emissions selected by the Legislature, and one department representative selected by the Director. The panel has three functions: 1) to evaluate the effectiveness of the Small Business and Public Assistance program and to identify any obstacles that may cause it to become less effective, 2) to provide feedback on outreach and education methods provided by the program, and 3) to review written documents developed by department programs to ensure the information is understood by the lay person. The panel was formed pursuant to the Nebraska Environmental Protection Act amendments of 1992.

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

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

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

The Small Business and Public Assistance Coordinator also coordinates all activities related to the review of Environmental Assessments that are submitted to the Department.

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

The Environmental Assistance Division 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 vast amounts of information required under this act. The information that facilities are required to provide the department, includes: 1) a one-time report of an extremely hazardous substance at a facility that triggers the emergency planning process, 2) notification of any significant changes to a facility's emergency plans, 3) notification of the sudden release of a hazardous substance, 4) an annual report listing the hazardous chemicals present at 10,000 pounds or above the threshold planning quantity at the facility, 5) an annual quantitative report of the listed chemicals, and 6) an annual facility inventory report of toxic chemicals manufactured, stored or used, and the amounts released to the environment by the specific media.

A facility in Nebraska is required to submit a Tier II report if listed hazardous substances are present at any one time during the preceding calendar year at the facility in amounts either equal to or greater than amounts established by EPA. In calendar year 2007, approximately 3,400 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This was nearly a 4% increase from the previous year.

The Environmental Assistance Division has been working with the department's Information Technology section to enable online entry of required information. For the past several years, facilities have been able to access, view, change and report their chemical information online instead of submitting a paper copy form each year. Approximately 81% of the facilities reported online in Nebraska in 2007. 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 2007, the Community Right-to-Know Coordinator attended 18 local meetings and assisted with local emergency exercises and provided information regarding chemicals at facilities in their communities. In 2007, the Community Right-to-Know Coordinator assisted with the Regional Local Emergency Planning Committee (LERC) Conference in Kansas City, and planning the State LEPC Conference. The Regional Conference was attended by over 225 people involved in emergency planning and responses in the states of Nebraska, Kansas, Iowa and Missouri.

### **Nebraska Environmental Partnerships Program**

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

The NEP typically works with communities of 1,000 people and fewer whose needs are as unique as the towns themselves. All work and recommendations made by the program are based on the individual community's specific needs. Meetings are held at the request and convenience of local community leaders. The local leaders determine the extent of the NEP's involvement. Decisions remain in the hands of the local community leaders.

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

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

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

- 1) Preliminary Engineering Reports are first steps towards drinking water project funding. NEP administers a Planning Grant program through the Drinking Water State Revolving Fund (DWSRF) that can assist in the procurement of a Preliminary Engineering Report. Since its inception in SFY2002, NEP, through the DWSRF, has awarded planning grants to 56 communities, for a total of \$553,800. Grants are provided for up to 90% of costs for eligible preliminary engineering report services, but cannot exceed \$15,000 per system. Grants for preliminary engineering report services for Regional Public Water Systems remain at \$25,000. Federal funding was not received in time to award grants in SFY2007 and SFY2008, but the funding should be allocated in SFY 2009.
- 2) Facility Plans are first steps towards wastewater project funding. The program also administers a Facility Planning Grant program through the Clean Water State Revolving Fund that can assist in the procurement of a Facility Plan. Grants are provided for up to 90% of the eligible facility plan project cost, but cannot exceed \$20,000.

Since its inception in FY2004, NEP, through the CWSRF, has awarded facility-planning grants to 36 communities, for a total of \$504,340.

Grants are provided for up to 90% of the eligible facility plan project cost, but cannot exceed \$20,000. Grant awards for FY2008, totaling \$155,200, were awarded to eight communities: Ansley, Auburn, Duncan, Ewing, Lewiston, Madrid, Ohioa and Ulysses.

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

Three additional projects have been initiated over the last year:

- The program has increased efforts to ensure communities are aware, and take advantage, of the resources available in various NDEQ waste management grant programs. Those grant programs include: Waste Reduction and Recycling Incentive Grants; Litter

Reduction and Recycling Grants; Illegal Dumpsite Cleanup; and the Landfill Disposal Fee Rebate Program. NEP assists in grant reviews and other areas as needed.

- NEP organized presenters and presentations for Clerks' School that was held in Kearney in March. In addition to presentations by DEQ staff, the program arranged to have EPA's Environmental Finance Center (EFC) at Boise State University available via the internet for individual assistance.
- The program was asked to participate on the NeWARN (Nebraska Agency Water /Wastewater Response Network) Steering Committee. The Committee is comprised of DHHS, DEQ, League of Municipalities, NeRWA, MAP, NEMA, and several communities. The Steering Committee is charged with helping Nebraska communities better utilize capital resources (equipment, etc.) when a disaster takes place in the community.

### **Release Assessment**

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

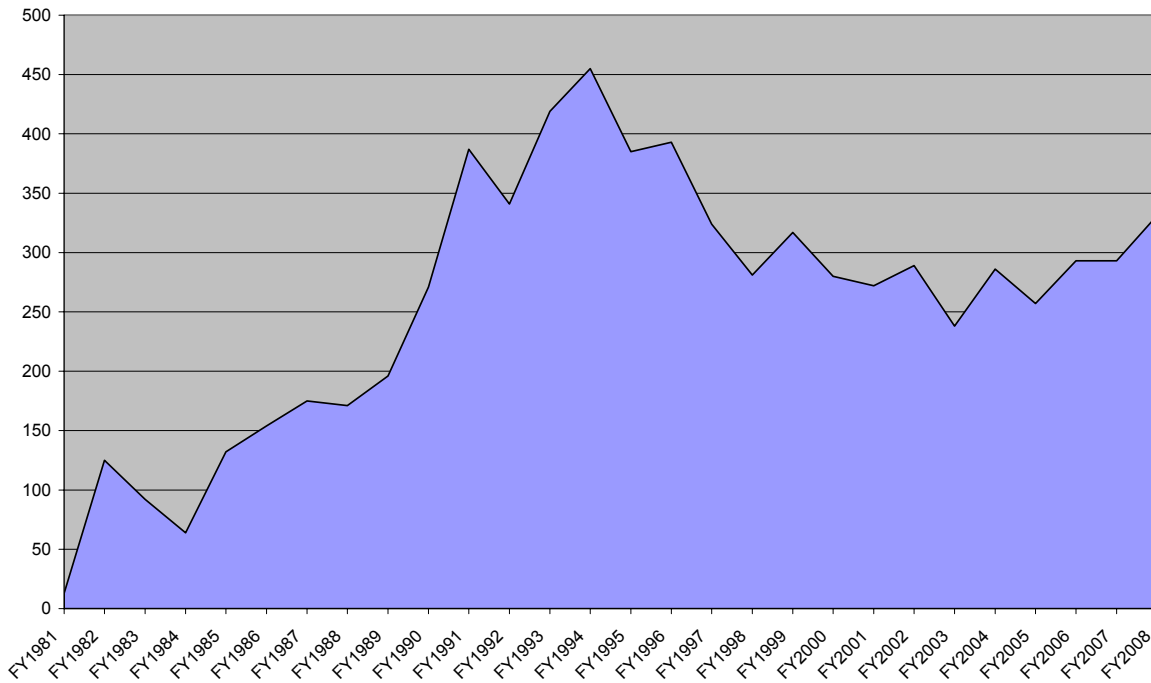
The Release Assessment Coordinator is responsible for training, equipping and supervising a group of personnel who, in addition to their responsibilities to other departmental programs, provide initial assistance and response to spills. These individuals have the responsibility of maintaining an emergency system, on call 24 hours a day. They represent the environmental interests of the state at the scene of a petroleum/chemical spill or other environmental emergency. All personnel are members of the State Emergency Response Team (SERT) and coordinate closely with the local, state and federal agencies involved in emergency response situations.

The Release Assessment Program assists in arranging for the disposal of harmful and potentially hazardous materials.

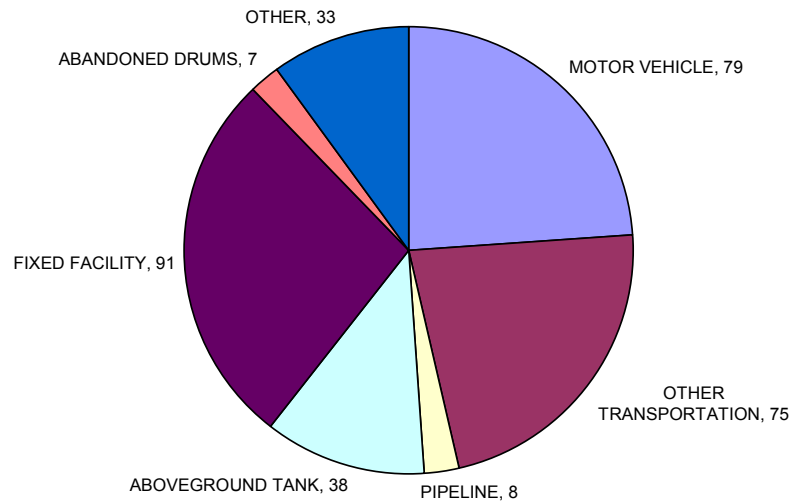
The agency is developing a department-wide electronic system for receiving information from the public and the regulated community related to complaints and spills. Ultimately the system will enable the public to submit some information on-line. Additionally the system will provide the department with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

The charts on the next pages show the types of spills that occurred in FY08.

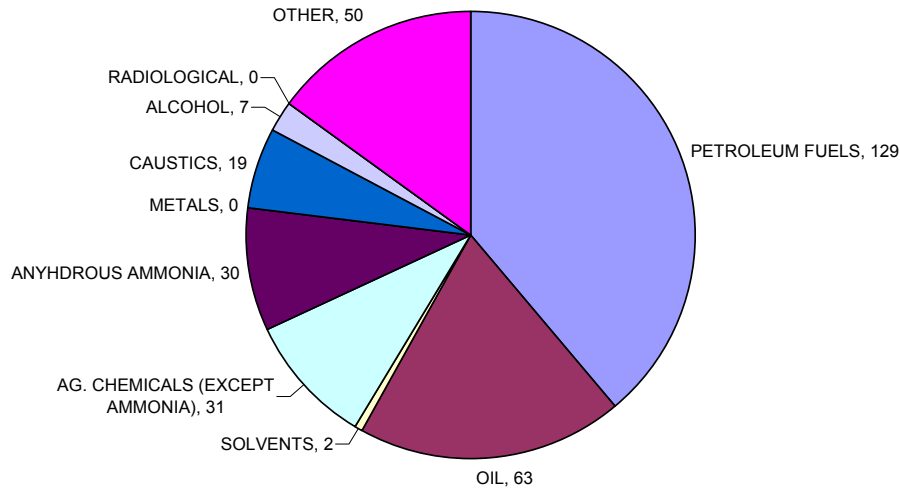
**Surface Spills Reported by Fiscal Year**



**Surface Spill Incident Types  
(current fiscal year)**



### Surface Spill Material Released (current fiscal year)



### Homeland Security

The Department has been actively involved in the state's Homeland Security efforts, which are directed by the Lieutenant Governor. The Department's Deputy Director of Programs represents the Department on the Lieutenant Governor's Homeland Security Leadership Group. The Leadership Group has directed appropriate state agencies to form the following teams: 1) Planning, 2) Exercise, 3) Training, and 4) Web/Information. The Release Assessment Coordinator serves as the overall team coordinator.

The NDEQ Homeland Security Exercise Team and other department staff participated in a statewide exercise, Terrex '07, hosted by the Nebraska Emergency Management Agency. The exercise involved multiple state agencies. Agency representatives participated in a tabletop exercise sponsored by the Nebraska Pipeline Association, and a full-scale exercise sponsored by the EPA, involving the deployment of booms to the Missouri River.

# CHAPTER 8:

## Expenditure and Budget Summary

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The following information summarizes department expenditures for fiscal year 2008 and outlines budget projections for fiscal year 2009. 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 FY08 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY08 expenditures of programs funded by state general funds and/or cash funds. This chart lists expenditures by activity. Activity in this case is not considered a program activity, but is a category of expenditure. Activities listed in this chart are personal services, operating expenses, travel, capital outlay, contracting and distribution of aid.

**Chart C** is the proposed FY09 budget for each federal grant. Chart C also lists proposed match for each program for which a non-federal match is required. Additionally, match for the 319H grant is provided by in-kind services in the Groundwater Management Area program.

**Chart D** lists proposed FY09 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. As in Chart B, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, contracting and distribution of aid.

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



**Chart A -- Actual Expenditure for Each Federal Grant for State Fiscal Year 2008**

<b>Grant Program / Title</b>	<b>Assistance ID #</b>	<b>Grant</b>	<b>Match</b>	<b>Total</b>
Performance Partnership	BG997325-05	1,705,973	396,097	2,102,070
Performance Partnership	BG997325-06	2,489,996	885,504	3,375,500
NPDES e-Permitting Grant	CP987719-01	1,199		1,199
Clean Water State Revolving Fund	CS310001-07	5,429,600	1,087,184	6,516,784
604 B Water Quality Management	C6007328-16	33,084		33,084
604 B Water Quality Management	C6007328-16	53,903		53,903
319 H Non-Point Source	C9007403-XX	2,225,813	51,366	2,277,179
Drinking Water State Revolving Fund	FS997805-XX	7,032,737	1,645,800	8,678,537
Underground Injection Control	G987677-07	17,742	60,998	78,740
Section 106 Monitoring	I987678-01	78,679		78,679
Leaking Underground Storage Tanks	LS987161-03	680,867	7,066	687,933
Leaking Underground Storage Tanks	LS987161-04	142,395		142,395
Department of Defense	NE-06	140,810		140,810
Pollution Prevention Technical Assistance	NP987767-01	88,472		88,472
EN Implementation	OS831971-01	31,530		31,530
Network Challenge	OS832603-01	461,092		461,092
Operator Training	T987812-01	21,778	7,603	29,381
Section 128 (a) State Response	RP987322-02	527,613		527,613
Superfund UNL Mead	V987587-01	46,074		46,074
Superfund Core	VC987267-03	23,691		23,691
Superfund Core	VC987267-04	152,936	17,178	
Superfund Management Assistance	V997531-05	16,170		16,170
Superfund Management Assistance	V997531-06	121,390		
Superfund Site Assessment	V997532-03	10,129		10,129
Superfund Site Assessment	V997532-04	163,316		
Tuttle Creek Lake	WS987733-01	45,816		45,816
PM 2.5 Ambient Air Monitoring	XA987723-01	212,264		
PM 2.5 Ambient Air Monitoring	XA987923-01	5,879		
<b>Totals</b>		<b>21,960,949</b>	<b>4,158,796</b>	<b>25,446,781</b>

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

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

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

**Chart B - Actual Expenditure of State Funds for State Programs for Fiscal Year 2008 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	1,247,562	428,009	46,225	608	164,884	1,887,288	45,189	1,932,477
CLEAR / Environmental Trust	011	C					496,119	496,119		496,119
Ag - Livestock	016	G/C	1,232,946	46,974	69,449		39,299	1,388,668		1,388,668
Air Construction Permits	020	C	51,336	31,506	1,187		1,538	85,567		85,567
Superfund State Cost Share	023	G/C		25			1,460,835	1,460,860		1,460,860
Litter Reduction	024	C	84,081	30,215	1,559		52,503	168,358	1,532,284	1,700,642
Private Onsite Wastewater Cert & Registration	030	C	168,182	57,223	4,915		8,895	239,215		239,215
Environmental Official Training	031	C	43,623	23,401	3,048			70,072		70,072
Emission Inventory - Title V	033	C	1,612,103	553,469	47,590	2,221	164,473	2,379,856		2,379,856
Chemigation	034	C	4,816	2,739	118		5,663	13,336		13,336
Remedial Action Plan Monitoring Act	036	C	20,042	6,449	725		973	28,189		28,189
Private Onsite Wastewater Permit & Approval	037	C	1,253					1,253		1,253
Operator Certification	040	C	70,389	23,640	4,664		8,295	106,988		106,988
Community Right to Know	041	G	81,872	2,016	3,718		3,634	91,240		91,240
Petroleum Release Remedial Action Act	051	C	869,727	392,634	22,647		2,062,135	3,347,143	6,559,577	9,906,720
Emergency Response	057	C	194,708	76,550	5,678		4,951	281,887		281,887
Engineering Reviews	061	G	330,758	3,110	881		8,815	343,564		343,564
Stormwater Grants	067	G	6,301					6,301	2,460,000	2,466,301
Waste Reduction & Recycling	091	C	161,315	74,152	7,852		113,973	357,292	4,669,137	5,026,429
Agency Organizational Dues	099	G		23,595			209,926	233,521		233,521
<b>Totals</b>			<b>6,181,014</b>	<b>1,775,707</b>	<b>220,256</b>	<b>2,829</b>	<b>4,806,911</b>	<b>12,986,717</b>	<b>15,266,187</b>	<b>28,252,904</b>

**FUND TYPE LEGEND**

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

**Chart C - Proposed Budget for Each Federal Grant Program for State Fiscal Year 2009**

<b>Grant / Program Title</b>	<b>Match</b>	<b>Grant</b>	<b>Total</b>
Performance Partnership	1,435,414	4,228,247	5,663,661
Clean Water State Revolving Fund	1,028,000	5,140,000	6,168,000
Exchange Network		250,000	250,000
604 B Water Quality Management		100,000	100,000
319 H Non-Point Source	52,110	3,510,736	3,562,846
Drinking Water State Revolving Fund	2,104,785	10,523,928	12,628,713
Leaking Underground Storage Tanks	79,794	742,984	822,778
Section 106 Monitoring		75,000	75,000
Department of Defense		155,178	155,178
PM 2.5 Ambient Air Monitoring		188,874	188,874
Operator Training	11,136	33,403	44,539
Superfund UNL Mead		8,589	8,589
Superfund Core	23,573	212,151	235,724
Superfund Management Assistance		157,062	157,062
Superfund Site Assessment		192,473	192,473
Section 128 (a) State Response		579,252	579,252
Network Challenge		113,465	113,465
Pollution Prevention		75,000	75,000
Tuttle Creek Lake Project		202,000	202,000
EN Implementation		257,525	257,525

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

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

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

**Chart D - Proposed Budget of State Funds for State Programs for Fiscal Year 2009 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	1,329,464	440,207	48,700		173,300	1,991,671	100,000	2,091,671
Ag - Livestock	016	G/C	1,358,328	52,800	68,620		10,575	1,490,323		1,490,323
Air Construction Permits	020	C	182,709	71,142	500		1,306	255,657		255,657
Superfund State Cost Share	023	G/C						-	2,173,000	2,173,000
Litter Reduction	024	C	92,617	30,946	1,875		50,000	175,438	1,600,000	1,775,438
Private Onsite Wastewater Cert & Registration	030	C	231,385	80,606	4,225		8,925	325,141		325,141
Emission Inventory - Title V	033	C	1,775,878	589,848	49,550		178,825	2,594,101		2,594,101
Chemigation	034	C	13,392	5,053	150		6,000	24,595		24,595
Remedial Action Plan Monitoring Act	036	C	24,741	7,721			1,100	33,562		33,562
Private Onsite Wastewater Permit & Approval	037	C	45,124	14,562				59,686		59,686
Operator Certification	040	C	71,946	23,914	5,075		8,825	109,760		109,760
Community Right to Know	041	G	71,258	2,250	4,050		4,000	81,558		81,558
Petroleum Release Remedial Action Act	051	C	1,014,228	410,228	23,850		7,051,237	8,499,543	9,175,000	17,674,543
Emergency Response	057	C	189,719	65,097	1,525		5,400	261,741		261,741
Engineering Reviews	061	G	325,638	3,050	975	1,625	9,050	340,338		340,338
Stormwater Grants	067	G	12,657					12,657	2,487,344	2,500,001
Waste Reduction & Recycling	091	C	190,516	81,886	7,325		125,478	405,205	5,000,000	5,405,205
Agency Organizational Dues	099	G		16,590			5,226	21,816		21,816
<b>Totals</b>			<b>6,929,600</b>	<b>1,895,900</b>	<b>216,420</b>	<b>1,625</b>	<b>7,639,247</b>	<b>16,682,792</b>	<b>20,535,344</b>	<b>37,218,136</b>

**FUND TYPE LEGEND**

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

# CHAPTER 9:

## Distribution of Aid

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

This chapter provides a summary of those aid activities for fiscal year 2008. It also provides information regarding the Litter Reduction and Recycling Grant Program as required by §81-1504.01.

### **Waste Management Grants**

Following is a summary of funds provided in FY 2008 through the waste grants programs managed in the Waste Planning and Aid Unit.

The Litter Reduction and Recycling Grant Program provides funds to reduce litter, provides education and promotes recycling in Nebraska. It operates on an annual rather than a fiscal year basis. Funding for the program is an annual fee on manufacturers, wholesalers and retailers who have significant sales in categories of products that would generally be considered to produce litter. Approximately \$1.3 million is available annually through this program.

In FY 2008, 68 Litter Reduction and Recycling grants were awarded, totaling \$1,614,715. The grants were awarded in three categories: Public Education, \$659,977; Cleanup, \$135,176; and Recycling, \$819,562. These grants were awarded to both public and private entities.

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

In FY 2008, 151 projects totaling \$5,593,732 were funded from the Waste Reduction and Recycling Incentive Grants Program.

The Illegal Dumpsite Cleanup Program, established in 1997, receives up to five percent of the total revenue from the disposal fee collected in the preceding fiscal year. This program provides funding for political subdivisions to cleanup solid waste disposed of along public roadways or ditches.

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.

Any municipality or county may apply for a rebate if they have a written purchasing policy in effect requiring a preference for purchasing products, materials or supplies which are manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a 10 cent rebate from the \$1.25 per ton disposal fee. Rebates are issued quarterly.

## **Petroleum Remediation**

The Petroleum Remediation program provides aid through the Petroleum Release Remedial Action Fund to assist in paying the cost of cleanup of sites where petroleum has leaked from tanks, generally service stations. Funding to this program is provided mostly by a fee on petroleum sold in Nebraska. Over \$131 million has been disbursed since the program began. The program provided \$6,328,725 to 337 sites for investigation and cleanup in FY2008.

## **Wastewater grants and loans**

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

I. The **Clean Water State Revolving Loan Fund** provides low interest loans to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems. The sources of funding for this program include federal grants, an initial state general fund appropriation and funds from Nebraska Investment Financial Authority (NIFA) through bond issuance. In FY2008, loans totaling \$12.8 million was allocated, and \$15.1 million was disbursed.

II. **Clean Water Small Community Matching Grants** provides matching grants to eligible communities with populations of 10,000 or less. In FY2008, \$242,000 was allocated for these grants. For FY2009, up to \$650,000 is available for construction grants and any one community can receive a maximum of \$200,000.

III. **Facility Planning Grants** provide initial planning assistance to eligible municipalities for wastewater treatment system improvement projects. Grants may be provided to municipalities with populations of 10,000 or fewer that are identified with a financial hardship. Privately-owned wastewater treatment systems are not eligible for assistance. FY2008 grants are provided for up to 90% of the eligible facility plan project cost, but cannot exceed \$20,000. Grant awards for SFY2008, totaling \$155,200, were awarded to eight communities: Ansley, Auburn, Duncan, Ewing, Lewiston, Madrid, Ohiova and Ulysses.

## **Drinking Water State Revolving Fund**

The Drinking Water State Revolving Fund provides funding assistance on Drinking Water projects. In FY2008, loans totaling \$3.16 million were allocated, and \$7.2 million was disbursed.

The construction of wastewater and drinking water facilities is a multi-year process. There are projects which have been approved in previous fiscal years which may have received funds in fiscal year 2008. Conversely, projects approved in fiscal year 2008 may receive funds in future fiscal years. Source water protection activities that address drinking water quality, quantity, security, or education are eligible for grant funding. These grants have allowed public water suppliers to place security fences around wellfields, install water-saving devices within the community, decommission unused wells in Wellhead Protection Areas, and provide useful educational information to the public. Grants usually range from \$10,000 to \$50,000.

The Nebraska Environmental Partnerships program used Drinking Water State Revolving Fund local assistance set-aside funds to provide planning grant assistance to small public water supply systems as a part of the state's capacity development strategy to help communities develop technical, managerial, and financial capacity particularly as it relates to long-term capital improvement needs. This financial assistance is being provided to communities to identify capital improvement needs as well as increase their readiness to proceed in accomplishing these improvements.

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

### **Nonpoint Source Management**

The Nonpoint Source Management program provides pass through funding for the prevention and abatement of nonpoint source water pollution and the restoration of watershed resources under Section 319 of the federal Clean Water Act. This funding is provided to units of government, educational institutions, and non-profit organizations, for projects that facilitate implementation of the state Nonpoint Source Management Plan. Funds provided in FY2008 included: \$6,596,919 for large projects; \$129,099 for small projects; \$703,466 for community lake restoration projects; \$165,600 for wellhead area management projects; and \$60,000 for urban run-off management.

### **Storm Water grants**

In 2006, the Nebraska Legislature passed LB1226, which established the Storm Water Management Plan Program. This grant program provides funding to cities and counties with storm water permits to implement their local Storm Water Management Plans (SWMPs). In SFY2008, approximately \$2.5 million was distributed to 17 cities and 3 counties, to be used to implement aspects of the 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 the operations that technically competent people are hired for vacant positions. Without highly trained and experienced staff, the department would not be able to effectively carry out its mission of protecting Nebraska's environment.

Recruiting qualified and experienced employees for the more advanced positions that require extensive education and experience remains a focus. The department feels fortunate to have recruited excellent staff in 2008.

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

Reaching Affirmative Action goals also remains a challenge. The department monitors our goals to encourage the receipt of applications from qualified members of protected groups by seeking to recruit members of protected groups.

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



<b>Employees Assuming Agency Positions (by Discipline)</b>											
<i>These figures include new hires, promotions, transfers and classification upgrades for a one-year period. Figures for 2008 are from October 1, 2007 through September 30, 2008.</i>											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Director/Deputy Director/Assistant Director/ Division Administrator	1	4	0	0	0	0	1	0	0	0	0
Section Supervisor	0	0	3	0	2	0	0	0	0	2	0
Unit Supervisor/Records Manager	3	0	4	3	0	2	2	1	1	2	0
Human Resources	8	7	6	3	0	0	1	0	0	0	2
Federal Aid Administrator, Financial Assurance Coordinator	1	2	0	0	2	1	2	2	0	0	0
Clerical/Accounting	9	7	0	4	5	1	5	0	4	6	4
Information Technology/Public Information/Research Analyst	2	2	3	1	0	1	1	1	0	3	2
Attorney	0	1	0	0	1	0	1	3	0	0	0
Environmental Engineer	9	6	5	3	3	2	2	6	3	5	2
Field Data Specialist	0	0	0	0	0	0	0	0	0	0	0
Compliance Specialist	4	7	0	0	0	0	1	0	0	0	1
Programs Specialist	21	5	12	6	6	7	2	12	7	12	13
Geologist, Groundwater	2	0	0	1	1	1	4	1	3	0	4
Environmental Assistance Coordinator						1	1	0	0	0	0
<b>TOTALS</b>	<b>60</b>	<b>41</b>	<b>33</b>	<b>21</b>	<b>20</b>	<b>16</b>	<b>23</b>	<b>26</b>	<b>18</b>	<b>30</b>	<b>29</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, or the Livestock Waste Management Act, unless a class of permittees is exempted by the Council. The purpose of financial responsibility is for an applicant to provide funds to be used in the event of abandonment, default or other inability of the permittee to comply with terms or conditions of its permit or license. State statutes also identify types of funding mechanisms that applicants can use to meet the requirements.

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

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
<b>Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (LF)</b>							
Alliance Landfill	Alliance	MSWDA	03/17/94	\$ 3,038,430	\$ 1,230,188	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	\$ 173,840	\$ 112,100	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$ 3,449,600	\$ 3,450,400	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	04/09/96	\$ 3,648,804	\$ 1,725,031	Trust Fund	Cornerstone Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$ 11,205,275	\$ 11,205,275	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	07/01/96	\$ 4,147,605	\$ 2,131,620	Trust Fund	Cornerstone Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$ 1,022,887	\$ 527,297	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$ 4,401,729	\$ 1,943,157	Trust Fund	Security Natl. Bank
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$ 8,025,310	\$ 3,125,045	Enterprise Fund	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	08/12/96	\$ 4,973,312	\$ 1,826,413	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$ 174,626	\$ 24,673	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$ 2,317,230	\$ 1,333,267	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$ 2,784,122	\$ 2,784,122	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	\$ 4,161,380	\$ 2,001,622	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	\$ 1,216,988	\$ 544,936	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$ 874,500	\$ 375,330	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$ 2,213,183	\$ 1,114,022	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	\$ 14,647,600	\$ 14,647,600	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$ 1,446,753	\$ 598,239	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	\$ 811,300	\$ 85,400	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	\$ 249,816	\$ 77,519	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	07/01/96	\$ 1,444,559	\$ 497,617	Trust Fund	Cornerstone Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$ 11,300,465	\$ 3,200,696	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$ 21,503,220	\$ 18,859,864	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$ 6,188,877	\$ 7,066,550	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$ 2,405,752	\$ 611,668	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	9/25/97	\$ 1,327,706	\$ 418,025	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	\$ 1,183,631	\$ 285,543	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	\$ 93,798	\$ 10,422	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$ 3,040,309	\$ 1,092,078	Enterprise Fund	City of York
*MSWDAs are landfills that are operating under current solid waste management regulations. **Sanitary LFs are closed facilities that have post-closure monitoring and maintenance.							
<b>Construction/Demolition Landfills</b>							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	\$ 173,808	\$ 173,808	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$ 131,127	\$ 24,867	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	10/19/98	\$ 230,000	\$ 230,000	Surety Bond	Employers Mutual Cas. Co.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	\$ 16,273	\$ 9,417	Enterprise Fund	Village of Arnold
Benkelman C & D Landfill	Benkelman	Const./Demol.	10/15/06	\$ 59,590	\$ 1,244	Enterprise Fund	City of Benkelman
Broken Bow C & D Landfill	Broken Bow	Const./Demol.	11/23/07	\$ 98,511	\$ 2,061	Enterprise Fund	City of Broken Bow
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$ 41,255	\$ 41,255	Letter of Credit	First Natl. Bank Newman Gr
Butler County C & D Landfill	David City	Const./Demol.	06/01/97	\$ 305,062	\$ 305,062	Surety Bond	Evergreen Ntl. Indemnity Co.
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	\$ 191,120	\$ 191,120	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction C & D	Omaha	Const./Demol.	3/9/96	\$ 253,244	\$ 253,244	Surety Bond	Fireman's Fund Ins. Co.
KGP Services C & D	Norfolk	Const./Demol.	11/06/03	\$ 63,650	\$ 63,650	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$ 45,702	\$ 32,137	Enterprise Fund	City of Kimball
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	\$ 153,721	\$ 106,601	Enterprise Fund	Lexington Area SW Agency
Limited Fill C & D Landfill	Omaha	Const./Demol.	04/30/97	\$ 36,907	\$ 31,932	Trust Agreement	First Natl. Bank, Omaha
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$ 1,055,650	\$ 1,055,650	Financial Test	City of Lincoln
Loup Central C & D Landfill	Elba	Const./Demol.	1/28/2001	\$ 28,318	\$ 29,705	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const./Demol.	04/09/96	\$ 90,709	\$ 9,103	Trust Fund	Security Natl. Bank
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$ 128,996	\$ 128,996	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$ 58,248	\$ 24,033	Enterprise Fund	City of O'Neill
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	\$ 146,746	\$ 146,746	Letter of Credit	Five Points Bank
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	\$ 39,442	\$ 27,561	Enterprise Fund	City of Plainview
Rainwood Hill LLC C & D	Omaha	Const./Demol.	02/10/08	\$ 63,992	\$ 69,992	Surety Bond	Nationwide Mutual Ins. Co.
Schmader C & D Landfill	West Point	Const./Demol.	05/05/04	\$ 105,356	\$ 105,356	Letter of Credit	Charter West Ntl Bank
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	\$ 98,318	\$ 31,031	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency/Imperial	Imperial	Const./Demol.	06/01/01	\$ 63,658	\$ 19,069	Enterprise Fund	City of Imperial
Three Rivers C & D Landfill	Indianola	Const./Demol.	07/25/00	\$ 76,073	\$ 21,141	Trust Agreement	Adams Bank & Trust
York C & D Landfill	York	Const./Demol.	12/01/07	\$ 226,055	\$ 14,252	Enterprise Fund	City of York
<b>Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills</b>							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$ 5,640,014	\$ 5,640,014	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$ 3,264,622	\$ 3,264,622	Insurance Policy	Steadfast Insurance Co.
Fremont Utilities	Fremont	FFCA	05/28/96	\$ 222,963	\$ 500,000	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	FFCA	2/1/01	\$ 1,176,600	\$ 463,383	Enterprise Fund	City of Hastings
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	\$ 1,072,416	\$ 1,072,416	Financial Test	NPPD
NPPD Sheldon Station 3	Sheldon	FFCA	04/01/95	\$ 126,211	\$ 126,211	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	\$ 584,032	\$ 584,032	Financial Test	NPPD
OPPD NE City	NE City	FFCA	04/04/95	\$ 1,669,880	\$ 1,669,880	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	\$ 1,014,200	\$ 1,014,200	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$ 239,980	\$ 239,980	Financial Test	OPPD
Platte Generation	Grand Island	FFCA	08/25/97	\$ 191,660	\$ 191,800	Enterprise Fund	City of Grand Island
Waste Management	Bennington	Indus. Waste	04/01/02	\$ 3,579,420	\$ 3,579,420	Surety Bond	Evergreen Ntl. Indemnity Co.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
<b>Transfer Stations, Material Recovery Facilities, Compost Sites</b>							
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	\$ 3,494	\$ 3,494	Letter of Credit	First Natl. Bank, NG
Butler County MRF	David City	Mat. Recovery	08/15/03	\$ 6,900	\$ 6,900	Surety Bond	Evergreen Ntl. Indemnity Co.
Central Sanitation	Cenral City	Transfer Station	07/02/03	\$ 10,523	\$ 10,523	Surety Bond	Platte River Ins Co.
Custer Transfer Station	Broken Bow	Transfer Station	06/27/94	\$ 6,867	\$ 6,867	Letter of Credit	NE State Bank & Trust
Doernamann Const. Co.	Clarkson	Compost	12/15/99	\$ 79,499	\$ 79,499	Letter of Credit	Clarkson Bank
E3 Biofuels Compost	Mead	Compost	04/01/07	\$ 170,975	\$ 170,975	Escrow Account	American Ntl Bank
Fremont CRD, Inc.	Fremont	Transfer Station	04/09/96	\$ 12,875	\$ 12,875	Surety Bond	American Guar & Liability Co
King Transfer Station	Walthill	Transfer Station	04/02/96	\$ 583	\$ 591	Escrow Account	First Natl. Bank, Walthill
J & J Sanitation	Ord	Transfer Station	09/22/00	\$ 6,813	\$ 6,816	Surety Bond	Capitol Indemnity Corp
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$ 41,176	\$ 45,474	Escrow Account	US Bank Ntl Assoc
Sanitation Systems	Wilber	Transfer Station	07/03/03	\$ 5,538	\$ 5,538	Surety Bond	Capitol Indemnity Corp
Seneca Sanitation	Dubois	Transfer Station	03/07/96	\$ 3,700	\$ 3,700	Letter of Credit	First Natl. Bank, Centralia
Saunders County San.	Wahoo	Transfer Station	07/02/03	\$ 5,917	\$ 5,917	Surety Bond	Capitol Indemnity Corp
Waste Connections of NE	Bridgeport	Transfer Station	08/15/03	\$ 6,869	\$ 6,869	Surety Bond	Evergreen Ntl. Indemnity Co.
Waste Connections of NE	Gering	Transfer Station	08/15/03	\$ 14,740	\$ 14,740	Surety Bond	Evergreen Ntl. Indemnity Co.
<b>RCRA Closure and RCRA Post-Closure (RCRA PC)</b>							
Agromac International	Gering	RCRA PC	09/29/87	\$ 7,333	\$ 7,333	Letter of Credit	Platte Valley Ntl. Bank
Behlen Manufacturing Co.	Columbus	RCRA PC	08/30/94	\$ 174,800	\$ 174,800	Financial Test	Behlen Mfg. Co.
Clean Harbors Technology	Kimball	RCRA Closure	05/10/95	\$ 13,728,206	\$ 13,728,206	Insurance Policy	Steadfast Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$ 460,681	\$ 1,002,872	Trust Fund	First Natl Bank of Omaha
Eaton Corporation	Omaha	RCRA PC	03/27/84	\$ 4,463,158	\$ 4,463,158	Letter of Credit	Key Bnk Ntl. Assoc.
Malnove Corporation	Omaha	RCRA PC	10/05/89	\$ 216,240	\$ 216,240	Letter of Credit	Wells Fargo
Tenneco Automotive Inc.	Cozad	RCRA PC	11/25/85	\$ 1,411,000	\$ 1,411,000	Letter of Credit	Chase Manhattan Bank
Safety Kleen	Grand Island	RCRA Closure	10/15/01	\$ 124,380	\$ 124,380	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$ 329,537	\$ 329,537	Insurance Policy	Indian Harbors Insurance Co.
Telex Communications	Lincoln	RCRA PC	10/27/88	\$ 10,344	\$ 10,344	Letter of Credit	Wachovia Bank
Tetra Micronutrients	Fairbury	RCRA Closure	06/15/07	\$ 202,340	\$ 202,340	Letter of Credit	Bank of America, N.A.
USA Tire Management	Dakota City	RCRA Closure	12/14/07	\$ 14,577	\$ 14,577	Escrow Account	Vantus Bank Sioux City IA
Valmont Industries	Valley	RCRA PC	10/30/85	\$ 319,000	\$ 319,000	Financial Test	Valmont Industries
Van Diest Suppy Liquid Plant	McCook	RCRA Closure	02/16/06	\$ 1,463,334	\$ 1,463,334	Letter of Credit	1st State Bank Webster Cty IA
<b>Underground Injection Control (UIC)</b>							
Crow Butte Resources, Inc.	Crawford	UIC		\$ 25,207,672	\$ 25,207,672	Letter of Credit	Royal Bank of Canada
<b>Waste Tire Sites</b>							
ABC Tire LLC	Kansas C, KS	Waste Tire	06/15/06	\$ 10,000	\$ 10,000	Surety Bond	United Fire & Casualty Co.
Butler County Landfill	David City	Waste Tire	05/16/97	\$ 178,625	\$ 178,625	Surety Bond	Travelers Casualty & Surety
Champlin Tire Recycling Inc	Concordia KS	Waste Tire	10/04/96	\$ 10,000	\$ 10,000	Letter of Credit	United Bank & Trust

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
D & B Salvage	Correctville, IA	Waste Tire	03/08/07	\$ 10,000	\$ 10,000	Surety Bond	Old Republic Surety Co.
Don's New & Used Tires	Lincoln	Waste Tire	03/13/03	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Double A Trucking	Shelby	Waste Tire	06/05/06	\$ 10,000	\$ 10,000	Letter of Credit	Bank of the Valley
EnTire Recycling Inc	Brock	Waste Tire	04/21/96	\$ 10,000	\$ 10,000	Letter of Credit	The First National Bank
GreenMan Tech of IA	Des Moines IA	Waste Tire	11/21/02	\$ 10,000	\$ 10,000	Escrow Account	Wells Fargo
GreenMan Tech of MN	Savage MN	Waste Tire	07/01/97	\$ 5,000	\$ 5,000	Escrow Account	Wells Fargo
J & M Steel	Hastings	Waste Tire	08/27/98	\$ 5,000	\$ 5,000	Letter of Credit	1st Bank & Trust, Clay Center
Kenny Frazier	Edmond OK	Waste Tire	05/26/04	\$ 5,000	\$ 5,000	Escrow Account	Bank of America, Inc.
Lee Pester	Lincoln	Waste Tire	07/01/96	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Leo Porter	Oshkosh	Waste Tire	06/09/00	\$ 5,000	\$ 5,000	Letter of Credit	Nebraska State Bank
L. P. Gill	Jackson	Waste Tire	11/01/06	\$ 10,000	\$ 10,000	Letter of Credit	Dakota County State Bank
Marty Lukassen	Mitchell	Waste Tire	03/03/03	\$ 5,000	\$ 5,000	Surety Bond	Union Insurance Co.
Nebraska Rubber Innovatio	O'Neill	Waste Tire	02/03/00	\$ 20,000	\$ 20,000	Letter of Credit	Marquette Bank Nebraska
Resource Management Co	Brownell, KS	Waste Tire	06/08/99	\$ 10,000	\$ 10,000	Letter of Credit	First State Bank, Ness Cy, KS
River City Recycling	Omaha	Waste Tire	09/07/99	\$ 43,750	\$ 43,750	Letter of Credit	US Bank Ntl Assoc, Omaha
Tire Cutters	Centralia KS	Waste Tire	11/10/03	\$ 5,000	\$ 5,000	Letter of Credit	1st Natl. Bank, Centralia, KS
Tire Energy	Odessa, MO	Waste Tire	07/12/05	\$ 10,000	\$ 10,000	Letter of Credit	Bank of Odessa, MO
Tire Town, Inc.	Leavenworth	Waste Tire	03/15/96	\$ 5,000	\$ 5,000	Letter of Credit	First Commercial Bank