



# Nebraska Department of Environmental Quality

## Annual Report to the Legislature 2007

Submitted December 1, 2007

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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 FY08 of approximately \$85.5 million. Of that amount, \$46.2 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>	\$17.1 million	43.5%	\$14.6 million	31.6%
<b>State General Funds</b>	\$3.7 million	9.4%	\$4.6 million	10.0%
<b>Cash Funds<sup>1</sup></b>	\$18.5 million	47.1%	\$17.0 million	36.8%
<b>Trust Funds<sup>2</sup></b>			\$10.0 million	21.6%
<b>Total</b>	\$39.3 million		\$46.2 million	
<sup>1</sup> Cash Funds refer to fees collected by the department.				
<sup>2</sup> Trust Funds refer to loan repayments the department receives.				

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 FY07.

This chapter provides: 1) a brief description of agency goals and related activities; 2) agency activities and significant issues for fiscal year 2007; 3) significant legislation of 2007 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 2007

Among the significant issues that have occurred in 2007 are:

**Biofuel facility permitting** - Nebraska's first ethanol plant began production in Hastings in January, 1985. Since that time, the ethanol industry in the state has grown dramatically. There are currently 21 ethanol plants operating in Nebraska, collectively producing 1.36 billion gallons of ethanol each year. In addition, as of October 30, 2007, there have been 18 new permits to construct ethanol plants, with the capacity to produce 1.9 billion gallons a year; seven expansion permits issued to existing ethanol plants, which would increase the plants' capacity by 802 million gallons a year; eight applications for new ethanol plants, for a total of 834 million gallons a year; and one expansion permit application at an existing ethanol plant for a total of 202 million gallons a year. In addition to ethanol plants, there continues to be interest in the development of biodiesel industry. The production of biodiesel may require permits from the Air Quality Division and Water Quality Division, and involves the Waste Management Division as well.

**Web redesign** – In 2007, 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 the public easier accessibility and more useful information.

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

Environmental Alerts	Press Releases	Calendar of Events
Rules and Regulations	Publications	Requests for Proposals
Program Information	Public Notices	Enforcement Resolutions
Assistance	Cleanups	Compliance
Financial	Maps and Data	Permits and Authorization
Report a Problem		

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

**Omaha Combined Sewer Overflow:** Like many large cities across the nation, portions of Omaha's sewer system is a "Combined Sewer Overflow" – that is, the system handles both storm water and wastewater. When rain causes high water volumes, there are bypasses and raw sewage is discharged directly to the river. Separating the systems is essential to prevent wastewater overflows into the Missouri River during heavy rains. The City of Omaha has reached an agreement with DEQ in an Administrative Consent Order, relating to the eventual elimination of the combined sewer system, and full compliance with the Clean Water Act. Under the agreement, the city will have the project completed by Oct. 1, 2024.

**Environmental Video:** DEQ has recently completed 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 intends to distribute this video to secondary schools across the state, and to use 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 new efficiency effort focuses on water quality standards review and approval process. This effort has been recognized nationally by the Environmental Council of States and received the first “States Innovation Award.”

### III. Legislation in 2007

Nine pieces of legislation passed in 2007 which had an impact on the agency. They include:

**LB 79** — Consolidates the reporting of annual litter reduction and recycling activities in DEQ’s annual report and eliminates any other separate reporting requirement.

**LB 80** — Creates additional uses for the Drinking Water Administration Cash Fund. The legislation provides grants for the planning, design and/or construction of drinking water projects including provisions for emergency grants and for planning grants to evaluate the feasibility of regional water systems. It creates a parallel program similar to the existing small town grants provisions of the Wastewater Treatment Facilities Construction Assistance Act. Funding for grants will come from the existing fee system for the Drinking Water Administration Cash Fund.

**LB 161** — Authorizes the Environmental Quality Council to increase the maximum fee that the agency can charge for the certification of wastewater treatment operators in Nebraska. The original legislation in 1987 established a maximum fee of \$150 per application; the new cap is \$300. The program is fee funded.

**LB 263** -- Allows minor modifications to Integrated Solid Waste Management applications or permits to be exempt from public notice or hearing requirements so long as the Director of the Department of Environmental Quality finds that the public health and welfare will not be endangered. The criteria for minor modifications are detailed in the bill.

**LB 313** — Exempts applicants under the Livestock Waste Management Act who own small or medium animal feeding operations from the requirements of the Engineers and Architects Regulation Act if they are required to obtain a construction and operating permit but are not required to obtain a National Pollutant Discharge Elimination System Permit. Amendments to the Livestock Waste Management Act in 2006 inadvertently changed this requirement in existing statutes. LB 313 clarifies that only applications for a National Pollutant Discharge Elimination System Permit need to be certified by a professional engineer.

**LB 333** — Amends the Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act and allows the Environmental Quality Council to adopt fee schedules to cover the costs of permitting complex on-site systems and reviewing subdivision plans. There is an additional provision of the bill that allows the DEQ Director to waive certification and examination fees

for inspectors employed by a governmental agency or subdivision with the authority to enforce inspection and compliance programs that are at least as stringent as the Act and the rules and regulations in place under the Act.

**LB 530** — Changes the distribution of grants to counties under the Storm Water Management Plan Program. Legislative Bill 530 directs the grant be distributed to the county based upon the county population, less the population of city applicants within that county.

**LB 568** — Extends the scrap tire grant program an additional five years from June 2007 to June 2009.

**LB 677** — Changes the start date for imposing livestock inspection late fees from January 1, 2000 to January 1, 2008. The bill creates a window of time for individuals operating certain types of operations to comply with requirements implemented in 2000 without being subject to a monetary penalty.

#### **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).

##### **1998 (220 FTE)**

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

- Livestock Waste Management Act
- Underground Storage Tanks/Petroleum Release Reimbursement Fund

##### **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

# CHAPTER 2:

## Administration/Legal/ Management Services/Field Offices

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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.

The Division also assists the Attorney General's office by providing legal expertise in environmental law and participating in court cases as requested.

During FY07, the Director issued 20 administrative orders. Twenty-six civil judicial cases were settled or decided by a court and civil penalties of \$830,000 were imposed with payments of \$51,094 made to other funds as reimbursement. Most of the judicial settlements also included contributions, totaling approximately \$272,000, for the purpose of funding environmentally beneficial projects.

## 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.

This 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**

This 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 is responsible to assist supervisors to recruit, hire, develop, retain, and reward a high quality of diverse staff and to promote a working environment that enhances the agency's mission and strengthens individual and organizational performance through fiscally responsible compensation and benefits programs, progressive human resource 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; participation on the State of Nebraska Management Bargaining Team to negotiate biennial Labor Contracts; 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 150,670 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, and hazardous waste sites. The Section responded to approximately 1,600 public records requests during FY2007.

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 main 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. Three 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 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 has 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, of 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 start 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.

### **Public Information Office**

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

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

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

An increasingly important method of communicating with the public is the agency's web site: **[www.deq.state.ne.us](http://www.deq.state.ne.us)**. The web site has grown considerably in recent years, and an agency-wide effort is on-going to revise the site to make it more accessible and interactive for our customers. (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's main e-mail address. That address is: **[moreinfo@ndeq.state.ne.us](mailto:moreinfo@ndeq.state.ne.us)**.

### **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 and management, and ensures contracts are kept current and contractors meet contract conditions.

### **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.

## V. 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 6 offices around the state. The local 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.

In an effort to balance the workload across the eastern part of Nebraska, the boundaries of the Northeast field offices were adjusted, moving some counties into the Eastern region and into the Lincoln Main office region. This adjustment better reflects the current work assignments by most of the compliance programs at NDEQ. See the regional office map on the following page.

Also in 2007, the NDEQ Field Offices played an expanded role in the State of Nebraska's response to the January 2007 ice storm. The field offices were tapped to assist with the preliminary damage assessment phase of the Federal Emergency Management Agency (FEMA) response. NDEQ and FEMA staff formed 10 teams that quickly moved across the vast area impacted by the storm and collected key information along the way. The Field Offices were uniquely equipped to assist because of the physical location of the offices, the staff's knowledge of the roadways, and their contacts with local government officials.

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. Field Office staff participated in seven regional water quality festivals/events that were attended by thousands of children and adults. 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.

# Department of Environmental Quality Offices

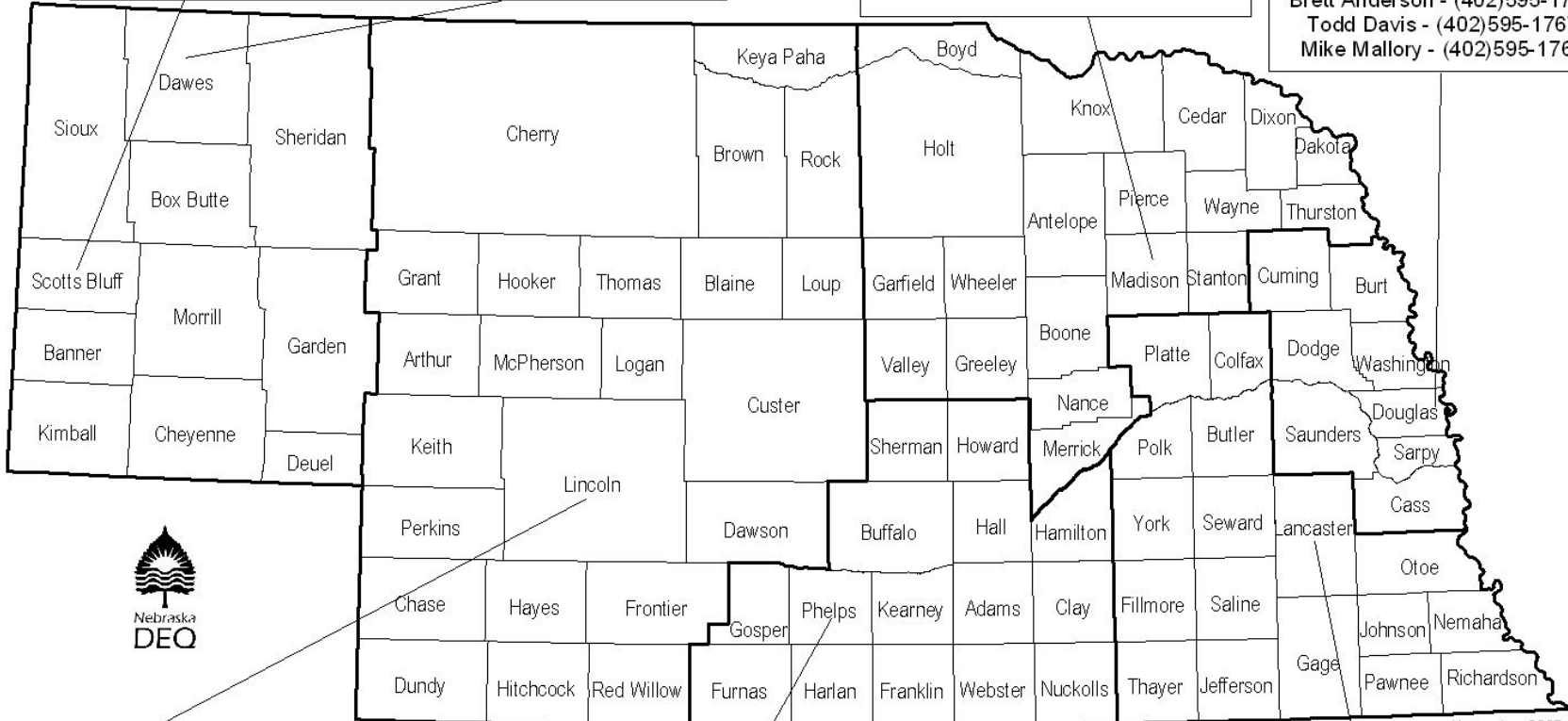
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# CHAPTER 3:

## 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 seventeen council members, the second summarizes Council actions during FY2007.

**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

### Council Actions

Council Meeting Date	Regulation	Action
September 8, 2006	Title 129 - Air Quality Regulations	EQC Approved as Amended. Attorney General Did NOT Approve.
December 1, 2006	Title 124 - Rules and Regulations for the Design, Operation and Maintenance of On-Site Wastewater Treatment Systems	EQC Approved As Amended. Approved by Attorney General 1/23/07. Sent to Governor 1/31/07.
March 2, 2007 (Video Conference)	Title 128 - Nebraska Hazardous Waste Regulations	EQC Approved As Amended. Sent to Attorney General 3/27/07. Attorney General Approved 5/1/07.
June 14, 2007	EQC meeting was cancelled due to probable lack of a 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 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 major air quality programs are: the construction permit program, operating permit program, emission inventory program, ambient air quality monitoring program, inspection and compliance 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, responsibility for various facets of the 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>Beginning July 2006</b>	<b>Applications Received</b>	<b>Applications Processed</b>	<b>Pending June 2007</b>
<b>56</b>	<b>77</b>	<b>77</b>	<b>56</b>

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). The PSD program applies to sources that emit significant levels of emissions. If regulated under PSD, the source has additional requirements that must be met. Sources subject to the PSD program and significant sources of hazardous air pollutants are required to control emissions with the best control technology available. Predictive air quality modeling is used to ensure that any new or modified source will not cause or contribute to violations of the ambient air quality standards or otherwise significantly deteriorate air quality.

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. In FY07, the Department collected \$115,750. 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.

Processing the increased number of permits in a timely manner has been a challenge for the department. As a result, during 2005 and 2006 NDEQ committed resources to address these concerns. 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.

Changes NDEQ has implemented as a result of its process improvement initiative include:

- Standardizing permit template language;
- Requiring pre-application meetings for more complex permit applications;
- Emphasizing pre-application information and activities;
- Implementing the permitting process with agreed upon timeframes (Applicant and Department);
- Developing ethanol and generic air construction permit application packages;
- Establishing a toll-free permit hotline;
- Filling key vacant Department staff positions; and
- Developing an initial permit tracking system for the Department webpage.

As a result of these process changes, NDEQ has seen:

- More complete permit applications submitted;
- Improved communication with permit applicants;
- A 50% reduction in review time for ethanol plant air construction permits;
- An almost 50% reduction in review time for all air construction permits;
- A 55% reduction in the air construction permitting backlog; and
- Air Quality Division staff gain greater ownership of the process, empowering them to identify and address continual improvement opportunities.

Efforts to continually improve our permitting process and, ultimately, customer service are ongoing. Air Quality Division staff are revising application forms (based on staff and stakeholder feedback), developing new guidance documents, making more information available on the Agency's website, and conducting meetings to identify additional ways to improve our processes and customer service.

### 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 renewed every five years. Operating permits are issued for both large and small sources of air pollution. The table below provides statistics relating to applications received, processed and pending:

Beginning July 2006	Applications Received	Applications Processed	Pending June 2007
50	12	14	48

### Compliance Section

#### Emission Inventory Program

Each year, the Department conducts an inventory of emissions from major industrial sources and a representative sample of 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 that has been completed was for calendar year 2002; the next comprehensive inventory will focus on calendar year 2005. It is expected that EPA will release the 2005 comprehensive inventory during FY2008.

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 recent years, the Department had carryover funds available, which were used to help offset the emission rate. However, for the 2006 inventory, which supports state fiscal year 2008, 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. The rate for 2006 emissions was \$57 per ton, an increase of \$6 per ton from 2005 but \$2 less than previously projected.

### 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 to protect both public health and public welfare for the following six pollutants:

- 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 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.

The monitoring network within the state is comprised of 34 monitors at 25 sites. An overview of the monitoring program is provided as a table titled *Nebraska's Air Monitoring Network - Summary Description* on the following page. For additional information about the monitoring network, please refer to the *Nebraska Air Quality Report*, which may be found on NDEQ's website, [www.deq.state.ne.us](http://www.deq.state.ne.us).

**Nebraska's Air Monitoring Network - Summary Description  
As of June 2007**

*Monitors operated by the Douglas County Health Department*

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

5 PM<sub>10</sub> monitors at 4 sites

7 PM<sub>2.5</sub> monitors at 3 sites, including collocated continuous and speciation monitors 3

Ozone monitors at 3 sites \*

1 Carbon Monoxide monitor at 1 site \*

2 Sulfur Dioxide monitors at 2 sites

No Lead monitors, discontinued in 2002

\* *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 At 1 site

*Monitors operated by the Lincoln/Lancaster Health Department*

**Lincoln Metro Area**

2 PM<sub>2.5</sub> monitors at 1 site (one PM<sub>2.5</sub> continuous monitor)

1 Ozone monitor at 1 site

1 Carbon Monoxide monitor at 1 site

*Monitors operated by the Nebraska Department of Environmental Quality*

**Cozad**

1 PM<sub>10</sub> monitor at 1

site **Dakota City**

1 TRS monitor at 1 site

**Gothenburg**

1 PM<sub>10</sub> monitor at 1

site **Grand Island**

1 PM<sub>2.5</sub> monitor at 1

site **Lexington**

1 TRS monitor at 1 site

**Scottsbluff**

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

**South Sioux City** (Being relocated)

1 TRS monitor at 1 site

**Weeping Water**

4 PM<sub>10</sub> monitors at 3 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**



The network is evaluated annually and is subject to ongoing modification to address changing conditions or standards, new information, and modernization. Recent and anticipated network upgrades are summarized below.

### **Air Monitoring Network Changes and Modernization**

- Ozone and continuous PM<sub>2.5</sub> data is reportedly hourly to the EPA AirNOW system, which in turn makes air quality information available to the public on a contemporaneous basis. The AirNOW system maybe 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 sequential monitors. The automated monitors reduce on-site attendance needs. Operations can be checked by NDEQ 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.
- The Department, in partnership with the University of Nebraska, began mercury deposition monitoring in July 2007 at a site located near Mead, Nebraska. This effort is part of the National Atmospheric Deposition Program/National Trends Network (NADP/NTN), a nationwide network of precipitation monitoring sites. Additional information about the NADP/NTN can be found at:  
**<http://nadp.sws.uiuc.edu/nadpoverview.asp>**.

### **Future Air Monitoring Issues**

National air monitoring needs are shifting from just monitoring for National Ambient Air Quality Standards compliance toward providing data that is also useful for developing a better understanding of regional/national air quality interactions. At the same time, emphasis is shifting away from coarse particulate matter (PM<sub>10</sub>) pollution toward fine particulates (PM<sub>2.5</sub>) and fine particulate precursors (trace level ammonia and sulfur dioxide).

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.

The shifts in national air monitoring priorities have been accompanied by shifts in the federal funding support and this is anticipated to continue. USEPA 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 potential exists that after Federal Fiscal Year 2008 no Section 103 funding will be available for PM<sub>2.5</sub> monitoring, and that PM<sub>2.5</sub> monitoring will need to be funded using Section 105 and state match funds. EPA does not anticipate increases in Section 105 grant funding to accommodate the PM<sub>2.5</sub> monitoring. Rather, a re-evaluation of monitoring priorities will likely be necessary to determine monitoring activities within the existing Section 105 funding framework.

The net result anticipated is that the current air monitoring network deployed for monitoring NAAQS compliance will shrink, while new monitors capable of providing information on national/regional air quality trends will be added to the network.

### Inspection and Compliance Program

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.

As promoted in 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

<b>Compliance Activity</b>	<b>NDEQ</b>	<b>Lincoln/ Lancaster Co.</b>	<b>Omaha Air Quality Control</b>	<b>Total</b>
On-site Inspections	<b>186</b>	<b>123</b>	<b>55</b>	<b>364</b>
Stack Test Observations	<b>20</b>	<b>0</b>	<b>0</b>	<b>20</b>
Continuous Emission Mon. Audits	<b>6</b>	<b>2</b>	<b>1</b>	<b>9</b>
Complaints	<b>122</b>	<b>12</b>	<b>72</b>	<b>206</b>
Burn Permits Issued	<b>103</b>	<b>47</b>	<b>59</b>	<b>209</b>

### 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	Lincoln/ Lancaster Co.	Omaha Air Quality Control	Total
Asbestos Project Notifications	N/A*	59	157	216
Asbestos Site Inspections	N/A*	57	73 <sup>1</sup>	130

\*NDEQ no longer conducts asbestos inspections or processes notifications. <sup>1</sup> 2005 Asbestos Site Inspections

### 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, and to provide compliance assistance and outreach to the regulated community and general public.

This year, the unit developed new training opportunities and a system for tracking training for Air Division staff. In addition, two staff members have been designated to be subject experts on two sets of federal regulations to which regulated industry are subject. One person will become the expert on 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 unit also continued to sponsor annual Air Program Update Workshops for representatives from businesses, consulting firms, and industry. These half-day workshops are held across the state where general and technical information is provided on current events, regulations, permitting activities, and modeling activities pertaining to the Air Quality Program.

The unit also oversees the development of air quality regulations. During 2007, the Air Quality Division, with input from stakeholders, developed rules for the Clean Air Mercury Rule program. This significant rulemaking is a market based cap and trade program on the mercury emissions from coal fired power plants. In addition, the Department partnered with the University of Nebraska to begin mercury deposition monitoring in July 2007. Other air quality regulations revisions were designed to streamline the construction permitting process.

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 unit plans to submit its Regional Haze/BART State Implementation Plan by the end of calendar year 2007.

# 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 2007, 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
- maintenance of 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**

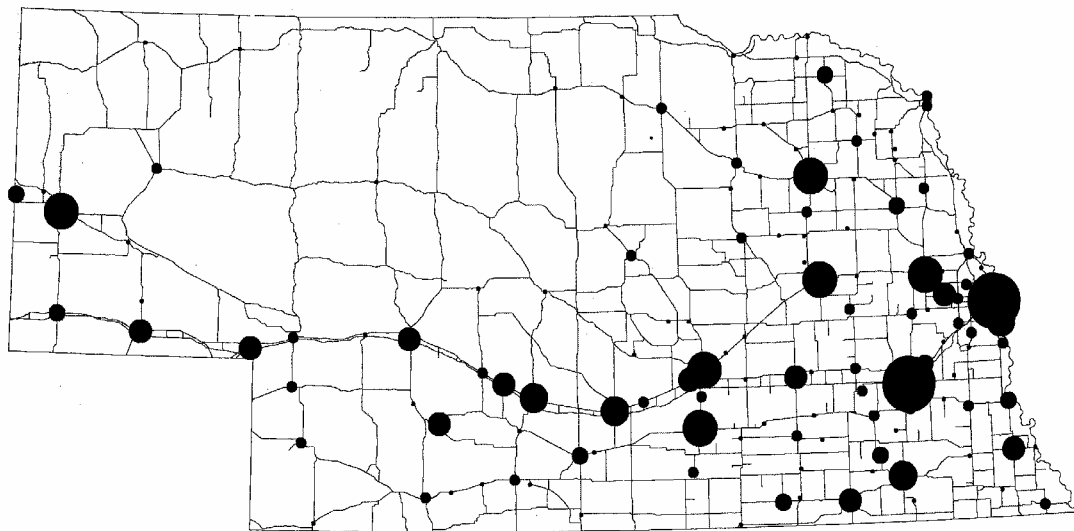
Funding for RCRA program activities is provided by an EPA grant, which requires a 25% state match. This match is met with state General Funds. Additionally, the Department can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. There were no new facilities proposed in FY07.

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:

- 75 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month)
- 483 Small Quantity Generators (between 220 and 2200 pounds generated per month)
- 1097 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)
- 15 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 FY2007 RCRA Activities</b>		
<b>Activity</b>	<b>State</b>	<b>EPA</b>
<b>Compliance Assistance</b>		
On-site Visits	12	0
Direct Assistance Contacts	663	*
Public Outreach Presentations (total 161 in attendance)	14	*
<b>Inspections</b>		
Land Treatment Facilities	3	1
Treatment and Storage Facilities	3	2
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	1	0
Facility Self-Disclosure	0	0
Large Quantity Generator	13	7
Small Quantity Generator	6	4
Conditionally Exempt Small Quantity Generators	17	4
Transporters	0	0
<b>Permitting</b>		
Closure Plans Finalized	2	0
Permits Issued/Renewed	3	2
Modifications	6	0
EPA Corrective Action Orders	*	0
<b>Record Reviews</b>		
Financial Assurance	22	4
* - 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. In addition, some sites that have been investigated in the past may be reassessed if new information is obtained that indicates that a threat to public health and/or the environment may exist. During the past year, the Department has performed work on five pre-screening assessments, one preliminary assessment, four combined preliminary assessments/site investigations and one site investigation.

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

**Targeted 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 targeted assessments at brownfield sites in Nebraska. These assessments are performed by NDEQ at no cost to interested parties in Nebraska communities. A targeted 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 seven targeted 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 2007</b>	
Municipal Solid Waste Disposal Areas (Landfills)	23
Industrial Waste	1
Solid Waste Compost Sites	10
Transfer Stations	37
Materials Recovery Facilities	6
Construction & Demolition Waste Disposal Areas	22
Delisted Waste Disposal Areas	1
Fossil Fuel Combustion Ash Disposal Areas	7
<b>Total</b>	<b>107</b>

The following chart indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2007:

<b>Summary of Activities: FY2007</b>	
<b>Compliance</b>	
Facility Inspections (General)	134
Facility Inspections (Construction)	2
Complaints Received	125
Complaints Investigated	85
Complaints Closed	74
<b>Permitting</b>	
New Permits Issued	2
Permit Renewals	30
Major Permit Modifications	3
Transferred Permits	0
Public Hearings	0
Financial Assurance Reviews	165
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, FY2007</b>	
<b>Permitting</b>	
Renewed Hauler Permits	22
New Permits Issued	4

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 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 gains feedback from the public regarding their grant-funded projects and activities, verifies that activities are in line with the approved application, and inspects equipment during on-site inspections. Field office staff assists with on-site inspections.

In addition to the on-site compliance inspections, the Department conducts financial reviews of grant recipients. Staff reviews 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

End-use market for recycled materials also receive additional points.

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 \$750,000 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.

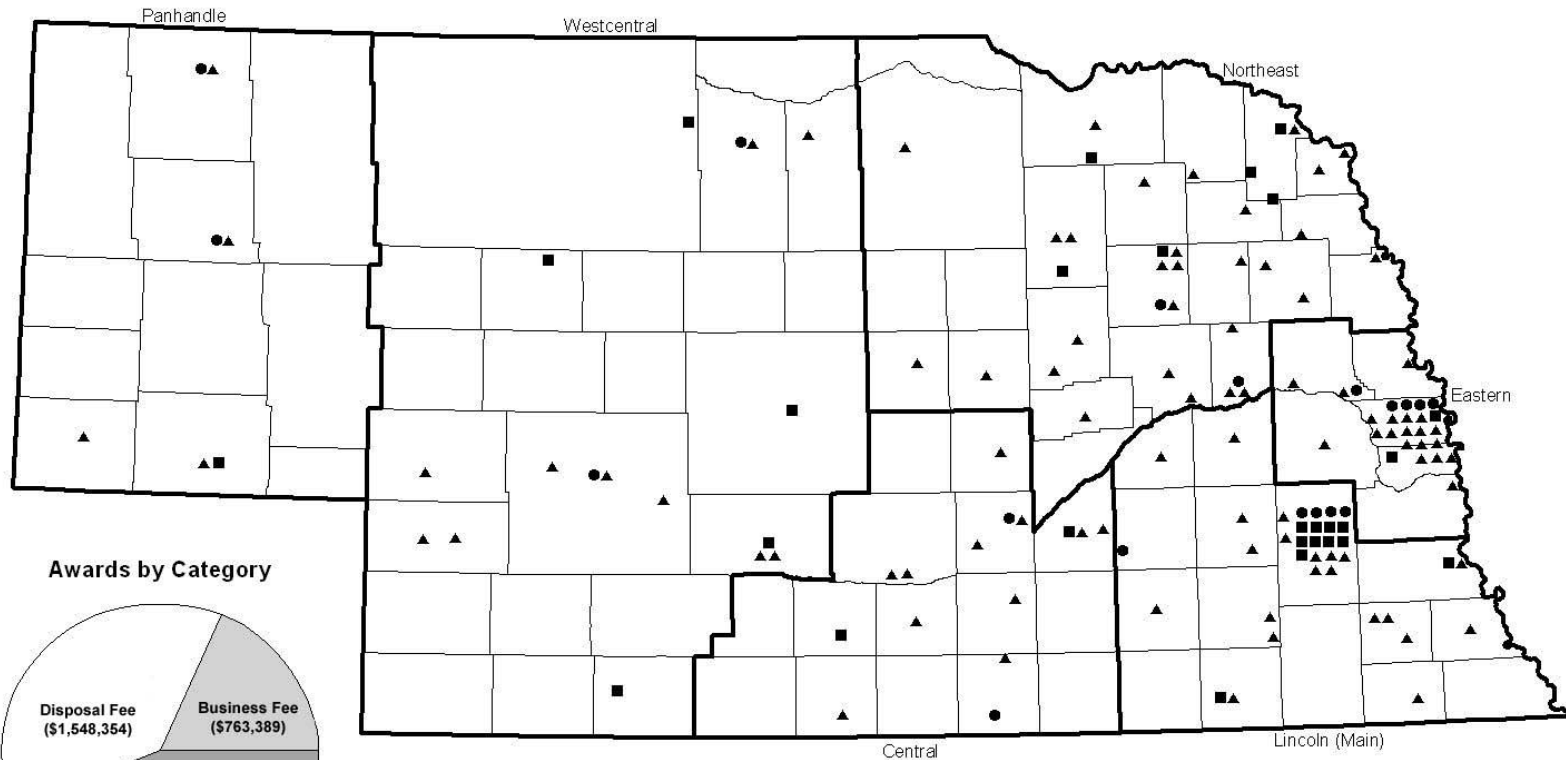
The Waste Reduction and Recycling Incentive Fund provides grants to assist in financing sound integrated waste management programs and projects. These programs and projects may include, but are not limited to: recycling systems; market development for recyclable materials; intermediate processing facilities 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 FY2007, the Department awarded \$4,092,989 for Waste Reduction and Recycling Incentive Grants to 140 projects. Eighteen of these grants were awarded from the Business Fee category (\$763,389), 27 were awarded from the Disposal Fee category (\$1,548,354), and 95 received grants from the funds set aside from the scrap tire funds (\$1,781,246). The following map shows the locations across Nebraska that received funds.



## Waste Reduction and Recycling Incentive Grants Program 2007 Grant Awards



**Awards by Category**



■ Disposal Fee	\$1,548,354	27 grants, including 2 statewide and 2 regional
● Business Fee	\$763,389	18 grants, including 1 statewide and 2 regional
▲ Tire Fee	\$1,781,245	95 grants, including 7 regional
<b>Total</b>	<b>\$4,092,988</b>	<b>140 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 \$1.2 million is received annually.

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

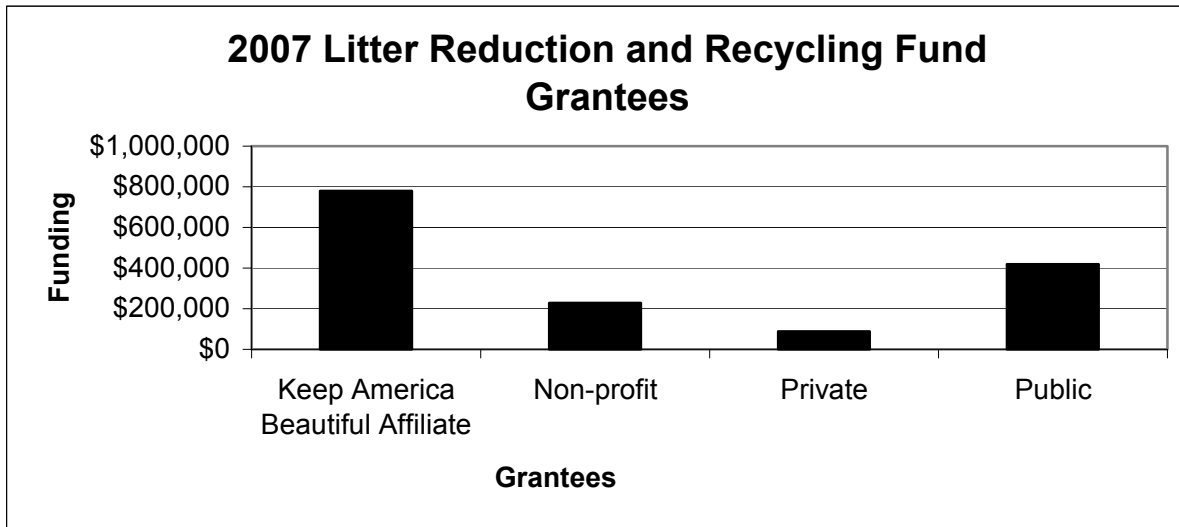
- Food for human consumption, beverages, soft drinks, carbonated water, liquor, wine, beer, and other malt beverages, unless sold by retailers solely for consumption indoors on the retailer's premises;
- Food for pet consumption;
- Cigarettes and other tobacco products;
- Household paper and household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

### Fund Summary

#### **Litter Reduction and Recycling Fund July 1, 2006 - June 30, 2007 (FY 2007)**

<b>Fund Balance June 30, 2006</b> .....	<b>\$779,485</b>
Revenues:	
Litter Taxes Collected .....	1,540,821
Interest, Grant Returns .....	90,175
<b>Net Collections for Year</b> .....	<b>\$1,630,996</b>
Expenditures:	
Department of Environmental Quality Administration .....	146,377
FY 2007 Grant Funds Expended .....	1,543,681
<b>Total Expenditures FY 2007</b> .....	<b>\$1,690,085</b>
<b>Fund Balance June 30, 2007</b> .....	<b>\$710,423</b>

In FY2007, \$1,515,435 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. Most 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 2007 grantees.



**2007 Grant Allocations**

**Litter Reduction and Recycling Fund**

In FY2007, the Department gave 69 Litter Reduction and Recycling Grant Program awards to 50 organizations in Nebraska. The breakdown is as follows:

<b>Public Education</b>	(37%)	20 grants	\$ 568,004
<b>Cleanup</b>	( 7%)	16 grants	\$ 105,921
<b>Recycling</b>	(56%)	33 grants	<u>\$ 841,510</u>
			<b>\$1,515,435</b>

**Public Education**

In FY2007, 20 grants totaling \$568,004 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**

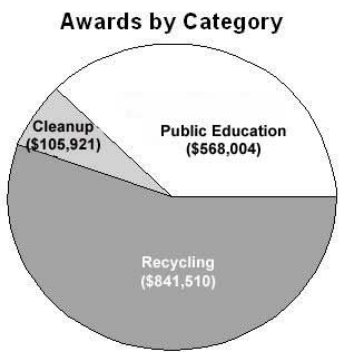
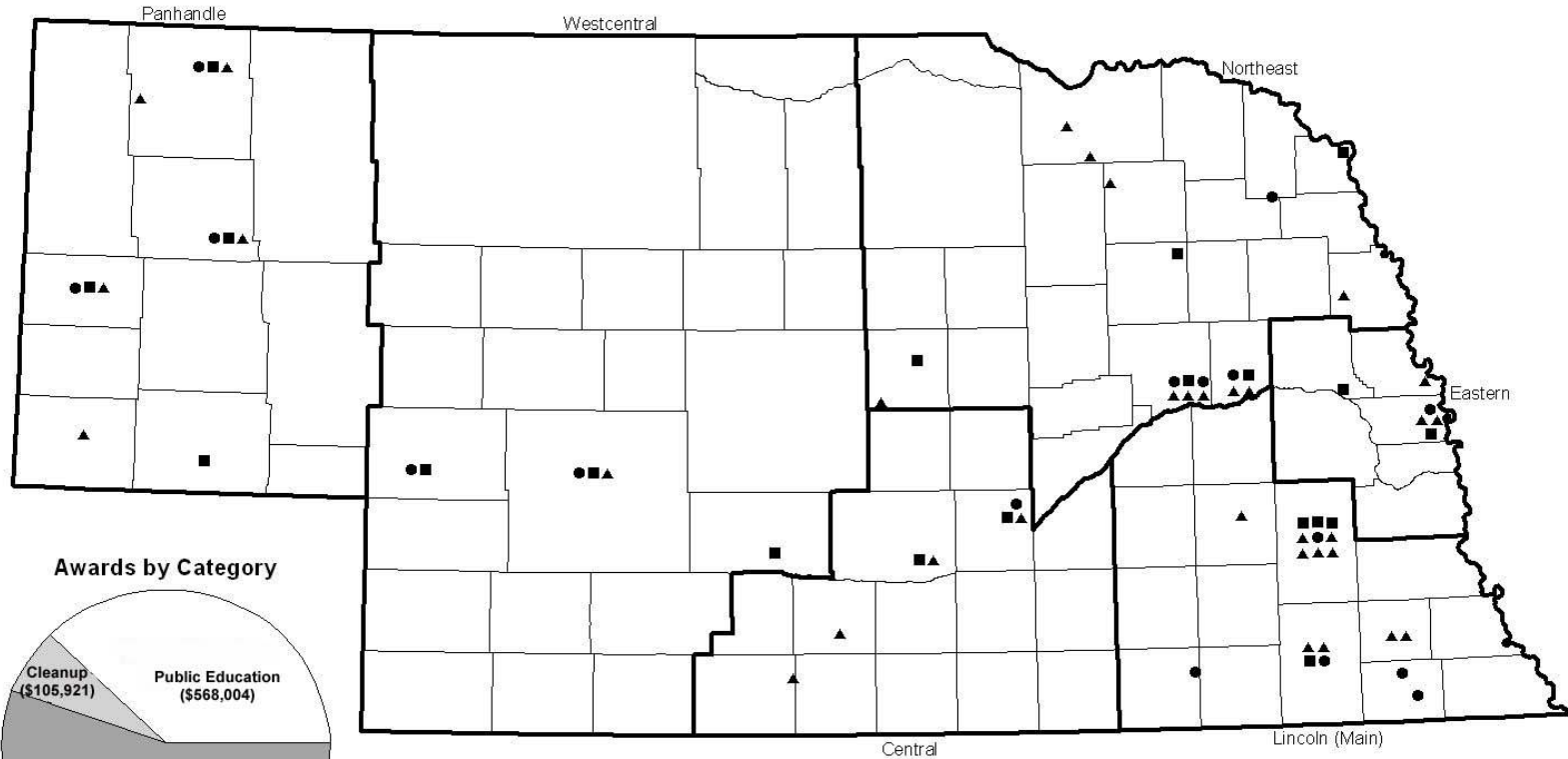
In FY2007, 16 grants totaling \$105,921 were awarded under the category of cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas, and other public use areas within the state. Not only are the 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 FY2007, 33 grants totaling \$841,510 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 2007 Grant Awards



■ Public Education	\$568,004	20 grants, including 1 statewide and 2 regional
● Cleanup	\$105,921	16 grants, including 1 regional
▲ Recycling	\$841,510	33 grants, including 2 statewide and 3 regional
<b>Total</b>	<b>\$1,515,435</b>	<b>69 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 \$125,000 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 remediation of petroleum contamination resulting from leaking above ground storage tanks and leaking underground storage tanks; and 2) administering a remediation assistance fund for persons responsible for cleanup costs due to petroleum releases from tanks.

#### **Petroleum Remediation/Title 200 Reimbursement Fund**

The first step in the Petroleum Remediation Program is the review of tank removal assessment reports to determine whether potential contamination exists. In the event these reports indicate a threat to health, safety, or the environment, the program then 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 cleanup requirements and issue public notices with their decisions. Staff review remedial actions throughout the project and determine when sufficient cleanup has been accomplished. The program also has several "orphan" sites for which remediation is proceeding through contracts paid with federal or state funds.

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. Those that pose no significant risk are closed; those that pose significant risk are prioritized for further work. For the past six 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, the next step in the RBCA process.

Since June 1999 through the end of October 2007, 1,760 Tier 1 site investigations have been initiated. Of the 1,526 Tier 1 field investigations completed thus far, 892 (58%) were closed, and 634 (42%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 389 Tier 2 investigations have been completed; 289 (74%) of these have been closed. Of the 1,493 sites that have completed a Tier 1 or Tier 2 investigation, 230 (15%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

The Petroleum Remediation Program is also responsible for the Petroleum Release Remedial Action Reimbursement Fund, established to help pay remediation costs for owners/operators of facilities which have leaking petroleum tanks. Costs for both underground and above ground tank releases are eligible for reimbursement. To assist applicants, the program developed guidelines entitled "Reasonable Rates Schedule and Reimbursement Guidance Manual." The program's activities in this area include receiving and processing applications for reimbursement from the fund and subsequently initiating reimbursements for eligible costs. Processing of applications involves:

- Reviewing the completeness of the applications;
- Checking compliance with requirements of tank registration and removal;
- Evaluating eligible costs as defined by Department regulations (Title 200);
- Determining if reasonable rates are being charged by consultants for the work; and
- Determining if the work plans and actions undertaken are consistent with the Department's regulations.

The revenue going into the fund is about \$11 million annually. As of June 30, 2007, a total of \$122,541,873 has been disbursed since the program began. During the past fiscal year, NDEQ reimbursed \$5,915,441 to 218 active sites and an additional \$4,647,049 to 170 Tier 1 sites.

The 28 sites listed below, all but five 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, 2007)	Site Status (as of June 30, 2007)
BURLINGTON NORTHERN RR	ALLIANCE	\$975,000.00 X	Active
BURLINGTON NORTHERN RR	ALLIANCE	\$972,578.98 X	Active
BURLINGTON NORTHERN & SF	MC COOK	\$975,000.00 X	Active
KONECKY OIL	MEAD	\$975,000.00 X	Active
ELKHORN VALLEY COOP	SNYDER	\$953,516.14	Active
COOP FIRTH	FIRTH	\$947,955.06	Active
MAGERS SERVICE	NORTH PLATTE	\$947,669.57	Active
CORNER SERVICE	BANCROFT	\$922,872.87	Active
PETERSON OIL CO INC	DAVENPORT	\$906,923.34	Closed
TOMAHAWK TRUCK STOP	NORTH PLATTE	\$879,430.07	Closed
GORDON AIRPORT AUTHORITY	GORDON	\$865,512.06	Closed
BNSF	ALLIANCE	\$858,209.81	Active
NU STAR ENERGY LP	NORFOLK	\$854,068.76	Active
NEITZEL OIL CO.	SPRINGFIELD	\$836,200.25	Active
DANKERTS INC.	CHAMBERS	\$826,845.62	Active
FORMER HERSHEY TRUCK STOP	HERSHEY	\$806,392.37	Active
WORTMAN MOTOR CO.	DONIPHAN	\$786,400.55	Active
IBP ATV(AT THE VERTICALS)	DAKOTA CITY	\$769,251.98	Active
COOP PANHANDLE	MITCHELL	\$754,355.53	Active
AMERITAS INVESTMENT CO	LINCOLN	\$730,795.46	Active
WESTERN COOPERATIVE CO.	ALLIANCE	\$709,713.96	Active
UNOCAL CORPORATION	OGALLALA	\$683,526.86	Active
KLEPPER OIL	DU BOIS	\$672,529.92	Closed
WHITEHEAD OIL 33RD A	LINCOLN	\$654,870.91	Active
SINCLAIR OIL CORP.	GRAND ISLAND	\$651,829.07	Active
BARNARD OIL COMPANY	BEATRICE	\$617,881.13	Closed
COBB MOTORS INC	STUART	\$595,950.04	Active
MIDLAND COOP - AXTELL	AXTELL	\$600,124.97	Active

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



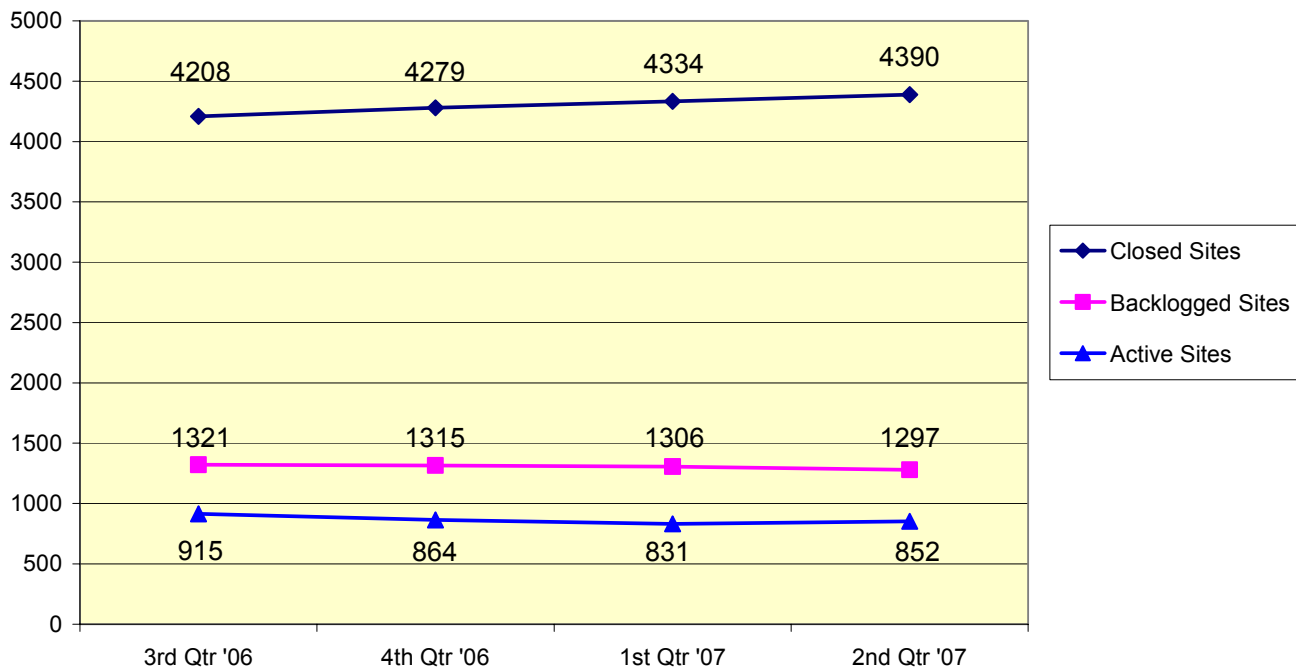
Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own. Over 140 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

As of September 30, 2007, there were 177 "orphan" sites (sites that do not have an identified or solvent party designated as responsible for cleanup) in some stage of investigation/cleanup. There were also 730 orphan sites waiting on the inactive list. NDEQ uses federal and state money for investigation and cleanup of these sites.

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:

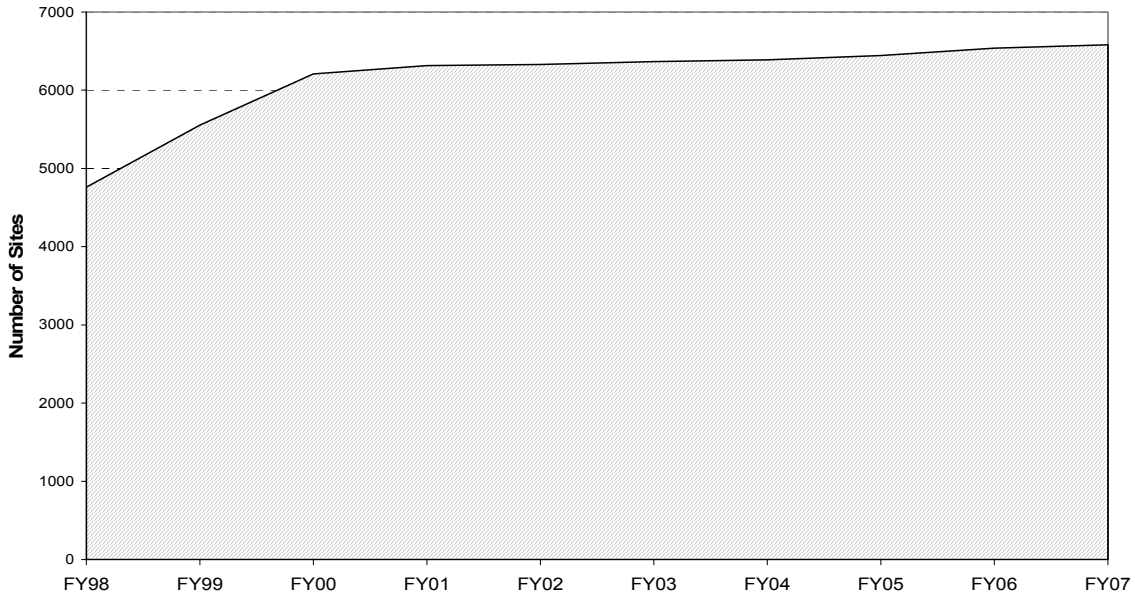
- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary
- **Backlogged Sites:** Sites identified as potentially needing cleanup, but are on a waiting list for further investigation
- **Active Sites:** Sites that are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

### LUST trends: July 1, 2006 to June 30, 2007

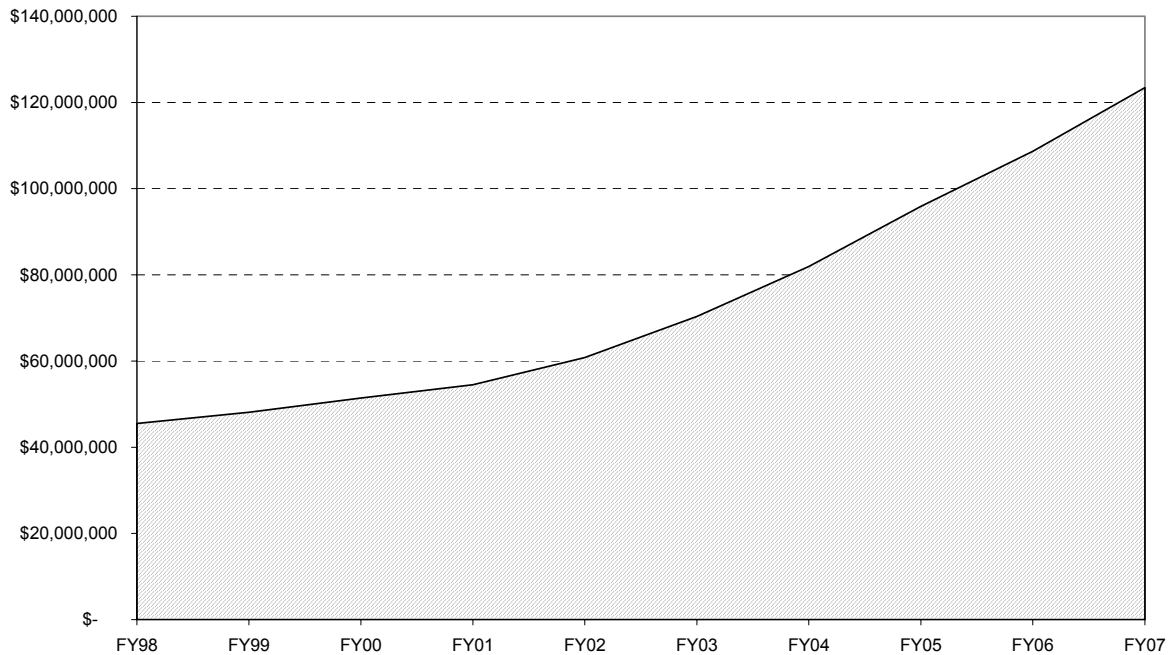


The chart below shows the cumulative number of sites that have had releases in the last several years. The second chart shows the cumulative amount that the program has spent on investigation and cleanup.

**Cumulative LUST Release Totals  
(last 10 years through FY07)**



**Cumulative Title 200 Disbursements  
(last 10 years through FY07)**



## **Agriculture Section**

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

### **LIVESTOCK WASTE CONTROL PROGRAM**

#### **Construction and Operating Permits**

On December 1, 2006, amendments to the Livestock Waste Management Act became effective. A key provision was the replacement of Construction Approvals with a new permit, the Construction and Operating Permit. The Construction and Operating Permit allows the construction and the operation of livestock waste control facilities.

During FY2007, the program issued 72 Construction Approvals, of which more than 80% were issued to Large Concentrated Animal Feeding Operations (CAFOs), and 73 Construction and Operating Permits, with approximately 75% issued to Large CAFOs.

In addition to the new permits listed above, a total of 43 permits were modified or transferred during FY2007. This includes 18 Construction Approvals, 12 Construction and Operating Permits and 13 State Operating Permits. The Livestock Waste Control Program received a total of 158 permit applications for state permits during FY07. Under the amended laws, an operation could have both a Construction and Operating Permit and National Pollutant Discharge Elimination System (NPDES) permit coverage.

#### **National Pollutant Discharge Elimination System Permits (NPDES)**

NPDES permits issued to CAFOs (both Individual and General permits) prohibit discharges of livestock waste from production or land application areas to waters of the state, except for the limitations established in the permit.

Producers may apply for an individual NPDES permit or request coverage under the NPDES General Permit for Open Lot Livestock Operations. Coverage under a NPDES Permit must be renewed upon expiration of the permit, which is normally issued for a term of five years.

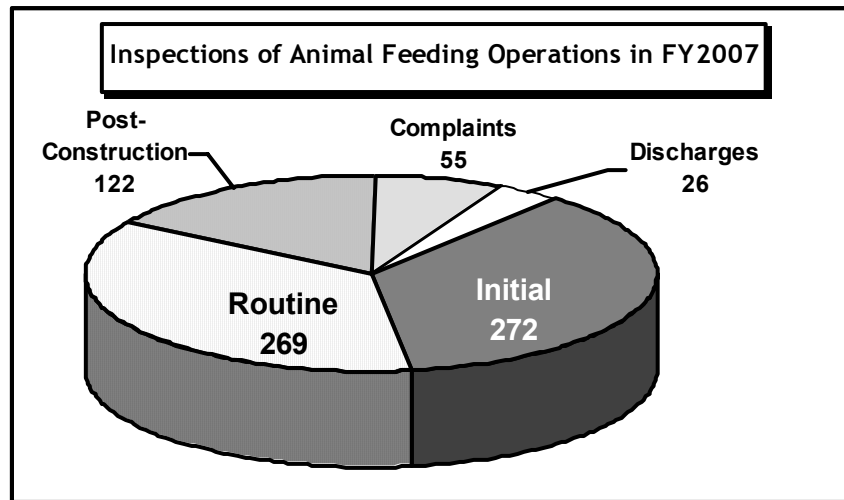
During FY2007, the Livestock Waste Control Program received a total of 67 applications for new, modified or transferred NPDES Permit coverage: 16 applications for NPDES Individual Permits and 51 applications for NPDES General Permit coverage. This number is significantly fewer than in the previous year (156 NPDES applications in FY2006, all for Large CAFOs). However, a substantial increase in the number of NPDES applications is expected for FY2008. The current NPDES General Permit for Open Lot Livestock Operations will expire on March 31, 2008, and the 224 operations currently covered by the permit must submit an application for coverage under the new General Permit, being developed.

#### **Annual Fees**

In FY2007, animal feeding operations were required to pay an annual permit fee, based upon the number of permitted animals. During FY2007, the provisions of the amended Livestock Waste Management Act clarified which permitted operations were subject to payment of an annual fee, to include those large operations with Construction Approvals or Construction and Operating Permits, in addition to large operations with State Operating Permits and all operations with NPDES permit coverage. In FY07, DEQ received and deposited \$364,000 in annual permit fees from about 600 facilities.

### Inspections

Livestock Waste Control Program staff conducted a total of 744 inspections during FY2007, including initial, post-construction, routine, complaint and miscellaneous inspections. The chart shows the number of inspections by type.



The Program received 152 requests for initial inspections during FY2007, with slightly more than half from medium animal feeding operations.

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), work 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 has leveled off in recent years. However, a slight increase in the number of permits issued was seen in 2006 over the previous year, with 16,966 chemigation site permits issued in 2006, compared to 16,329 permits in 2005. During the first three quarters of calendar year 2007 (ending September 30, 2007), 10,039 annual site permits were 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 Service. Applicator certifications also are reported on a calendar-year basis.

Last year, 695 applicators were trained, tested and certified, bringing the current number of certified chemigation applicators to more than 4,000 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.

In FY2007, the Program received five complaints and one proposal for an alternative design for a storage facility. Of the five complaints: one was referred to the Nebraska Attorney General's office and enforcement action is complete; two have been resolved; and two are still pending. Follow-up inspections are scheduled for these two pending cases from FY2007. The proposal for the alternative design for a fertilizer storage facility was reviewed and was determined to be not in compliance with the regulations and has been resolved.

### **Applicable Regulations**

- Title 130, "Livestock Waste Control Regulations" applies to animal feeding operations and management of livestock waste (Livestock Waste Control Program);
- Title 195, "Rules and Regulations Pertaining to Chemigation," regulates application of fertilizer and pesticides to protect irrigation water sources (Chemigation Program); and
- Title 198, "Rules and Regulations Pertaining to Agricultural Chemical Containment," concerns storage, loading and rinsing activities of bulk liquid fertilizers and pesticides (Agricultural Chemical Secondary Containment 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:

- 2007 --- Big Blue, Little Blue and Republican river basins
- 2008 --- Loup, Niobrara, and White River-Hat Creek river basins;
- 2009 --- Lower Platte and Nemaha river basins;
- 2010 --- Elkhorn and Missouri Tributaries river basins; and
- 2011 --- Middle Platte, North Platte and South Platte 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; Kansas State University; Central District Health Department; and U.S. Geological Survey.

A description of surface water implementation, monitoring, and assessment programs conducted during 2007 follows.

**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. Funds will be used to install no-till farming systems, riparian buffer strips, and other conservation measures. Cost share payments will be used to encourage and support landowner adoption of best management practices. Follow-up monitoring is planned after implementation of the BMPs to assess the effectiveness of the program.

**Basin Rotation Monitoring Program** — The Basin Rotation Monitoring Program targets two to three river basins each year for intensive monitoring. In 2007, a total of 46 stream sites and 13 lake beaches in the Big Blue, Little Blue and Republican basins were sampled weekly from April 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 2005, toxic algae (microcystin) sampling was added and the network was established at major public beaches across the State. This program was expanded in 2006 from 38 to 42 lake beaches and then in 2007 to 48 beaches. Weekly updates on the suitability of lake water quality for recreation activities were reported on the NDEQ's website. In 2007, over 1,000 lake beach samples were analyzed for *E. coli* bacteria and microcystins, and an additional 900 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.

**Ambient Stream Monitoring Program** — This program has a network of 98 fixed stations located on mainstem 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 98 sites are located on mainstem 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 98 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. Monthly sampling is conducted from October through March. Samples are analyzed for traditional chemical and physical parameters. Cost-cutting measures were implemented in 2006, reducing the amount of analysis conducted for some heavy metals, herbicides and coldwater fish communities. During 2007, a total of 1,764 water samples were collected for this program.

**Fish Tissue Monitoring Program** — A total of 53 fish tissue samples were collected from 43 streams and lakes across Nebraska for analysis of toxic pollutants during 2007. This information is used to assess toxic pollutant trends, identify potential problem areas, and to issue fish consumption advisories. While 2006 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 2007, a total of 45 stream sites were sampled in the Big Blue, Little Blue and Republican river basins. One stream site was dry and could not be sampled. 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. From 1983-1993, 80-100 stream biological samples were collected annually using a less regimented approach. 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 47 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 2007, a total of 235 samples were collected at deep water locations and an additional 190 profiles were collected from mid-lake locations.

**Lake Inlet Streams Monitoring Program** — During 2007, 12 lake inlet streams were sampled during periods of significant precipitation to provide information on nutrient, sediment, and pesticide loadings to lakes during runoff events.

**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 2007, NDEQ analyzed over 1,000 samples for total microcystins at 48 beaches on 44 different lakes. Based on the results of these data, health alerts were issued on seven 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 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 using remote sensing technology 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 the 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 3 different fish species from Fremont Lake #20, but not in fish from the other two lakes during 2006.
- Groundwater monitoring wells were installed near Fremont Lake #20 in 2006 and are being sampled monthly. Low levels of the microcystin toxins have been detected from some of the wells during 2006 and 2007.
- Samples from five sites are being split and analyzed by the UNL Water Lab to provide a comparison of results between two analysis methods, and to provide a quality control check on procedures.



- 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.

**Fish Kill and Citizen Complaint Investigations** — A total of 44 fish kills and 30 citizen complaints were reported between July 1, 2006 and June 30, 2007. 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 2006 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 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.

## Groundwater Assessment Programs

### Groundwater Quality Monitoring Report

Legislation passed in 2001 directs 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. 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

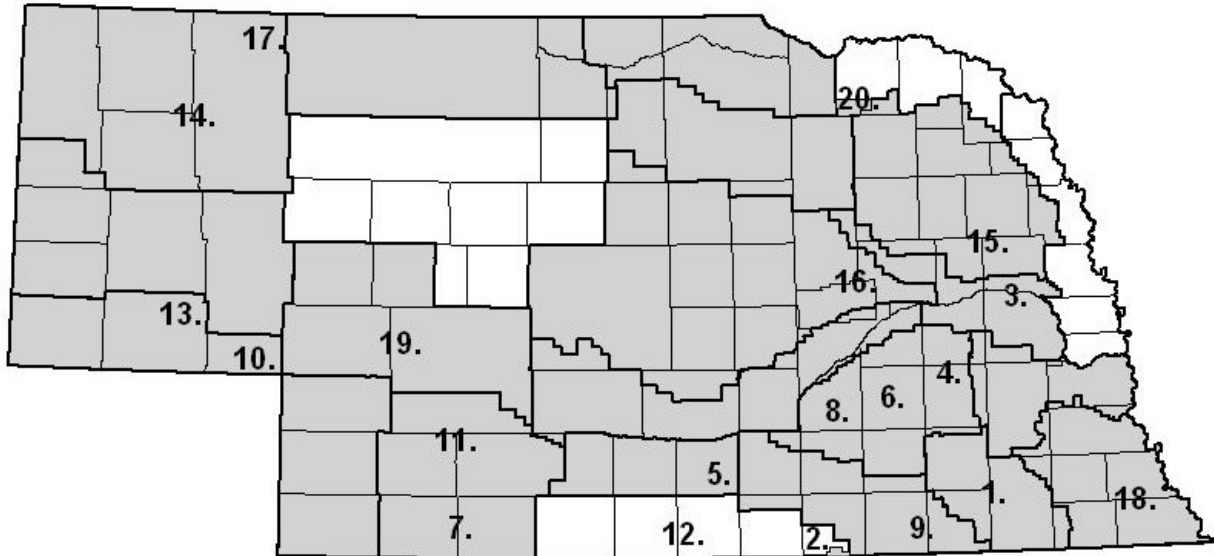
The Groundwater Unit is responsible for hydrogeologic review of various Department projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks and surface 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 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 (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.

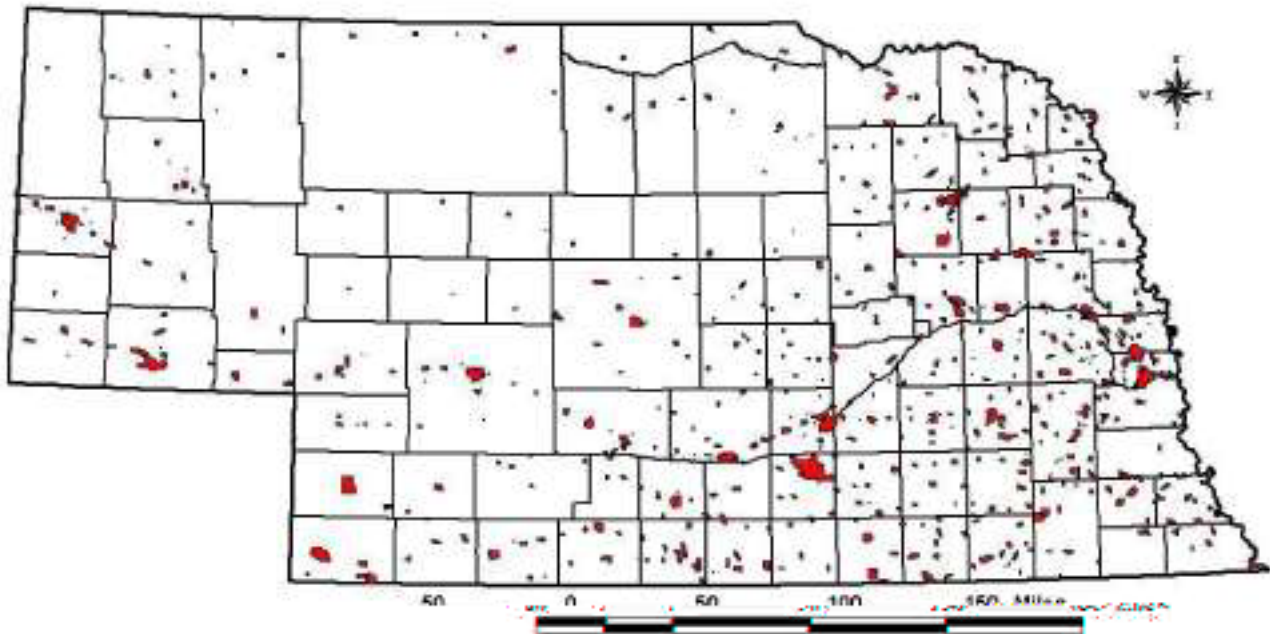
One Class I injection well currently operates within the state. The permit for this well is issued to Crow Butte Resources, Inc. for injection of wastewater below the lowermost underground source of drinking water. Class III wells are used to inject fluids for the purpose of extracting minerals. The only Class III wells in the State are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources, Inc. operates 3412 Class III wells as of October 1, 2007.

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.

### 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. Seventy-seven community water supplies have approved Wellhead Protection Plans.

## Wellhead Protection Areas, October 1, 2007



## 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 form the basis of water quality protection for all surface water quality programs conducted by the Department. The federal Clean Water Act specifies that States review their water quality standards and revise where appropriate once every three years. NDEQ's latest triennial review was completed in 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. The State is still awaiting a response from EPA.

Most of this work involved two major issues. The first is the development of nutrient criteria for lakes and impounded waters. These criteria define acceptable levels of nitrogen, phosphorus and chlorophyll in lakes and impounded waters. The criteria are extremely important in light of increasing concern over toxic algae in Nebraska lakes. The second major effort was to develop "use attainability analyses" for the primary contact recreation use. EPA had determined that previous classifications of this use were not according to the intent of the Clean Water Act and that NDEQ needed to revise its classifications for this use. An entirely new protocol for determining which streams would qualify under use attainability analyses to not have the primary contact recreation designated use was developed during the previous year. All streams were analyzed with this protocol and streams needing a different recreational classification were changed in these Title 117 revisions.

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.

NDEQ organized and participated in a regional "Kaizen" process improvement effort with the states of Iowa, Kansas, and Missouri and with EPA Region VII and EPA Headquarters. This effort worked through the problems that states have with revising and obtaining EPA approval of their water quality standards. A new process was designed that will be implemented to expedite the EPA approval process. It focused mainly on EPA tasks and communication between states and EPA.

### Section 401 Water Quality Certification

The Planning Unit administers the Section 401 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. Five hundred thirty Section 404 permit reviews were conducted by the unit during FY2007.

On January 9, 2001 the U.S. Supreme Court issued a decision in the matter of Solid Waste Agency of Northern Cook County 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 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.

In 2006, the Department prepared a Surface Water Quality Integrated Report, which is a combined Section 303(d) list and Section 305(b) report. Integration of the required list and report provides the general public with a comprehensive summary of state and national water quality status. The report was finalized and submitted to EPA in May 2006. As of Oct. 1, 2007, EPA has not taken action on Nebraska's submittal.

During FY2007, TMDLs were completed for identified impaired waters in the Lower Platte River Basin, Nemaha River Basin, Carter Lake near Omaha, NE, Lake Ogallala and Fremont Lake #20. The TMDLs were submitted to EPA Region 7, with approval being received in September 2007. In addition, TMDLs have been initiated for waters in the Elkhorn River Basin, Missouri Tributaries Basin and Big Indian Lake near Odell.

### **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, 4) Urban Run-off Management Assistance (<\$75,000) and 5) Wellhead Protection Area Management Assistance (negotiated). During 2007, 44 projects were ongoing among the five grant categories. These included 28 large projects totaling (\$6,299,672), 6 small projects (\$99,026), seven community lakes projects (\$490,316), one urban run-off management projects (\$60,000) and two wellhead area management assistance projects (\$165,600).

New projects funded by the Department during 2007 included seven large projects totaling \$1,740,755, four new community lake projects (\$188,563), and one new urban run-off management project (\$60,000). A total of 144 large projects have been funded through Section 319 grants since the beginning of the program in 1990. Of these 144 projects, 79 have addressed surface water, 41 have addressed groundwater and 24 have focused on both surface water and groundwater problems.

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

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

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

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

Beginning in FY2004, \$200,000 was set-aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide; in 2006, the amount available for grants was reduced to \$150,000. 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, and eight for FY2008. 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 FY2006-2007, the department continues 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.

The public can now get access to the bacteria monitoring data and blue-green algae levels for lakes on the DEQ website. The monitoring results are updated weekly during the recreational season.



## 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 the Nebraska Environmental Protection Act and 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.

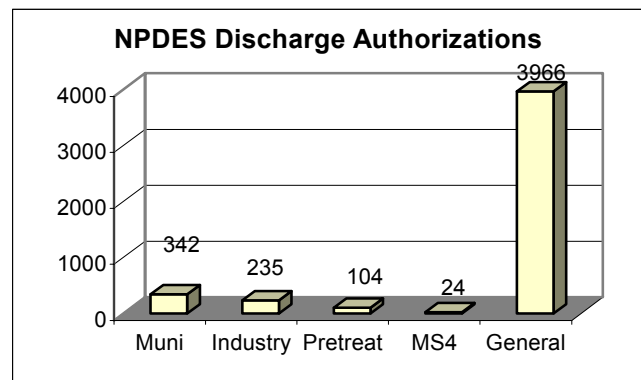
The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology based standards or water quality based standards. Technology based standards reflect effluent quality that can be achieved using treatment 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. Both the Construction Storm Water General Permit and the Industrial Storm Water General Permit will be reissued in 2008.

There are 3966 active facilities which are provided discharge authority under general permits and 681 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 2576 construction storm water, 104 dewatering/hydrostatic testing, 1185 industrial storm water, and 101 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 by the facility for a period of three years.

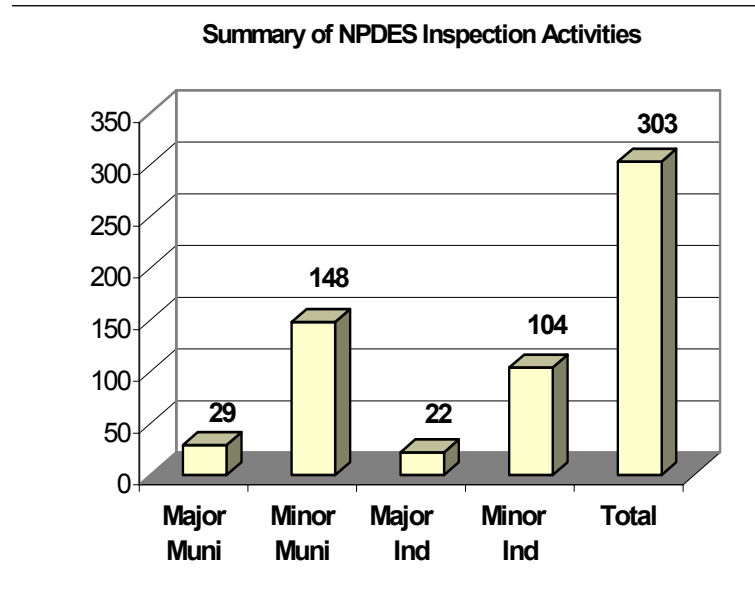
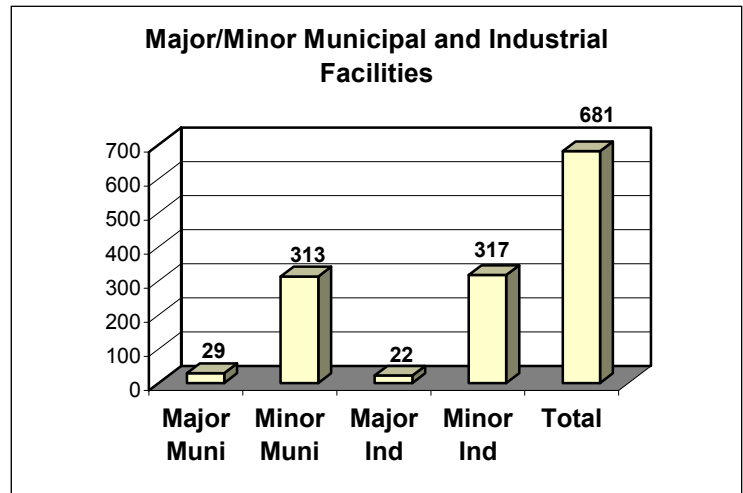
The program verifies compliance through a variety of activities including reviewing discharge monitoring reports, following up on complaints and incident reports, conducting on-site inspections, and performing effluent monitoring inspections. During on-site inspections, program personnel walk through 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 255 total inspections in Fiscal Year 2007. 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 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 to less than one acre, if 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 and the Omaha MS4 Permit was issued on October 1, 2003. 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 (TMDLs) 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.

The Department has entered into a Memorandum of Understanding with the City of Omaha to better coordinate the NPDES construction storm water program with the City's Grading Permit Program. The Department also maintains a similar working arrangement with the City of Lincoln and Lower Platte South NRD. As a result, Omaha, Lincoln, the Lower Platte South NRD and the Department share compliance and permit application review responsibilities. This sharing of responsibilities continues to provide mutual benefits from both an environmental and a resource management perspective. This responsibility sharing is necessary; construction permitting alone has jumped four-fold since Phase II was implemented.

Nearly \$2.5 million in grant funds were distributed in FY2007 under Legislative Bill 1226 for MS4 permittees. This grant can be 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. The grant has been renewed by Legislature for another two years. 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. Both of these permits will be reissued in FY2008.

### **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 the City to complete the long-term control plan by 2024. The projects included in the plan span 18 years and are estimated to cost \$1.5 billion. The goal of the projects is to reduce or eliminate combined sewer overflows and comply with State and Federal regulations.

### **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 be found in Title 119. The rules and regulations set forth discharge standards and limits that apply to all industrial users of publicly-owned wastewater treatment plants. Permits are required of those industries that are determined to be significant industrial users. Any of the following criteria can be used as the basis for determining whether an industry is a significant industrial user: 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 and the Nebraska Environmental Protection 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 considerably 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 FY07, a total of 251 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. The Department is proposing a short list of amendments to Title 123 at the December 2007 EQC Hearing. These amendments keep the regulations current with national design standards for the Department's construction permit program.

### **104(g) Assistance Program**

The 104(g) Assistance Program, which has been administered by NDEQ since 1983, provides one-on-one training to wastewater treatment facility operators. The program is funded by an EPA grant through Sec. 104(g)(1) of the Clean Water Act. The Department received \$24,875 in grants and matched it with \$8,292 of state funds in FY07. This training is focused on assisting the operator to improve operation and maintenance of wastewater treatment plants.

The 104(g) assistance program for wastewater treatment facility operators provided diagnostic evaluation, initiated training, or assistance at Eagle, Cedar Bluffs, Creighton, Hartington, Hebron, Logan View High School, Spencer, Springfield, West Point, and Wymore. Program assistance was completed this year at Davey, Friend, Petersburg, Snyder, Table Rock, Uehling, and Wilber. Generally, training is completed at facilities in a two-year period. Presenting the findings and accomplishments of the training to the village boards or city councils or other appropriate body completes the training assistance for facilities. The training program, paired with dedicated efforts from the communities involved, has yielded positive results.

### **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 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.

The program focuses on protecting surface and groundwater in the area of proposed onsite systems through the certification of onsite professionals, review of plans for subdivision development, and review of plans and permitting of systems where concerns have been identified, or systems with non-domestic wastes. Certification of onsite professionals covers 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 assure that the design, installation, modification, repair, and maintenance of onsite wastewater systems is performed by qualified, competent, 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 certification. As of October 2007, a total of 734 professionals have been certified by exam for the 2006 - 2007 certification cycle, some in multiple categories. A total of 12 hours of approved continuing education is required to renew the certification by exam for the subsequent two-year certification cycle. Examinations for the certification by exam began in July of 2005. The Department has held 85 exam sessions and administered 1,148 exams.

The registration requirement provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, through September of 2007, there has been a total of 5,534 systems registered.

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. Nebraska Health and Human Services System personnel also routinely work cooperatively 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 review requirements, necessary before any construction, and waste management alternatives for subdivisions and housing developments located where municipal sewer systems aren't available.

The Private Onsite Wastewater Treatment System Advisory Committee advises the Department on administration of the Act and proposed rules and regulations. The latest changes, which became effective June 20, 2007, revised the fee schedule to increase registration fees to help cover the direct and indirect costs of administering the program, as required by the Act. Additional changes to establish application fees for permits and subdivision approvals, as required by LB333, have been approved by the Environmental Quality Council and are in the approval process. Other changes to the regulations continue to be discussed and are under development with the advisory committee. These would provide for endorsements for properly qualified certified professional to conduct special activities or procedures not currently identified in the regulations.

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. As part of the permitting requirements, the program also reviews permit applications for systems that do not meet requirements for Authorization by Rule. In FY 2007, the program received a total of 40 permit applications, and a total of 25 applications for subdivision review and approval.

Program staff work with many other organizations, including local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association (NOWWA), the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, and the Groundwater Foundation to educate the public about the importance of proper installation and maintenance of onsite wastewater treatment systems and to improve the knowledge and skills of the various practitioners who install and maintain onsite systems. NOWWA has held annual conferences and produced other training seminars since its inception in March 2001. UNL Cooperative Extension has continued to develop and deliver a variety of training and continuing education programs.

### **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. Staff will monitor and ensure compliance of those facilities that are required to have certified operators. As of October 2007, the wastewater operator training certification program has 815 certified operators with municipal certificates and 67 operators with industrial certificates.

In calendar year 2007, the Department is providing four, five-day classroom training workshops for operators and six testing opportunities. For 2008, the Department intends to provide four regular training sessions and six examinations.

In the past, the Department worked with operators of industrial wastewater treatment facilities to develop training sessions and regulations for mandatory certification of industrial operators. That effort resulted in the revision of Title 197 to include mandatory certification of industrial operators. Training and testing of industrial operators will continue in FY08.

## 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 is 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	\$27,868,602
EPA 2007 Capitalization Grant	\$5,529,600
NIFA/CWSRF Series 2007B Match Bonds	\$868,736
EPA 2008 Capitalization Grant	\$5,735,000
NIFA/CWSRF Series 2008 B Match Bonds	\$901,600
Administration Fund Cash Match	\$442,584
December 15, 2007 Loan Payments	\$7,241,951
1-Year Projected Interest on Fund Balance	\$1,114,750
<b>TOTAL</b>	<b>\$49,702,823</b>
<b>USES OF FUNDS</b>	
Administration Expense	\$442,584
Match Bond Payment	\$1,813,146
604(b)	\$200,000
Current Loan Obligations	\$19,794,699
Available to Loan	\$27,452,394
<b>TOTAL</b>	<b>\$49,702,823</b>

The FY07 program Funds consist of \$5.5 million CWSRF capitalization grant, \$868,736 NIFA bond match and about \$11.4 million in repayments and interest. The program disbursed \$29.8 million for wastewater treatment project construction costs. Loan contracts were signed with 6 communities and loan amendments were signed with 3 communities for a total obligation of \$11.7 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 FY2007.

### Municipalities Receiving CWSRF Loans in FY2007

Municipality	Loan Date	Loan Amount	Small Community Grant Amount
Deshler Amd#1	8/10/06	\$215,000	
Lyons	10/18/06	\$832,000	
Arlington Amd#1	12/11/06	\$400,000	
Concord	2/26/07	\$311,000	\$58,000
Bancroft	3/19/07	\$693,700	\$100,000
Chapman	4/4/07	\$420,000	\$100,000
Indianola	4/19/07	\$1,102,200	\$100,000
North Platte Amd#1	4/26/07	\$7,000,000	
Big Springs	5/25/07	\$793,000	
TOTAL		\$11,766,900	\$358,000

Ten SRF wastewater projects completed construction and initiated operation in SFY07: Deshler, Garland, Hickman, Madison, McCook, Murray, Omaha, Rising City, St. Paul, and Stamford. Ten projects are under construction: Arlington, Big Springs, Chapman, Concord, Dwight, Gosper Co. SID#1 (aka Johnson Lake), McCook, North Platte, Palmer, and Silver Creek.

### 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 \$4.57 million in grant funding for 52 projects in conjunction with a CWSRF loan during the seventeen years of the program. Many small municipalities find that needed projects are too costly without the additional grant subsidy provided along with the CWSRF loan. During FY2000, legislation was passed providing the department with authority to allocate up to \$500,000 per year for small town matching grants. Funding for these grants is taken out of the CWSRF Cash Fund, a fund generated through fees collected on CWSRF loans. In FY2003 additional legislation increased the population level for eligible communities to 5,000 or less. The department intends to provide funding to as many qualifying projects as possible; therefore, grant amounts are limited so that any one community can receive a maximum of \$100,000. The FY2003 legislation also provided authority to make grants for community assessments and facility plans. The department provides planning grants through the Nebraska Environmental Partnership Program.

### Drinking Water State Revolving Loan Fund

In August 1996, the federal Safe Drinking Water Act was amended to include a Drinking Water State Revolving Fund program (DWSRF). In 1997 the Nebraska Legislature passed LB517, which amended the Nebraska Safe Drinking Water Act and established the DWSRF. An agreement between the NDEQ and the Nebraska Department of Health and Human Services Division of Public Health (DHHS-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 (CWSRF) 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 DHHS-DPH including day to day program management activities for both agencies, and 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 FY2006, under the Source Water Protection Implementation set-aside (15%) NDEQ and DHHS-DPH provided \$200,000 for community assessments and preliminary engineering reports, and \$200,000 for wellhead 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 wellhead 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 \$300,000. 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	\$11,687,298
EPA 2007 Capitalization Grant	\$8,229,000
NIFA/DWSRF Series 2007A Match Bonds	\$1,645,800
EPA 2008 Capitalization Grant	\$8,200,000
NIFA/DWSRF Series 2008A Match Bonds	\$1,640,000
December 15, 2007 Loan Payments	\$1,834,474
1-Year Projected Interest on Fund Balance	\$467,492
<b>TOTAL</b>	<b>\$33,704,064</b>
<b>USES OF FUNDS</b>	
Small System Technical Assistance	\$328,580
Source Water Protection Implementation	\$1,575,000
Public Water System Program Administration	\$1,000,000
Loan Forgiveness Future	\$400,000
Current Loan Obligations	\$11,141,342
Current Loan Forgiveness	\$154,328
Available to Loan	\$19,104,814
<b>TOTAL</b>	<b>\$33,704,064</b>

The FY2007 DWSRF capitalization grant allocation totaled \$8.2 million from FY07 federal appropriations. The program disbursed \$6.4 million for drinking water project construction. Loan contracts were signed with 5 communities and loan amendments were signed with 2 communities for a total obligation of \$10 million including Loan Forgiveness. The following chart shows the municipalities receiving Drinking Water State Revolving Fund loans in FY2007.

**Municipalities Receiving DWSRF Loans in FY2007**

MUNICIPALITY	LOAN DATE	LOAN AMOUNT	LOAN FORGIVENESS
Kearney	7/27/06	\$8,176,025	
Ansley	8/16/06	\$600,000	
Ainsworth	10/23/06	\$350,000	
Fairmont	11/20/06	\$230,000	
Hardy	1/10/07	\$224,000	
Scotia Amd#1	2/6/07	\$60,000	
Elba Amd#1	5/15/07	\$360,750	
<b>TOTAL</b>		<b>\$10,000,775</b>	<b>0</b>

Six DWSRF projects completed construction and initiated operation in SFY07: Ainsworth, Bancroft, Big Springs, Bloomfield, Holbrook, and Pender. Twelve projects are under construction: Ansley, Broken Bow, Central City, Clarks, Cozad, Elba, Fairmont, Hardy, Kearney, Lyons, Scotia, and Stratton.

# CHAPTER 7:

## Environmental Assistance Division

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The purpose of the Environmental Assistance Division is to serve the regulated community and the public by providing assistance and coordinating and providing outreach activities. The division consists of several programs: Small Business and Public Assistance, SARA Title III - Community Right-To-Know, Nebraska Environmental Partnerships (NEP), Release Assessment and Homeland Security. By centralizing these programs, the division brings greater focus to the department's overall assistance and outreach efforts and provides the public and regulated community with a better understanding of the department's regulations and environmental issues.

Over the last year the programs within the Environmental 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 Nebraska's efforts to assist small communities to many national entities who are interested in our program.
- 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. A number of on-site visits have occurred and the SBAP has coordinated the preparation of a number of assistance documents.
- 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 that are 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.
- The Division has been active in the Interstate Technology and Regulatory Council, an organization devoted to the introduction of innovative technologies that will increase the speed, and reduce the cost of addressing various types of environmental contamination.
- In 2007, the Division provided facilitation for a team effort to streamline the water quality standards review and approval process. This effort, which involved representatives from the state environmental agencies in Nebraska, Iowa, Kansas and Missouri, and from EPA Headquarters and Region 7, was recognized nationally by the Environmental Council of States and received the first "States Innovation Award."

Following is a summary of the programs within the Environmental Assistance Division:

### **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 people: 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. The Department is examining methods to re-invigorate the panel's activities.

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 serve as a clearinghouse for information 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.

### **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 2006, approximately 3,250 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This was nearly a 5% 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 78% of the facilities reported online in Nebraska in 2006. 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 2006, the Community Right-to-Know Coordinator attended 15 local meetings and assisted with local emergency exercises and provided information regarding chemicals at facilities in their communities.

## Nebraska Environmental Partnerships Program

Access to a clean and safe environment is a goal that all Nebraskans agree on. In order to realize and sustain this goal, our communities must have the ability to provide high quality drinking water, be able to adequately treat wastewater, and provide sound waste management services, including viable recycling systems, for their citizens. Our communities struggle as they balance the challenges of:

- Complex environmental regulations
- Limited financial resources
- Aging infrastructure
- Aging population
- Small communities getting smaller

The Nebraska Environmental Partnerships (NEP) program is a unique state-coordinated program aimed at helping small towns meet these challenges through a team process that helps local communities prioritize risks and find technically and financially feasible solutions to issues they face.

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 NEP 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, but the funding will be allocated in SFY 2008.

- 2) Facility Plans are first steps towards wastewater project funding. NEP also administers a Facility Planning Grant program through the Clean Water State Revolving Fund that can assist in the procurement of a Facility Plan. Grants are provided for up to 90% of the eligible facility plan project cost, but cannot exceed \$20,000.

Since its inception in SFY2004, NEP, through the CWSRF, has awarded facility planning grants to 28 communities, for a total of \$349,140.

Grants are provided for up to 90% of the eligible facility plan project cost, but cannot exceed \$20,000. Grant awards for SFY2007, totaling \$81,840, were awarded to six communities: Carroll, Cedar Bluffs, Clearwater, Hayes Center, Salem and Uehling.

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."

In an effort to provide additional services to our small communities, the NEP has begun partnering with NDEQ's Waste Management Division's Planning & Aid unit. This effort is intended 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.

The NEP will provide NDEQ assistance information pertinent to all communities throughout the state. This information includes technical assistance, funding sources information, non-regulatory assistance, and many other topics relevant to the communities.

If you have questions about this or any other NEP program, please contact Jackie Stumpff, NEP Coordinator, Environmental Assistance Division, Nebraska Department of Environmental Quality, (402) 471-3193, or email: Jackie.Stumpff@ndeq.state.ne.us.

### **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.

A Release Assessment Coordinating group has been formed and the Release Assessment Coordinator directs its activities. The purpose of this group is to better communicate and resolve issues related to common spill reports and complaints. The result is an improved and coordinated effort to address all of the various issues associated with a chemical accident or other event.

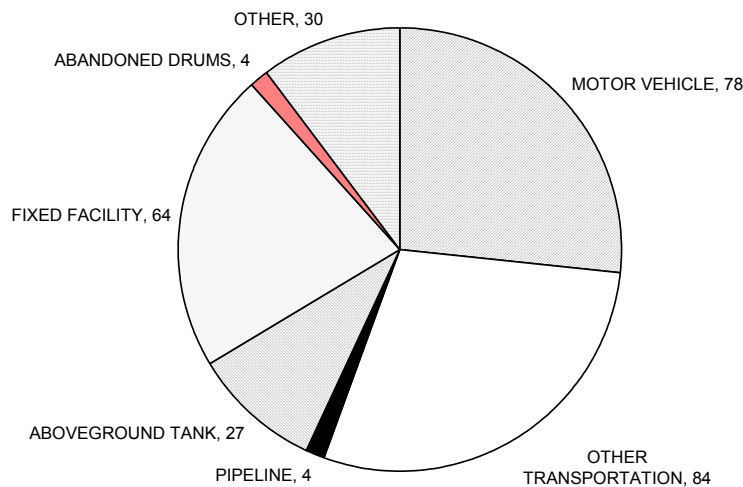
The Release Assessment Coordinator is responsible for training, equipping and supervising a group of personnel who provide initial assistance and response to spills. These individuals have the responsibility of maintaining an emergency system, on call 24 hours a day. They represent the environmental interests of the state at the scene of a petroleum or 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. Similar to the Petroleum Remediation Program, staff also oversee remedial action requirements when cleanup is necessary.

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

The chart below show the types of spills that occurred in FY07.

**Surface Spill Incident Types**  
(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 staff from EAD participated in three exercises: a pipeline exercise with Buffalo County, a hazardous materials exercise with Gage County, and an exercise related to a chemical rail car derailment with the City of Omaha, Douglas County and the

Union Pacific Railroad. Additionally, staff from EAD participated in planning for, and performance of, TRANSCAER training. TRANSCAER is devoted to training first responders in emergency procedures related to transportation incidents. TRANSCAER is sponsored primarily by the rail and trucking industry and classes were offered at seven locations across the state. The response to ethanol incidents was emphasized and over 600 first responders and over 50 staff from ethanol facilities took part in the TRANSCAER training.

# CHAPTER 8:

## Expenditure and Budget Summary

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The following information summarizes department expenditures for fiscal year 2007 and outlines budget projections for fiscal year 2008. 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 FY07 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY07 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, consulting and distribution of aid.

**Chart C** is the proposed FY08 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 for by in-kind services in the groundwater management area program.

**Chart D** lists proposed FY08 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. Please note, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, consulting and distribution of aid.

Activities of agency programs are described in Chapters 2 through 7 of this report.

### Chart A -- Actual Expenditure for Each Federal Grant for State Fiscal Year 2007

Grant Program / Title	Assistance ID #	Grant	Match	Total
Performance Partnership (2)	BG997325-05	\$3,560,586	\$1,303,432	\$4,864,018
Toxic Algae remote Sensing	CP987511-01	\$70,174	\$5,263	\$75,437
NPDES e-Permitting Grant	CP987719-01	\$900		\$900
Clean Water State Revolving Fund (4)	CS310001-05		\$240,704	\$240,704
Clean Water State Revolving Fund (4)	CS310001-06	\$4,424,300	\$861,534	\$5,285,834
604 B Water Quality Management	C6007328-15	\$12,417		\$12,417
604 B Water Quality Management	C6007328-16	\$72,776		\$72,776
319 H Non-Point Source (3)	Various	\$3,963,807	\$81,838	\$4,045,645
Drinking Water State Revolving Fund (4)	Various	\$4,358,458	\$1,645,860	\$6,004,318
Underground Injection Control (1)	G987677-01	\$35,429	\$27,708	\$63,137
Underground Injection Control (1)	G987677-07	\$66,900	\$55,378	\$122,278
Section 106 Monitoring	I987678-01	\$66,677		\$66,677
Leaking Underground Storage Tanks	LS987161-02	\$256,608	(\$745)	\$255,863
Leaking Underground Storage Tanks	LS987161-03	\$238,648	\$125,419	\$364,067
Department of Defense	Various	\$157,976		\$157,976
Pollution Prevention Technical Assistance	NP987607-01	\$98,235		\$98,235
Pollution Prevention Technical Assistance	NP987767-01	\$13,546		\$13,546
EN Implementation	OS831971-01	\$9,842		\$9,842
Network Challenge	OS832603-01	\$175,125		\$175,125
PM 2.5 Ambient Air Monitoring	XA987723-01	\$287,419		\$287,419
Operator Training	T987163-02	(\$641)	(\$353)	(\$994)
Operator Training	T987674-01	\$28,371	\$9,146	\$37,517
Operator Training	T987812-01	\$2,633	\$456	\$3,089
Section 128 (a) State Response	RP987322-01	\$100,929		\$100,929
Section 128 (a) State Response	RP987322-02	\$378,205		\$378,205
Superfund UNL Mead	V987587-01	\$4,667		\$4,667
Superfund Core	VC987267-03	\$161,076	\$32,515	\$193,591
Superfund Management Assistance	V997531-05	\$115,756		\$115,756
Superfund Site Assessment	V997532-03	\$219,118		\$219,118
Tuttle Creek Lake	WS9877733-01	\$26,668		\$26,668
<b>Totals</b>		<b>\$18,906,605</b>	<b>\$4,388,155</b>	<b>\$23,294,760</b>

1) Underground Injection Control Program match is provided by the Mineral Exploration Program

2) Performance Partnership BG997325-05 is made up of Water 106, Air 105, Groundwater, RCRA 3011, 319 H

3) 319 H Non Point Source Match comes from the Groundwater Management Area Program

4) 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 2007 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	\$1,178,467	\$410,196	\$61,961	\$4,270	\$122,174	\$1,777,068	\$68,053	\$1,845,121
CLEAR / Environmental Trust	011	C					\$100	\$100		\$100
Ag - Livestock	016	G/C	\$1,171,892	\$28,462	\$50,387		\$31,704	\$1,282,445		\$1,282,445
Air Construction Permits	020	C	\$882				\$15,816	\$16,698		\$16,698
Superfund State Cost Share	023	G/C					\$2,007,921	\$2,007,921		\$2,007,921
Litter Reduction	024	C	\$80,708	\$37,295	\$2,925		\$25,449	\$146,377	\$1,543,681	\$1,690,058
Private Onsite Wastewater Certification	030	C	\$169,596	\$62,730	\$9,629		\$8,699	\$250,654		\$250,654
Environmental Official Training	031	C	\$1,460	\$708				\$2,168		\$2,168
Emission Inventory - Title V	033	C	\$1,475,015	\$494,282	\$44,278	\$1,813	\$49,058	\$2,064,446	\$20	\$2,064,466
Chemigation	034	C	\$7,186	\$4,943	\$89		\$102	\$12,320		\$12,320
Remedial Action Plan Monitoring Act	036	C	\$18,852	\$6,457	\$27		\$1,641	\$26,977		\$26,977
Operator Certification	040	C	\$63,913	\$24,059	\$2,502		\$9,912	\$100,386		\$100,386
Community Right to Know	041	G	\$79,182	\$2,424	\$2,318		\$1,234	\$85,158		\$85,158
Petroleum Release Remedial Action Act	051	C	\$984,880	\$421,971	\$21,425		\$3,742,602	\$5,170,878	\$11,137,769	\$16,308,647
Emergency Response	057	C	\$174,366	\$51,556	\$5,038		\$2,464	\$233,424		\$233,424
Engineering Reviews	061	G	\$299,885	\$2,689	\$507		\$8,441	\$311,522		\$311,522
Agency Training Program	066	G	\$29					\$29		\$29
Stormwater Grants	067	G	\$10,591	\$89				\$10,680	\$2,488,000	\$2,498,680
Waste Reduction & Recycling	091	C	\$160,588	\$63,454	\$9,834		\$19,891	\$253,767	\$2,861,475	\$3,115,242
Air Training	098	C					\$14,364	\$14,364		\$14,364
Agency Organizational Dues	099	G		\$21,650			\$60,000	\$81,650		\$81,650
<b>Totals</b>			<b>\$5,877,492</b>	<b>\$1,632,965</b>	<b>\$210,920</b>	<b>\$6,083</b>	<b>\$6,121,572</b>	<b>\$13,849,032</b>	<b>\$18,098,998</b>	<b>\$31,948,030</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 2008**

<b>Grant / Program Title</b>	<b>Match</b>	<b>Grant</b>	<b>Total</b>
Performance Partnership	\$4,349,959	\$1,427,608	\$5,777,567
Clean Water State Revolving Fund	\$5,140,000	\$1,028,000	\$6,168,000
604 B Water Quality Management	\$100,130		\$100,130
319 H Non-Point Source	\$5,713,633	\$73,245	\$5,786,878
Drinking Water State Revolving Fund	\$10,241,455	\$1,961,490	\$12,202,945
Leaking Underground Storage Tanks	\$673,572	\$67,929	\$741,501
Section 106 Monitoring	\$75,000		
Department of Defense	\$169,638		\$169,638
PM 2.5 Ambient Air Monitoring	\$244,080		\$244,080
Operator Training	\$38,261	\$12,755	\$51,016
Superfund UNL Mead	\$39,345		\$39,345
Superfund Core	\$207,409	\$23,046	\$230,455
Superfund Management Assistance	\$178,712		\$178,712
Superfund Site Assessment	\$270,992		\$270,992
State 128 (A) Response	\$503,803		\$503,803
Network Challenge	\$350,000		\$350,000
Pollution Prevention	\$75,000		\$75,000
Tuttle Creek Lake Project	\$75,000		\$75,000

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

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 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	\$1,278,429	\$441,080	\$38,968	\$525	\$105,555	\$1,864,557	\$100,000	\$1,964,557
Ag - Livestock	016	G/C	\$1,253,938	\$47,865	\$44,290	\$3,875	\$45,800	\$1,395,768		\$1,395,768
Air Construction Permits	020	C	\$190,079	\$58,767			\$136,000	\$384,846		\$384,846
Superfund State Cost Share	023	G/C						\$0	\$2,155,000	\$2,155,000
Litter Reduction	024	C	\$88,538	\$31,051	\$2,700			\$122,289	\$1,600,000	\$1,722,289
Private Onsite Wastewater Certification	030	C	\$183,049	\$58,786	\$14,725		\$575	\$257,135		\$257,135
Environmental Official Training	031	C		\$70,000				\$70,000		\$70,000
Emission Inventory - Title V	033	C	\$1,694,639	\$580,073	\$43,750	\$8,900	\$152,525	\$2,479,887		\$2,479,887
Chemigation	034	C	\$12,667	\$9,311	\$50		\$12,000	\$34,028		\$34,028
Remedial Action Plan Monitoring Act	036	C	\$35,893	\$12,388	\$325		\$375	\$48,981		\$48,981
Operator Certification	040	C	\$63,469	\$23,239	\$1,725	\$200	\$3,825	\$92,458		\$92,458
Community Right to Know	041	G	\$69,588	\$810	\$1,325			\$71,723		\$71,723
Petroleum Release Remedial Action Act	051	C	\$997,466	\$449,453	\$25,050	\$550	\$9,494,325	\$10,966,844	\$10,000,000	\$20,966,844
Emergency Response	057	C	\$168,564	\$56,154	\$1,675	\$1,600	\$1,000	\$228,993		\$228,993
Engineering Reviews	061	G	\$322,247	\$5,900	\$575	\$1,625	\$6,579	\$336,926		\$336,926
Stormwater Grants	067	G	\$10,220	\$500	\$1,238			\$11,958	\$2,487,972	\$2,499,930
Waste Reduction & Recycling	091	C	\$187,446	\$64,023	\$7,050		\$75	\$258,594	\$4,300,000	\$4,558,594
Agency Organizational Dues	099	G		\$61,500			\$209,926	\$271,426		\$271,426
<b>Totals</b>			<b>\$6,556,232</b>	<b>\$1,970,900</b>	<b>\$183,446</b>	<b>\$17,275</b>	<b>\$10,168,560</b>	<b>\$18,896,413</b>	<b>\$20,642,972</b>	<b>\$39,539,385</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 2007. 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 2007 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 2007, 69 Litter Reduction and Recycling grants were awarded, totaling \$1,515,435. The grants were awarded in three categories: Public Education, \$568,004; Cleanup, \$105,921; and Recycling, \$841,510. 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 2007, 140 projects totaling \$4,092,988 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 \$122 million has been disbursed since the program began. The program provided \$10,562,490 to 388 sites for investigation and cleanup in FY2007.

### **Clean Water State Revolving Loan Fund**

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 FY2007, loans totaling \$11.7 million were allocated, and \$29.8 million was disbursed.

The Nebraska Environment Partnerships program used Clean Water State Revolving Fund administrative cash funds to provide facility planning grant assistance to eligible municipalities for wastewater treatment system improvement projects that may seek funding through the Water Wastewater Advisory Committee Common Preapplication Process. 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.

Facility planning grants may be provided to municipalities with populations of 5,000 or fewer that are identified with a financial hardship. This includes any city, town, village, sanitary improvement district, natural resources district, or other public body created by or pursuant to state law having jurisdiction over a wastewater treatment facility. Privately owned wastewater treatment systems are not eligible for assistance.

FY2007 grants are provided for up to 80% of the eligible facility plan project cost, but cannot exceed \$15,000 (an increase from FY2005's limit of \$12,500).

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

The Drinking Water State Revolving Fund provides funding assistance on Drinking Water projects. In FY2007, loans totaling \$8.2 million were allocated, and \$10.0 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 have may received funds in fiscal year 2007. Conversely, projects approved in fiscal year 2007 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 created by or pursuant to state law 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 FY2007 included: \$6,299,672 for large projects; \$99,026 for small projects; \$490,316 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 SFY2007, approximately \$2.5 million was distributed to 19 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 2007.

Staff retention continues to be an important goal for the agency. Staff turnover can impact continuity in the department's programs and enforcement activities, and can cause 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 2007 are from October 1, 2006 through September 30, 2007.</i>											
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Director/Deputy Director/Assistant Director/ Division Administrator	0	1	4	0	0	0	0	1	0	0	0
Section Supervisor	0	0	0	3	0	2	0	0	0	0	2
Unit Supervisor/Records Manager	1	3	0	4	3	0	2	2	1	1	2
Human Resources	1	8	7	6	3	0	0	1	0	0	0
Federal Aid Administrator, Financial Assurance Coordinator	0	1	2	0	0	2	1	2	2	0	0
Clerical/Accounting	8	9	7	0	4	5	1	5	0	4	6
Information Technology/Public Information/Research Analyst	3	2	2	3	1	0	1	1	1	0	3
Attorney	0	0	1	0	0	1	0	1	3	0	0
Environmental Engineer	4	9	6	5	3	3	2	2	6	3	5
Field Data Specialist	0	0	0	0	0	0	0	0	0	0	0
Compliance Specialist	1	4	7	0	0	0	0	1	0	0	0
Programs Specialist	9	21	5	12	6	6	7	2	12	7	12
Geologist, Groundwater	0	2	0	0	1	1	1	4	1	3	0
Environmental Assistance Coordinator							1	1	0	0	0
<b>TOTALS</b>	<b>27</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>

# 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	\$ 2,707,601	\$ 1,109,765	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	\$ 114,600	\$ 114,600	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$ 2,829,100	\$ 2,829,100	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	04/09/96	\$ 3,553,914	\$ 1,501,151	Trust Fund	Cornerstone Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$ 10,913,875	\$ 10,913,875	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	07/01/96	\$ 3,017,283	\$ 2,283,907	Trust Fund	Cornerstone Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$ 616,014	\$ 448,753	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$ 4,278,554	\$ 1,793,965	Trust Fund	Security Natl. Bank
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$ 7,816,600	\$ 2,743,672	Enterprise Fund	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	08/12/96	\$ 3,397,039	\$ 1,499,575	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$ 193,729	\$ 22,546	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$ 2,256,999	\$ 1,145,016	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$ 2,662,891	\$ 2,810,762	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	\$ 4,053,161	\$ 1,816,886	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	\$ 1,182,459	\$ 461,654	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$ 872,685	\$ 409,624	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$ 2,155,628	\$ 945,792	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	\$ 14,360,000	\$ 14,360,000	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$ 1,409,129	\$ 580,576	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	\$ 848,610	\$ 80,820	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	\$ 273,735	\$ 73,670	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	07/01/96	\$ 1,406,993	\$ 454,603	Trust Fund	Cornerstone Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$ 11,006,589	\$ 2,986,358	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$ 18,369,401	\$ 18,369,401	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$ 6,287,713	\$ 6,767,219	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$ 2,405,752	\$ 546,805	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	\$ 1,253,381	\$ 363,054	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	\$ 40,352	\$ 9,997	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$ 2,961,243	\$ 944,391	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	\$ 137,298	\$ 137,298	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$ 127,409	\$ 18,861	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	10/19/98	\$ 224,028	\$ 224,028	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	\$ 15,851	\$ 7,360	Enterprise Fund	Village of Arnold
Benkelman C & D	Benkelman	Const./Demol.	10/15/06	\$ 59,590	\$ 1,244	Enterprise Fund	City of Benkelman
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$ 48,615	\$ 48,615	Letter of Credit	First Natl. Bank Newman Gr
Butler County C & D	David City	Const./Demol.	06/01/97	\$ 305,062	\$ 305,062	Surety Bond	Evergreen Ntl. Indemnity Co.
Gage County C & D	Beatrice	Const./Demol.	02/23/98	\$ 191,148	\$ 191,148	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction C & D	Omaha	Const./Demol.	03/09/96	\$ 136,607	\$ 136,607	Surety Bond	Fireman's Fund Ins. Co.
KGP Services C & D	Norfolk	Const./Demol.	11/06/03	\$ 37,841	\$ 39,935	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$ 44,406	\$ 25,757	Enterprise Fund	City of Kimball
Lexington C & D	Lexington	Const./Demol.	09/30/98	\$ 149,724	\$ 93,712	Enterprise Fund	Lexington Area SW Agency
Limited Fill C & D	Omaha	Const./Demol.	04/30/97	\$ 70,903	\$ 66,449	Trust Agreement	First Natl. Bank, Omaha
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$ 1,072,400	\$ 1,072,400	Financial Test	City of Lincoln
Loup Central C & D	Elba	Const./Demol.	01/28/01	\$ 27,582	\$ 23,350	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const./Demol.	04/09/96	\$ 88,350	\$ 4,488	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	\$ 55,124	\$ 20,838	Enterprise Fund	City of O'Neill
PAD LLC C & D	Hastings	Const./Demol.	06/05/02	\$ 142,980	\$ 142,929	Letter of Credit	Five Points Bank
Plainview C & D	Plainview	Const./Demol.	09/26/00	\$ 39,442	\$ 25,772	Enterprise Fund	City of Plainview
Schmader C & D	West Point	Const./Demol.	05/05/04	\$ 102,617	\$ 102,617	Letter of Credit	Charter West Ntl Bank
Sidney C & D	Sidney	Const./Demol.	11/23/99	\$ 97,259	\$ 27,681	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	\$ 51,818	\$ 17,072	Enterprise Fund	City of Imperial
Three Rivers C & D	Indianola	Const./Demol.	07/25/00	\$ 76,073	\$ 17,979	Trust Agreement	Adams Bank & Trust
<b>Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills</b>							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$ 5,493,342	\$ 5,493,342	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$ 2,966,969	\$ 2,966,969	Insurance Policy	Steadfast Insurance Co.
Fremont Utilities	Fremont	FFCA	05/28/96	\$ 217,164	\$ 500,000	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	FFCA	2/1/01	\$ 1,180,400	\$ 400,074	Enterprise Fund	City of Hastings
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	\$ 1,044,527	\$ 1,044,527	Financial Test	NPPD
NPPD Sheldon Station 3	Sheldon	FFCA	04/01/95	\$ 122,927	\$ 122,927	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	\$ 1,626,450	\$ 1,626,450	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	\$ 988,050	\$ 988,050	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$ 245,430	\$ 245,430	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	\$ 2,875,451	\$ 2,875,451	Surety Bond	Evergreen Ntl. Indemnity Co.
<b>Transfer Stations, Material Recovery Facilities, Compost Sites</b>							
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	\$ 3,494	\$ 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.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Central Sanitation	Central City	Transfer Station	07/02/03	\$ 10,523	\$ 10,523	Surety Bond	Platte River Ins Co.
Custer Transfer Station	Broken Bow	Transfer Station	06/27/94	\$ 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
Tracy MRF	York	Mat. Recovery	04/01/03	\$ 3,982	\$ 3,982	Letter of Credit	Cornerstone Bank
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 (PC)</b>							
Agromac International	Gering	RCRA PC	09/29/87	\$ 8,725	\$ 8,725	Letter of Credit	Platte Valley Ntl. Bank
Behlen Manufacturing Co.	Columbus	RCRA PC	08/30/94	\$ 190,860	\$ 190,860	Financial Test	Behlen Mfg. Co.
Clean Harbors Technology	Kimball	RCRA Closure	05/10/95	\$ 10,761,237	\$ 10,761,237	Insurance Policy	Steadfast Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$ 500,993	\$ 977,063	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	\$ 173,474	\$ 173,474	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$ 389,906	\$ 389,906	Insurance Policy	Indian Harbors Insurance Co.
Telex Communications	Lincoln	RCRA PC	10/27/88	\$ 236,450	\$ 236,450	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.
Valmont Industries	Valley	RCRA PC	10/30/85	\$ 126,000	\$ 126,000	Financial Test	Valmont Industries
Van Diest Supply 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		\$ 22,980,913	\$ 22,980,913	Letter of Credit	Royal Bank of Canada
<b>Scrap Tire Sites</b>							
ABC Tire LLC	Kansas C, KS	Scrap Tire	06/15/06	\$ 10,000	\$ 10,000	Surety Bond	United Fire & Casualty Co.
Butler County Landfill	David City	Scrap Tire	05/16/97	\$ 128,625	\$ 128,625	Surety Bond	Travelers Casualty & Surety
Champlin Tire Recycling Inc	Concordia KS	Scrap Tire	10/04/96	\$ 10,000	\$ 10,000	Letter of Credit	United Bank & Trust
D & B Salvage	Correctville, IA	Scrap Tire	03/08/07	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Don's New & Used Tires	Lincoln	Scrap Tire	03/13/03	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Double A Trucking	Shelby	Scrap Tire	06/05/06	\$ 10,000	\$ 10,000	Letter of Credit	Bank of the Valley

## NDEQ FINANCIAL ASSURANCE

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