

Annual Report to the Legislature 2005

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## CHAPTER 1:

## Agency Overview

The Nebraska Department of Environmental Quality was created pursuant to passage of the Nebraska Environmental Protection Act in 1971. Although the Department has grown and been given additional responsibilities over the years, its ongoing mission has remained the same — the protection of Nebraska's air, land and water resources. Presently, the Agency is authorized a staffing level of 217 full-time employees.

The Department has a total annual budget for FY06 of approximately \$79.4 million. 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:

Funding Type	\$ Amount	% of Total				
Federal Funds	\$35.4 million	44.4 %				
State General Funds	3.4 million	4.3 %				
Cash Funds <sup>1</sup>	30.9 million	38.8 %				
Trust Funds <sup>2</sup>	10.0 million	12.5 %				
1 -	<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 actions of the Environmental Quality Council during FY05.

This chapter provides: 1) a brief description of agency goals and related activities; 2) agency activities and significant issues for fiscal year 2005; 3) significant legislation of 2005 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 2005

Among the significant issues that have occurred in 2005 are:

Web redesign planning – Plans are under way to significantly redesign the department's web page (<a href="www.deq.state.ne.us">www.deq.state.ne.us</a>) to make it more customer-oriented and interactive. Over 40 staff members have participated in initial meetings to review areas that can be improved. The end result will be a web page that is better organized, easier to navigate, with more interactive features such as editable forms, with a variety of new features and information. It is expected that this new web site will be available to the public before the end of 2006, although additional features will continue to be added.

Toxic algae – Although toxic blue-green algae has always been a potential threat to public health, it became an issue of greater concern in Nebraska in 2004 and 2005. The state's awareness of the issue became sharply focused in early May 2004, when NDEQ received reports of a dog dying after drinking water containing algae from a sandpit lake south of Omaha. NDEQ purchased laboratory equipment to determine the levels of the toxin Microcystin in potentially affected lakes, and, in conjunction with Nebraska Health and Human Services System and the

Nebraska Game and Parks Commission and developed a sampling protocol and Health Alert system to notify the public if there were potential hazards. Over the 2004 recreational season, which extended from May 1 through September 30, Health Alerts were issued at 24 lakes in Nebraska. Weekly sampling continued in 2005, and further analysis is being conducted to learn more about toxic algae trends and methods of preventing it from occurring in the future. During the recreational season of 2005, Health Alerts were issued for 12 lakes.

Ethanol 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 12 ethanol plants operating in Nebraska, collectively producing more than 500 million gallons of ethanol each year. In addition, as of November 15, 2005, there are 16 proposed facilities that are either under permit review, or have received a permit but are not yet operating. NDEQ has also been apprised of another 12 plants that are being planned but have not yet submitted a permit. Because of this continued growth, it is expected that there will be increased oversight and compliance activities related to ethanol facilities for 2006.

Omaha lead site – Cleanup work continues at the Omaha lead Superfund site, which covers a large area of eastern Omaha. The region is roughly 8,800 acres, and approximately 65,600 residents live in the area. The site became a priority after elevated levels of lead in children's blood were discovered in the area, and initial tests indicated high levels of lead in about 40% of the residences' yards that were sampled. As part of the cleanup solution, soil is being removed from properties with the greatest human health risk. EPA reports that 905 properties had been excavated from January 1 to November 9, 2005, and 1,612 have been excavated since the cleanup project began. Although significant progress is being made, the complete cleanup process will take many more years. Two local public information centers have recently been established, so that residents can check on the status of their properties. They are located at 4909 S. 25<sup>th</sup> St. and 3040 Lake St. in Omaha.

Ash Grove Trial Burn — Under the supervision of NDEQ air quality staff, Ash Grove was allowed to conduct a trial burn of whole tires as a supplemental fuel at their Louisville, NE facility. NDEQ issued a variance in July 2004 after soliciting public input. The variance required air emissions testing be done with and without tires. The purpose of the testing was to determine the emission changes that would result from using whole tires to supplement coal. The results of the testing conducted during July 2005 showed significant decreases in many pollutants when tires were added as fuel, and only very slight increases in other pollutants. Ash Grove has indicated to NDEQ that they will be submitting a permit application before December 31, 2005, requesting the ability to use tires as supplemental fuel on a permanent basis. If this occurs, the state will consider the trial burn data during the permit review.

Improved locational information through GPS -- Improving the quality of the data stored in the agency's Integrated Information System (IIS) in an ongoing effort. During 2005, NDEQ focused on improving the quality of the facility location information. This information is used for emergency planning, modeling and permitting activities carried out by the agency. A standard procedure for collecting locational information was developed. Over 30 handheld Global Positioning System (GPS) units were purchased and distributed to staff. During the first three months of this effort, over 900 high quality locational coordinates were collected by staff while conducting routine inspections and site visits.

Records Requests -- The agency continues to provide increasing assistance to the public through public records and internet requests. In FY2005, the Records Management Unit responded to approximately 1,400 public records requests, and reproduced approximately 175,000 pages of records. Approximately 950 internet requests were received through the agency web site's e-mail feedback feature.

#### III. Legislation in 2005

Five pieces of legislation passed in 2005 which had a significant impact on the agency were:

- **LB 33** Changes the termination date of the Litter Reduction and Recycling Act from October 30, 2007 to October 30, 2010.
- **LB 94** Amends the size of facility entitled to the 400-ton cap for air emission fee purposes, to mid-sized electric generation facility as defined in the bill.
- LB 298 -- Amends the Petroleum Release Remedial Action Act to restore coverage of the act for other fuels not defined as petroleum, including financial assurance coverage and access to the fund for reimbursement.

LB 298 also adopts the Uniform Environmental Covenants Act. The goal of the Uniform Environmental Covenants Act is to integrate environmental covenants into the traditional real property system and ensure long-term viability of those covenants. Two basic policies of the bill are: 1) To ensure that land use restrictions, mandated environmental monitoring requirements, environmental risk of residual contamination will be reflected on the land records and effectively enforced over time as a valid real property servitude, and 2) To return previously contaminated property, often located in urban areas, to the stream of commerce. The Act applies to both state and federal cleanups. The Act does not substitute or impose substantive clean-up standards or change the remedial decision making process. The bill prohibits the state or a political subdivision from being the holder of a covenant.

LB 351 — Increases the membership of the Environmental Quality Council from sixteen to seventeen members. The public-at-large member is eliminated and two members are added: one to represent minority populations or low-income persons, and a biologist.

#### 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).

#### 1994-95 (195 FTE)

#### State Legislation/Not Federally Mandated

- Waste Tire Management (loans)
- Voluntary Superfund Program
- Landfill Rebates

#### 1996 (195 FTE)

#### State Legislation/Not Federally Mandated

- Underground StorageTanks/Petroleum Release Reimbursement Fund/ State Revolving Fund
- Detailed Report of Title V Air Activities

#### 1997 (210 FTE)

#### State Legislation/Federally Mandated

- · Safe Drinking Water Act
- Resource Conservation and Recovery Act

#### State Legislation/Not Federally Mandated

- Clean Air Act
- · Clean Water Act

#### 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

## CHAPTER 2:

## Administration/Legal/ Management Services/Field Offices

The Administration and Management Services Division provide administrative 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.

The Administration of the Department 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 is effectively responding 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 calendar year 2004, the Director issued 50 administrative orders. Fifteen civil judicial cases were settled or decided by a court, penalties and other awards of \$191,600 were imposed. In several cases, additional environmentally beneficial projects with an estimated dollar value of \$12,700 were undertaken.

#### 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 four sections — Fiscal Services, Human Resources, Information Management, and the Public Information Office. In addition, a grant and contract coordinator was added to the Division in 2003.

#### **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 Program in collecting and reporting all applicable fees. This section is also responsible for tracking receipt of Title V air emission fees.

#### **Human Resources/Records Management/Database Administration**

This Section is divided into three organizational teams that provide management services in the areas of Human Resources, Records Management and Database Administration.

#### **Human Resources**

The Human Resources Section is responsible for assisting supervisors to recruit, hire, develop, retain, and reward a high quality of diverse staff and to promote a working environment that supports diversity which enhances the agency's mission. One of the section's goals is to help strengthen 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: the evaluation of reasonable disability accommodations; coordination of the agency's compliance with the reporting requirements of the Accountability and Disclosure Commission; the preparation of various reports; the provision of technical assistance to supervisors concerning the administration of corrective actions; conduct investigations; consultation with supervisors concerning the preparation of responses to grievances; workplace harassment or other complaints. Human Resources staff participates as a member of the agency's policy management team and consults with supervisors concerning the interpretation and communication regarding agency policies.

#### **Records Management**

The Records Management Unit is primarily responsible for managing the agency's facility records. Facility related documents are indexed, or cataloged, into the Agency's computerized database, the Integrated Information System, and filed into folders. Document indexing provides a brief electronic 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 122,250 agency files have been centralized into the agency's Records Management System. Centralizing the agency's records has increased accessibility to agency files for both agency staff and the public.

The Records Management Unit coordinates responses to requests for information from the public, private consultants, and regulated entities that wish to review file information about specific property and projects. These public records requests involve a variety of topics such as landfills, leaking underground storage tanks, hazardous waste sites, and file history of specific facilities. The Unit responded to approximately 1,400 public records requests and reproduced approximately 175,000 pages of records during FY2005.

The Records Management Unit 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.

#### **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 these updates with agency program staff, Records Management, Information Technology, and the regulated community.

#### **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 for Microsoft Office and Lotus Notes. They also conduct training and oversee data telecommunications for the Agency. Three professional staff design, develop, support, and provide training for computer programs that satisfy the Agency's information management needs and administer the Agency's computerized databases. One professional staff member provides support and assistance with mapping/locational information through a Geographical Information System. One professional staff person is responsible for managing all of the Information Technology staff, 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.

#### **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. Two other methods of communication with the public about timely environmental topics are through the agency's newsletter, the Environmental Update, and through our web site, www.deq.state.ne.us. Previous editions of the newsletter are available to the public and can be obtained by either visiting our web site, or by writing to: NDEQ Public Information Office, 1200 N St., Box 98922, Lincoln, NE 68509-8922.

In an effort to reduce production costs and paper use relating to the newsletter, NDEQ has established an e-mail notification and an electronic link to the newsletter on our web site. About twothirds of our newsletter readership now receive e-mail notification, rather than having the newsletter mailed to them. Anyone who wishes to receive electronic notification and a link to the newsletter whenever a new edition is placed on our web site may write to the address above, or send an e-mail to moreinfo@ndeq.state.ne.us.

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.

#### Agency's web site: www.deq.state.ne.us

As is stated on page 2, an agency-wide effort is being conducted to re-design the web page to make it more accessible and interactive for our customers. The current site provides a wide array of information to the public relating to the agency, including:

Rules and Regulations

**News Releases** 

Calendar of Events

On-line newsletter **Fact Sheets** 

Program information **Guidance Documents**  Featured articles **Forms** 

**Enforcement Resolutions** 

**Public Notices** 

All of these features will continue to be available on the web site after the re-design. Additionally, there will be a variety of new features and improved navigation for our customers.

#### **Grants/Contractual Management**

In Fiscal Year 2003 an agency employee was transferred to the Management Services Division to be primarily responsible for grant coordination and contract management. This position assists with federal grant applications and compliance with grant conditions and requirements, particularly reporting requirements. In addition, the position assists with Requests For Proposals, contract development and management. This position 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.

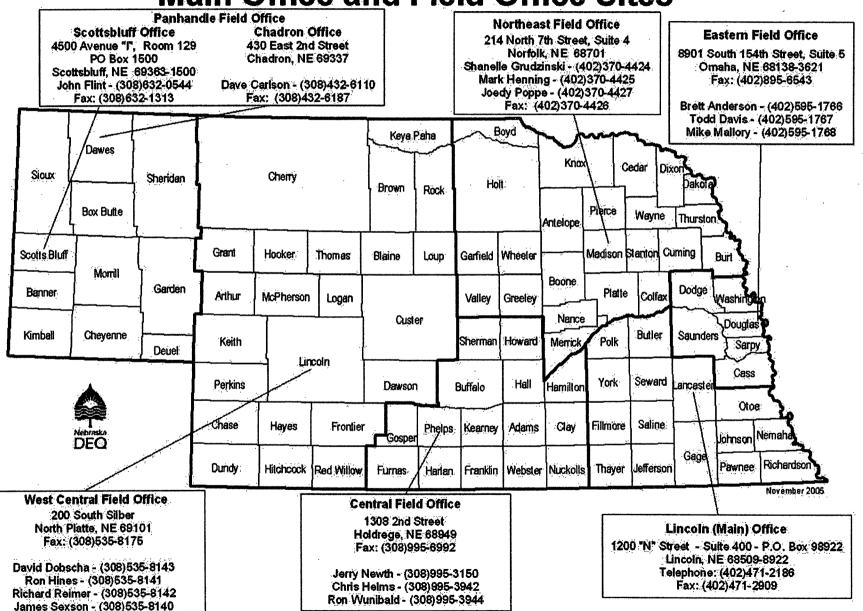
#### IV. Field Offices

The mission of the NDEQ Field Office Section is to "protect the air, land and water of Nebraska by enforcing state environmental regulations, and actively participating in our local communities." There are 15 employees in 6 offices around the state. These employees conduct compliance inspections, complaint investigations, environmental sampling, project management, draft permit reviews and local compliance assistance for the agency's Air Quality, Waste Management and Water Quality Divisions. The local field offices enable the agency to provide the public with greater access to NDEQ staff, to provide more timely response to citizens and to develop a better understanding of local issues because NDEQ staff live and work in the local community.

In response to increasing public demand for services in the northeast region of Nebraska, the NDEQ added a third compliance position to the Northeast Field Office in Norfolk, NE. The primary task assignment for this position is in the Agriculture program. A number of other adjustments were made in the task assignments for field office staff to better serve the Air Quality and Agriculture programs in 2005. An emphasis was placed on training and developing standard operating procedures for all compliance inspectors in 2005. This effort will continue into 2006.

The public awareness of the services provided in the NDEQ field offices continues to improve. There was a 35% increase in the number of citizens reporting environmental pollution directly to the field offices, compared to 2004. When citizens contact their local field office rather than the main office, the agency can typically respond more rapidly to complaints about potential environmental pollution.

# Department of Environmental Quality Main Office and Field Office Sites



## CHAPTER 3:

## **Environmental Quality Council**

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

The Council has 17 members who are appointed by the Governor to four-year terms. Appointments require legislative approval. Council members represent: the food manufacturing industry; conservation interests; the agricultural processing industry; the automobile or petroleum industry; the chemical industry; heavy industry; the power generating industry; crop production; labor; the livestock industry; county government; municipal government (two members, one of which represents cities not of the primary or metropolitan class); a professional engineer; a biologist; a representative of minority interests; and a doctor with knowledge about the 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 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 FY2005.

#### **Council Members**

Representing	Council member	Term Expires
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2009
Ag Processing Industry	Pat Trotter Gothenburg	June 22, 2007
Automotive/Petroleum Industry	Mark Whitehead Lincoln	June 22, 2009
Biologist	Mark Czaplewski Grand Island	June 22, 2009
Chemical Industry	Donald Williams Orchard	June 22, 2007
County Government	Jodi Thompson Imperial	June 22, 2007
Conservation	Steven G. Oltmans Omaha	June 22, 2007
Food Products Manufacturing	Vaughn J. Blum Columbus	June 22, 2009
Heavy Industry	Michael Griffin Crawford	June 22, 2007
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
Municipal Government	Ronald W. Zeiger Syracuse	June 22, 2009
Physician	Dr. Janet Bernard North Platte	June 22, 2007
Power Generating Industry	Joseph Citta, Jr. Columbus	June 22, 2009
Professional Engineer	John T. Baker Scottsbluff	June 22, 2007

### Council Actions

Council Meeting Date	Regulation	Action
September 10, 2004 – Videoconference Meeting	No Regulation Hearings - Business Meeting Only	No Action on Regulations
October 19 & 20, 2004 Lincoln	Title 119 Rules & Regulations Pertaining to the Issuance of Permits Under the NPDES	Approved
	Title 121 Effluent Guidelines and Standards	Repealed
	Title 127 Rules & Regulations Governing the Nebraska Pretreatment Program	Repealed
	Rulemaking Petition – Title 129, Ch 1.050, and Appendix II – Filed by Vulcraft Nebraska	Withdrawn
	Title 130 - Rules and Regulations Pertaining to Livestock Waste Control	Approved
March 4, 2005	Title 129 - Air Quality Regulations	Approved
Lincoln	Title 124 - Rules and Regulations for the Design, Operation and Maintenance of On-Site Wastewater Treatment Systems	Approved
	Title 132-Integrated Solid Waste Management Regulations	Approved
June 2, 2005	Title 129 – Air Quality Regulations	Approved

## CHAPTER 4:

## Air Quality Division

The objectives of the Air Quality Division are to achieve and maintain the ambient air quality standards, to protect the quality of the air in areas of the state that have air cleaner than the standards, and to implement air quality rules and regulations. By fulfilling these objectives, the Department is confident that public health and the environment will be adequately protected.

The major air quality programs are: the construction permit program, the operating permit program, the emission inventory program, the ambient air quality monitoring program, the inspection and compliance program, the asbestos program, and the 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 may include air quality monitoring, planning, permitting and enforcement within their areas of jurisdiction.

#### **Permitting Section**

#### **Construction Permit Program**

The NDEQ has maintained a construction permit program for air contaminant sources since 1972. 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 (PTE) above prescribed quantities. The table below provides statistics relating to applications received, processed\* and pending:

Pending July 2004	Applications Received	Applications	Applications Pending June 2005
76	67	78	65

<sup>\* &</sup>quot;Applications Processed" includes permits issued and those that are determined not to need a permit.

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). Sources which are subject to the PSD program or are 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.

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 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 like ethanol plants, power plants, and grain processing facilities across the state. Processing the increased number of permits in a timely manner has been a challenge for the department. As a result, NDEQ has committed significant resources to address these needs. The NDEQ invited persons from government and industry to help it improve its 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.

The department conducted a KAiZEN event (KAiZEN is a Japanese term meaning continuous improvement, taken from words 'Kai' means continuous and 'zen' means improvement) in February, which included personnel from NDEQ, EPA, utilities, consultants, local and state government, and industry, to identify ways that the department could review and process air construction permit applications in a more timely and efficient manner. The weeklong KAiZEN activity resulted in several work products and recommendations on how to improve the permitting process. In the following months, several of the KAiZEN results were implemented or 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 and still maintain the same high level of technical and regulatory review.

#### **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 Department was required to establish and implement a comprehensive operating permit program for sources of certain air pollutants. The Federal operating permit program is referred to as the "Title V" operating permit program. The State of Nebraska's Title V operating permit program is referred to as the Class I operating permit program. While the Federal Title V program only regulates major sources of air pollution, the Nebraska program also regulates minor, or Class II, sources. The table below provides statistics relating to applications received, processed\* and pending:

Pending July 2004	Applications Received	Applications Processed*	Applications Pending June 2005
88	37	57	68

<sup>\* &</sup>quot;Applications Processed" includes permits issued and those that are determined not to need a permit.

Since the program began in 1994, nearly 1500 applications have been submitted. The operating permit team continues to work toward taking final action on the initial round of permits and has begun processing applications for renewals. Operating permits are valid for up to five years.

#### **Compliance Section**

#### **Emission Inventory Program**

The Department conducts an annual inventory of emissions from major industrial sources and a representative sample of minor industrial sources. Additionally, the Department helped assemble a comprehensive inventory to account for air emissions from a variety of other source categories. For the 2002 comprehensive submittal the Department's efforts focused on gathering activity data needed to support modeling efforts. This comprehensive inventory was recently completed for the 2002 calendar year; the next comprehensive inventory will be conducted again for the 2005 calendar year. The comprehensive inventory will be useful for determining trends, as well as for regional planning efforts.

Major industrial sources of air pollution pay emission fees per ton of pollutant emitted per calendar year. The maximum over 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 is 400 tons per pollutant. The fees generated are used to support the major industrial source permitting programs.

The fee for 2004 emissions was \$38 per ton, a decrease of \$3 per ton from the year of 2003. The Department currently does not anticipate the fee rate to significantly change for the 2005 emissions inventory.

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

The State of Nebraska operates an ambient air-monitoring network to comply with the requirements of the Federal Clean Air Act and 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 our National Parks and Monuments.

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

NAAQS have been established for seven pollutants:

- Particulate Matter with a diameter of 10 micrometers or less (PM10)
- Particulate Matter with a diameter of 2.5 micrometers or less (PM2.5)
- Sulfur Dioxide (SO2)
- Nitrogen Dioxide (NO2)
- Carbon Monoxide (CO)
- Ozone (O3)
- Lead (Pb)

The NAAQS were established to protect both public health (which is termed a Primary Standard) and Public Welfare (which is termed a Secondary Standard and protects against excessive soiling, materials corrosion and crop damage). For all of the pollutants except sulfur dioxide, the NAAQS are listed as combined primary and secondary standards (i.e., protective of both human health and welfare). For sulfur dioxide, separate primary and secondary standards are listed.

The SAAQS are identical to the NAAQS with respect to the seven pollutants above, and also contain a 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 some short-term exceedances of the TRS standard in Dakota City (e.g., 47 minutes in April 2003 and 10 minutes in April 2004). There have been significant reductions in TRS levels since 2001 and the Department continues monitoring in this area. For a more complete explanation of monitoring findings, please refer to the *Nebraska Air Quality Report*, which is published annually.

The monitoring network within the state is comprised of 36 monitors at 30 sites. See the table below titled *Nebraska's Air Monitoring Network - Summary Description* for an overview description of monitor and site locations. For a more detailed description of the network, please refer to the *Nebraska Air Monitoring Network Review*, which like the *Nebraska Air Quality Report* is published annually.

The network is re-evaluated annually (See the *Nebraska Air Monitoring Network Review*) and is subject to ongoing modification to address changing conditions or standards, new

information, and modernization. The highlight bullets that follow the *Nebraska's Air Monitoring Network – Summary Description* table provide a good summary of recent changes.

Nebra	ska's Air Monitoring Network - Summary Description As of June 2005
Omaha Metro Area (De	ouglas and Sarpy Counties)
Monitors operated by t	he Douglas County Health Department
PM <sub>10</sub>	5 monitors at 4 sites
PM <sub>2.5</sub>	7 monitors at 3 sites, including collocated continuous and speciation monitors
Ozone	3 monitors at 3 sites *
Carbon Monoxide	1 monitor at 1 site *
Sulfur Dioxide	2 monitors at 2 sites
Lead	None, discontinued in 2002
Toxics	A study of potential toxic air pollutants was conducted in the Dundee Neighborhood in cooperation with the Omaha Air Quality Control program, USEPA, Agency for Toxic Substances and Disease Registry (ATSDR - An agency of the US Department of Health and Human Services), and NDEQ.
* The site at 30 <sup>th</sup> & F	Fort Streets has both ozone and a carbon monoxide monitor.
Lincoln Metro Area Monitors operated by t	he Lincoln/Lancaster Health Department
PM <sub>2.5</sub>	2 monitors at 1 site
Ozone	1 monitor at 1 site
Carbon Monoxide	1 monitor at 1 site
Weeping Water	4 PM <sub>10</sub> monitors at 3 sites Operated by NDEQ 1 PM <sub>2.5</sub> monitor at 1 site
Blair	1 PM <sub>2.5</sub> monitor at 1 site Operated by DCHD
Cozad	1 PM <sub>10</sub> monitor at 1 site Operated by NDEQ
Gothenburg	1 PM <sub>10</sub> monitor at 1 site Operated by NDEQ
Grand Island	1 PM <sub>2.5</sub> monitor at 1 site Operated by NDEQ
North Platte	1 PM <sub>2.5</sub> monitor at 1 site Operated by NDEQ
Scottsbluff	1 PM <sub>2.5</sub> monitor at 1 site Operated by NDEQ
Dakota City	1 TRS monitor at 1 site Operated by NDEQ
South Sioux City	1 TRS monitor at 1 site Operated by NDEQ
Lexington	1 TRS monitor at 1 site Operated by NDEQ
IMPROVE monitor site	es for the study of regional haze
Two Sites operated	d under contracts administered by the NDEQ
Nebraska Natio	onal 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 USEPA
	· · · · · · · · · · · · · · · · · · ·

Omaha Indian Reservation in Thurston County

#### Highlights of Changes and Events Related to Nebraska's Air Monitoring Network

Air Quality Monitoring Trends: Ozone and Fine Particulates – Nationally, EPA is
reporting good progress at maintaining compliance with most standards. The areas that
have the highest compliance problems are ozone and PM<sub>2.5</sub> in larger urban areas. Both of
these pollutants are formed in the atmosphere from other pollutant precursors, which
complicates their control. These pollutants are typically associated with urban smog.

EPA is placing an emphasis on the monitoring of these two pollutants in urban areas, including the use of advanced continuous monitors for PM<sub>2.5</sub>. These continuous monitors provide for real-time data that can be used as a basis for the issuance of health alerts, but are not EPA approved to demonstrate compliance with the NAAQS. Also anticipated is the use of "speciation" monitors that provide information on the make-up of the PM<sub>2.5</sub> material. Speciation data is useful in helping identify pollutant sources and to make more definitive public health impact analyses.

Nebraska is fortunate in that all areas of the state, including the Omaha and Lincoln areas, are in attainment with these standards. There are standard  $PM_{2.5}$  monitors, as well as speciation and continuous  $PM_{2.5}$  monitors, located at 4102 Woolworth Street in Omaha. The continuous monitor was newly installed in 2004.

In the spring of 2005, Nebraska became a part of EPA's AIRNow network. AIRnow is a valuable tool for informing the public what the current air quality conditions are. Primarily ozone,  $PM_{10}$ , and  $PM_{2.5}$  are reported to AIRnow. All of Nebraska's ozone data and most of the  $PM_{2.5}$  and  $PM_{10}$  data from the continuous monitors are reported every hour of every day. The AIRNow website can be accessed at www.epa.gov/airnow.

Air Quality Monitoring Trends: Air Toxics - The potential impacts of air-borne toxics is of
increasing concern. Air toxics present monitoring challenges due to the great number of
potential substances, sampling difficulties, testing expense, and the lack of promulgated
standards. Typically, air toxics monitoring is conducted as part of a special study with
recognized limitations and goals. A multi-disciplined team approach is required that
includes expertise in sampling, constituent analysis, statistics, and risk analysis.

An air toxic study was conducted in the Dundee Neighborhood of Omaha in 2002 thru 2004 (six days of sampling over a two year period). The Douglas County Health Department conducted the monitoring with assistance from the Omaha Air Quality Control program, USEPA, the U.S. Agency for Toxic Substances and Disease Registry (ATSDR - an agency of the US Department of Health and Human Services), and the NDEQ. ATSDR analyzed the data obtained to evaluate public health risks, and determined that the data did not demonstrate the existence of a public health threat.

- Network Modernization A number of modernization efforts are ongoing, including:
  - The continued replacement of manually operated PM<sub>10</sub> monitors with sequential monitors which require on-site attendance only once every 14 days;
  - The addition of continuous PM<sub>10</sub> and PM<sub>2.5</sub> monitors, which can provide data within minutes, rather than the typical one month turn-around time for filter-based monitors. These monitors require on-site QA checks every two weeks; and
  - The establishment of new computer networks and databases for downloading, processing and sharing monitoring data, and for documentation of QA activities.

- PM<sub>2.5</sub> Designation and Network ~ PM<sub>2.5</sub> is the abbreviation for particulate matter with a diameter equal to or less than 2.5 micrometers. These fine particulates are of a greater health concern than larger particulate matter because they can more easily reach the lungs. The NAAQS for PM<sub>2.5</sub> is relatively new, with monitoring being initiated in 1999.

  Monitoring was initially undertaken at 13 sites: four in the Omaha metro area, one in the Lincoln metro area, and eight in the rest of the state. This monitoring demonstrated that all areas of the state were in compliance with the National Ambient Air Quality Standards (NAAQS). Nebraska submitted its PM<sub>2.5</sub> attainment designation recommendation to EPA in February 2004. Monitoring at three of the initial sites in Chappell, Hartington and Merriman were discontinued in 2002. The PM<sub>2.5</sub> network now consists of nine sites: two in Omaha, and one in each of the following communities: Bellevue, Blair, Grand Island, Lincoln, North Platte, Scottsbluff, and Weeping Water. On January 1, 2005, the Douglas County Health Department discontinued one site and two monitors in Omaha. One monitor also had a change in sampling frequency; it was changed from every day to every third day.
- PM<sub>10</sub> PM<sub>10</sub> is the abbreviation for particulate matter with a diameter equal to or less than 10 micrometers. It originates primarily from stationary and fugitive sources. Nebraska began monitoring PM<sub>10</sub> in 1987. There are currently nine sites: four in Omaha, three in Weeping Water, and one each in Cozad and Gothenburg. The monitoring data from these sites is currently in compliance with the NAAQS, although significant levels of PM<sub>10</sub> are being detected at several sites (see bullets on Broken Bow, Cozad, Gothenburg and Weeping Water below).

A new continuous monitor was added approximately two miles west of Weeping Water near the intersection of Highway 50 and Fletcher Avenue. Upon determining it was not feasible to supply the site with traditional power, NDEQ explored alternative sources of energy. With some funds from EPA, it was decided that solar power would be a viable option. This station was completed and became operational in April 2005. This solar-powered monitor is the only one of its kind in the nation.

- Sulfur Dioxide (SO<sub>2</sub>) SO<sub>2</sub> is a gas formed from the combustion of fuels containing sulfur. It is emitted from both mobile and stationary sources. Natural gas, gasoline and diesel fuels have a relatively low sulfur content. The primary sources of SO<sub>2</sub> are large coal-fired combustion sources, such as power plants.
  - Two SO<sub>2</sub> monitors are currently operated in the Omaha metro area. This SO<sub>2</sub> network was re-examined in 2003 using updated information and modeling procedures, including consideration of the anticipated expansion of the Mid-America Power Plant in Council Bluffs, IA. This effort demonstrated that the two existing monitors should be relocated to better evaluate the highest SO<sub>2</sub> areas. One monitor was relocated from 28<sup>th</sup> and Reynolds to 11300 N. Post Road in May 2004. The relocation of the second monitor, from 1616 Whitmore to 4102 Woolworth Street, requires written approval from USEPA, and DCHD is drafting justification to accomplish this.
- Ozone (O3) Ozone is a gas formed in the atmosphere from the photochemical reaction of
  other pollutant precursors, such as nitrogen oxides and volatile organic compounds. It
  typically only reaches problematic levels in or adjacent to larger metropolitan areas or in
  densely populated regional areas. There are currently four ozone monitors in Nebraska:
  three in the Omaha metro area and one in the Lincoln metro area. The data from these
  monitors are in compliance with the NAAQS.

- Carbon Monoxide (CO) CO is a gas that is emitted from combustion sources. There are
  currently two CO sites in Nebraska: one in the Omaha metro area and one in Lincoln. A
  second site in Omaha had to be discontinued when the building in which it was located was
  demolished in June 2005. Modeling is currently underway to locate a suitable replacement
  site for this monitor. The data from these monitors are in compliance with the NAAQS.
- Nitrogen Dioxide (NO<sub>2</sub>) NO<sub>2</sub> is a gas formed during combustion from the reaction of oxygen and nitrogen in combustion air. It is emitted from both mobile and stationary sources. Controls implemented over the last 30 years, such as, auto emission controls and emission standards enforced through state and local air quality permits, have effectively controlled NO<sub>2</sub> emissions such that attainment with the NAAQS for NO<sub>2</sub> has been achieved. Thus, NO<sub>2</sub> monitoring was discontinued within the state, with USEPA approval, in 1984.
- Lead (Pb) Lead levels at concentrations above the NAAQS were a problem in Omaha through 1997. Following the closure of the ASARCO lead refinery in July 1997, ambient air lead levels dropped more than ten-fold. This area has been determined to be in attainment with the standard since 1998 and monitoring for lead was discontinued in 2002. With the phase out of leaded gasoline in the 1980's, and in the absence of any new sources, lead is not anticipated to be an ambient air quality problem in the foreseeable future.
- Total Reduced Sulfur (TRS) The TRS standard was promulgated in 1997 and monitoring was started that same year in the Lexington and Dakota City/South Sioux City areas. Monitoring initially demonstrated TRS levels well above that standard in both areas. Following the covering of the IBP wastewater lagoons in 2001, TRS levels dropped more than ten-fold in both areas; and came into compliance with the TRS standards, except for some brief periods in the spring at Dakota City. In 2003, TRS monitoring was discontinued at one site in Lexington and one site in Dakota City. This reduction in the network was undertaken because the consistently low readings at these sites indicated that they were no longer needed. TRS monitoring was also conducted in Broken Bow from 2000 through 2002, and was discontinued after no exceedances were found. The TRS network now consists of two monitors in Dakota City/South Sioux City area and one in the Lexington area.
- IMPROVE (Interagency Monitoring of Protected Visual Environments) These monitors are operated to study nation-wide/regional air quality impacts related to visibility at national parks, wilderness areas and monuments. There are two IMPROVE monitors in Nebraska that are operated under EPA-funded, third-party contracts administered through the NDEQ. The monitors are located at the Crescent Lake National Wildlife Refuge in Garden County and the Halsey National Forest in Thomas County. There is also an IMPROVE monitor located on the Omaha Indian Reservation in Thurston County, which is operated by the Omaha Tribe of Nebraska and lowa with oversight directly from USEPA.
- Weeping Water Area The limestone mining, processing and trucking activities in this area are a significant source of PM<sub>10</sub>. From the 1998 through 2000, the air quality in the Weeping Water area was such that an exceedance of the National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub> appeared imminent. In December 2000, the NDEQ and local stakeholders (businesses, government and interested citizens) initiated a cooperative program to reduce PM<sub>10</sub> emissions and improve air quality in the region. Improved control measures were implemented in the area, initially on a voluntary basis and later as conditions in air quality permits. These efforts have improved the air quality in the area. However, PM<sub>10</sub> levels remain relatively high and close to the NAAQS, which is why EPA is requesting more monitoring be conducted in the area. A second monitoring site for PM<sub>10</sub> was established in Weeping Water in October 2003, and a third site, located west of Weeping Water, was established in April 2005. Both of these sites are equipped with EPA-approved continuous monitors.

- Cozad and Gothenburg Areas PM<sub>10</sub> monitors are located in these two communities to address particulate sources, including alfalfa processing facilities located there. These areas remain in compliance with the NAAQS. It is anticipated that the monitors in these two areas will remain because, although in compliance, significant PM<sub>10</sub> levels are being detected.
- **Broken Bow Area** Monitoring for PM<sub>10</sub> and TRS was initiated in 2000 in response to local concern over air quality in the region. This monitoring demonstrated that air quality in the area was meeting national and state air quality standards. Monitoring in the Broken Bow area was discontinued in the fall of 2002.

#### **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, ambient air monitoring, acid rain, and the annual air emissions inventory.

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 be otherwise 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. Many citizens of Nebraska have benefited the last year from several hundred thousand dollars of environmental projects being performed in their community as the result of Supplemental Environmental Projects.

#### **Compliance Activity Summary**

Compliance Activity	NDEQ	Lincoln/ Lancaster Co.	Omaha Air Quality Control	Total
On-site Inspections	165	108	, <b>55</b>	328
Stack Test Observations	22	0	1	23
Continuous Emission Mon. Audits	4	3	1	8
Complaints	94	41	58	193
Burn Permits Issued	114	39	66	219

#### **Asbestos Program**

The Department, because of budget constraints, maintains a minimal asbestos program. NDEQ receives notifications for asbestos projects, but presently does not conduct inspections. 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	73	89	162
Asbestos Site Inspections	N/A	52	73	125
			•	

#### Planning and Development Program

Over the last year, the Air Division continued to devote significant resources to assistance and outreach activities. The Division's Outreach Plan is in the process of being updated. The Outreach Plan identifies specific outreach objectives and strategies to meet the Division's goals. Implementation of the activities identified in the plan is a continuing effort. The Division continues to develop fact sheets and guidance documents to assist Nebraska businesses understand and comply with the air quality regulations. Additionally, the Division continues to sponsor annual Air Program Update Workshops, in which 164 representatives from businesses, consultants, and industry attended. These are half-day workshops 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.

In 1999, EPA promulgated the regional haze rule, which is intended to protect the visibility and ecosystems of designated parks and wilderness areas in the United States. Since 1999, Nebraska has been working with states and tribes in the Central United States to address regional haze issues. This effort has culminated in the development of a regional planning organization known as the Central States Air Planning Association (CENRAP). CENRAP membership is comprised of states, tribes, various federal agencies, and public stakeholders. The Department continues to provide leadership for CENRAP regional atmospheric modeling activities and actively participates in air pollution control strategy evaluation and development.

## CHAPTER 5:

## Waste Management Division

The Waste Management Division is comprised of two sections and one unit. These include the Waste Management Section, the Remediation Section and the Planning and Aid Unit. Both Waste Management and Remediation sections share responsibilities for 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 2004, 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, and
- > 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.

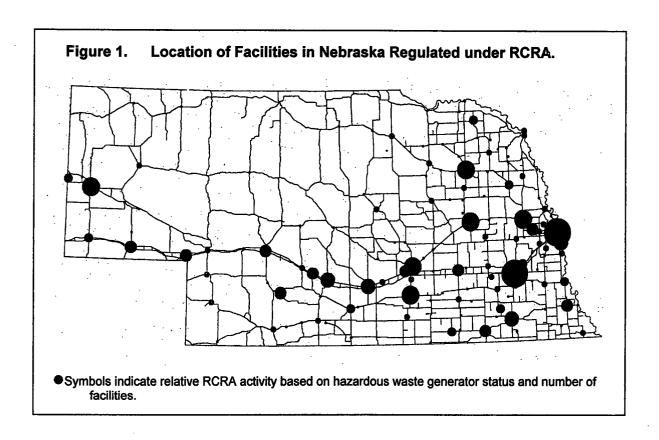
The RCRA program also conducts extensive permitting and closure activities to minimize and eliminate the release of hazardous material into the environment. Closure actions are required for treatment, storage or disposal (TSD) facilities that are discontinuing operations or that have operated without 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. The Nebraska RCRA program is working with EPA to assume more responsibility in this program.

Currently, the RCRA Program (see Figure 1) oversees:

- 87 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month)
- 544 Small Quantity Generators (between 220 and 2200 pounds generated per month)
- 1028 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
  - 1 Hazardous Waste Incinerator Facility
  - 1 Federal Hazardous Waste Storage Facility
  - 50 Treatment/Storage/Disposal Facilities (active and inactive)
  - 22 Hazardous Waste Transporters
  - 2 Hazardous Waste Storage Facilities (Non-Federal)



#### **Summary of Activities**

A summary of compliance assistance activities, inspections, and permitting activities completed in FY2005 is provided below.

	FY	2005
Activity	<u>State</u>	<u>EPA</u>
Compliance Assistance		
On-site visits	8	0
Direct Assistance Contacts	686	
Public Outreach Presentations (total 284		
in attendance)	7	*
Inspections		
Land Treatment Facilities	4	1
Treatment and Storage Facilities	1	3
Comprehensive Groundwater		
Monitoring Evaluations	00	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	0	0
Large Quantity Generators	10	5
Small Quantity Generators	14	5
Conditionally Exempt Small Quantity Generators	28	8
Transporters	0	0

<sup>\* -</sup> Data not available

#### **Activity**

	State	EPA
Permitting	<del></del>	
Closure Plans Finalized	1	, 0
Permits Issued/Renewed	0	0
Modifications	12	. 0
EPA Corrective Action Orders	NA	0
Record Reviews		
Financial Assurance	27	1

#### **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 FY05.

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

#### **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 proposed NPL site and numerous non-National Priorities List sites with known or suspected releases of hazardous substance that are not being channeled 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.

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 four combined preliminary assessments/site investigations and two site reassessments.

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

#### **Chart definitions:**

**Removal Action:** Short-term action intended to stabilize or clean up an incident or site which 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.

**Construction Complete:** Completion of the construction of the cleanup system. **Cleanup Ongoing:** Ongoing operation and maintenance of the cleanup system.

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 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 at three active sites and twenty-seven formerly used defense 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 which 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.

This program is currently negotiating a Memorandum of Agreement (MOA) with EPA Region VII to obtain federal approval of the cleanup program. Upon receiving federal approval of the program, 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, twenty-two sites have entered the voluntary cleanup program. Currently, five sites are active in the voluntary cleanup program. Five sites are inactive, but still in the program. One site has been deferred to the Department's Petroleum Remediation Section. Three sites have been deferred to the EPA Superfund program. Three sites withdrew from the program. Five 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.

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 brownfield 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 work on thirteen Phase I Environmental Site Assessment.

## **RAPMA 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	Inactive	1/17/96
Union Pacific RR	Omaha-N. Downtown	Withdrawn 3/7/03	1/17/96
Farmland Industries	Scottsbluff	Deferred to Petroleum Remediation Section	2/26/96
Lincoln Journal Star	Lincoln-Downtown	Inactive	2/26/97
Farmland Industries	Hastings-East	Completed 9/2/03	6/25/97
Hastings Areawide	Hastings	Withdrawn 6/23/00	12/17/97
Lincoln Plating Co.	Lincoln	Inactive	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	Active	11/9/99
Progress Rail Services	Sidney-North	Active	11/22/99
Brownie Mfg.	Waverly-Highway 6	Withdrawn 7/19/01	4/25/00
BNSFRR	Lincoln-Havelock Yards	Inactive	10/26/00
New Holland	Grand Island-Southwest	Deferred to EPA Superfund	11/9/00
Owen Parkway East	Omaha-Abbott Drive	Inactive	12/13/00
Omaha Riverfront Redevelopment	Omaha-Riverfront	Active	5/18/01
Sanford & Son	Lincoln-North	Active	1/22/02
Union Pacific RR Child Development Center	Omaha-N. Downtown	Active	3/5/04

#### **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 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 number of facilities:

#### **Total Permitted Facilities in FY 2005**

Municipal Solid Waste Disposal Areas (Landfills)	23
Industrial Waste	1
Solid Waste Compost Sites	9
Transfer Stations	38
Materials Recovery Facilities	6
Construction & Demolition Waste Disposal Areas	21
Delisted Waste Disposal Areas	1
Fossil Fuel Combustion Ash Disposal Areas	7
Total	106

### **Summary of Activities: FY 2005**

### Compliance

Facility Inspections (General)	137
Facility Inspections (Construction)	13
Complaints Investigated	104
Complaints Received	169
Complaints Closed	107
Complaints Referred	18
Notices of Violation	37

### **Permitting**

New Permits Issued	2
Permit Renewals	21
Major Permit Modifications	1
Transferred Permits	0
Public Hearings	0
Financial Assurance Reviews	193
Facilities Closed	4

### **Financial Assurance and Fees**

All permitted solid waste landfills are required to provide financial assurance for closure and postclosure 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 by Title 132. Waste tire processors are no longer required to obtain individual permits, but approved beneficial uses of waste tires are outlined in the regulation. Waste tire haulers are required to obtain individual permits annually. Waste tire haulers 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 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 outreach includes responding to telephone inquiries, letters, and contacts from other states, developing guidance documents, conducting site visits and providing technical advice. The Department has developed guidance documents to explain the proper use of waste tires for blow-out and bank stabilization. Direct financial assistance is also available through the Waste Reduction and Recycling Incentives Grant program, which is described later in this chapter.

### Waste Tire Permit Totals, FY2005

### **Permitting**

Renewed Hauler Permits	15
New Permits Issued	1
Transferred Permits	0
Terminated Permits	24

### Compliance

Notice of Violations 2

The Waste Tire Program 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.

### 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:

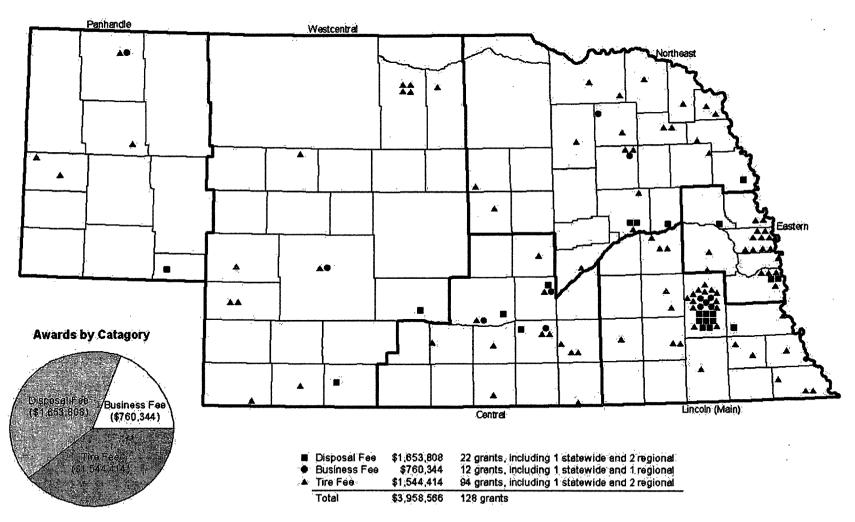
- ➤ A business fee on sales of tangible personal property, which generates about \$700,000 annually.
- > A \$1 per tire fee on the retail sale of new tires in Nebraska, which generates about \$1.6 million annually;
- > Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.1 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, which includes toxicity reduction, and 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 calendar year 2005, the Department awarded \$3,958,566 in the Waste Reduction and Recycling Incentive Grants Program to one hundred twenty-eight projects. Twelve of these grants were awarded in the Business Fee category (\$760,344), twenty-two were awarded from the Disposal Fee (\$1,653,808) category, and ninety-four received grants from the funds (\$1,544,414) set aside from the scrap tire funds. The following map shows the locations across Nebraska that received funds.

# Waste Reduction and Recycling Incentive Grants Program 2005 Grant Awards



### 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 gross products manufactured. The annual litter fee for wholesalers and retailers is equal to \$175 for each million dollars of the sales made in the state. Approximately \$1.2 million is available annually.

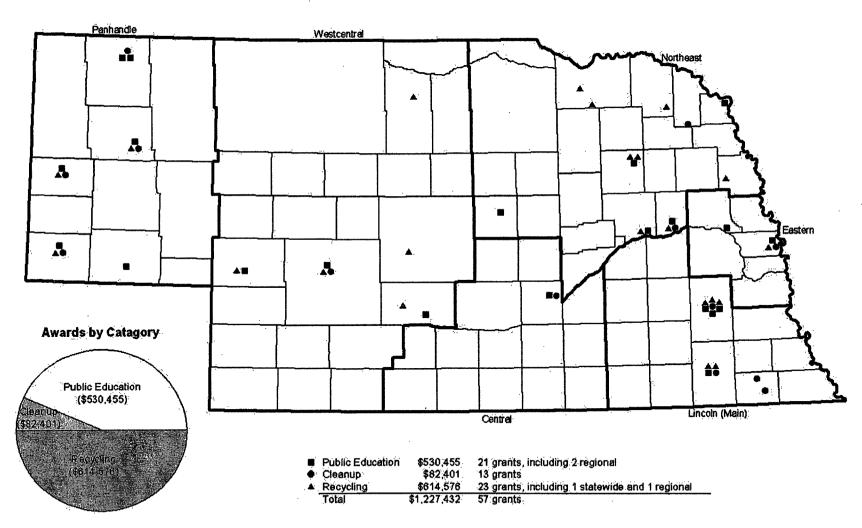
The annual litter fee is imposed on products in the following categories:

- 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.

The Litter Reduction and Recycling funds are awarded in three categories listed below. Each year the Environmental Quality Council establishes the percentages for allocation of funds for each category. The table for 2005 below shows amounts awarded, number of grantees, and purpose of the grants.

Category	Percentage allocation	Number of grantees	Amount Awarded	Purpose of grants
Public Education	43%	21	\$530,455	Programs promoting recycling, the reduction of litter and a desire for a cleaner environment, and securing greater awareness of and compliance with anti-litter laws.
Cleanup	7%	13	\$ 82,401	Litter cleanups of public highways, waterways, recreation lands, urban areas, and public places.
Recycling	50%	23	\$614,576	New or improved community recycling and source separation programs. An important key to successful long-term recycling in Nebraska is establishing lasting markets for the recycled commodities that we collect. The Department continues to give priority consideration to recycling proposals contributing to market development.
Total	100.0%	57	\$1,227,432	

# Litter Reduction and Recycling Grant Program 2005 Grant Awards



### **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.

During fiscal year 2004-2005, \$91,232 was reimbursed to political subdivisions for the cleanup of illegal dump sites. A total of thirteen political subdivisions received funding through the program. This included nine counties and four municipalities. The completed cleanups have been responsible for the proper handling of illegally disposed waste and preservation of the beauty of Nebraska's roadsides.

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 issued quarterly.

Since its inception, seven communities have participated in the program. A total of \$85,620 in rebates were awarded in fiscal year 2004-2005.

# CHAPTER 6:

# Water Quality Division

The goal of the Water Quality Division is to protect the surface and groundwater resources in Nebraska. This chapter describes the 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 commencing 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 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 September 2, 2005, 1,331 Tier 1 site investigations have been initiated. Of the 1,254 Tier 1 field investigations completed thus far, 815 (65%) were closed, and 439 (35%) were determined to need a more detailed Tier 2 investigation. Of the 1,445 sites that have completed a Tier 1 or Tier 2 investigation, 148 (12%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater. Since April 2002, 248 Tier 2 investigations have been initiated; out of the 191 completed by September 2, 2005, 145 (76%) have been closed.

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, 2005, a total of \$95,213,241 has been disbursed since the program began. During the past fiscal year, NDEQ reimbursed \$6,696,112 to 191 active sites and an additional \$3,418,264 to 179 Tier 1 sites.

The 22 sites listed below, all but two 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 amour		Reimbursed amount	it Site Status	
	(as of June 30, 2005)		(as of June 30, 2005)	
BNSF Railroad	Alliance	\$975,000.00 X	Active	
Konecky Oil	Mead	\$975,000.00 X	Active	
BNSF Railroad	Alliance	\$972,578.98 X	Active	
Elkhorn Valley Coop	Snyder	\$953,516.14	Active	
BNSF Railroad	Mc Cook	\$943,998.71	Active	
Firth Coop	Firth	\$892,052.49	Active	
Peterson Oil Co Inc	Davenport	\$890,079.65	Active	
Gordon Airport Authority	Gordon	\$865,512.06	Closed	
Magers Service	North Platte	\$859,668.32	Active	
Tomahawk Truck Stop	North Platte	\$854,227.29	Active	
Kaneb Pipeline	Norfolk	\$837,246.92	Active	
Corner Service	Bancroft	\$817,689.46	Active	
Dankerts Inc.	Chambers	\$806,405.48	Active	
Neitzel Oil Co.	Springfield	\$788,907.29	Active	
BNSF Railroad	Alliance	\$751,432.70	Active	
Former Hershey Truck Stop	Hershey	\$743,375.94	Active	
Henkel Oil Co	Norfolk	\$730,180.15	Active	
Ameritas Investment Co	Lincoln	\$693,867.54	Active	
Klepper Oil	Du Bois	\$672,529.92	Closed	
Whitehead Oil 33rd and A	Lincoln	\$644,876.37	Active	
Sinclair Oil Corp.	Grand Island	\$627,069.53	Active	
IBP ATV(At The Verticals)	Dakota City	\$602,701.99	Active	

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

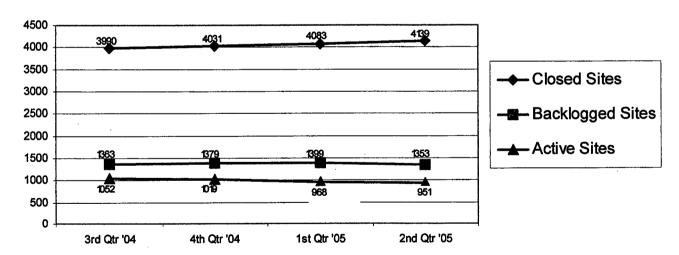
Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own. Since April 1996 when the law was enacted through September 2005, 130 suspended or backlogged leaking underground storage tank (LUST) sites have been closed based on voluntary submittals.

As of August 2005, there were 234 "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 691 orphan sites waiting on the inactive list on August 31, 2005. 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:

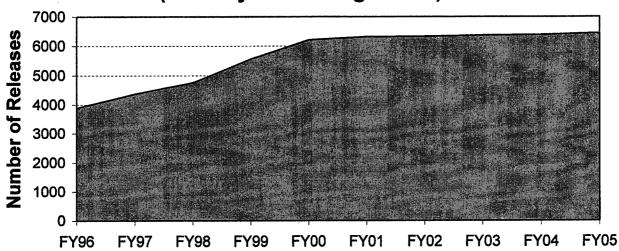
- > Closed Sites: Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary
- > Backlogged Sites: Sites identified as potentially needing cleanup, but are on a waiting list for further investigation
- > Active Sites: Sites that are currently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

# LUST trends: July 1, 2004 to June 30, 2005

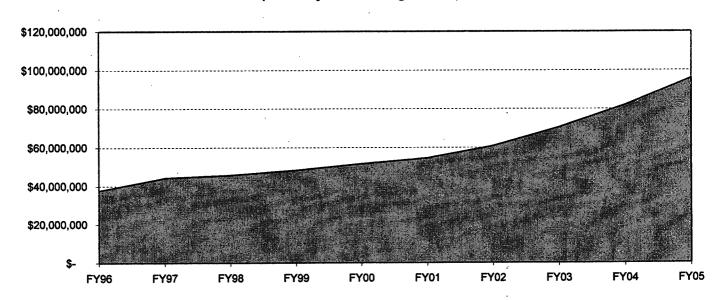


The chart below shows the cumulative number of sites that have had releases in the last several years. The second chart shows the cumulative amount that the program has spent on investigation and cleanup.

# Cumulative LUST Release Totals (last 10 years through FY05)



# Cumulative Title 200 Disbursements (last 10 years through FY05)



## **Agriculture Programs**

The Agriculture Section includes the Livestock Waste Control Program, the Chemigation Program and the Agricultural Chemical Secondary Containment Program. The Livestock Program is responsible for administering Title 130, "Livestock Waste Control Regulations" which apply to animal feeding operations in Nebraska and management of livestock waste. The Chemigation Program administers Title 195, "Rules and Regulations Pertaining to Chemigation." The program, together with Nebraska's 23 Natural Resource Districts, make sure that chemigation applicators and irrigation systems comply with Title 195 and the Nebraska Chemigation Act. The Agricultural Chemical Secondary Containment Program administers Title 198, "Rules and Regulations Pertaining to Agricultural Chemical Containment," concerning secondary containment and loadout facilities for bulk liquid fertilizer and pesticide storage, as well as loading and rinsing activities of custom applicators.

### **Livestock Waste Control Program**

During FY2005, the Livestock Waste Management Act and Title 130, "Livestock Waste Control Regulations," were amended to comply with revisions to federal rules concerning concentrated animal feeding operations (CAFOs). The amendments to the state laws and the regulations governing livestock waste control in Nebraska involved major changes in the operation of the Livestock Program and impacted many of the state's livestock producers.

The amended Livestock Waste Management Act took effect on July 14, 2004, bringing Nebraska's laws in compliance with changes to federal Environmental Protection Agency rules mandated a year earlier. At the time the state laws took effect, the regulations implementing the laws were under development. Within the next three months, Agriculture Section staff completed a draft of Title 130 that contained major changes, held public meetings and met with industry and environmental groups to obtain input and presented the proposed final version to the Environmental Quality Council at its October 2004 meeting. The Council approved the amended Title 130, which then was approved by Governor Heineman and became effective February 14, 2005.

The significance of the changes and the potential impact of the new regulations on many livestock producers prompted the Agriculture Section to hold a series of 28 meetings across the state, beginning in late February and continuing through March. At the meetings, staff provided information on the regulatory changes and answered questions from approximately 400 producers and other interested people. Section staff also held a workshop for more than 100 technical consultants and professional engineers who work with Title 130 regulations. In addition to these public outreach meetings, the Section staff also continued to do initial inspections, handle complaints, review applications, issue permits, and keep up with the usual workload.

The cooperation and teamwork required to accomplish -- within just a few months -- the drafting of new regulations, implementation of amended state laws, and extensive public outreach efforts, as well as providing continued regulatory oversight activities during FY2005, earned the Agriculture Section the "Expo 2005 Team of the Year" award. The award was presented from the Nebraska State Government Chapter of the National Management Association, the second such award ever received by the Department of Environmental Quality.

In February 2005, the U.S. Court of Appeals overturned significant parts of the federal CAFO rules, and the EPA has announced it will be revising those rules. Since Nebraska laws and Title 130 regulations reflect the federal rules, changes also will be required in the Livestock Waste Management Act and in the regulations.

### **Livestock Waste Control Program and Title 130 Changes**

The amendments made to Title 130 during FY2005 significantly affected the way the program operates, how control of livestock waste is regulated in Nebraska, and which operations are subject to regulations. Some of the more significant changes in state law and regulation include the following:

- Redefinition and reclassification Formerly known as livestock operations, the term
  became animal feeding operations (AFO) and concentrated animal feeding operations
  (CAFO). A CAFO is an animal feeding operation that meets certain criteria for livestock
  numbers or potential to discharge. Rather than the former Class I-IV designation, operations
  now are designated Large, Medium, and Small, based upon the greatest number of any one
  species of livestock at the operation, rather than the total number, as was previously
  calculated.
- 2. Operations subject to regulation The number of days which livestock can be confined without being considered an animal feeding operation (and, therefore, not subject to regulations), changed to less than 45 days, and that vegetation must be maintained in the area.
- 3. Conversion to a one-permit system The National Pollutant Discharge Elimination System (NPDES) Permit became the only permit issued by the Department, rather than the previous three-permit system of state construction and operating permits and NPDES permits. Currently, all operations classified as Large CAFOs are required to apply for an NPDES permit by February 13, 2006. However, EPA has indicated that this deadline will be extended.

The Large CAFOs must apply for a permit, unless they can demonstrate qualification for a designation of "No Potential to Discharge" from either the production or the land application areas.

Although some animal feeding operations may not be required to obtain a permit, they still may need to obtain approval from the Department prior to construction of a livestock waste control facility. The previous Construction Permit is replaced with a state Construction Approval.

- 4. **Fees** An annual fee, based upon the permitted number of head at an operation, was established. In addition, application and initial inspection fees were modified.
- 5. Other Revisions Other revisions include: changes to the public notice requirements when an application is received; establishment of a phosphorus index for sampling; clarification of the "Bad Actor" definition and provision; and a definition of a Major Modification to an application or to an operation.

### **Livestock Waste Control Program Activities**

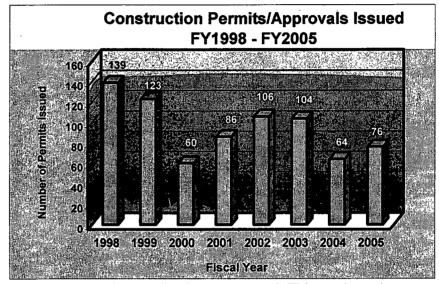
Livestock Program staff conduct inspections of animal feeding operations, review permit applications, issue public notices, provide compliance assistance, recommend compliance actions, and draft permits for livestock waste control facilities statewide. In addition, field office personnel are assigned

on a part-time basis to work with the Livestock Program, and other field office staff are available on an as-needed basis.

**Engineering** – The Agriculture Section engineers are responsible for ensuring livestock waste control facilities in the state are technologically capable of preventing livestock waste from entering waters of the state. In addition to reviewing new applications for construction approvals and permits, the Engineering Services Unit reviews applications for modifications and design changes; evaluates test results, and provides compliance assistance to applicants and technical advisors. During FY2005, the Section's engineers performed 632 reviews and compliance assistance activities. Unit staff also

were involved in drafting Title 130 regulatory amendments and participated in the producer meetings.

Permits – Under the amended regulations, Construction Permits no longer are issued; but are replaced with a Construction Approval. Operations wanting to construct livestock waste control facilities are required to submit an application and receive approval from the Department prior to beginning construction. In FY2005, construction approvals increased nearly 20%, compared



to construction permits in FY2004, with 76 construction applications approved. This total number includes approvals for new construction, as well as modified and transferred construction permits, originally issued prior to the effective date of the revised Title 130.

Since state operating permits are no longer issued under the revised regulations, only five new state operating permits were issued in FY2005. However, the number of modifications, transfers and upgrades of previously issued operating permits rose by 64% over the previous year. A major contributing factor to the large increase in the number of permits in this category, however, was the transfer of ownership of more than 50 separate operations previously under a single ownership.

FY2005 saw an increase in the numbers of NPDES permits issued, due to the new regulations that required Large CAFOs to obtain coverage under a NPDES permit. This permit prohibits discharges to waters of the State, except as established in effluent limitations for the livestock waste control facility and for the agronomic application of livestock wastes to cropland. Producers may submit an application for an individual NPDES permit or request coverage under the NPDES General Permit for Open Lot Livestock Operations.

The current regulations, effective in 2005, for the first time require all CAFOs, including total confinement and poultry operations, to apply for a NPDES permit, unless they can demonstrate no potential to discharge to waters of the State exists from either the production area or the land application areas. Under certain circumstances, medium and small animal feeding operations may be designated as CAFOs, and required to obtain NPDES coverage.

In FY2005, only one individual NPDES permit was issued; however, coverage under the NPDES General Permit was issued to 31 open-lot animal feeding operations. Of these 31 NPDES General Permits, 26 were new permits, 4 were modified permits and one permit was transferred. This figure is down from the FY2004 figure of 61 General Permits issued. This brings the total number of animal feeding operations covered under the NPDES General Permit to 102 operations.

The Section received 98 NPDES applications in FY2005, up from the 80 NPDES applications received in FY2004. The majority of the applications were for coverage under the NPDES General Permit.

### **Inspections**

The number of initial inspection requests received this fiscal year rose sharply from FY2004, with 123 requests received in FY2005, compared to 77 the previous year. Program staff continued to reduce the backlog of initial inspection requests, completing a greater number of initial inspections during FY2005 than the previous year – 460 versus 442 initial inspections in FY2004. The most significant increase in the number of inspections conducted was in the category of post-construction inspections, which showed a 15% increase in the number of inspections conducted over the figures for both FY2004 and FY2003 – 93 post-construction inspections in FY2005 compared to 81 inspections in each of the previous two years.

The total number of inspections conducted was less this fiscal year, due, in large part, to increased public outreach and education efforts and participation in the development of revised Title 130 regulations by Agriculture Section staff. In FY2005, Agriculture Section inspectors performed a total of 964 inspections, down from 1,040 total inspections the previous year.

Complaints – Reversing a three-year trend, the Section received more complaints concerning livestock operations during FY2005 than the previous year – 84 complaints, compared to 65 complaints received in FY2004.

General information about the Livestock Waste Control Program, fact sheets, forms, guidance documents, the NPDES General Permit, Title 130 regulations, and public notices of Intent to Issue or Deny Construction Approval for animal feeding operations are available on the Department's web site, www.ndeg.state.ne.us.

### **Chemigation Program**

The Chemigation Program is responsible for protecting the irrigation water source from contamination by fertilizer or pesticides, as established in the Nebraska Chemigation Act. When fertilizer or pesticides (i.e., fungicide, herbicide or insecticide) are being applied through an irrigation system, the Chemigation Program and Nebraska's 23 Natural Resource Districts (NRDs) work together to ensure that chemigation applicators and irrigation systems comply with the requirements of the Chemigation Act and Title 195, "Rules and Regulations Pertaining to Chemigation."

The NRDs inspect and issue permits for the specific safety equipment that must be installed on the irrigation system. The program has been well received, with a high degree of compliance. One spill occurred this year, and the investigation found that neither surface water nor groundwater was impacted.

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 moderate increase in the number of permits issued was seen in 2004 over the previous year, with 15,561 chemigation site permits issued in 2004, compared to 14,508 permits in 2003. During the first three quarters of calendar year 2005 (ending September 30, 2005), over 13,000 annual site permits were issued.

The Department certifies all chemigation applicators, who must be re-certified every four years. The records of applicator certifications also are kept and reported on a calendar year basis. To receive certification, the applicators must complete training and testing, which is provided by the University of Nebraska Cooperative Extension system. In 2004, 613 applicators were trained, tested and certified, bringing the total number of certified chemigation applicators to 4,261. Information about chemigation applicator training dates and certified applicators is available on the Department's web site, <a href="https://www.ndeq.state.ne.us">www.ndeq.state.ne.us</a>.

### **Agricultural Chemical Secondary Containment Program**

The Agricultural Chemical Secondary Containment Program administers Title 198, "Rules and Regulations Pertaining to Agricultural Chemical Secondary Containment" for commercial and private secondary containment and loadout facilities for bulk liquid fertilizer and pesticide storage. Title 198 also includes requirements for the loading and rinsing activities of custom applicators of liquid fertilizers and pesticides.

The regulations 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.

The Department works with the Nebraska Department of Agriculture's Pesticide Program to identify noncompliance.

The Program received no complaints in FY2005 involving fertilizer or pesticide storage facilities. At the end of FY2004, four cases were pending. Of those four, two have been resolved and compliance efforts are proceeding on the remaining two cases.

## **Surface Water Assessment Programs**

The Surface Water Unit collects physical, chemical, and biological water quality samples from streams and lakes throughout the state in conjunction with a rotating basin monitoring strategy. This strategy targets surface water monitoring in two or three river basins each year instead of throughout the entire state. Targeting resources in this manner improves the Department'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. These data are used to document existing water quality conditions, assess the support of beneficial uses (such as recreation, aquatic life, public drinking water supply), and prioritize water quality problems. The current five-year rotating monitoring cycle is listed below:

2005 -- Elkhorn and Missouri Tributaries river basins;

2006 -- Middle Platte, North Platte, and South Platte river basins;

2007 -- Big Blue, Little Blue and Republican river basins;

2008 -- Loup, Niobrara, and White River-Hat Creek river basins; and

2009 -- Lower Platte and Nemaha river basins.

During 2005, surface water monitoring resources were primarily targeted in the Elkhorn and Missouri Tributaries river basins. Monitoring efforts were coordinated with other Department sections and with other agencies and organizations. These data will be included in a biennial water quality report to Congress and in other water quality reports produced by the Department. A brief description of the surface water monitoring activities conducted during 2005 follows.

Basin Rotation Monitoring Network – A total of 16 streams and 5 lakes in the Elkhorn and Missouri Tributaries river basins were sampled weekly from April through September for a wide array of chemical and biological constituents to document existing water quality conditions and assess the support of beneficial uses such as recreation. Stream flow was also measured at the time of collection to calculate loadings. Channel surveys were conducted at seven of the stream locations to facilitate the development of flow rating curves where gauging stations did not exist. Assistance was also received from many of the Natural Resource Districts (NRDs), Nebraska Game and Parks and Nebraska Public Power Districts, allowing an additional 32 lakes and 19 streams across the State to be sampled and analyzed for bacteria. The lake bacteria data were reported on the NDEQ web page to provide current information to the public on the suitability of these swimming beaches for primary contact recreation.

Ambient Stream Monitoring Network – This network was initiated in 2000 with the primary objective of providing information on the status and trends of water quality in Nebraska streams, and linking assessments of status and trends with natural and human factors that affect water quality. In addition, this network samples fish communities in coldwater streams to document existing or potential Coldwater Class A stream designations (streams capable of supporting a self-sustaining trout populations).

The Ambient Stream Monitoring Network includes representative mainstem and tributary stream sites in all 13 river basins and incorporates ecoregion and land use considerations. Initially, this network consisted of 42 sites; however, in 2002, the network was expanded to 98 sites. In 2004 sampling frequency was increased from monthly to monthly October through April and twice a month May through September. The samples are analyzed for a variety of chemical and physical constituents. In addition, samples are analyzed for heavy metals quarterly and fish communities are

sampled once a year in coldwater streams. During 2005, a total of 2,052 water samples were collected for this program.

Ambient Fish Tissue Monitoring Program — Sixty-four fish tissue samples were collected from 38 streams and lakes across Nebraska for analysis of toxic pollutants during 2005. This information is used to assess toxic pollutant trends, identify problem areas, and assess and report on the suitability of fish for human consumption. Based on fish tissue information collected prior to 2005, fish consumption advisories will be issued or reissued for 41 sites in 2005, including 19 stream or canal segments and 22 lakes. A new advisory will be issued for Merritt Reservoir near Valentine based on elevated levels of mercury.

Advisories for suspected carcinogens 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 could result in an additional cancer risk of one in 10,000. For mercury, a noncarcinogen, an action level has been adopted for the protection of women of child-bearing age, infants, and adolescents less than 15 years of age. There is no immediate health risk from consuming an occasional meal of fish from these waterbodies. However, in order to reduce health risks that may result from long-term consumption of contaminated fish, it is recommended that consumption of 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.

Regional Environmental Monitoring and Assessment Program (R-EMAP) — The R-EMAP Program involves a unique randomized sample design that allows water quality status and trend assessments to be made with a known level of confidence. This program, initiated in 1994, is used to evaluate the health of the aquatic life populations and involves the collection of water, sediment, habitat, fish and macroinvertebrate samples from wade-able streams in conjunction with the rotating basin monitoring strategy. During 2005, 40 sites were evaluated in the Elkhorn and Missouri Tributaries river basins.

Lake Monitoring Programs —Lake water quality data was collected for several monitoring programs during 2005. A 25-lake ambient network involving the collection of monthly water samples from May through September was initiated in 2002 and continued through 2005. These data will be used to document existing water quality conditions and long-term trends. Cooperative monitoring with the University of Nebraska-Lincoln and the U.S. Army Corp of Engineers allowed for monthly samples to be collected from an additional 21 lakes to provide pre-project and post-project data used to prioritize project needs and to evaluate effectiveness of nonpoint source projects. Monitoring focused on nutrients, sediment, pesticides, heavy metals, dissolved oxygen, pH, temperature, conductivity, and water clarity. In addition, weekly E. coli bacteria samples were collected from 37 swimming beaches in lakes during May through September. Data were reported on the NDEQ web page to provide current information to the public on the suitability of these beaches for swimming.

Nonpoint Source Monitoring — Monitoring and assessment of surface water quality for nonpoint source pollution is crucial for effective implementation of the Nebraska Nonpoint Source Management Program. These data are used to identify and prioritize nonpoint source problem areas, develop nonpoint source watershed management plans, and evaluate the effectiveness of measures implemented to control nonpoint source pollution. Most of the surface water monitoring programs described above can be utilized for this purpose. However, the following specific nonpoint source sampling activities were also conducted during 2005: Seventeen lake inlet streams were sampled during periods of significant precipitation to provide information on nutrient and sediment loading to lakes during runoff events; Bathymetric surveys were conducted on six lakes and two sediment

basins to provide a measure of the rate at which each lake was filling with sediment; and biological assessments were conducted on three lakes to evaluate pre and post restoration conditions.

Fish Kill and Citizen Complaint Investigations —Eighteen fish kills were reported between July 1, 2004 and June 30, 2005. Most of these were attributed to low oxygen from winter and summer kill, low flows, temperature stress, and disease/parasite. A total of 12 citizen complaints were also received by the Surface Water Unit during the same time period. On-site investigations were conducted, as needed, to document existing water quality conditions, surface water quality standards violations, and identify pollution sources.

Toxic Algae—Although toxic blue-green algae has always been a potential threat to public health, it became an issue of greater concern in Nebraska in 2004. The state's awareness of the issue became sharply focused in early May, when NDEQ received reports of a dog dying after drinking water containing algae from a sandpit lake south of Omaha. NDEQ purchased laboratory equipment to directly determine the levels of the microcystin (a toxin produced by some strains of blue-green algae) in potentially affected lakes. NDEQ, in conjunction with Nebraska Health and Human Services System and the Nebraska Game and Parks Commission, developed a sampling protocol and Health Alert system to notify the public if there were potential hazards.

During 2005, following much literature review and consultation with other agencies, the sampling protocol and Health Alert system were slightly modified and the NDEQ continued monitoring. UNL was again contracted to provide information for private lakes. Additionally, special studies were developed to better identify cause and effect relationships of toxic algae blooms. NDEQ contracted with UNL to conduct fly-overs and remote sensing photography of lakes to evaluate the potential of using this method as a tool for early detection of potential problems and provide repetitive coverage of a large area in a cost effective, timely manner. While this data is presently under review, initial results show great promise.

During 2005, NDEQ analyzed over 840 samples for the microcystin toxin on approximately 80 different waterbodies across the State. Based on the results of these data, 76 health alerts were issued on 12 different lakes. NDEQ will continue to coordinate with appropriate entities and review and revise procedures in an effort to better monitor and advise the public on this issue

## **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. The most recent report was issued December 1, 2004 and is available on NDEQ's web site. 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.

### **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 program and is of environmental significance. Unit personnel continue to take responsibility under Title 118 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 Area acting on their own authority. In addition to the three NDEQ-designated areas, 19 NRDs have designated GWMAs within their jurisdiction. However, if an NRD does not implement a Groundwater Management Area, the Department has the responsibility of implementation. The following map shows NDEQ study areas (numbers) and existing GWMAs (shaded areas).

# 17. 13. 19. 13. 19. 11. 12. 2. 9. 18.

# **Progress in the Groundwater Management Area Program**

**NDEQ GWMA Studies** 

- 1. Beatrice/DeWitt, 1988
- 2. Superior, 1988
- 3. Fremont, 1988
- 4. E. Upper Big Blue, 1989
- 5. Wilcox/Hildreth, 1989
- 6. York/Polk Co., 1990
- 7. Red Willow/Hitchcock Co., 1990
- 8. W. Upper Big Blue, 1991
- 9. E Little Blue, 1992 94
- 10. Deuel Co., 1992

- 11. N Middle Republican, 1995
- 12. Lower Republican, 1996 97
- 13. E. Chevenne Co., 1996
- 14. Box Butte Co./Mirage Flats, 1998
- 15. S. Lower Elkhorn, 1999
- 16. E. Upper Loup, 2000
- 17. E. Sheridan Co., 2001
- 18. Humboldt, 2001
- 19. Keith-Lincoln Co., 2002 03

### **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.

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 3190 Class III wells as of October 1, 2005.

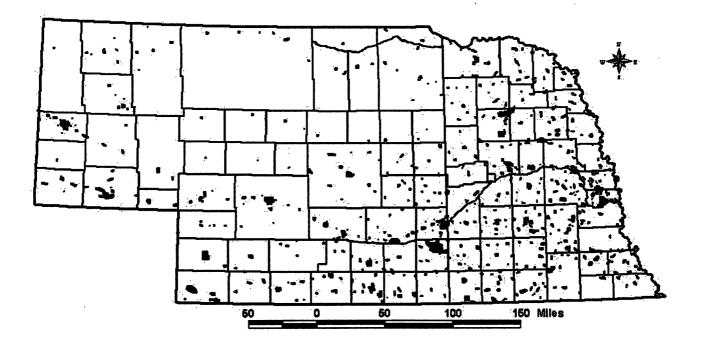
Injection wells not included in the other specific classes are considered to be Class V wells. The EQC adopted regulations in 2002, prohibiting the following types of Class V wells: agricultural drainage wells, untreated sewage waste disposal wells, cesspools, radioactive waste disposal wells, motor 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. Fifty-six community water supplies have approved Wellhead Protection Plans.

# Wellhead Protection Areas, October 1, 2005



## **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 the 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 triennial review will end in FY2006 with the final proposed revisions being heard by the Environmental Quality Council. Much of the preparation and actual review took place in FY2005.

Most of this work involved two major issues. The first is the development of nutrient criteria for lakes and impounded waters. These criteria, if adopted, will define acceptable levels of nitrogen, phosphorus and chlorophyll in lakes and impounded waters. The criteria will be 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 this designated use was developed. All streams were analyzed with this protocol and streams that needed to be reclassified were noted for the final proposed revisions.

The proposed revisions are scheduled to be heard and acted on by the Environmental Quality Council at their December 2005 meeting. Following the EQC action, approval by the Attorney General, the Governor and then by EPA is anticipated in 2006. The current standards were approved in late 2002, and are available on the department's web page at **www.deq.state.ne.us**. In addition to developing the standards, the Planning Unit develops and implements procedures for applying the standards to surface water quality programs.

### **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. Seven hundred fifty-three Section 404 permit reviews were conducted by the unit during FY2005.

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. 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 – Nebraska Surface Water Quality Standards.

Although the department has no permitting mechanism to authorize projects in advance of their implementation, procedures have been developed to assist project proponents 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 their assigned beneficial uses as listed in Title 117 – Nebraska Surface Water Quality Standards. From this list, states are to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters and remove the identified impairments.

In 2004, the Department prepared the first Surface Water Quality Integrated Report, which was a combined Section 303(d) list, and Section 305(b) water quality report. The report provided the general public with a comprehensive summary of state and national water quality. Although no Integrated Report was required for 2005, preparations for the 2006 submittal have been initiated.

During 2005 TMDLs were prepared for the identified impaired waters in the Big and Little Blue and Republican River Basins with the pollutants of concern being fecal coliform and *E. coli* bacteria. The TMDLs were submitted to EPA Region 7 with approval being received in March 2005. Along with these TMDLs have been drafted for the impaired waters in the Loup, Niobrara and White-Hat River Basins, as well as Iron Horse Trail Lake located near DuBois, NE. Submittal of these TMDLs is expected to occur in late 2005, following public review.

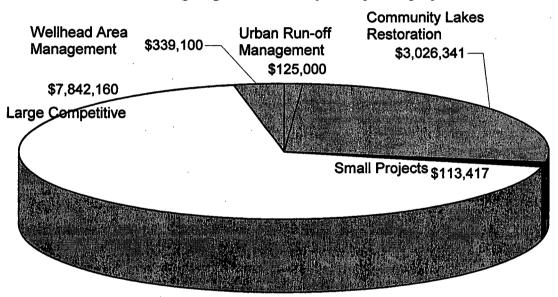
### **Nonpoint Source Management Program**

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 area management 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 2005 included investigative water quality evaluations, detailed watershed assessments, and effectiveness evaluations of implemented nonpoint source management measures.

### **Current Ongoing CWA 319 Projects by Category**



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 (<\$300,000), 4) Urban Run-off Management Assistance (<\$75,000) and 5) Wellhead Area Management Assistance (negotiated). During 2005, 58 projects were ongoing among the five grant categories. These included 30 large projects totaling \$7,842,160, 8 small projects (\$113,417), 14 community lakes projects (\$3,026,341), two urban run-off management projects (\$125,000) and four wellhead area management assistance projects (\$399,100).

New projects funded by the Department during 2005 included 13 large projects totaling \$2,667,511, four small projects (\$29,500), no new community lake projects, no new urban run-off management projects and no wellhead area management assistance project (0). A total of 129 large projects have been funded through Section 319 grants since the beginning of the program in 1990.

Of these 129 projects, 71 have addressed surface water, 39 have addressed groundwater and 19 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. Throughout the country, all states have developed a SWAP 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 per year has been set-aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide. Grants are given to units of government, education institutions, and non-profit organizations to carry out projects that will help protect the state's drinking water sources. Ten grants were awarded in both fiscal years 2004 and 2005, and eleven grants will be awarded for FY2006. Most 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 water quality information available to anyone who has an internet connection. The web site for this information is <a href="https://www.epa.gov/storet/">www.epa.gov/storet/</a>. During FY2004-2005, the department added approximately 70,000 records to the STORET database and is nearing completion of the addition of another 120,000 records of monitoring results conducted on surface waters of the State. The end result will be the centralization of NDEQ's previous and current water quality monitoring information.

The public also has access to the bacteria monitoring data for lakes on the NDEQ website. The bacteria monitoring results are updated weekly during the summer.

# **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 controlling and 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, in some instances, groundwater. The NPP functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

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

The Department is responsible for developing and issuing NPDES permits, and for ensuring that permitted facilities comply with permit requirements. The regulatory basis for this program is through an EPA delegation agreement with the Department and NDEQ Title 119 - *Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System.*The Nebraska NPDES program encompasses a number of different types of discharges including: municipal, commercial and industrial wastewater discharges; livestock waste control (this responsibility is under the Agriculture Section and Title 130); industrial discharges to public wastewater treatment systems (a.k.a. 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

**NPDES Discharge Authorizations** 

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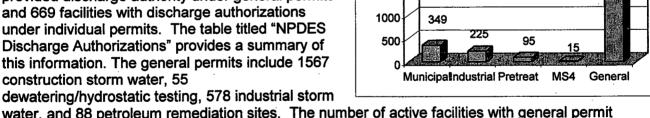
quality based standards. Technology based standards reflect effluent quality that can be achieved using treatment technology that is available to the permittee. NDEQ Title 119 Chapter 21 and Chapter 27 set forth technology-based standards for municipal facilities and many types of industrial facilities. 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 and dewatering, gasoline contaminated groundwater remediation projects, petroleum product contaminated groundwater remediation projects, construction site storm water. and industrial site storm water. Also the urbanized area around Omaha was issued a general Municipal Separate Storm Sewer System (MS4) permit on August 1, 2004. This allows any area within Sarpy. Douglas or Washington Counties to apply and be covered under this MS4 general permit. Currently 10 entities in the urbanized area of Omaha are authorized under this permit. A general Statewide MS4 permit is ready for issuance covering 10 new MS4 communities within the State.

In addition, a general permit for Warm Water B Controlled Discharge Lagoons is ready for Public Notice and will be followed by development of a general permit for Warm Water B Mechanical Plants later in 2006.

There are an estimated 2288 active facilities provided discharge authority under general permits and 669 facilities with discharge authorizations under individual permits. The table titled "NPDES Discharge Authorizations" provides a summary of this information. The general permits include 1567 construction storm water, 55



2500

2000

1500

water, and 88 petroleum remediation sites. The number of active facilities with general permit discharge authorizations was estimated because of the short-term nature of construction sites that are permitted for storm water discharges.

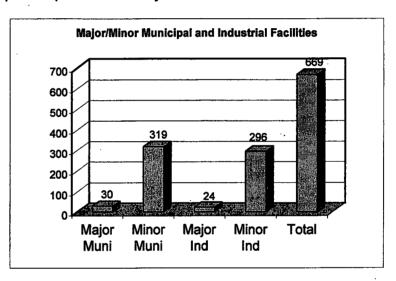
### **Municipal and Industrial Facilities**

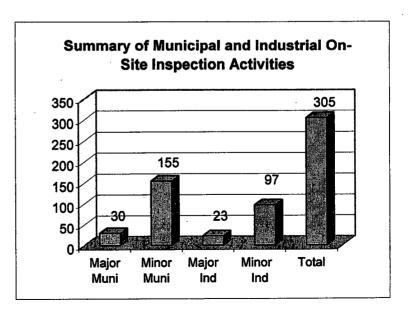
Both industrial and municipal facilities are grouped as major or minor facilities based upon their size and/or their potential to impact the receiving stream. The chart titled "Major/Minor Municipal and Industrial Facilities" provides a numeric break down of these categories.

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

The Section verifies compliance through a variety of activities including reviewing discharge monitoring reports, following up on complaints and incident reports. conducting on-site inspections, and performing effluent monitoring inspections. During on-site inspections, section personnel walk through the facility and review operational procedures and records. Major industrial and municipal facilities receive annual on-site inspections. The priority of minor facilities inspections is based on compliance histories, incident reports and complaints. Inspectors performed 305 inspections in 2004. 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 Plan priorities.

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





### **Storm Water Program**

In compliance with federal regulations, the NPDES Storm Water Phase I and Phase II Programs regulate the discharge of pollutants in storm water from certain construction sites, industrial facilities and municipal storm sewer outfalls. Phase II was promulgated by EPA in March of 2003. Storm Water Phase II federal regulations lower the threshold for coverage of construction sites from five acres or more to one acre or more. 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, make all subject to Phase II regulations for MS4 permits. A statewide general permit has been drafted, public noticed and is ready for issuance January 1, 2006. The Storm Water Management Plans for all of these cities have been received and will be placed on public notice in early 2006.

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. The Department will approach future MS4 authorities with similar agreements with the help of the NRDs that include the MS4 areas.

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 the next fiscal year. Major outreach activity is necessary to contact and permit salvage yards. EPA estimates a very small compliance rate with salvage yards (nationally on the order of 1%).

### **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 issued during FY03. 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.

### **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 of 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. NDEQ Title 127 - Rules and Regulations Governing the Nebraska Pretreatment Program was consolidated with Title 119 this year. These pretreatment regulations can now be found in Chapter 26 of Title 119. The rules and regulations set forth prohibited discharge standards that apply to all industrial users of publicly owned wastewater treatment facilities and require permits for significant industrial users. The significant industrial users are determined by one of several means: 1) the existence of an industrial category for which pretreatment discharge standards are established in NDEQ Title 119, Chapter 27; 2) the volume or strength of the wastewater discharged from the facility; or 3) the potential of the industrial user to adversely affect the wastewater collection or treatment facilities.

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

inspections. Compliance data are entered into the PCS database to facilitate compliance review activities.

Although the Pretreatment Program is really a subprogram of the NPDES program, the 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 have agreed to 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.

### **Amended NDEQ Title 119**

Title 119 — Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System was amended last year and became effective on May 16, 2005. The Department updated Title 119 to more closely parallel the federal NPDES program and to incorporate new federal requirements that have been adopted since Title 119 was previously amended.

The amended Title 119 includes requirements for storm water permitting under the federal Phase II Storm Water Rule and the new Combined Animal Feeding Operation (CAFO) Rule Public Participation Process relating to permit issuance, public notice and participation that are applicable to all NPDES permits. The other aspects of the CAFO Rule are addressed in Title 130.

In addition, the amended Title 119 includes the following major changes:

- 1. Inclusion of language pertaining to Section 316(b) of the Federal Clean Water Act. This rule protects fish caught (impinged) on screens and/or pulled through (entrained) in the cooling water intakes for power plants.
- 2. Authorization by Rule for irrigation with treated domestic wastewater.
- 3. Exclusions of discharges from geothermal, non re-circulating single family household heat pumps, agricultural tile drains and discharges to Publicly Owned Treatment Works from swimming pools.
- 4. Inclusion of new language consistent with the federal 503 sludge language to clearly address the proper handling of sewage sludge (biosolids).
- 5. Inclusion of new effluent guidelines for meat and poultry, and for pharmaceuticals point source categories.
- 6. Consolidation and incorporation of the requirements for both NDEQ Title 121 Effluent Guidelines and Standards and Title 127 Rules and Regulations Governing the Nebraska Pretreatment Program.

# **Wastewater Engineering Management**

Wastewater Engineering Management activities include the review and approval of planning and construction documents for municipal, industrial, and commercial wastewater treatment facilities and sanitary sewer systems. These reviews assure that proposed wastewater facilities meet engineering design standards to protect the public health and achieve proper wastewater treatment. The Wastewater Section issues construction permits for wastewater facilities after plans and specifications have been reviewed and approved. In addition, the section maintains and updates State regulations, guidelines, and technical standards that provide the basis for design of these facilities. Staff also assist with the Nebraska Environmental Partnership Program.

For SFY05, a total of 275 construction permits were issued for wastewater facilities in Nebraska. Considerable time was spent the last year working with owners of existing and proposed industrial wastewater treatment facilities to assure that their wastewater facilities are properly designed.

For several years the section had been preparing a revision to NDEQ Title 123, *Rules and Regulations for the Design, Operation and Maintenance of Wastewater Works*. This Title was submitted to the Environmental Quality Council at their September 9, 2005 hearing and was approved by the Council.

### **On-Site Assistance Program**

The On-Site 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 \$31,750 in grants and matched it with \$10,583 of state funds in FY05. This training is focused on assisting the operator to improve operation and maintenance of wastewater treatment plants.

The 104(g) federal on-site assistance program for wastewater treatment facility operators provided diagnostic evaluation, initiated training, or continued assistance at Davey, Hawaiian Village, Elmwood, Friend, Pender, Staplehurst, Uehling, Table Rock, Wilber, Uehling, and Wisner. Program assistance was completed this year at Arapahoe, Bancroft, Scotia, Rosalie, Lincoln Solar Rest Area, Clear Lake, Fort Calhoun, and Hebron. 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.

### **On-Site Wastewater Treatment Facilities**

The on-site 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 on-site systems. The program focuses on protecting surface and groundwater in the area of proposed on-site systems through the certification of on-site professionals, review of plans for subdivision development, and review of plans and permitting of systems in problem areas or systems with non-domestic wastes.

Certification of on-site professionals covers installation, inspection, maintenance, and pumping of onsite systems. Subdivision review requirements apply when on-site systems will be used and any proposed lots will have less than three acres suitable for building.

The program staff work to assure that the design, installation, modification, repair, and maintenance of on-site wastewater systems is performed by qualified, competent, and certified professionals who are familiar with Title 124 – Rules and Regulations for the Design, Operation and Maintenance of On-Site Wastewater Treatment Systems, and proper practices of their trade. The Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act (Act) passed in 2003 required that anyone doing work associated with on-site wastewater systems be certified by the State of Nebraska. The Act provided for the registration of all on-site wastewater systems constructed, reconstructed, altered, or modified. The law also provided for certification and system registration fees to support the program.

For 2004 and 2005 individuals obtained temporary provisional certification by completing an affidavit that they had the required minimum experience in performing their trade and paying the certification fee. A total of 747 temporary provisional certifications were issued and these temporary provisional certificates expire at the end of 2005. A certification by examination is required for professionals to obtain certification for the 2006 – 2007 certification cycle. Examinations for the certification by exam began in July of 2005. Continuing education is required to maintain the certification by exam for the subsequent two-year certification cycle.

The result of the registration requirement is a statewide inventory of on-site systems. This the first level of management under EPA's voluntary "Guidelines for the Management of Onsite/Decentralized Wastewater Systems." There were over 1,130 systems registered as of November 2005.

NDEQ has cooperative agreements with several local governmental agencies to help implement and coordinate the program in their jurisdictions. Nebraska Health and Human Services System personnel also routinely work cooperatively with NDEQ to resolve health related on-site wastewater handling issues. NDEQ provides information to the public, industry practitioners, and local governments on the regulations for new on-site 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 outside a municipal sewer system.

The Private Onsite Wastewater Treatment System Advisory Committee advises the Department on administration of the Act and proposed rules and regulations. The latest changes needed to implement examination and continuing education requirements became effective May 15, 2005. Additional changes to the regulations are contemplated and needed to enhance the capabilities of professionals to provide for endorsements for special activities or procedures not currently identified in the regulations.

The regulations set minimum design standards for all on-site wastewater treatment systems and include an Authorization by Rule to allow the installation of the standardized conforming on-site systems by a certified professional and subsequent operation without a construction or operating permit. These standard conforming systems constitute the vast majority of all new on-site 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 on-

site wastewater issues, review of proposed subdivision developments, and review of permit applications, which may include large systems or systems that receive non-domestic wastes.

Program staff work with many other organizations, including local health or planning and zoning, the Nebraska On-site Wastewater Association (NOWWA), the Nebraska On-site Wastewater Task Force, UNL Cooperative Extension, and the Groundwater Foundation to educate the public about the importance of proper installation and maintenance of on-site wastewater systems and to improve the knowledge and skills of the various practitioners who install and maintain on-site systems. NOWWA has held annual conferences and produced other training seminars since its inception in March 2001. The Department also worked with UNL Cooperative Extension to help UNL develop the training program implemented in the summer of 2005.

### Wastewater Treatment Facility Operator Training and Certification Program

Well-trained and competent operators are a critical component to ensuring that wastewater treatment plants are well run and protect the environment. The life span of treatment facilities can be prolonged and the financial investment can be protected by proper operation and maintenance programs. To accomplish this, the Wastewater Treatment Facility Operator Training and Certification Program was established.

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. At this time, the wastewater operator training certification program has 864 certified operators with municipal certificates and 30 operators with industrial certificates.

In calendar year 2005, the Department is providing four, five-day classroom training workshops for operators and six testing opportunities. For 2006, the program will provide four regular training sessions and six examinations.

Over the past two years the Department has worked with operators of industrial wastewater treatment facilities to develop training sessions and regulations for mandatory certification of industrial operators. This effort has resulted in the revision of Title 197 to include mandatory certification of industrial operators. Training and testing of industrial operators will continue in FY06.

### **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 seventeen years of activity the Fund capitalization level exceeds \$139 million: \$120 million received from federal grants with the match provided from fees, state general fund appropriations, and \$20.5 million in match from NIFA bond issues. There is also \$85 million in recycled principal available or re-loaned by the program. The program has made loans to 146 municipalities at a total loan amount of \$223 million, adjusted to reflect final loan amounts.

### **CWSRF Source of Funds**

FUNDS MADE AVAILABLE	FFY2005	FFY2006 Estimate
Capitalization Grant - CWSRF	5,467,300	4,500,000
NIFA Series 2005B Match Bonds	875,000	
Future NIFA Series 2006B Bonds		720,000
Administration Cash Match <sup>(1)</sup>	218,692	180,000
Interest Earnings <sup>(2)</sup>	4,855,147	3,353,023
Loan Repayments <sup>(2)</sup>	4,691,617	7,833,461
TOTAL CWSRF	16,107,523	16,406,484
Less Loan Awards & Admin Costs	1,636,724	180,000
Available for Loans	14,252,107	15,931,355

<sup>(1)</sup> Source of Cash Match is the Administrative Fee Account outside of the SRF

The FY05 program Funds consist of \$5.5 million CWSRF capitalization grant, \$0.875 million NIFA bond match and about \$9 million in repayments and interest. The program disbursed \$19.6 million for wastewater treatment project construction costs. Loan contracts were signed with 19 communities and loan amendments were signed with 2 communities for a total obligation of \$20.4 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 FY2005.

<sup>(2)</sup> Interest earnings and loan repayments are estimated.

#### Municipalities Receiving CWSRF Loans in FY2005

MUNICIPALITY	LOAN DATE	LOAN AMOUNT	SMALL TOWN GRANT AMOUNT
Valley	7/15/04	4,850,000	100,000
Sutherland	8/13/04	250,000	
Gering	9/13/04	3,250,000	
Ruskin Amd. #1	11/4/04	181,200	
Garland	11/30/04	312,000	100,000
McCool Junction	12/6/04	84,200	
Rising City	12/16/04	350,340	100,000
Arlington	1/7/05	1,000,000	
Palmer	1/12/05	565,000	100,000
Oxford	1/28/05	1,300,000	100,000
Cass Co. SID#5	2/22/05	1,150,000	
Ewing	3/21/05	50,000	
Deshler	4/5/05	720,000	
McCook	4/5/05	4,200,000	
Stamford	4/11/05	395,400	
Malcolm	4/12/05	550,000	•
North Bend	4/22/05	308,000	
Ewing Amd. #1	5/10/05	17,000	
Gothenburg	5/19/05	440,000	
Bassett	5/19/05	70,700	
Hickman	5/26/05	390,000	

Five SRF wastewater projects completed construction and initiated operation in SFY05: Butler Co. SID#1, Ewing, McCool Junction, Paxton, and Schuyler. Twenty three projects are under construction including those who have received loans so far in SFY2006: Arlington, Bassett, Bertrand, Cook, Deshler, Garland, Gering, Gothenburg, Hickman, Howells, Madison, McCook, Murray, North Bend, Omaha CSO, Oxford, Palmer, Rising City Ruskin, Stamford, Sutherland, Valley, and West Point.

#### **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 \$3.93 million in grant funding for 45 projects in conjunction with a CWSRF loan during the fifteen 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 up to \$100,000. The FY2003 legislation also provided authority to make grants for

community assessments and facility plans. The department started providing planning grants during FY2004 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 Regulation and Licensure (DHHSR&L), 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.

#### **DWSRF Source of Funds**

FUNDS MADE AVAILABLE	FFY2005	FFY 2006 ESTIMATE
Capitalization Grant DWSRF	8,285,500	8,000,000
NIFA Series 2005A Match Bonds	1,657,100	
Future NIFA Series 2006A Bonds		1,600,000
Loan Repayments	3,123,128	2,400,000
TOTAL DWSRF	13,065,728	12,000,000
Less Loan Awards and Set-Asides	10,865,211	1,660,000
Available for Loans	2,200,517	10,640,000

The FY2005 DWSRF capitalization grant allocation totaled \$8.3 million from FY05 federal appropriations. The program disbursed \$13.5 million for drinking water project construction. Loan contracts were signed with 8 communities and loan amendments were signed with 2 communities for a total obligation of \$16.9 million including Loan Forgiveness. The following chart shows the municipalities receiving Drinking Water State Revolving Fund loans in FY2005.

### **Municipalities Receiving DWSRF Loans in FY2005**

MÜNICIPALITY	LOAN DATE	LOAN AMOUNT	LOAN FORGIVENESS		
South Sioux City Amd. #1	9/30/04	590,000			
Bruno	11/12/04	164,100			
McCook	2/14/05	9,922,000	100,000		
Clarks	2/15/05	305,000	100,000		
Sidney Amd. #1	3/30/05	1,625,000			
Kimball	4/12/05	700,000			
Louisville	4/21/05	843,275			
Elba	6/13/05	341,250			
Lyons	6/22/05	695,000			
Broken Bow	6/28/05	1,400,000	100,000		

Six DWSRF projects completed construction and initiated operation in SFY05: Ainsworth, Benedict, Dodge, Duncan, Giltner, and North Platte. Eighteen projects are under construction, including those who have received loans during FY2006: Arapahoe, Bancroft, Beaver Lake Association, Benedict, Big Springs, Bruno, Clarks, David City, DeWitt, , Fairbury, Kimball, Louisville, Mccook, Pender, Plattsmouth, Scotia, Sidney, and South Sioux City.

Detailed capitalization funding uses, including planned set-aside options and anticipated levels of loan forgiveness, are shown in the following "DWSRF Funding Uses" 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. These activities are being paid out of the administrative cash fund and may include program operating costs for both NDEQ and DHHSR&L 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%) will be used to provide technical assistance to Public Water Supply Systems serving 10,000 or fewer persons. This will be accomplished through contracts with organizations with expertise in dealing with small systems and is coordinated by the DHHSR&L.

In FY2005, under the Source Water Protection Implementation set-aside (15%) NDEQ and HHSR&L will use \$200,000 for community assessments and preliminary engineering reports, and \$200,000 for wellhead protection project grants. The Nebraska Environmental Partnerships Program will oversee the grants provided for community assessments and preliminary engineering reports. The department's Source Water Program will oversee the wellhead protection grants.

The DHHSR&L 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). DHHSR&L 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 FUNDING USES AND STATUTORY LIMITS

	CAPITALIZATIO ALLOCATION P			
	LEGAL LIMIT	INTENDED USE LEVEL	FEDERAL	STATE
<u>FY2005</u>				
DWSRF			6,591,240	1,657,100
DWSRF Administration	4%	0%	0	
Small System Technical Assistance	2%	2%	165,710	
Source Water Protection Implementation	15%	14.82%	1,228,550	
Public Water System Program Administration	10%	3.61%	300,000	
TOTAL			8,285,500	1,657,100
2005 Loan Forgiveness	30%	5.46%	500,000	
FY2006 Projected Funding				
DWSRF			6,340,000	1,600,000
DWSRF Administration	4%	. 0%	0	
Small System Technical Assistance	2%	2%	160,000	
Source Water Protection Implementation	15%	15%	1,200,000	
Public Water System Program Administration	10%	3.75%	300,000	
TOTAL			8,000,000	1,600,000
2006 Loan Forgiveness	30%	5.64%	500,000	

# CHAPTER 7:

## **Environmental Assistance Division**

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 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 ethanol
  industry. A number of on-site visits have occurred and the SBAP has coordinated the
  preparation of a number of assistance documents. The Division has also been active in the
  continued promotion of the establishment and implementation of Environmental Management
  Systems.
- The Community Right-to-Know program continues to work with Local Emergency Planning Committees in planning efforts as well as providing relevant information.
- The Release Assessment program continues to devise efforts to enhance the Department's ability to respond to releases into the environment by securing equipment and additional training for the Department's Immediate Response Team.
- 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 examination and promotion of methane recovery at Concentrated Animal Feeding Operations (CAFOs). The Partnership has been actively involved in the state's first commercial operation which began producing methane in October of this year.
- Like several programs within the Department, the Environmental Assistance Division has been examining the federal Brownfields program, which is intended to restore blighted and contaminated areas of the country to productive use. Typically most Brownfield resources are devoted to heavily industrialized areas. A team from within the Department has been examining the program with the intention of capitalizing on Brownfield resources for Nebraska entities, particularly small communities.
- Finally 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.

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 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 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.

Another component 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 knowledge and 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 2004, approximately 2,800 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This is a 27% increase, compared to 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 first time, facilities were able to access, view, change and report their chemical information online instead of submitting a paper copy form each year. Approximately 65% of the facilities reported online in Nebraska this year. This information will be more readily accessible for purposes such as developing local emergency plans. Additionally, the Community Right-To-Know Coordinator has become more involved in the Homeland Security Planning activities.

#### **Nebraska Environmental Partnerships**

The Nebraska Environmental Partnerships program was formed to help Nebraska's small communities address the challenges posed by: 1) complex environmental regulations, 2) limited financial resources, and 3) aging infrastructure.

The Environmental Partnerships program is a unique state-coordinated effort 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. Rather than establishing mandates and expecting citizens to comply, the program establishes partnerships with communities with a goal of finding customized solutions that will benefit everyone. It is a collaborative, teamwork approach.

The Environmental Partnerships program typically works with communities of 1,000 or fewer. Since the program's inception, Community Assessment grants were normally the starting point for assistance that consisted of a snapshot analysis of the community's current environmental health infrastructure, discussion of the analysis results, prioritizing issues and finding solutions. Recent circumstances have necessitated the Environmental Partnerships program to focus its assistance elsewhere.

The program has provided some form of customized environmental assistance to more than 230 small communities throughout Nebraska. More than 100 communities received Community Assessment grants. In order to continue to provide individualized assistance to Nebraska's small

communities, the Environmental Partnerships program has created a community-training program. Program staff travels to communities, at the community's request, and provides individualized training relevant to that community's environmental questions and needs. The curriculum is intended to explain new regulations and requirements, instruct community officials in completing DEQ forms and loan/grant applications, and make assistance available in whatever else is pertinent to the community officials and the surrounding region.

The Environmental Partnerships program continues to collaborate with the Drinking Water State Revolving Fund to administer a grant program that provides planning grant assistance to small public water supply systems. These Planning grants are intended to be used 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. The planning grants may be provided to public water supply systems with populations of 10,000 or fewer.

The Environmental Partnerships program also continues to collaborate with the Clean Water State Revolving Fund to administer a facility planning grant program that provides financial assistance to high priority Publicly Owned Wastewater Treatment Works. The facility planning grants may be provided to municipalities with populations of 5,000 or less that demonstrate serious financial hardship.

The program is also responsible for coordinating a number of other projects that assist small communities. It is actively involved in coordinating and participating in regional water system planning meetings throughout the state.

The Environmental Partnerships program continues to provide information to the Environmental Council of the States (ECOS). ECOS is an organization comprised of the directors of the states' environmental agencies. Its mission is to improve the nation's environment by championing the roles of states in environmental management; providing for the exchange of ideas, views, and experiences among states; fostering cooperation and coordination in environmental management; and articulating state positions to Congress, federal agencies and the public on environmental issues.

ECOS has sought the Department's advice and asked that we appear at workshops to explain the Nebraska Environmental Partnerships program. ECOS has recognized the Nebraska Environmental Partnerships program as unique and has held it up as a model for other states to follow in providing assistance to small communities.

#### 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 Release Assessment Coordinator, in conjunction with staff from Information Technology, is developing a department wide system for receiving a wide variety of information from the public and the regulated community. This includes information related to complaints, spills and releases into the environment, fish kills, and other types of environmental information the public submits to the Department. Ultimately the system will enable the public to submit some information on-line. Additionally the system will provide the department with a more effective manner to share the information submitted. The Release Assessment Coordinator will ensure that the information submitted is routed to the appropriate program and that the department provides a timely response to the information.

#### **Homeland Security**

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

Efforts by the NDEQ Homeland Security Planning Team have concentrated on updating the NDEQ's Emergency Operations Plan. The NDEQ Homeland Security Exercise Team developed and implemented two in-house exercises, which were conducted in the Spring and Fall of 2005. NDEQ was an active participant in the planning of a statewide exercise, which took place on November 3, 2005.

As is the case with many state agencies, the Department has devoted significant resources to obtaining and updating the equipment needed to address Homeland Security needs. Federal funds, administered by the Nebraska Emergency Management Agency, have been allocated to address these equipment needs.

# CHAPTER 8:

## Low-Level Radioactive Waste Program

In December 1998, the Nebraska Department of Environmental Quality and the Nebraska Department of Health and Human Services Regulation and Licensure issued a cooperative decision to deny a license application to build and operate a low-level radioactive waste disposal facility in Boyd County, Nebraska. The decision followed a comprehensive review of the application by a team of over one hundred technical professionals from government, the university and private organizations.

#### **Settlement Paid**

On August 1, 2005 the State of Nebraska made a \$145.8 million payment to the Central Interstate Compact Commission. The payment satisfied a settlement agreement reached in August 2004 following several years of litigation regarding the State's decision to deny a license application for a low-level radioactive waste disposal facility in north central Nebraska. As a result of the payment, the Compact Commission filed a "Satisfaction of Judgment" motion with the U.S. District Court the same month.

The agreement arose in part out of two pending lawsuits. The first suit, initiated in December 1998, involved a challenge by the Compact Commission alleging the State acted in bad faith in making its decision to deny US Ecology's license application. On September 30, 2002, the U.S. District Court issued a \$151 million decision against the State of Nebraska. The State appealed the decision to the United States Supreme Court. As part of the Settlement, the State agreed to withdraw its Supreme Court appeal and the Compact Commission agreed to file a "Satisfaction of Judgment" with the District Court upon Nebraska's timely payment of a the settlement figure. Additionally, the utility plaintiffs agreed to dismiss their related claims pending in State Court.

The second suit involved a challenge by the State of Nebraska to a July 2003 action by the Compact Commission to revoke Nebraska's membership in the Compact after the State had formally notified the Compact Commission of its intent to withdraw its membership. The State, as part of the settlement agreement, agreed to drop the suit. Nebraska's membership in the compact ended in the summer of 2004.

#### **Program Activities**

As a result of the recent activities, the agency has closed out its Low-Level Radioactive Waste Program activities. The department has not requested funds to operate the program. Program staff has assumed other duties in the agency. As part of several responsibilities, one staff member will have a continuing role monitoring national low-level radioactive waste activities.

# CHAPTER 9:

## Expenditure and Budget Summary

The following information summarizes department expenditures for fiscal year 2005 and outlines budget projections for fiscal year 2006. 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 FY05 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY05 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 FY06 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 FY06 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 8 of this report.

Chart A Actual Expendi	ture for Each Fed	eral Grant for Sta	ite Fiscal Year 2	2005
Grant Program / Title	Assistance ID #	Grant	Match	Total
Pollution Prevention Performance Partnership	BG997322-03	11,787	10,566	22,353
Performance Partnership	BG997325-A1	49		49
Performance Partnership	BG997325-04	3,668,266	1,366,179	5,034,445
Plum Creek MST	CP987401-01	77,172	568	77,740
Joint State Atrazine Study	CP997369-01	41,666		41,666
Clean Water State Revolving Fund	Various	8,477,178	1,723,332	10,200,510
604 B Water Quality Management	C6007328-13	25,783		25,783
604 B Water Quality Management	C6007328-14	50,998		50,998
319 H Non-Point Source	Various	3,640,743	85,833	3,726,576
Drinking Water State Revolving Fund	Various	12,874,473	1,680,921	14,555,394
Underground Injection Control	G987092-04	27,669	34,048	61,717
Underground Injection Control	G987092-05	21,119	22,578	43,696
Leaking Underground Storage Tanks	LS987161-01	926,953	196,283	1,123,236
Department of Defense	NE-02	677		677
Department of Defense	NE-03	14,523		14,523
Department of Defense	NE-04	140,778		140,778
Pollution Prevention Technical Assistance	NP987321-01	78,064		78,064
Pollution Prevention Technical Assistance	NP987508-01	30,948		30,948
Network Readiness	OS831312-01	201,102		201,102
PM 2.5 Ambient Air Monitoring	XA987417-01	228,025		228,025
PM 2.5 Ambient Air Monitoring	XA987417-02	60,382		60,382
Operator Training	T987163-01	(3,403)	(159)	(3,562)
Operator Training	T987163-02	570	, ,	570
Operator Training	T987405-01	44,894	7,235	52,129
Superfund Core	VC987267-01	13,159	10,643	23,802
Superfund Core	VC987267-02	180,953	20,889	201,842
Superfund Core / Voluntary Cleanup	V997530-02	42		42
Superfund Management Assistance	V997531-03	14,504		14,504
Superfund Management Assistance	V997531-04	109,029	•	109,029
Superfund Site Assessment	V997532-02	282,323	•	282,323
Class V Project	X6987390-01	(2,279)		(2,279)
MST for TMDLS	X987093-01	(2,331)		(2,331)
Homeland Security Grants	Various	131,780		131,780
Totals		31,367,598	5,158,915	36,526,514

Performance Partnership BG997325-04 is made up of Water 106, Air 105, Groundwater, RCRA 3011, 319 H & Agency Training 319 H Non Point Source Match comes from the Groundwater Management Area Program (Subprogram 35) A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	С	1,004,824	343,046	43,472	6,387	92,959	1,490,688	71,909	1,562,597
CLEAR / Environmental Trust	011	С					764,168	764,168		764,168
Ag - Livestock	016	G/C	1,030,794	32,750	42,186	6,596	18,526	1,130,852		1,130,852
Superfund State Cost Share	023	С					305,747	305,747		305,747
Litter Reduction	024	С	78,198	28,573	3,025		1,308	111,104	1,182,693	1,293,797
Mineral Exploration	029	С	42,793	9,241	3,554		1,038	56,626		56,626
Private Onsite Wastewater Certification	030	С	109,811	41,739	6,324	1,747	8,395	168,016		168,016
Sutherland Settlement Agreement	031	С	4,239	1,584	59			5,882		5,882
Emission Inventory - Title V	033	С	1,213,332	444,679	32,182	6,912	260,737	1,957,842		1,957,842
Chemigation	034	С	6,820	8,519			57	15,396		15,396
Groundwater Management Areas	035	G	77,975	2,102	812		4,944	85,833		85,833
Remedial Action Plan Monitoring Act	036	С	15,355	6,182	480		7,183	29,200		29,200
Operator Certification	040	С	41,533	20,003	1,698	160	4,020	67,414		67,414
Community Right to Know	041	G	74,224	3,366	1,576	3,043	7,643	89,852		89,852
Petroleum Release Remedial Action Act	051	С	879,683	345,240	20,612	26,396	3,837,883	5,109,814	9,435,390	14,545,204
Emergency Response	057	С	148,958	41,695	4,668	3,861	181	199,363		199,363
Engineering Reviews	061	G	284,055	2,456	353		3,852	290,716		290,716
Low Level Radioactive Waste	085	G	81,148	31,510	3,068	-	63,920	179,646		179,646
Waste Reduction & Recycling	091	С	139,473	47,930	8,918		9,202	205,523	3,159,088	3,364,611
Financial Assurance	093	С	-	-	•		90,796	90,796		90,796
Agency Organizational Dues	099	G				-	61,480	61,480		61,480
Totals			5,233,215	1,410,615	172,987	55,102	5,544,039	12,415,958	13,849,080	26,265,038

#### FUND TYPE LEGEND

G - Program Expends General Funds
C - Program Expends Cash Funds
G/C - Program Expends Both General and Cash Funds

Grant / Program Title	Match	Grant	Total
Performance Partnership	1,205,731	4,534,222	5,739,953
Clean Water State Revolving Fund	2,028,000	10,140,000	12,168,000
604 B Water Quality Management		88,041	88,041
319 H Non-Point Source	104,325	3,200,031	3,304,356
Drinking Water State Revolving Fund	2,000,000	10,000,000	12,000,000
Underground Injection Control	63,563	86,173	149,736
Leaking Underground Storage Tanks	119,990	1,296,998	1,416,988
Department of Defense		181,347	181,347
Network Readiness		400,000	400,000
PM 2.5 Ambient Air Monitoring		260,010	260,010
Operator Training	8,751	48,749	57,500
Superfund Core	22,532	202,729	225,261
Superfund Management Assistance		160,248	160,248
Superfund Site Assessment		309,011	309,011
State 128 (A) Response		254,313	254,313

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, Agency Training, and a part of 319 H 319 H Non Point Source Match comes from the Groundwater Management Area Program (Subprogram 35) A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

Chart D - Prope	osed Budget	of Sta	te Funds	for State P	rograms	for Fis	cal Year 2000	6 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	С	1,029,961	402,653	35,204	15	518,683	1,986,516	102,409	2,088,925
CLEAR / Environmental Trust	011	С			•	•	625,000	625,000		625,000
Ag - Livestock	016	G/C	1,124,391	18,042	32,349	15	25,297	1,200,094		1,200,094
Air Construction Permits	020	С	160,715	56,548	4,326	5,000		226,589		226,589
Superfund State Cost Share	023	G					558,633	558,633		558,633
Litter Reduction	. 024	С	80,008	30,480	4,014		100,900	215,402	1,200,000	1,415,402
Mineral Exploration	029	С	41,501	14,151	4,406		3,505	63,563	,	63,563
Private Onsite Wastewater Certification	030	С	180,677	71,868	1,000	2,500		256,045		256,045
Sutherland Settlement Agreement	031	С					140,000	140,000		140,000
Emission Inventory - Title V	033	С	1,299,056	489,934	30,283	33,123	209,250	2,061,646		2,061,646
Chemigation	034	С	12,076	8,761			7	20,844		20,844
Groundwater Management Areas	035	G	93,468	2,755	2,995		5,107	104,325		104,325
Remedial Action Plan Monitoring Act	036	С	84,443	30,014	445		3,987	118,889		118,889
Operator Certification	040	С	63,205	24,018	2,199		4,400	93,822	•	93,822
Community Right to Know	041	G	75,921	6,704	904		5,217	88,746		88,746
Petroleum Release Remedial Action Act	051	С	841,871	327,357	17,359		8,038,872	9,225,459	8,899,971	18,125,430
Emergency Response	057	C	134,425	41,796	6,310		106	182,637		182,637
Engineering Reviews	061	G	293,988	6,475	800	200	3,568	305,031		305,031
Waste Reduction & Recycling	091	С	180,796	70,383	4,868		3,137	259,184	3,100,000	3,359,184
Agency Organizational Dues	. 099	G		61,480				61,480		61,480
Totals			5,696,502	1,663,419	147,462	40,853	10,245,669	17,793,905	13,302,380	31,096,285

#### FUND TYPE LEGEND

G - Program Expends General Funds
C - Program Expends Cash Funds
G/C - Program Expends Both General and Cash Funds

# CHAPTER 10:

## Distribution of Aid

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

This chapter provides a summary of those aid activities for fiscal year 2005. It also provides information regarding the Litter Reduction and Recycling Grant Program as required by §81-1504.01, passed in the 1993 legislative session.

#### **Waste Management Grants**

Following is a summary of funds provided in 2005 through the waste grants programs managed in the Waste Planning and Aid Unit.

The Litter Reduction and Recycling Grant Program provides funds to reduce litter, provide education and promote recycling in Nebraska. 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 \$1.2 million is available annually through this program.

In calendar year 2005, 57 Litter Reduction and Recycling grants were awarded, totaling \$1,227,432. The grants were awarded in three categories: Public Education, \$530,455; Cleanup, \$82,401; and Recycling, \$614,576. 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 calendar year 2005, 128 projects totaling \$3,958,566 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. During Fiscal Year 2005, \$91,232 was reimbursed to political subdivisions for the cleanup of illegal dump sites.

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.

Since its inception in 1994, seven communities have participated in the program. Approximately \$85,620 in rebates were awarded in fiscal year 2005.

#### **Water Programs**

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 \$95 million has been disbursed since the program began. The program provided \$10,114,376 to 370 sites for investigation and cleanup in FY2005.

The Clean Water State Revolving Loan Fund (SRF) 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 FY2005, loans totaling \$20.4 million were allocated, and \$19.6 million was disbursed.

The Drinking Water State Revolving Fund provides funding assistance on Drinking Water projects. In FY2005, loans totaling \$16.9 million were allocated, and \$13.5 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 2005. Conversely, projects approved in fiscal year 2005 may receive funds in future fiscal years.

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 FY2005 included: \$7,842,160 for large projects; \$113,417 for small projects; \$3,026,341 for community lake restoration projects; \$339,100 for wellhead area management projects; and \$125,000 for urban run-off management.

Beginning in FY2004, \$200,000 per year has been set aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide. Grants are given to units of government, education institutions, and non-profit organizations to carry out projects that will help protect the state's drinking water sources. Ten grants were awarded in both fiscal years 2004 and 2005, and eleven grants will be awarded for FY2006. 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.

#### **Nebraska Environmental Partnerships**

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 (WWAC) Common Preapplication Process in the FY2005 and FY2006. 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.

Grants are provided for up to 80% of the eligible facility plan project cost, but cannot exceed \$12,500. Grant awards for FY2005, totaling \$125,000, were allocated to 10 communities: Bancroft, Broadwater, Concord, Lodgepole, Lyons, Martinsburg, Melbeta, Steinauer, Taylor and Verdigre. Funds have been disbursed to two of the communities.

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.

Grants are provided for up to 90% of the costs for eligible preliminary engineering report services, but cannot exceed \$10,000 per system.

# CHAPTER 11: Staffing

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

Because the department deals with a wide array of complex environmental issues, it is essential to 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 2005.

Staff retention continues to be an important goal for the agency. Staff turnover can impact a lack of 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 annual 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 the activity on specific job categories:

# **Employees Assuming Agency Positions (by Discipline)**

These figures include new hires, promotions, transfers and classification upgrades for a one-year period. Figures for 2005 are from October 1, 2004 through September 30, 2005.

		1.			, ,			100			
	95	96	97	98	99	00.	01	02	03	04	05
Director/Deputy Director/Assistant Director/ Division Administrator	1	0	0	1	4	0	0	0	0	1	0
Section Supervisor	1	3	0	0	0	3	0	2	0	0	0
Unit Supervisor/Records Manager	0	3	1	3	0	4	3	0	2	2	1
Human Resources	2	0	1	8	7	6	3	0	0	1	0
Federal Aid Administrator, Financial Assurance Coordinator	0	1	0	1	2	0	0	2	1	2	2
Clerical/Accounting	3	4	8	9	.7	0	4	5	1	5	0
Information Technology/Public Information/Research Analyst	5	0	3	2	2	3	1	0	1	1	1
Attorney	0	0	0	0	1	0	0	1	0	1	3
Environmental Engineer	7	3	4	9	6	5	3	3	2	2	6
Field Data Specialist	0	0	0	0	0	0	0	0	0	0	0
Compliance Specialist	5	1	1	4	7	0	0	0	0	1	0
Programs Specialist	9	7	9	21	5	12	6	6	7	2	12
Geologist, Groundwater	1	1	0	2	0	0	1	1	1	4	1
Environmental Assistance Coordinator									1	1	0
TOTALS	36	23	27	60	41	33	21	20	16	23	26

# CHAPTER 12:

## Financial Assurance Requirements

Section 81-1505(21) provides the statutory authority for the Department to develop, and the Council to adopt as regulations, requirements for all applicants to establish proof of financial responsibility. The requirements pertain to all new or renewal permit applicants regulated under the Nebraska Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act, unless a class of permittees is exempted by the Council. In addition, section 81-15,100 of the Low-Level Radioactive Waste Disposal Act provides the authority for the Council to adopt financial assurance requirements. 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.

Facility Name	Location	Permit Type	Initial Date		Obligated Amount	D	Current Amount emonstrated	FA Mechanism	Guarantor
	Municipa	Solid Waste Dis	sposal Areas (	MS	SWDA)*, Sanit	ary	Landfills (Sa	anitary LF)**	
Alliance Landfill	Alliance	MSWDA	03/17/94	\$	2,580,686	\$	1,064,008	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	\$	118,440	\$	118,440	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$	2,674,420	\$	2,674,420	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	04/09/96	\$	2,926,885	\$	1,161,744	Trust Fund	Cornerstone Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$	10,338,952	\$	10,338,952	Surety Bond	Evergreen Ntl. Indemnity
G & P Dev Landfill	Milford	MSWDA	07/01/96	\$	2,852,938	\$	1,661,996	Trust Fund	Cornerstone Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$	582,561	\$	377,269	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$	3,921,581	\$	1,711,917	Trust Fund	Security Natl. Bank
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$	6,300,928	\$	1,952,628	Enterprise Fund	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	08/12/96	\$	3,238,395	\$	1,251,272	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$	259,200	\$	21,251	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$	2,196,250	\$	880,776	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$	2,114,679	\$	2,114,679	Performance Bond	Evergreen Ntl. Indemnity
Kearney Landfill	Kearney	MSWDA	03/31/94	\$	1,440,618	\$	1,441,618		Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	\$	1,150,700	\$	336,645	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$	987,500	\$	480,811	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$		\$	719,447	Enterprise Fund	Lexington Area SW Agen
Lincoln Bluff Road	Lincoln	MSWDA	04/01/96	\$		\$	12,670,763	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$			406,299	Trust Fund	Citizens Bank & Tr St. Pa
McCook Landfill	McCook	Sanitary LF	03/04/96	\$	816,368	\$	78,650	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	\$	316,327	\$	69,326	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	07/01/96	\$		\$	373,440	Trust Fund	Cornerstone Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$	9,831,026	\$	2,616,831	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$	17,368,853	\$	17,368,853	Surety Bond	Evergreen Ntl. Indemnity
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$	6,132,764	\$	6,185,203	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$	2,312,130	\$	411,036	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	9/25/97	\$	1,200,005	\$	294,878	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	\$		\$	221,740	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	\$	26,266	\$	9,265	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$	1,809,242	\$	645,632	Enterprise Fund	City of York
*MSWDAs are landfills that are op **Sanitary LFs are closed facilities		ure monitoring and/or		en	nolition I andfi	ille			
Abe's Trash Service	Blair	Const./Demol.	03/30/98	\$			114.075	Escrow Account	Donle of Done !
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$					Bank of Bennington
	Omaha	Const./Demol.	12/02/99	\$				Enterprise Fund	City of Alliance
Anderson Excavating	Omana	Const./Demoi.	10/19/98	Þ	211,826	Þ	211,826	Surety Bond	Employers Mutual Cas. Co

NDEQ FINANCIAL ASSURANCE											
Facility Name	Location	Permit Type	Initial Date		Obligated Amount	D	Current Amount emonstrated	FA Mechanism	Guarantor		
Amold C & D	Arnold	Const./Demol.	07/24/00	\$	14,988	\$	5,195	Enterprise Fund	Village of Arnold		
Bud's Sanitary Service	Newman Grove	Const./Demol.	06/01/97	\$	30,838	\$	29,650	Letter of Credit	First Natl. Bank Newman Gr		
Butler County	David City	Const./Demol.	06/01/97	\$	177,448	\$	177,448	Surety Bond	Evergreen Ntl. Indemnity Co.		
Gage County	Beatrice	Const./Demol.	02/23/98	\$	180,726	\$	180,726	Letter of Credit	1st Natl. Bank, Beatrice		
Hawkins Construction	Omaha	Const./Demol.	3/9/96	\$	65,428	\$	65,428	Surety Bond	Fireman's Fund Ins. Co.		
KGP Services	Norfolk	Const/Demol.	11/06/03	\$	36,103	\$	36,103	Escrow Account	Elkhorn Valley Bank & Trust		
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$	34,792	\$	13,765	Enterprise Fund	City of Kimball		
Lexington C & D	Lexington	Const./Demol.	09/30/98	\$	138,656	\$	52,302	Enterprise Fund	Lexington Area SW Agency		
Limited Fill	Omaha	Const./Demol.	04/30/97	\$	68,452	\$	65,077	Trust Agreement	First Natl. Bank, Omaha		
Lincoln North 48th St.	Lincoln	Const./Demol.	04/01/96	\$	1,086,058	\$	1,086,058	Financial Test	City of Lincoln		
Loup Central C & D	Elba	Const./Demol.	04/09/96	\$	21,629	\$	10,161	Trust Fund	Citizens Bank & Tr. St. Paul		
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$	121,967	\$	121,967	Financial Test	NPPD		
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$	52,122	\$	15,187	Enterprise Fund	City of O'Neill		
PAD LLC	Hastings	Const./Demol.	06/05/02	\$	134,628	\$	134,628	Letter of Credit	Five Points Bank		
Plainview C & D	Plainview	Const./Demoi.	09/26/00	\$	23,721	\$	23,052	Enterprise Fund	City of Plainview		
Schmader C & D	West Point	Const/Demol.	05/05/04	\$	97,028	\$	97,028	Letter of Credit	Charter West Ntl Bank		
Sidney C & D	Sidney	Const./Demol.	11/23/99	\$	90,839	\$	21,974	Enterprise Fund	City of Sidney		
SW NE Solid Waste Agencyli	mperial	Const./Demol.	06/01/01	\$	36,922	\$	7,438	Enterprise Fund	City of Imperial		
Stewart C & D	Indianola	Const./Demol.	07/25/00	\$	69,000	\$	14,984	Trust Agreement	Adams Bank & Trust		
	Foss	I Fuel Combust	ion Ash (FFC	À), lı	ndustrial Was	ste	Landfills, Mo	onofills			
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$	5,194,129	\$	5,194,129	Financial Test	Ash Grove		
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$	2,798,046	\$	2,798,046	Insurance Policy	Steadfast Insurance Co.		
Fremont Utilities	Fremont	FFCA	05/28/96	\$	226,073	\$	340,000	Enterprise Fund	City of Fremont		
Hastings Utilities	Hastings	FFCA	2/1//01	\$	1,118,490	\$	231,014		City of Hastings		
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	\$	987,634	\$		Financial Test	NPPD		
NPPD Sheldon Station 3	Sheldon	FFCA	04/01/95	\$	116,233	\$	116,233	Financial Test	NPPD		
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	\$	419,499	\$	419,499	Financial Test	NPPD		
OPPD NE City	NE City	FFCA	04/04/95	\$	3,880,700	\$	3,880,700	Financial Test	OPPD		
OPPD North Omaha	Omaha	FFCA	04/04/95	\$	960,020	\$	960,020	Financial Test	OPPD		
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$	254,200	\$	254,200	Financial Test	OPPD		
Platte Generation	Grand Island	FFCA	08/25/97	\$	179,878	\$	179,878	Enterprise Fund	City of Grand Island		
Waste Management	Bennington	Indus. Waste	04/01/02	\$	2,718,830	\$	2,718,830	Surety Bond	Evergreen Ntl. Indemnity Co.		
		Transfer Statio	ns, Material Re	eco,	very Facilities	s, C		<del></del>			
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	\$	3,494	\$	3,494	Letter of Credit	First Natl. Bank, NG		
Central Sanitation	Cenral City	Transfer Station	07/02/03	\$	7,635	\$			Capitol Indemnity Corp		
Custer Transfer Station	Broken Bow	Transfer Station	06/27/94	\$	6,867	\$		Letter of Credit	NE State Bank & Trust		
Fremont CRD, Inc.	Fremont	Transfer Station	04/09/96	\$	12,875	\$		Surety Bond	American Guar & Liability Co		

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	NDEQ FINANCIAL ASSURANCE											
Facility Name	Location	Permit Type	Initial Date		Obligated Amount		Current Amount emonstrated	FA Mechanism	Guarantor			
King Transfer Station	Walthill	Transfer Station	04/02/96	\$	583	\$	590	Escrow Account	First Natl. Bank, Walthill			
J & J Sanitation Inc.	Ord	Transfer Station	09/22/00	\$	6,813	\$	6,816	Surety Bond	Capitol Indemnity Corp			
Sanitation Systems	Wilber	Transfer Station	07/03/03	\$	10,955	\$	10,955	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. Inc.	Wahoo	Transfer Station	07/02/03	\$	5,372	\$	5,372	Surety Bond	Capitol Indemnity Corp			
Waste Management of NE	Bridgeport	Transfer Station	08/15/03	\$	6,980	\$	6,980	Surety Bond	Evergreen Ntl. Indemnity Co.			
Waste Management of NE	Gering	Transfer Station	08/15/03	\$	14,740	\$	14,740	Surety Bond	Evergreen Ntl. Indemnity Co.			
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$	24,530	\$	24,530	Escrow Account	US Bank Ntl Assoc			
Butler County MRF	David City	Mat. Recovery	08/15/03	\$	6,274	\$	6,274	Surety Bond	Evergreen Ntl. Indemnity Co.			
Tracy MRF	York	Mat. Recovery	04/01/03	\$	3,982	\$	3,982	Letter of Credit	Cornerstone Bank			
Doernamann Const. Co.	Clarkson	Compost	12/15/03	\$	79,499	\$	79,499	Letter of Credit	Clarkson Bank			
RCRA Closure and RCRA Post-Closure (RCRA PC)												
Agromac International	Gering	RCRA PC	09/29/87	\$	10,771	\$	10,771	Letter of Credit	Platte Valley Ntl. Bank			
Behlen Manufacturing Co.	Columbus	RCRA PC	08/30/94	\$	310,225	\$	310,225	Financial Test	Behlen Mfg. Co.			
Clean Harbors Technology	Kimball	RCRA Closure	05/10/95	\$	10,148,553	\$	10,148,553	Insurance Policy	Steadfast Insurance Co.			
Curtis Metals	Curtis	RCRA PC	05/07/87	\$	204,000	\$	204,000	Corporate Guarant	Burlington Northern			
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$	902,065	\$			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			
Radio Engineering Industries	Omaha	RCRA Closure	06/02/05	\$	9,500	\$	9,500	Escrow Account	US Bank			
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	\$	164,057	\$	164,057	Insurance Policy	Indian Harbors Insurance Co.			
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$	368,742	\$	368,742	Insurance Policy	Indian Harbors Insurance Co.			
Sophir Morris Paint	Omaha	RCRA Closure	10/07/05	\$	13,500	\$	13,500	Surety Bond	Travelers Casualty & Surety			
Telex Communications	Lincoln	RCRA PC	10/27/88	\$	236,450	\$	236,450	Letter of Credit	Wachovia Bank			
Valmont Industries	Valley	RCRA PC	10/30/85	\$	900,000	\$	900,000	Financial Test	Valmont Industries			
Van Diest Suppy Company	McCook	RCRA Closure	12/15/03	\$	30,500	\$	30,500	Letter of Credit	1st State Bank Webster Cty IA			
		Ur	nderground Inj	ect	ion Control (l	JIC	)	-	* · · · · · · · · · · · · · · · · · · ·			
Crow Butte Resources, Inc.	Crawford	UIC	· · · · · · · · · · · · · · · · · · ·	\$	16,033,706	\$	16,033,706	Letter of Credit	Royal Bank of Canada			
			Scrap	Tire	e Sites							
ABC Tire LLC	Kansas C KS	Scrap Tire	10/25/00	\$	10,000			Surety Bond	Federated Mutual, Inc.			
Butler County Landfill	David City	Scrap Tire	05/16/97	\$	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			
Don's New & Used Tires	Lincoln	Scrap Tire	03/13/03	\$	5,000		5,000	Surety Bond	Old Republic Surety Co.			
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			

NDEQ FINANCIAL ASSURANCE								
Facility Name	Location Permit Type		Initial Date	Obligated Amount		Current Amount Demonstrated	FA Mechanism	Guarantor
& 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.
ee Pester	Lincoln	Scrap Tire	07/01/96	\$ 5,	000	\$ 5,000	Surety Bond	Old Republic Surety Co.
eo Porter	Oshkosh	Scrap Tire	06/09/00	\$ 5,	000	\$ 5,000	Letter of Credit	Nebraska 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	\$ 40,	625	\$ 40,625	Letter of Credit	Commercial Federal, Omaha
Fire 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
Fire Town, Inc.	Leavenworth	Scrap Tire	03/15/96	\$ 5,	000	\$ 5,000	Letter of Credit	First Commercial Bank