Nebraska Department of Environmental Quality

Annual Report to the Legislature 2004

Submitted December 1, 2004

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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 FY05 of approximately $78.9 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	$34.8 million	44.1 %
State General Funds	4.1 million	4.5 %
Cash Funds	26.4 million	38.7 %
Trust Funds	10.0 million	12.7 %

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 FY04.

This chapter provides: 1) a brief description of agency goals and related activities; 2) agency activities and significant issues for fiscal year 2004; 3) significant legislation of 2004 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 annually 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. In FY2004, goals efforts resulted in a number of specific action items aimed at improving department effectiveness.

II. Significant Activities/Issues, Fiscal Year 2004

Among the significant issues that have occurred in 2004 are:

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 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, 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. NDEQ is working with other state agencies and the University of Nebraska to further develop toxic algae monitoring and notification strategies for 2005.

Response to tornado aftermath – Tornadoes swept through Nebraska May 22, 2004, causing extensive damage, particularly in the town of Hallam. Primary emergency response was conducted by local emergency agencies, with state support from the Nebraska Emergency Management Agency, the Nebraska State Patrol, and numerous others. NDEQ provided

assistance in the state's coordinated response to this situation, and provided advice regarding cleanup and disposal of debris. NDEQ staff members who are involved in Homeland Security issues provided staffing assistance for several weeks. The experience of this disaster has provided greater knowledge to the agency in defining the agency's role in disaster situations. The lessons learned are being applied to the agency's and the state's Homeland Security response plans.

Ethanol permitting – Due to legislation that provided financial incentives to new ethanol plants that were in operation by June 2004, the NDEQ reviewed an unusually large number of permit applications for ethanol facilities over the past two years. Because of this upswing, it is expected that there will be increased oversight and compliance activities related to ethanol facilities for 2005.

Grand Island groundwater contamination – In September 2004, the U.S. Environmental Agency announced than the Parkview Well area of Grand Island was one of 14 sites nationally proposed for the Superfund National Priorities List. The Parkview Well area is in the southwest part of Grand Island. Groundwater contamination was discovered in private drinking water wells during the summer of 2003 as NDEQ conducted an investigation in the vicinity. Local entities provided alternative water supplies for the affected public and the investigation was expanded to determine the extent of the problem. Federal, state, and local officials are coordinating efforts to further define the area impacted, determine the sources of contamination, and develop a clean up plan.

Low-Level Radioactive Waste settlement – On Aug. 17, 2004, a court-approved settlement was reached between the State of Nebraska and the Central Interstate Compact Commission, relating to a federal civil rights lawsuit (see Chapter 8). As a result of this agreement, the agency plans to close out its Low-Level Radioactive Waste Program activities. The Department has not requested additional general funds to operate the program. Current Low-Level Radioactive Waste program staff have assumed other duties in the agency.

Records Requests -- The agency continues to provide increasing assistance to the public through public records and internet requests. In FY2004, the Records Management Unit responded to 1298 public records requests, and 877 internet requests were received through the agency web site's e-mail feedback feature.

Report on the Environment – The agency is developing a document, separate from this Annual Report to the Legislature, that will provide the public with an overview of Nebraska's environment. This document will provide a general assessment of environmental conditions in different regions of the state, and rankings on various aspects of environmental quality. The document will be issued in 2005.

III. Legislation in 2004

Two pieces of legislation passed in 2004 which had a significant impact on the agency were:

LB 449 –This legislation establishes permit application fees for air quality construction permits required by regulations adopted by the Environmental Quality Council, ranging from $250 to $3,000 for facilities emitting specified quantities of air pollutants described in the bill. The application fee shall be based on potential to emit as defined by regulation.

LB 449 amends the Remedial Action Plan Monitoring Act to provide additional benefits, including liability protection, to participants in the state's voluntary cleanup, which are made available to acceptable state programs under the 2002 federal Small Business Liability Relief and Brownfields Revitalization Act. The legislation incorporates minimum federal criteria providing opportunities for

public participation and ensuring enforceability of cleanup agreements. It authorizes the adoption of rules and regulations and clarifies application contents, remedial action plan requirements, and procedures for NDEQ review and oversight.

The legislation also allows a registered environmental health specialist registered in Nebraska to site, install, construct, repair, and inspect a private onsite wastewater treatment system. It authorizes the director of NDEQ to delegate by contract the certification and registration program to a local government that has adopted a program at least as stringent as the state program.

LB 916 – This legislation amends the Livestock Waste Management Act and authorizes adoption of regulations no less stringent than the new federal concentrated animal feeding operation rules adopted under the Clean Water Act. It adds definition of animal feeding operations (AFOs) replacing animal units and class designations. It substitutes a construction approval process for construction permits. NPDES permits are required for all major AFOs and other AFOs that have a significant threat of discharge to waters of the state. The legislation describes acts that constitute violations of the law and provides exemption for small operations of a certain size. It sets inspection fees and establishes a new annual operating fee beginning March 1, 2006. The legislation includes a "bad actor" provision, modified from current law, that allows NDEQ to reject an application or revoke or suspend a permit or construction approval for specified reasons. It modifies various notice and review times.

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 (Staff for additional implementation)

State Legislation/Not Federally Mandated

- Clean Air Act (Staff to address permit backlog)
- Clean Water Act (Staff to address permit backlog)

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

2004 (217 FTE)
State Legislation/Federally Mandated
- Livestock Waste Management Act

State Legislation/Not Federally Mandated
- Air Quality Permit Fees

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 direction, 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.

In addition, 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 the Legislature's mandates.

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 conducts Environmental Quality Council hearings.

The Deputy Director of Programs coordinates the various agency programmatic activities and serves as the primary contact on national issues.

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 2003, the Director issued 29 administrative orders. Eighteen civil judicial cases were settled or decided by a court, penalties and other awards of $1,005,295 were imposed. In several cases, additional environmentally beneficial projects with an estimated dollar value of $204,886 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. During Fiscal Years 2003 and 2004, the Division provided significant time to the implementation of the Nebraska Information System (NIS) project.

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 with the EPA. A significant percentage of staff time is dedicated to meeting complex tracking requirements of the federal government. This section presently has six staff members.

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 receipts of Title V 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 terminating 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 files. This includes coordinating the conversion of programs' files to the computerized database called the Integrated Information System (IIS) and maintaining the files after conversion. Each document is assigned a barcode number and cataloged into the computerized database. The barcode number is scanned into the IIS and the following information is assigned to the document identification number: document type, document description, originator, recipients, date the document was received by the agency, and the date the document was written. There are approximately 102,310 agency files centralized in the Records Management Unit. Centralizing the agency's records has increased accessibility to agency files.

The Records Management Unit coordinates responses to requests from the public, private consultants, and regulated entities to review file information about specific property and projects. These public records requests involve a variety of topics, including landfills, leaking underground storage tanks, hazardous waste sites, and file history of specific industries. The Unit responded to nearly 1,300 public records requests during FY2004.

The Records Management Unit also provides support services to the agency by distributing the agency's incoming and outgoing mail, ordering supplies and equipment and providing staffing to 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 the address below. If you wish to receive future issues of the newsletter, please send a request to be placed on the Environmental Update mailing list to: NDEQ Public Information Office, 1200 N St., Box 98922, Lincoln, NE 68509-8922.

In an effort to reduce production costs and paper waste relating to the newsletter, NDEQ has established an e-mail notification and an electronic link to the newsletter on our web site. About two-thirds of our newsletter readership now receive e-mail notification, rather than having the newsletter mailed to them. If you wish to receive electronic notification and a link to the newsletter whenever a new edition is placed on our web site, please write to the address above, or send an e-mail to moreinfo@ndeq.state.ne.us Please include your name and e-mail address.

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

The Public Information Office and the Information Technology Section have been working together to improve and expand the agency's web site. The site provides a wide array of information relating to the agency, including:

Rules and Regulations	News Releases	Calendar of Events
On-line newsletter	Program information	Featured articles
Fact Sheets	Guidance Documents	Forms
Public Notices		

In 2005, the agency intends to implement an on-line complaint and notification system on the web site. It will be designed to provide the public and regulated industry an electronic method of submitting complaints and other information to the agency, as well as a tracking system to show how the agency has responded.

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 is utilized to assist with federal grant applications and compliance with grant conditions and requirements. In

addition, the position assists with Requests For Proposals and contract development, management and compliance. This position will also provide outreach for and coordination with agency aid programs.

Funding of Management Services

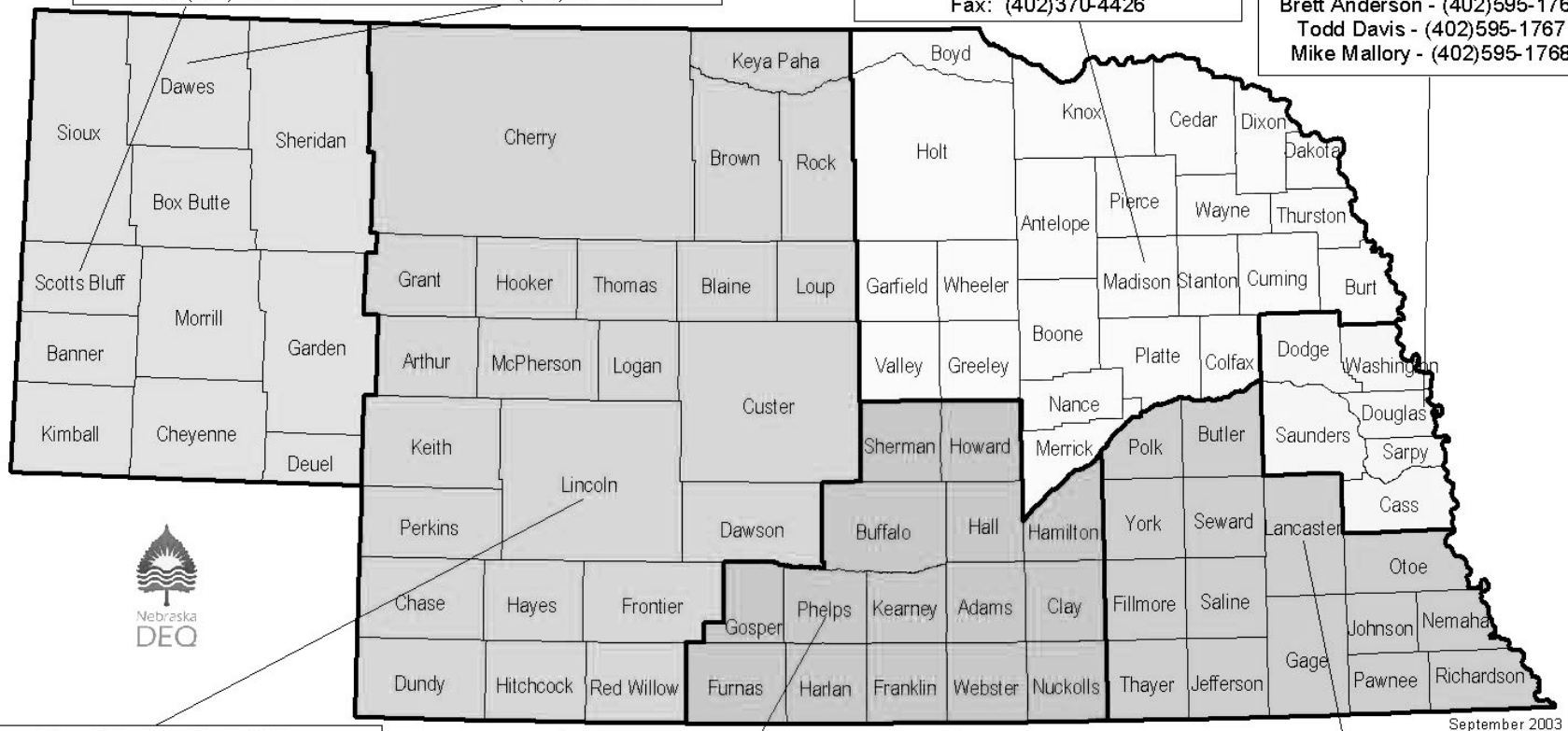
The Management Services Division provides essential administrative and technical support to the Department. Some activities in Management Services are program specific, but many are not. Funding for the Division is provided by two methods: 1) The majority of the staff salaries and activities are funded 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 14 employees in 6 offices around the state. These employees conduct compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency’s Air Quality, Waste Management and Water Quality Divisions. The local field offices enable the agency to provide the public with greater access to NDEQ staff, provide more timely response to citizens and develop a better understanding of local issues because NDEQ staff live and work in the local community.

The public demand on the local field offices has steadily increased over the past year. The number of citizen complaints that were phoned directly into the local NDEQ offices increased by over 50% in the first two quarters of 2004 compared to the same two quarters of 2003. Additionally, the requests from local governments for field office staff participation in locally sponsored environmental education activities increased in 2004. As the strategic plan for the field offices is completed, the public’s increasing demand for NDEQ services on this local level will be carefully considered. The Agency is moving into the fifth year since the expansion of the NDEQ field offices. It is clear that this effort has been successful in its stated goals of greater public access and better understanding of local issues.

Department of Environmental Quality
Main Office and Field Office Sites



September 2003

Panhandle Field Office

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Scottsbluff, NE 69363-1500
John Flint - (308)632-0544
Fax: (308)632-1313

Chadron Office
430 East 2nd Street
Chadron, NE 69337

Dave Carlson - (308)432-6110
Fax: (308)432-6187

Northeast Field Office
214 North 7th Street, Suite 4
Norfolk, NE 68701
Shanelle Grudzinski - (402)370-4424
Mark Henning - (402)370-4425
Fax: (402)370-4426

Eastern Field Office
8901 South 154th Street, Suite 5
Omaha, NE 68138-3621
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Brett Anderson - (402)595-1766
Todd Davis - (402)595-1767
Mike Mallory - (402)595-1768

West Central Field Office
200 South Silber
North Platte, NE 69101
Fax: (308)535-8175

David Dobscha - (308)535-8143
Ron Hines - (308)535-8141
Richard Reimer - (308)535-8142
James Sexson - (308)535-8140

Central Field Office
1308 2nd Street
Holdrege, NE 68949
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Jerry Newth - (308)995-3150
Chris Helms - (308)995-3942
Ron Wunibald - (308)995-3944

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CHAPTER 3:
Environmental Quality Council

To carry out the Nebraska Environmental Protection Act and related statutes, the Environmental Quality Council adopts rules and regulations which set air, water and land quality standards in order to protect the public health and welfare of the state, as well as regulations which guide department activities and regulatory responsibilities. The Governor appoints the director of the Department of Environmental Quality from candidates recommended by the Environmental Quality Council.

The Council has 16 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); an at large member; a professional engineer; and a doctor with knowledge about the health aspects of air, water and land pollution. The Council meets quarterly.

Following are two charts. The first summarizes Council actions during FY2004, the second lists the sixteen council members, by category.

Council Actions

Council Meeting Date	Regulation	Action
September 4, 2003 Lincoln	Title 129 – Nebraska Air Quality Regulations	Approved as amended
	Title 124 – Rules and Regulations for the Design, Operation and Maintenance of On-Site Wastewater Treatment Systems	Approved as amended
	Title 197 – Rules and Regulations for the Certification of Wastewater Treatment Facility Operators in Nebraska	Approved as amended
December 5, 2003 Lincoln	Title 132 – Integrated Solid Waste Management Regulations	EQC voted not to adopt at the 12/5/03 meeting
	Title 136 – Scrap Tire Management Rules and Regulations - Repeal	This hearing was withdrawn from the agenda
March 5, 2004	Title 115 – Rules of Practice and Procedure	Approved as amended
	Title 132 – Integrated Solid Waste Management Regulations	Approved as amended
	Title 136 – Scrap Tire Management Rules and Regulations - Repeal	Repeal approved
June 6, 2004 Omaha	Title 128 – Nebraska Hazardous Waste Regulations	Approved as amended
	Title 129 – Air Quality Regulations	Approved as amended

Council Members

Representing	Council member	Term Expires
Livestock Industry	Robert L. Gottsch Hastings	June 22, 2005
Conservation	Steven G. Oltmans Omaha	June 22, 2007
Ag Processing Industry	Vacant	June 22, 2007
Municipal Government	Vacant	June 22, 2007
Public At Large	Darlene "Shortie" Kiefer Kimball	June 22, 2005
Municipal Government	Michael W. Bair Aurora	June 22, 2005
Labor	Robert Hall Wahoo	June 22, 2005
Agricultural Crop Production	Robert E. Bettger Fairmont	June 22, 2005
Professional Engineer	John T. Baker Scottsbluff	June 22, 2007
Power Generating Industry	Bill Podraza Columbus	June 22, 2005
Chemical Industry	Donald Williams Orchard	June 22, 2007
County Government	Jodi Thompson Imperial	June 22, 2007
Physician	Dr. Janet Bernard North Platte	June 22, 2007
Automotive/Petroleum Industry	Mark Whitehead Lincoln	June 22, 2005
Heavy Industry	Tomas Miller Norfolk	June 22, 2007
Food Products Manufacturing	Vaughn J. Blum Columbus	June 22, 2005

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 planning and development program, and the asbestos program.

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

Permitting Section

Construction Permit Program

The NDEQ has had 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 2003	Applications Received	Applications Processed	Pending June 2004
80	94	98	76

Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). Sources 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.

In 2004, the Legislature passed LB449, which provides the Department the authority to assess construction permit application fees. Fees are fixed based upon the emissions potential of the facility. Application fees will begin being charged in January 2005.

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 2003	Applications Received	Applications Processed	Pending June 2004
152	61	125	88

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. These additional categories include area, mobile and biogenic sources. 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 emissions pay fees per ton of pollutant emitted per calendar year. The maximum fee assessment 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 Air Quality Division’s major industrial source permitting programs.

The rate for 2003 emissions was $41 per ton, a decrease of $10 per ton from 2002. The Department currently does not anticipate the fee rate to significantly change for the 2004 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 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 Program (which is within the Omaha Public Works Department) also provides periodic support for network related activities.

NAAQS have been established for seven pollutants:

- Particulate Matter with a diameter of 10 micrometers or less (PM_{10})
- Particulate Matter with a diameter of 2.5 micrometers or less ($PM_{2.5}$)
- Sulfur Dioxide
- Nitrogen Dioxide
- Carbon Monoxide
- Ozone
- Lead

The National Ambient Air Quality Standards 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 National Ambient Air Quality Standards 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 State Ambient Air Quality Standards are identical to the National Ambient Air Quality Standards 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 (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.

Nebraska's Air Monitoring Network - Summary Description June 2004		
Omaha Metro Area (Douglas and Sarpy Counties) Monitors operated by the Douglas County Health Department		
PM_{10}	5 monitors at 4 sites	
$PM_{2.5}$	9 monitors at 4 sites, including collocated continuous and speciation monitors	
Ozone	3 monitors at 3 sites *	
Carbon Monoxide	2 monitors at 2 sites *	
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 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 30th & Fort Streets has both ozone and a carbon monoxide monitor.		
Lincoln Metro Area Monitors operated by the Lincoln/Lancaster Health Department		
$PM_{2.5}$	2 monitors at 1 site	
Ozone	1 monitor at 1 site	
Carbon Monoxide	1 monitor at 1 site	
Weeping Water	3 PM_{10} monitors at 2 sites 1 $PM_{2.5}$ monitor at 1 site	Operated by NDEQ
Blair	1 $PM_{2.5}$ monitor at 1 site	Operated by DCHD
Cozad	1 PM_{10} monitor at 1 site	Operated by NDEQ
Gothenburg	1 PM_{10} monitor at 1 site	Operated by NDEQ
Grand Island	1 $PM_{2.5}$ monitor at 1 site	Operated by NDEQ
North Platte	1 $PM_{2.5}$ monitor at 1 site	Operated by NDEQ
Scottsbluff	1 $PM_{2.5}$ 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 sites for the study of regional haze Two Sites operated under contracts administered by the NDEQ: Nebraska National Forest In Thomas County Crescent Lake Wildlife Refuge in Garden County One site operated by the Omaha Tribe of Nebraska and Iowa and administered by 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 most problematic areas seem to be compliance with ozone and $PM_{2.5}$ 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 $PM_{2.5.}$ These continuous monitors provide for real-time data that can be used as a basis for the issuance of health alerts (Note: the continuous monitors can be used for the issuance of health alerts, but are not EPA approved to demonstrate compliance with the national ambient air quality standards). Also anticipated is the use of "speciation" monitors that provide information on the make-up of the $PM_{2.5}$ material. Speciation data is useful in helping identify pollutant sources and to make more definitive public health impact analyses. 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.

  Nebraska is fortunate in that all areas of the state, including the Omaha and Lincoln, are in attainment with these standards.

- **Air Quality Monitoring Trends: Air Toxics** - The potential impacts of airborne 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 from 2002 through 2004 (six days of sampling over a two year period). The Douglas County Health Department conducted the monitoring with assistance for Omaha Air Quality Program, EPA, 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:

  - The continued replacement of manually operated PM_{10} monitors that require daily attendance with sequential monitors. The new monitors advance filters automatically and require on-site attendance only once every 14 days; in the interim, their operational status is monitored via telephone modem links to their CPU controllers.
  - The addition of continuous PM_{10} and $PM_{2.5}$ monitors, which can provide data within minutes, rather than the typical one month turn-around time for filter-based monitors. The new monitors require on-site quality assurance checks every two weeks. In the interim, their operational status is monitored via telephone modem links to their CPU controllers.
  - The establishment of new computer networks and databases for downloading, processing and sharing monitoring data, and for documentation of quality assurance activities.

- **$PM_{2.5}$ Designation and Network** – $PM_{2.5}$ is the abbreviation for particulate matter with a diameter equal to or less than 2.5 micrometers. This pollutant is not only emitted from sources, but is also formed in the atmosphere from other precursors (also see *Air Quality Monitoring Trends: Ozone and Fine Particulates* above). These fine particulates are of a greater health concern than larger particulate matter because they can more easily reach the lungs. The NAAQS for $PM_{2.5}$ 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 NAAQS. Nebraska submitted its $PM_{2.5}$ attainment designation recommendation to USEPA in February 2004. Monitoring at three of the initial sites in Chappell, Hartington and Merriman were discontinued in 2002. The $PM_{2.5}$ network now consists of 10 sites: three in Omaha, and one in each of the following communities: Bellevue, Blair, Grand Island, Lincoln, North Platte, Scottsbluff, and Weeping Water

- **PM_{10}** – PM_{10} 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_{10} in 1987. There are currently eight sites: four in Omaha, two 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_{10} are being detected at several sites (See bullets on Broken Bow, Cozad, Gothenburg and Weeping Water below). It is anticipated that a new site will be added in the Weeping Water area in 2005; no reductions in sampling sites are anticipated.

- **Sulfur Dioxide** - Sulfur dioxide 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 (rules promulgated in the mid-1990's lowered the sulfur content of gasoline and diesel fuel). The primary sources of sulfur dioxide are large coal-fired combustion sources, such as power plants.

  Two sulfur dioxide monitors are currently operated in the Omaha metro area. This sulfur dioxide 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, Iowa. This effort demonstrated that the two existing monitors should be relocated to better evaluate the highest sulfur dioxide areas. One monitor was relocated from 28th 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 EPA, and Douglas County Health Department is drafting justification to accomplish this.

- **Ozone** – Ozone is a gas formed in the atmosphere from the photochemical reaction of other pollutant precursors (e.g., 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 is in compliance with the National Ambient Air Quality Standards. Changes in the ozone network are not anticipated.

- **Carbon Monoxide**– Carbon monoxide is a gas that is emitted from combustion sources. There are currently three carbon monoxide monitors in Nebraska: two in the Omaha metro area and one in Lincoln. The data from these monitors is in compliance with the National Ambient Air Quality Standards. Changes in the carbon monoxide network are not anticipated.

- **Nitrogen Dioxide**– Nitrogen dioxide is a gas formed during combustion from the reaction of oxygen and nitrogen in combustion air (i.e., it is not fuel-derived like sulfur dioxide). It is emitted from both mobile and stationary sources. Controls implemented over the last 30

years (e.g., auto emission controls and emission standards enforced through state and local air quality permits) have effectively controlled nitrogen dioxide emissions such that attainment with the National Ambient Air Quality Standards for nitrogen dioxide has been achieved. Thus, nitrogen dioxide monitoring was discontinued within the state, with USEPA approval, in 1984.

- **Lead** – Lead levels at concentrations above the National Ambient Air Quality Standards 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 1980s, 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)** – Nebraska established a state ambient air quality standard for TRS 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 state's TRS standards, except for some brief periods in the spring at Dakota City (47 minutes in April 2003 and 10 minutes in April 2004). In 2003, TRS monitoring was discontinued at two sites (one in Lexington and one 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. As of June 2004, the TRS network 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 Iowa with oversight directly from USEPA.

- **Weeping Water Area** – The limestone mining, processing, and trucking activities in this area are a significant source of PM_{10}. 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 for PM_{10} appeared imminent. In December 2000, the NDEQ and local stakeholders (businesses, government, and interested citizens) initiated a cooperative program to reduce PM_{10} 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_{10} levels remain relatively high and close to the National Ambient Air Quality Standards, which is why EPA is requesting more monitoring be conducted in the area. An additional monitoring site for PM_{10} (i.e., a second site) was established in Weeping Water in October 2003, and a third site, to be located west of Weeping Water, is anticipated in 2005. Both of these sites will be equipped with EPA-approved continuous monitors.

- **Cozad and Gothenburg Areas** – PM_{10} monitors are located in these two communities to address particulate sources, including alfalfa processing facilities located there. These areas remain in compliance with the National Ambient Air Quality Standards. It is anticipated that the monitors in these two areas will remain because, although in compliance, significant PM_{10} levels are being detected.

- **Broken Bow Area** – Monitoring for PM_{10} 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.

Through the Nebraska Environmental Protection Act, the Air Division attempts to obtain compliance with environmental regulations first through voluntary efforts. Voluntary compliance has helped bring about a better working relationship with the regulated community without sacrificing environmental quality. However, enforcement actions are pursued by the agency when compliance issues are serious, chronic, or cannot 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	232	115	44	391
Stack Test Observations	20	6	1	27
Continuous Emission Mon. Audits	4	4	1	9
Complaints	145	66	107	318
Burn Permits Issued	464	26	46	536

Asbestos Program

In July of 2003, the Legislature cut funding for the Division's Asbestos Program. The Division continues to receive notifications for asbestos projects, but does not typically 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	188	135	323
Asbestos Site Inspections	N/A	127	38	165

N/A = Information not available

Planning and Development Program

Over the last year, the 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 for businesses, consultants, and industry representatives. 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 Regional Air Planning Organization (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 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 for 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 citizens 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 on RCRA sites, sampling, and analysis procedures 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.

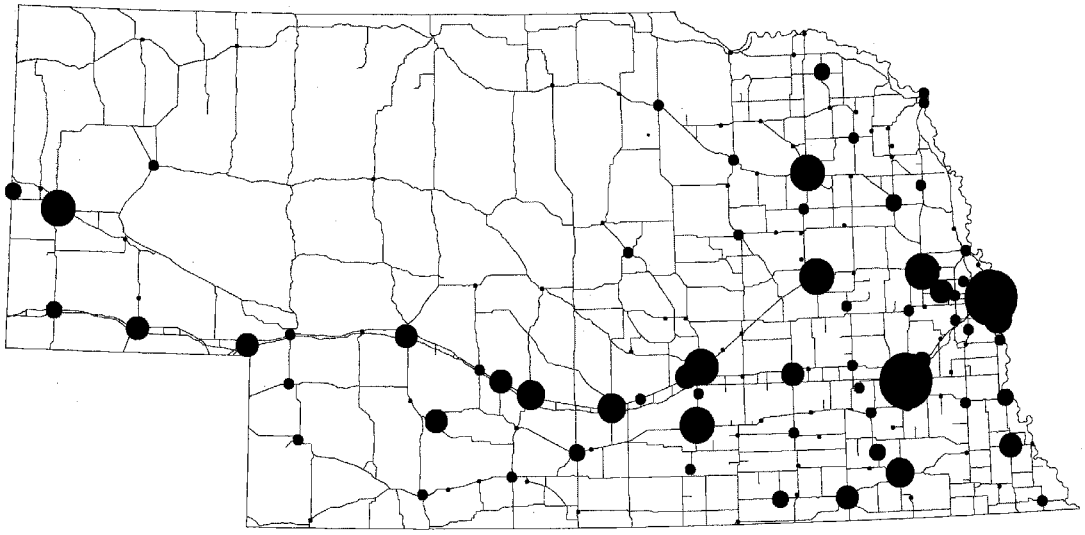
There is one operating hazardous waste storage and treatment facility in Nebraska: the Clean Harbors incinerator near Kimball. This facility has undergone annual performance test burns to demonstrate proper operation since hazardous waste treatment began in 1994. Operational and physical changes at the 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. The federal 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 gain more responsibility in this area.

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

77	Large Quantity Generators (greater than 2200 pounds generated per month)
525	Small Quantity Generators (between 220 and 2200 pounds generated per month)
953	Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
1	Hazardous Waste Incinerator Facility
1	Federal Facility
55	Treatment/Storage/Disposal Facilities (active and inactive)
22	Transportation Facilities
4	Hazardous Waste Storage Facilities

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



● Symbols indicate relative RCRA activity based on hazardous waste generator status and number of facilities.

Summary of Activities

A summary of compliance assistance activities, inspections, and permiting activities completed in FY2004 is provided below.

Activity	FY2004 State	FY2004 EPA
Compliance Assistance		
-On-site visits	4	1
-Direct Assistance Contacts	902	*
-Public Outreach Presentations (total 479 in attendance)	17	*
Inspections		
-Land Treatment Facilities	1	3
-Treatment and Storage Facilities	3	2
-Comprehensive Groundwater Monitoring Evaluations	0	0
-Operation and Maintenance Inspections	1	0
-Facility Self-Disclosures	1	0
-Large Quantity Generators	12	11
-Small Quantity Generators	21	5
-Conditionally Exempt Small Quantity Generators	34	4
-Transporters	0	0

Activity	FY2004 State	FY2004 EPA
Permitting		
-Closure Plans Finalized	3	0
-Permits Issued/Renewed	1	1
-Modifications	13	0
-EPA Corrective Action Orders	0	0
Record Reviews		
-Financial Assurance	29	3

** - Data not available*

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 FY04.

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 eleven 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 U.S. EPA and other federal agencies. NDEQ participates in the Superfund process by serving as a technical support agency to the EPA and as an 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 and geology/hydrogeology and performing a site reconnaissance. The third step is called a site investigation, which involves sampling environmental media. In some situations, the preliminary assessment step and the site investigation step are combined. During the past year, the Department has performed work on five combined preliminary assessments/site investigations and two site investigations.

NPL Site Management Assistance — The Superfund Management Assistance program provides management and technical support to the U.S. 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 in progress toward cleanup 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 Ongoing
Cornhusker Army Ammo Plant (Grand Island)	Hall	X	X	X	X	X	X
Hastings Groundwater Contamination (Hastings)	Adams	X	X	X	X	X	X
Lindsay Manufacturing Co. (Lindsay)	Platte		X	X	X	X	X
Nebraska Ordnance Plant (Mead)	Saunders	X	X	X	X	X	X
Waverly Groundwater Contamination (Waverly)	Lancaster		X	X	X	X	X
10th Street Site (Columbus)	Platte	X	X	X	X	X	X
Cleburn Street (Grand Island)	Hall		X	X	X	X	X
Ogallala Groundwater Contamination Site (Ogallala)	Keith	X	X	X	X	X	X
Bruno Coop Association (Bruno)	Butler	X	X	X	X	X	X
Sherwood Medical (Norfolk)	Madison	X	X	X	X	X	X
Omaha Lead Site (Omaha)	Douglas	X	X				
Parkview Well Site (Grand Island) (Proposed)	Hall						

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. Upon completion of a project, the Department will send a letter indicating whether additional action is needed.

During the last legislative session, the Act was amended by LB 449 to address requirements of the new federal Brownfields Law passed in 2002. The federal Brownfields Law contains requirements that all State voluntary cleanup programs must meet in order to continue to receive federal funding. Meeting these federal requirements will also provide protection from federal enforcement to parties that successfully complete cleanup action through the voluntary cleanup program. The amendments to the Act consisted of including new provisions for meaningful public participation, enforcement of approved voluntary cleanup plans, authorization to adopt rules and regulations, clarification to the oversight and cleanup plan approval process, and clarification to the process for certification of cleanup completion.

This program is currently involved with the development of a comprehensive voluntary cleanup program guidance document that explains the voluntary cleanup process and requirements to assist applicants in successfully completing redevelopment projects. Stakeholder workshops were held across the State to solicit input on the guidance document prior to finalization.

To date, twenty-two sites have utilized the voluntary cleanup program. Currently, seven 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. One site has 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 couple of 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. Currently, thirteen sites are being assessed in Nebraska that consist of four former manufactured gas plants, six formerly used defense sites, one municipal power plant, one former landfill site, and one former park office property.

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	Active	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	Active	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 associated with 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 not 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 initial 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 also regulated by this program.

Permit modification requests are regularly submitted by the 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 also coordinates with the Air Quality Division and assists in monitoring landfill gas at municipal solid waste disposal areas to ensure compliance with Title 129 – Air Quality Regulations. The program staff assists the Air Quality Division in the review of the gas collection and control system designs.

Currently, the Solid Waste Program oversees the following number of facilities:

Total Permitted Facilities in FY 2004

Municipal Solid Waste Disposal Areas (Landfills)	23
Industrial Waste	1
Solid Waste Compost Sites	9
Transfer Stations	39
Materials Recovery Facilities	6
Construction & Demolition Waste Disposal Areas	21
Delisted Waste Disposal Areas	1
Fossil Fuel Combustion Ash Disposal Areas	7
Total	**107**

Summary of Activities: FY 2004

Compliance

Facility Inspections (General)	123
Facility Inspections (Construction)	3
Complaints Investigated	80
Notices of Violation	31

Permitting

New Permits	3
Permit Renewals	25
Major Permit Modifications	1
Transferred Permits	0
Public Hearings	3
Financial Assurance Reviews	229

Financial Assurance and Fees

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

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

Waste Tire Management Program

The waste tire management program requirements are found in NDEQ Title 136 – Waste Tire Management Rules and Regulations. The purpose of this program is to ensure the proper management of waste tires in the State of Nebraska. The regulations provide the criteria for the management of waste tires, which are banned from land disposal in Nebraska.

The program regulates waste tire haulers, collectors, processors, and collection sites through the issuance of permits. Through the annual reports required by the permits and inspection activities, the program also ensures that tires are stored properly and that financial assurance funds are available for clean up in the event that a collection site is abandoned. The program also monitors the abatement of waste tire piles that existed before 1997, and illegal waste tire piles that have been created since then.

The 2003 Legislature passed LB143, which became effective August 31, 2003. This statute eliminated the permitting program for waste tire processors, collectors, and collection sites, but retained the permitting program for waste tire haulers. The law provides that waste tires will be regulated under the Integrated Waste Management Act. The program has been in the process of revoking the processor, collector, and collection site permits as these permits are no longer required. The program also recommended changes to Title 132-Integrated Solid Waste Management

Regulations to incorporate the new requirements established by LB143. At the March 2004 Environmental Quality Council meeting, the Council approved amendments to Title 132. When the regulations become effective, the program will reissue the hauler permits under the newly revised regulations. In addition,Title 136 will be repealed when the amendments to Title 132 become effective.

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, and for proper use of waste tire bales. Direct financial assistance was also available through the Waste Reduction and Recycling Incentives Grant program that is described later in this chapter.

Waste Tire Permit Totals, FY2004

Haulers	27
Compliance	
Notices of Violation	1
Permitting	
New Permits	3
Permit Renewals	4
Transferred Permits	0
Terminated	17

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.

The 2003 Legislature passed LB143, which became effective August 31, 2003. This statute eliminated the permitting program for waste tire processors and collection site owners, but retained the permitting program for waste tire haulers. The law provides that waste tires will be regulated under the Integrated Waste Management Act.

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:

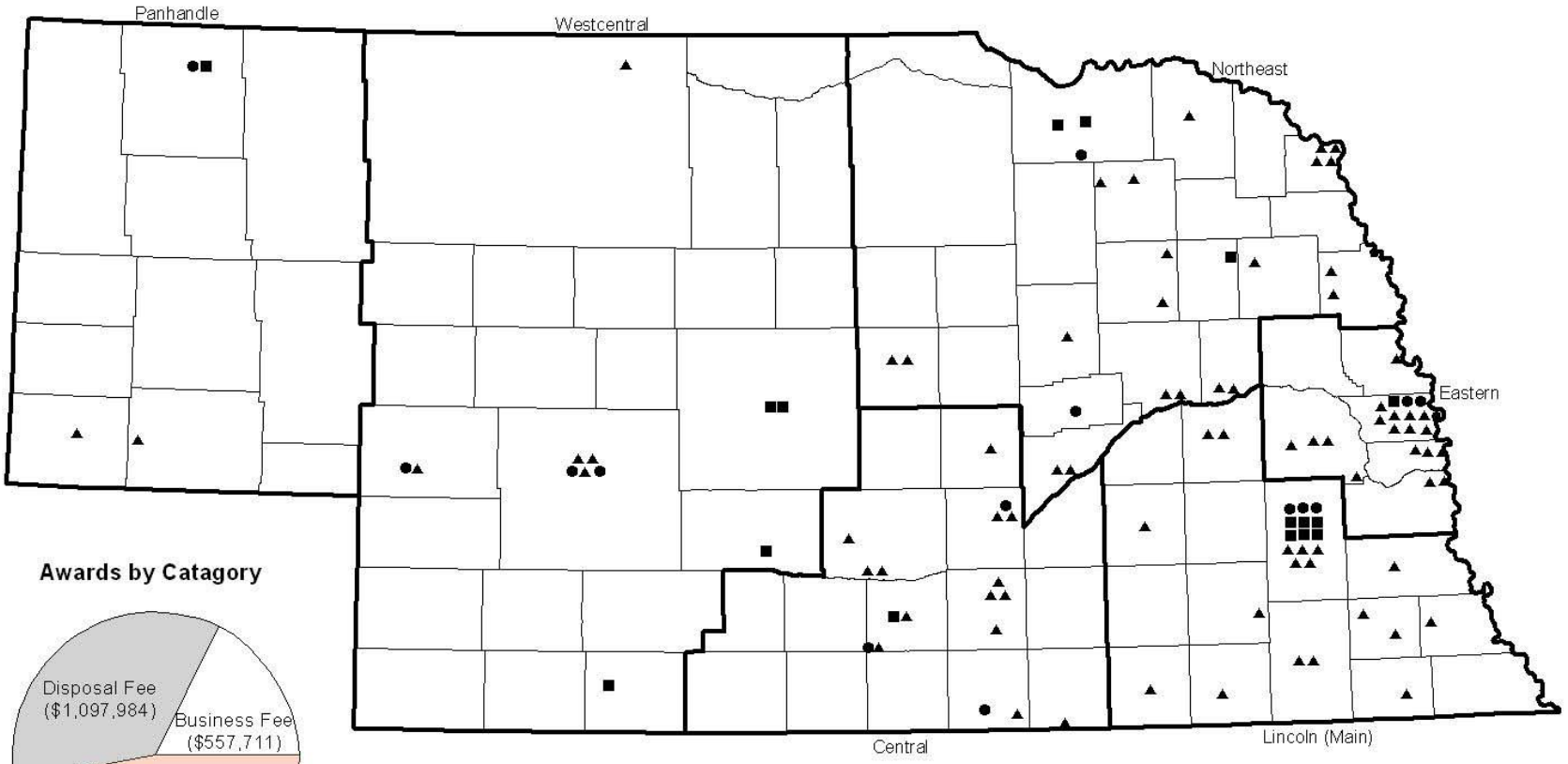
- A business fee on sales of tangible personal property, which generates about $700,000 annually.
- A $1 per tire fee on the retail sale of new tires in Nebraska, which generates about $1.6 million annually;
- Fifty percent of the $1.25 per ton disposal fee on solid waste disposed of in permitted landfills, 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 2004, the Department awarded $3,130,288 in the Waste Reduction and Recycling Incentive Grants Program to one hundred seventeen programs. Fourteen of these grants were awarded in the Business Fee category ($557,711), sixteen were awarded from the Disposal Fee ($1,097,984) category, and eighty-seven received grants from the funds ($1,474,593) 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
2004 Grant Awards



Awards by Catagory

■	Disposal Fee	$1,097,984	16 grants, including 1 statewide and 6 regional
●	Business Fee	$557,711	14 grants, including 1 statewide and 1 regional
▲	Tire Fee	$1,474,593	87 grants, including 7 regional
	Total	$3,130,288	117 grants

October 2004

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.

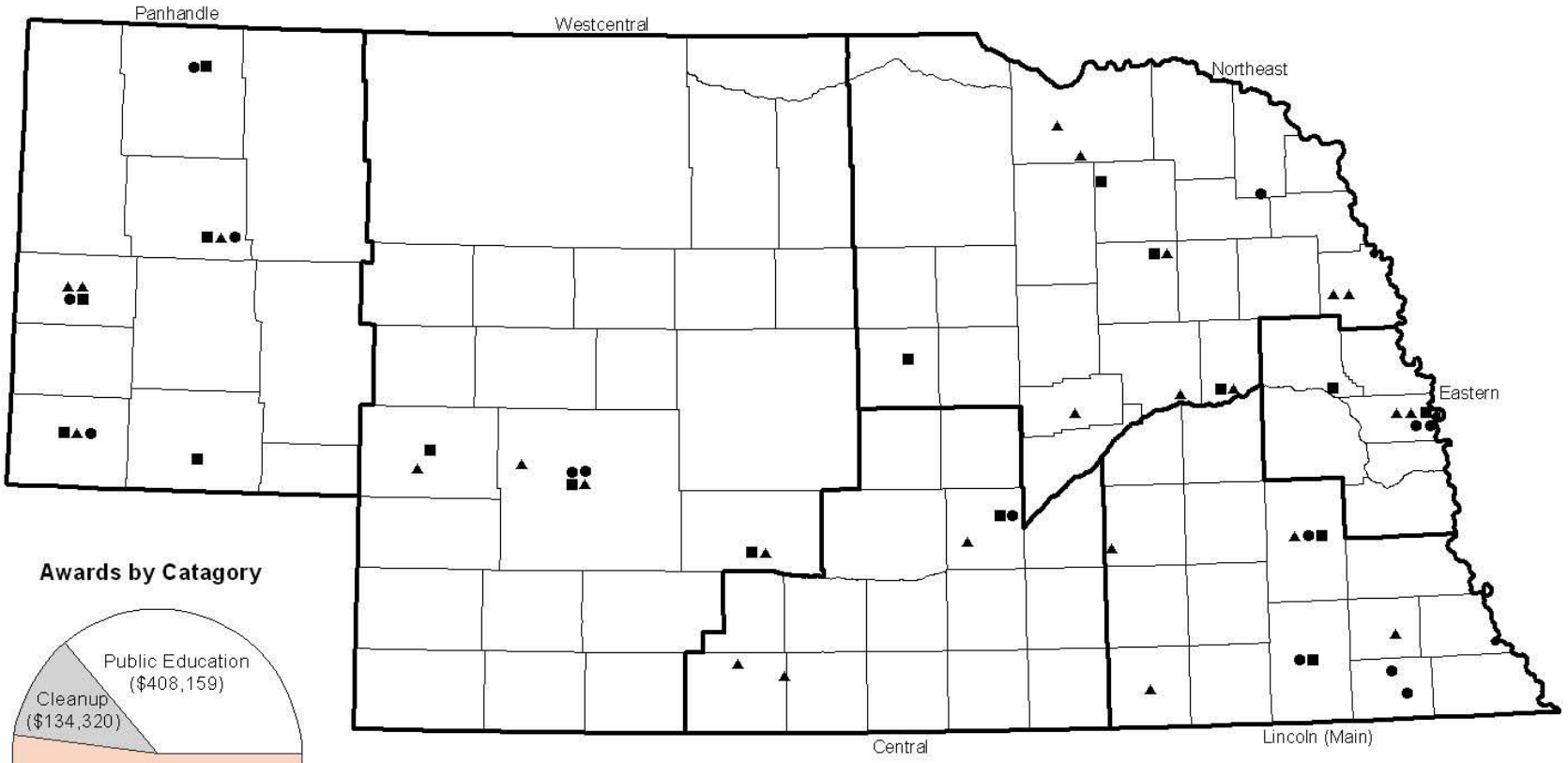
The annual litter fee is imposed on products in the following categories:

- 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 chart for 2004 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	38%	17	$408,159	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	15%	15	$134,320	Litter cleanups of public highways, waterways, recreation lands, urban areas, and public places.
Recycling	47%	24	$590,680	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%	56	$1,133,159	

Litter Reduction and Recycling Grant Program
2004 Grant Awards



Awards by Catagory

■	Public Education	$408,159	17 grants, including 2 regional
●	Cleanup	$134,320	14 grants
▲	Recycling	$590,680	25 grants, including 1 statewide and 1 regional
	Total	$1,133,159	56 grants

October 2004

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 $120,000 is available annually.

During fiscal year 2003-2004, $103,022 was reimbursed to political subdivisions for the cleanup of illegal dump sites. A total of seven political subdivisions received funding through the program. This included five counties and two 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 which 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 $79,297 in rebates were awarded in fiscal year 2003-2004.

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

DEQ'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 will allow evaluation of all petroleum release sites based on the risk they pose to human health. Those that pose no risk will be closed; those that pose significant risk will be prioritized for further work. For the past five years, the program has been initiating several new investigations each month to collect information needed for Tier 1, the first step in the RBCA process. The plan is to investigate additional sites each month until eventually the information necessary for a RBCA Tier 1 evaluation has been collected at all sites. Sites that fail Tier 1 are activated for Tier 2, the next step in the RBCA process.

Since June 1999 through the end of September 2004, 1,246 Tier 1 site investigations have been initiated. Of the 1,123 Tier 1 field investigations completed thus far, 744 (66%) were closed, and 379 (34%) were determined to need a more detailed Tier 2 investigation. Of the 1,263 sites that have completed a Tier 1 or Tier 2 investigation, 139 (12%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater. Since April 2002, 239 Tier 2 investigations have been initiated; out of the 140 completed by September 2004, 105 (75%) 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 over $10 million annually. As of June 30, 2004, a total of $81,926,184 has been disbursed since the program began. During the past year, DEQ reimbursed $4,272,317 to 180 active sites and an additional $2,309,544 to 194 Tier 1 sites.

The following list of 17 sites, 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.

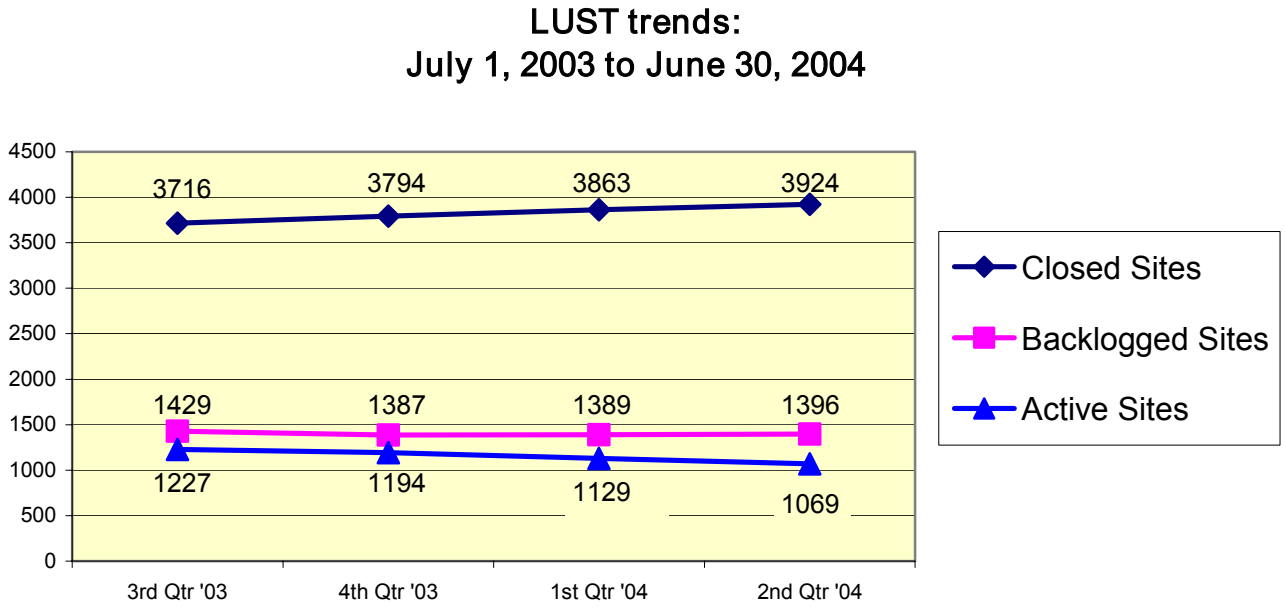
Site name	City	Reimbursed amount (as of June 30, 2004)	Site Status (as of June 30, 2004)
BURLINGTON NORTHERN RR	ALLIANCE	$975,000.00	Active
KONECKY OIL	MEAD	$975,000.00	Active
BURLINGTON NORTHERN RR	ALLIANCE	$972,578.98	Active
ELKHORN VALLEY COOP	SNYDER	$953,516.14	Active
BURLINGTON NORTHERN & SF	MC COOK	$943,998.71	Active
PETERSON OIL CO INC	DAVENPORT	$890,079.65	Active
COOP FIRTH	FIRTH	$872,965.96	Active
GORDON AIRPORT AUTHORITY	GORDON	$865,512.06	Closed
TOMAHAWK TRUCK STOP	NORTH PLATTE	$832,188.24	Active
CORNER SERVICE	BANCROFT	$799,126.41	Active
NEITZEL OIL CO.	SPRINGFIELD	$777,500.62	Active
DANKERTS INC.	CHAMBERS	$718,224.90	Active
HENKEL OIL CO	NORFOLK	$696,428.86	Active
KANEB PIPELINE	NORFOLK	$677,070.76	Active
KLEPPER OIL	DU BOIS	$672,529.92	Closed
AMERITAS INVESTMENT CO	LINCOLN	$672,001.37	Active
WHITEHEAD OIL, 33RD & A	LINCOLN	$633,757.79	Active

Responsible persons are able to perform voluntary remedial action prior to DEQ'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 2004, 122 suspended or backlogged leaking underground storage tank (LUST) sites have been closed based on voluntary submittals.

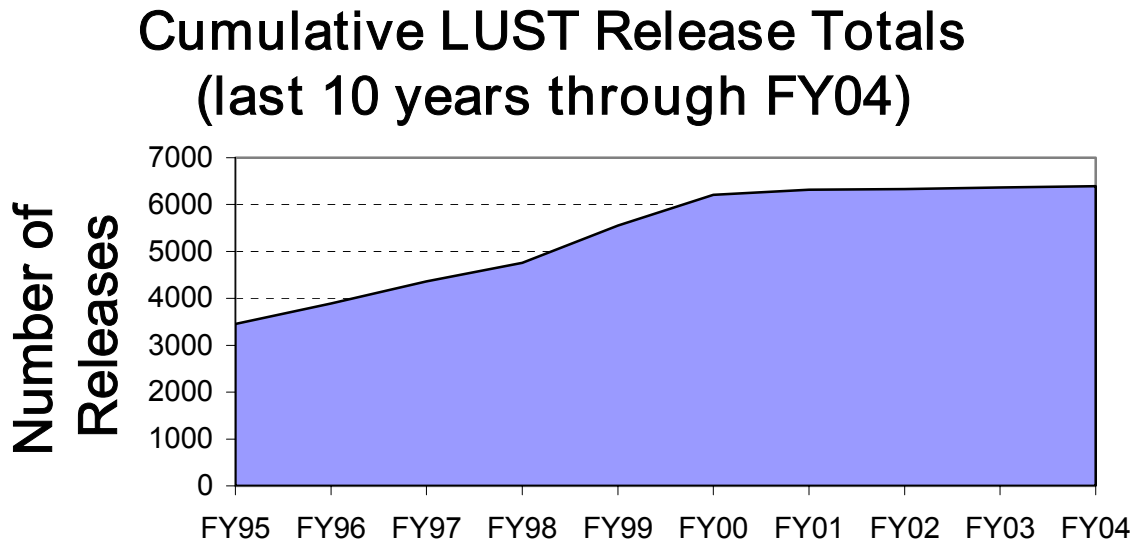
As of September 2004, there were 216 orphan sites in some stage of investigation/cleanup. There were also 640 orphan sites waiting on the inactive list on July 30, 2004. DEQ uses federal and state money for investigation and cleanup of these sites.

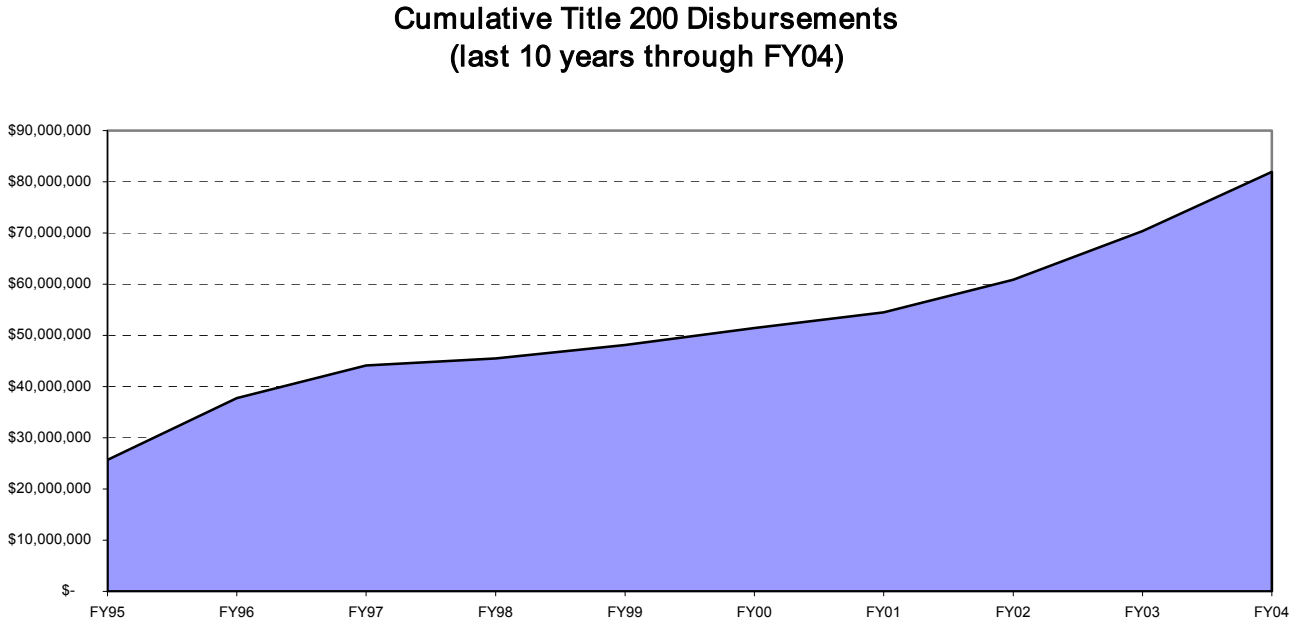
The following is a chart of quarterly activities for the last fiscal year relating to Petroleum Remediation sites in Nebraska. The chart provides information relating to:

- **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



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.





Agriculture Programs

The Department proposed sweeping changes to Nebraska's laws governing livestock waste control during FY2004, mandated by revisions to the federal Environmental Protection Agency's (EPA) rules concerning animal feeding operations. The resulting legislation, LB916, significantly changed the operation of the Livestock Waste Control Program of the Agriculture Section.

In developing the proposed legislation, the Department held a series of meetings in September 2003. In addition to the public, representatives from concerned industry, environmental, and educational groups provided input. The Legislature passed LB916 during the 2004 session, amending the Livestock Waste Management Act (LWMA), effective July 16, 2004. Upon passage of the Act, Agriculture Section staff immediately began work on needed amendments to *Title 130 --Rules and Regulations Pertaining to Livestock Waste Control* to implement the Act and the federal requirements.

In addition to work on legislative and regulatory changes, Agriculture Section staff continued their work with the Livestock Waste Control, Chemigation, and Agricultural Chemical Secondary Containment programs. The three programs saw increases in several areas, including the number of initial inspection requests received, coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit, chemigation permits issued, and Secondary Containment complaints investigated.

Livestock Waste Control Program

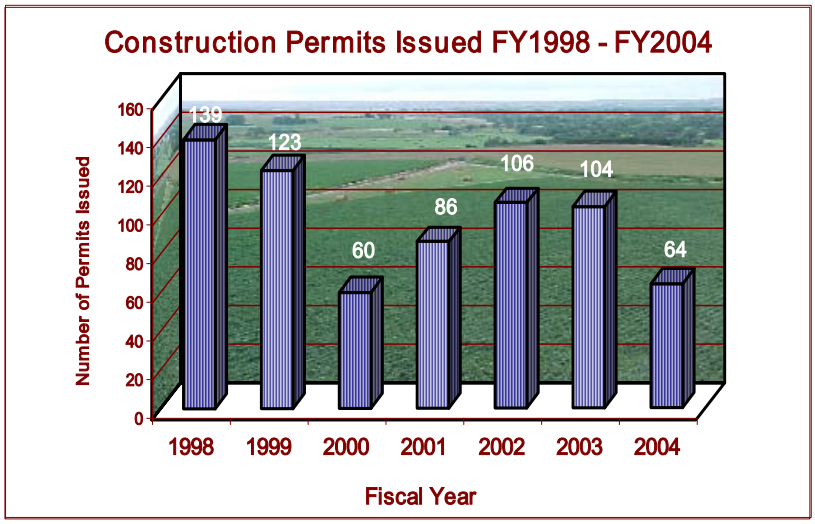
Background -- This program is responsible for administering Title 130 regulations, which apply to livestock operations -- now referred to as Animal Feeding Operations (AFO) or Concentrated Animal Feeding Operations (CAFO) under the amended LWMA. Small animal feeding operations remain exempt from the inspection, construction approval, and permit requirements, with some limited exceptions.

In addition, under the new regulations, the Department will convert to a one-permit system for livestock waste control facilities. A National Pollutant Discharge Elimination System (NPDES) permit will be the only permit issued. However, applications still must be submitted and approval obtained from the Department prior to construction of an animal feeding operation or livestock waste control facility. Because these changes did not become effective during the 2004 fiscal year, a more in-depth listing of the changes will be outlined in next fiscal year's report.

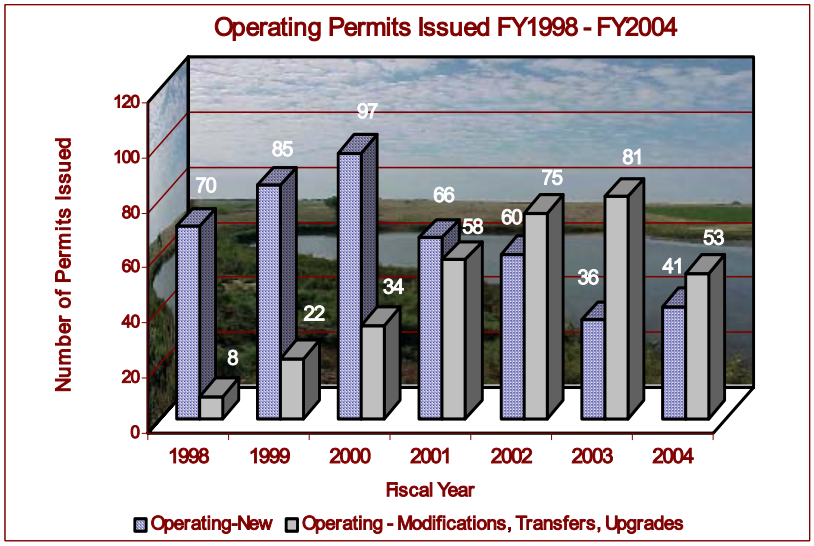
The program continues to oversee livestock waste control facilities ranging from holding ponds to lagoons to storage pits. During FY2004, the Livestock Program was responsible for permitting the construction and operation of livestock waste control facilities and the methods operations used to dispose of the livestock waste. If a livestock operation discharged, or had the potential to discharge, livestock waste, the Department determined whether a permit for a livestock waste control facility was needed. The program also received fees that were required when initial inspection requests and permit applications were submitted.

Program staff, consisting of three engineers, an Engineering Unit supervisor, and five program specialists, 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, three field office personnel are assigned on a part-time basis to work with the Livestock Program, and other field office staff is 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 and operating 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 FY2004, the Section's engineers performed 736 reviews and compliance assistance activities. In addition, Unit staff was involved in developing the amendments to the Livestock Waste Management Act and the subsequent amendments to Title 130.



Permits – The number of permit applications received remained about the same as last year, after undergoing a significant decline from the previous year – 48 applications were received in FY2004, compared with 46 applications in FY2003 and 93 applications in FY2002.



Permitting activity in the Livestock Waste Control Program in FY2004 was mixed – construction permit numbers were down, as were the numbers of modified, transferred and upgraded operating permits issued. However, the number of new operating permits issued rose.

Construction permits issued in FY2004 (64 permits) dropped 38% from the previous year's figure of 104 permits. In any given year, construction permit numbers include permits issued on applications received during the previous fiscal year. The decline in FY2004 construction permits is a reflection of the significant drop in the number of applications received in FY2003. The number of new operating permits issued rose slightly over FY2003 figures, up 14% from last year (see chart). However, the number of modified, upgraded and transferred operating permits issued during this year (53 permits) declined significantly, dropping 35% from FY2003. Despite the decline, for the third consecutive year, the number of operating permit modifications, transfers and upgrades issued exceeded the number of new operating permits issued.

NPDES Permits -- In addition to the state permit program, the Livestock Waste Control Program administers the National Pollution Discharge Elimination System (NPDES) permit program for animal feeding operations in Nebraska. The NPDES 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 either submit an application for an individual NPDES permit or request coverage under the NPDES General Permit.

In Nebraska, only open-lot livestock operations previously were subject to NPDES permit coverage issued by the Department. The eligibility criteria have changed with the conversion to a one-permit system for concentrated animal feeding operations, resulting from changes in the federal rules and the passage of the amended LWMA. In FY2005, total confinement operations also will be subject to NPDES permitting.

During FY2004, NPDES General Permit coverage was issued to 61 animal feeding operations, bringing the total number to 71 operations. Currently, 164 facilities have active NPDES individual permits. No new NPDES individual permits were issued in FY2004. Livestock Program staff continued evaluating applications for issuance or renewal of NPDES individual permits to determine eligibility for coverage under the general permit. During the review, some operations with NPDES permits were found to be inactive.

Inspections -- More requests for initial inspections from new or expanding animal feeding operations were received this year than in FY2003 -- 77 requests in FY2004, compared to 51 in FY2003. Eighty percent of the FY2004 requests were from smaller operations – those with less than 5,000 animal units. Program staff continued to reduce the backlog of initial inspection requests, conducting 12% more initial inspections in FY2004 than during the previous year.

Inspections conducted by type FY2004 vs. FY2003

Inspection Type	FY2004	FY2003
Routine & Maintenance	397	431
Initial	442	393
Complaint	113	120
Post-Construction	81	81
Miscellaneous	7	41
TOTAL	**1,040**	**1,066**

The total number of inspections of livestock waste control facilities conducted by Livestock Program staff declined slightly this year -- 1,040 inspections, compared to 1,066 conducted during FY2003. In contrast to the previous year, more inspections of all types were conducted at operations with less than 5,000 animal units.

Section staff conducted fewer complaint, routine and miscellaneous inspections in FY2004, but performed about the same number of post-construction inspections (see table). This reflects the drop in the number of construction permits issued, offset by the slight increase in the number of new operating permits issued. Transfers, upgrades and modifications to operating permits usually do not require post-construction inspections.

Complaints -- For the third consecutive year, fewer complaints were received during FY2004 concerning livestock operations -- 65 complaints received, compared to 76 complaints received in FY2003. Program staff maintained an average overall response time on complaints of one week or less in FY2004.

General information about the Livestock Waste Control Program, fact sheets, forms, guidance documents, the NPDES General Permit, the proposed amended Title 130, and public notices of Intent to Issue or Deny Construction Approval for animal feeding operations are available on the Department's web site, www.ndeq.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 are responsible for inspecting and permitting the specific safety equipment that must be installed on the irrigation system. The program has been well received, with a high degree of compliance. However, one illegal chemigator was fined $250, plus court costs, in the past year.

Since permitting began in 1987, the total number of annual permits followed an upward trend initially, leveled off in recent years, but showed a slight increase, with 14,513 site permits issued in FY2004, compared to 14,217 issued in FY2003.

The Department certifies all chemigation applicators. To receive certification, the applicators must complete training and testing, which is provided by the University of Nebraska Cooperative Extension system. Applicators must be re-certified every four years. For the year, 763 applicators were trained, tested and certified, bringing the total number of certified chemigation applicators to 4,222. Information about chemigation applicator training dates and certified applicators is available on the Department's web site, www.ndeq.state.ne.us.

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 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.

FY2004 saw an increase in the number of new complaints involving fertilizer or pesticide storage facilities investigated by the Department: 11 new complaints in FY2004 versus four the previous year. The Department also works with the Nebraska Department of Agriculture's Pesticide Program to identify noncompliance. Seven cases were resolved by voluntary compliance or found to be unsubstantiated. Compliance efforts are proceeding on the remaining four 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 limited 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:

2004 — Lower Platte and Nemaha river basins;
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; and
2008 — Loup, Niobrara, and White River-Hat Creek river basins

During 2004, surface water monitoring resources were primarily targeted in the Lower Platte and Nemaha 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 Surface Water Unit. A brief description of the surface water monitoring activities conducted during 2004 follows.

Basin Rotation Monitoring Network – A total of 25 streams and 15 lakes in the Lower Platte and Nemaha river basins were sampled weekly from April through September for traditional parameters, bacteria and pesticides to document existing water quality conditions and assess the support of beneficial uses. These data were used, in part, to assess suitability of water quality for primary contact recreational activities such as swimming, rafting, tubing, and canoeing. Assistance was also received from many of the Natural Resource Districts (NRDs) where an additional 22 lakes and 8 streams across the State were sampled and analyzed for bacteria using Colilert analysis equipment provided by DEQ through an EPA grant. 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. During 2004, a total of 1,667 samples were collected and analyzed for this network.

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 population).

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. Water samples are collected monthly and analyzed for traditional chemical and physical parameters. In addition, heavy metals are analyzed quarterly and fish communities are sampled once a year in coldwater streams. During 2004, a total of 1,908 water samples were collected for this program.

Ambient Fish Tissue Monitoring Program — Thirty-nine fish tissue samples were collected from 28 streams and lakes across Nebraska for analysis of toxic pollutants during 2004. 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 2004, fish consumption advisories will be issued or reissued for 40 sites in 2004, including 19 stream or canal

segments and 21 lakes. New advisories will be issued for Wolf-Wildcat Lake near Virginia and Lake Hastings in Hastings based on elevated levels of mercury and PCB's respectively.

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.

Joint State Atrazine Monitoring Program — The Joint State Atrazine Monitoring Program is an interstate cooperative effort between Nebraska and Kansas in the Big Blue River Basin to address public drinking water concerns about atrazine in Kansas surface waters. About two-thirds of the Big Blue River drainage is located in Nebraska; therefore, interstate cooperation is essential to the success of this program. In an effort to identify critical areas of runoff, atrazine monitoring was initiated in 1997. Presently, 15 stream sites in Nebraska and 10 sites in Kansas are being monitored for the herbicides atrazine, alachlor, acetochlor, and metolachlor. Best management practices will be targeted in these critical areas. In 2004, weekly grab samples were collected from April through September at each of the 25 sites and runoff samples were collected at eight of those sites during times of significant precipitation. A total of 614 samples (345 samples in Nebraska) were collected in 2004.

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 2002 and 2003, no samples were collected so previous data could be assessed and the biometrics refined. During 2004 monitoring was resumed, and 42 sites were evaluated in the Nemaha and Lower Platte Basins.

Lake Monitoring Programs —Lake water quality data was collected for several monitoring programs during 2004. A 25-lake ambient network involving the collection of monthly water samples from May through September was initiated in 2002 and continued through 2004. These data will be used to document existing water quality conditions and long-term trends. Similar monthly samples were collected from an additional 17 lakes to provide pre-project and post-project data used to prioritize project needs and to evaluate effectiveness of Non-Point Source projects. During 2004, a total of 385 lake samples were collected statewide for these programs. In addition, weekly E. coli bacteria samples were collected from 40 swimming beaches in lakes during May through September This data was 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 2004: Eighteen 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 7 lakes and 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 project restoration conditions.

Fish Kill and Citizen Complaint Investigations —Thirty-three fish kills were reported between July 1, 2003 and June 30, 2004. Most of these were attributed to low oxygen from winter and summer kill, low flows, temperature stress, and disease/parasite. A total of 26 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 toxin in potentially affected lakes, and, 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 2004, NDEQ analyzed over 600 samples for the Microcystin toxin on approximately 110 different waterbodies across the state. Based on the results of these data, health alerts were issued on 26 lakes. NDEQ is working with other state agencies and the University of Nebraska to further develop toxic algae monitoring and notification strategies for 2005.

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, 2003 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 were 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

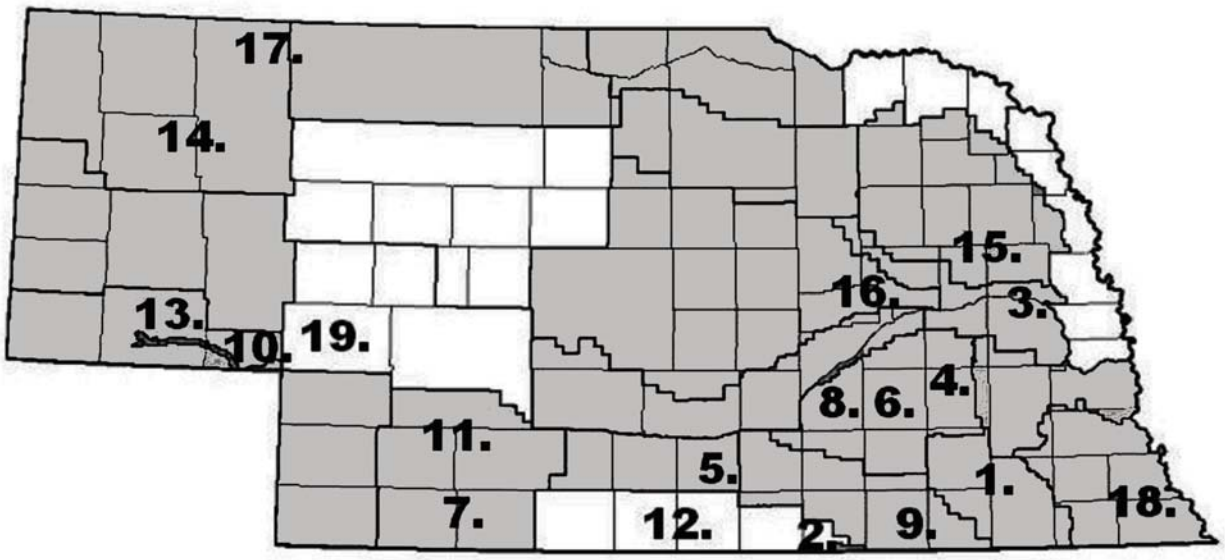
The Groundwater Unit is responsible for hydrogeologic review of various Department projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks and surface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

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. Cheyenne 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 issues and reviews 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, with most activity concentrating on 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 2872 Class III wells as of October 1, 2004.

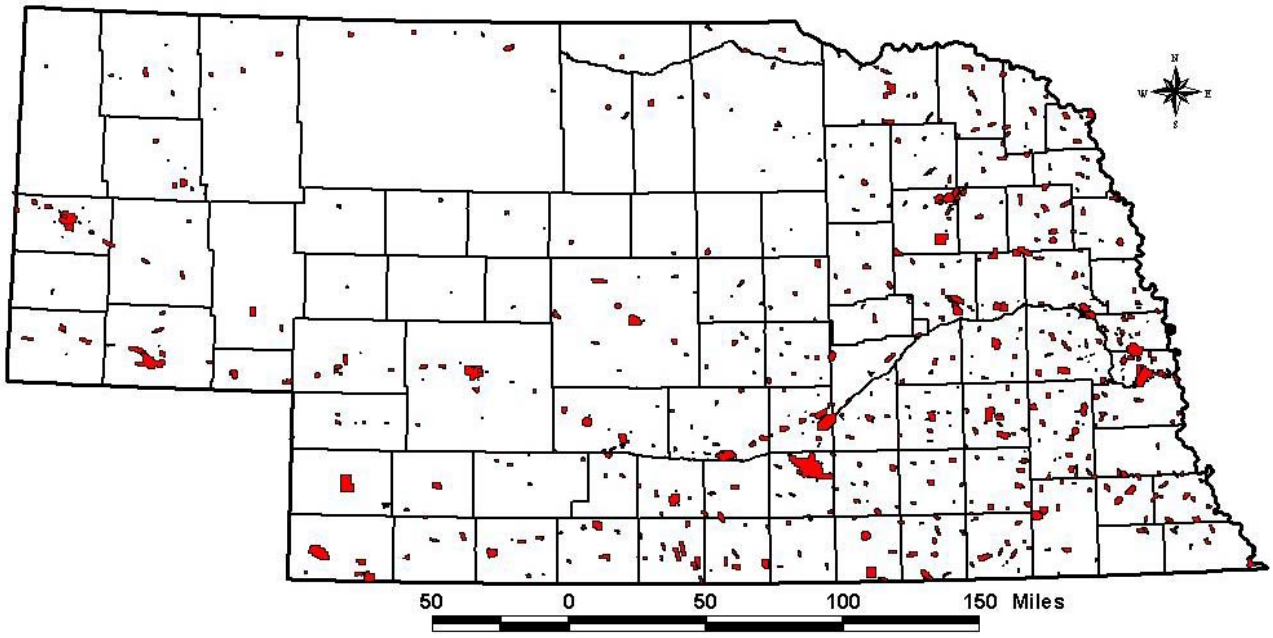
Injection wells not included in the other specific classes are considered to be Class V wells. The EQC adopted regulations in 2002, prohibiting the following types of Class V wells: agricultural drainage wells, untreated sewage waste disposal wells, cesspools, radioactive waste disposal wells, motor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

Wellhead Protection Areas, October 1, 2004



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. These standards were revised and 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. Four hundred nineteen Section 404 permit reviews were conducted by the unit during FY2004.

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.

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 proponents 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 proponents 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.

Prior to preparation of the 2004 Section 303(d) list of impaired waters, EPA guidance recommended combining the State's Section 303(d) list and the Section 305(b) water quality report. The recommendation was made in order to better provide the general public with a comprehensive summary of state and national water quality. Waterbodies would be associated with a single category that described the status of all beneficial uses. The NDEQ opted to prepare such a report not only for the general public but also for water quality management planning purposes (e.g. future monitoring, TMDL development, best management practice implementation). The final product is referred to as Surface Water Quality Integrated Report.

Assessment of water quality data and the compilation of the Integrated Report utilized methodologies previously developed. The exception to this was the changes to methodologies necessary to comply with EPA's Reporting Guidance. Upon completion, the report was made available for public review and comment, with notice being provided in several newspapers, mailings and the Department's Internet site. Few comments were received and the report was submitted to EPA Region 7 on March 30, 2004 and subsequently approved in April 2004. Future TMDLs will be developed based on the approved report.

Along with the 2004 Surface Water Quality Integrated Report, the Department prepared and submitted a TMDL for Johnson Lake, located in Gosper and Dawson Counties. The pollutant of concern is bacteria and the TMDL development proved difficult because of the unique nature of the waterbody. EPA Region 7 approval for this TMDL was received in September 2004. Along with the Johnson Lake TMDL, several others will be completed in Fall 2004.

Nonpoint Source Management Program

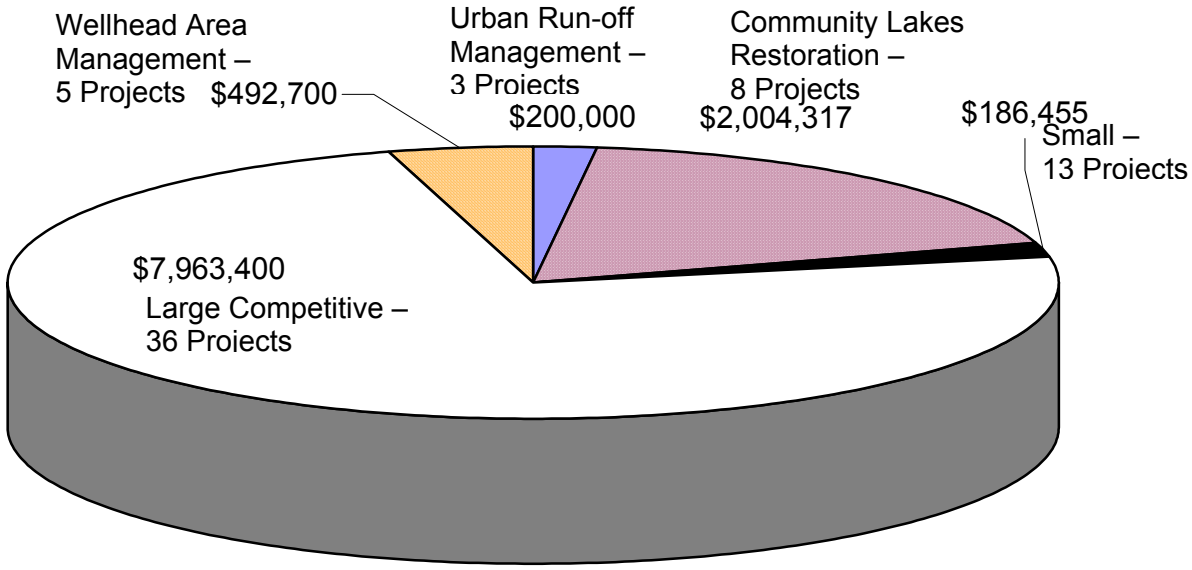
The Nebraska Nonpoint Source Management Program is an integrated statewide effort to protect and improve water quality impacted by nonpoint source pollution. The program is of particular significance because nonpoint source pollution is the most prevalent, widespread cause of water quality degradation 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.

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 2003 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 2004, 57 projects were ongoing among the five grant categories. These included 36 large projects totaling $7,963,400, 13 small projects ($186,455), eight community lakes projects ($2,004,317), three urban run-off management projects ($200,000) and five wellhead area management assistance projects ($492,700).

New projects funded by the Department during 2004 included 13 large projects totaling $2,651,000, four small projects ($49,455), no new community lake projects, and one wellhead area management assistance project ($60,000). A total of 116 large projects have been funded through Section 319 grants since the beginning of the program in 1990. Of these 116 projects, 61 have addressed surface water, 37 have addressed groundwater and 18 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. Ten grants were given to units and subunits of government, education institutions, and non-profit organizations to carry out projects that will help protect the state's drinking water sources in FY2004. Ten grants have also been awarded in FY2005. 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 CPP is that it should document processes and procedures used to make decisions relating to the Water Quality Division mission. The Planning Unit completely revised the organization of this document's previous version during FY2001 by incorporating existing process and procedure documents and proposing new sections. The document is still undergoing revision.

Water Quality Data Handling and Storage

The department has implemented the STORET electronic storage system for surface water quality data. Nebraska water quality information will be available to anyone who has an internet connection, at www.epa.gov/storet/. During FY2003-4, the department added to the database additional metadata for new and existing water quality stations established. All of the monitoring data from 1998 to 2003 is being entered into the database. When completed, this effort will result in the centralization of NDEQ's previous and current water quality monitoring information.

The department also intends to populate all of the existing (pre-1998) water quality monitoring results in the modernized STORET system, making it available to the public in a centralized location. There will be a system in place to update the database on a regular schedule, making the most current information available to the public. Currently, the public can get access to the bacteria monitoring data for lakes on the DEQ website.

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 and rivers. 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, dewatering/hydrostatic testing, and land application of wastewater.

NPDES Permits

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

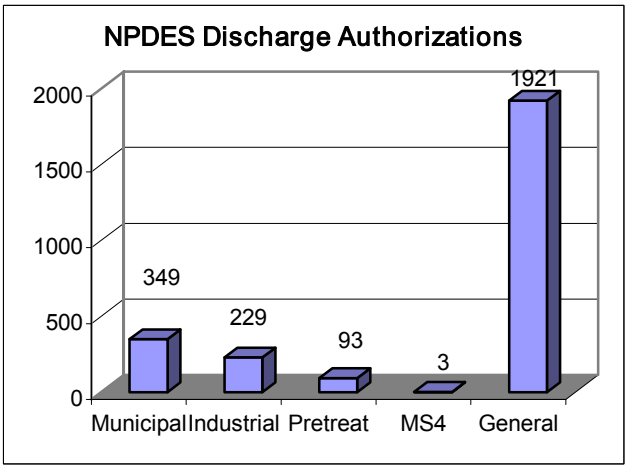
The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology based standards or water

quality based standards. Technology based standards reflect effluent quality that can be achieved using treatment technology that is available to the permittee. NDEQ Title 121- *Effluent Guidelines and Standards* sets forth technology-based standards for municipal facilities and many types of industrial facilities. Technology based standards can also be developed on a case-by-case basis when necessary.

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

Permits may be developed and issued on an individual site-specific basis, or they may be developed and issued to apply to facilities with similar activities or effluent characteristics. These two types of permits are respectively referred to as individual permits and general permits. To date, the department has developed and issued general permits for the following activity categories: hydrostatic testing and dewatering, gasoline contaminated groundwater remediation projects, petroleum product contaminated groundwater remediation projects, construction site storm water, industrial site storm water and land application of wastewater. 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. In addition, a general permit for Warm Water B Controlled Discharge Lagoons and a general Statewide Municipal Separate Storm Sewer System (MS4) permit for are being drafted for issuance.

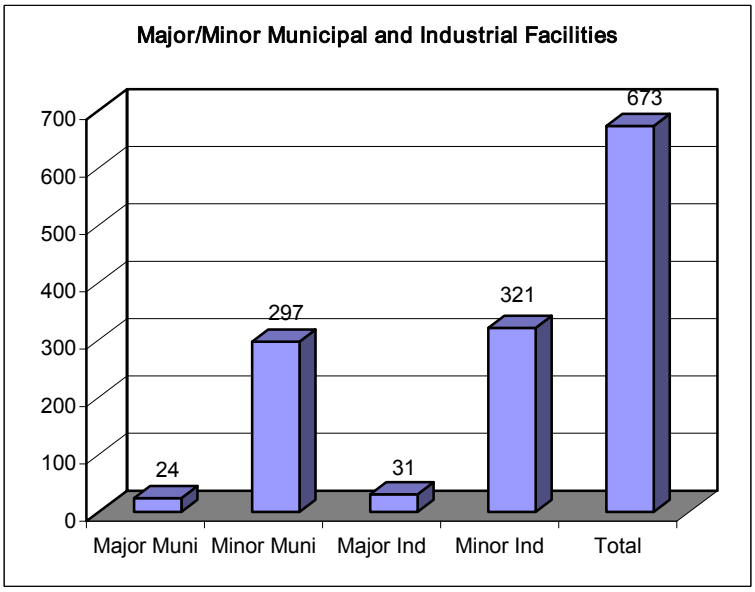
There are approximately 1921 active facilities provided discharge authority under general permits and 673 facilities with discharge authorizations under individual permits. The table titled “NPDES Discharge Authorizations” provides a summary of this information. The general permits include 1178 construction storm water, 53 dewatering/hydrostatic testing, 567 industrial storm water, 37 land application 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.



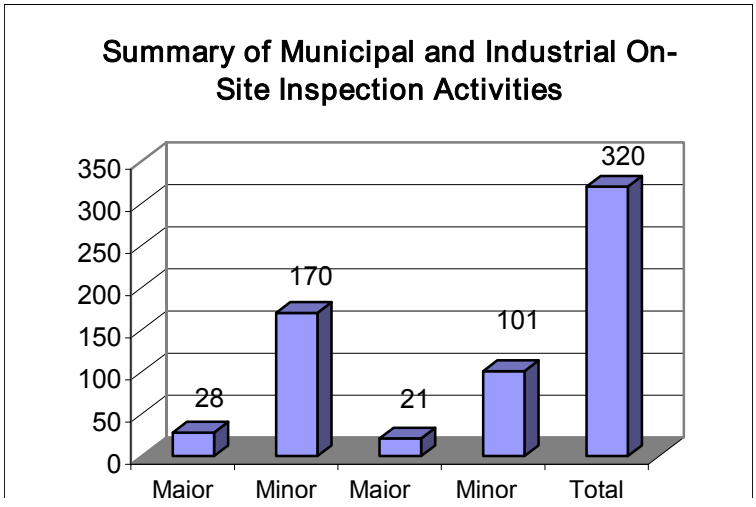
Municipal and Industrial Facilities

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

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. Minor facilities receive inspections about once in five years and usually within the basins currently being studied as part of the Basin Management Approach. Minor facilities outside these basins also receive inspections on the basis of discharge monitoring report results, past compliance histories, incident reports and complaints. Inspectors performed 320 total inspections in 2003. During effluent monitoring inspections effluent samples are collected and analyzed by the Department to compare with self-monitoring results. Facilities targeted for effluent monitoring inspections are chosen based upon pollution potential, past compliance or incident report histories, complaints and/or Basin Management Approach priorities.



Data generated by facility monitoring and Department on-site and effluent monitoring inspections are reviewed and entered into the federal 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 now 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 drafted and public noticed. It is projected to be issued prior to the end of 2004. The Department determined that the communities of Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Norfolk, North Platte and Scottsbluff were exempt as of December 20, 2002. However, new Total Maximum Daily Load reports which have been public noticed and approved by EPA, will make all but Hastings subject to Phase II regulations for MS4s. A statewide general permit is planned to cover these communities. All MS4 Storm Water Management Plans will be placed on public notice upon application for coverage under this permit.

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 as well as the Nebraska State Fair Park in Lincoln have combined sewers which are subject to storm-induced bypasses. Omaha's CSO and NPDES discharge permits were issued during FY03. Plattsmouth and Nebraska State Fair Park are in the drafting stage. 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* sets 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 121 - *Effluent Guidelines and Standards*, 2) the volume or strength of the wastewater discharged from the facility, or 3) the potential of the industrial user to adversely affect the wastewater collection or treatment facilities.

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

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

Draft NDEQ Title 119

The existing *Title 119 -- Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System* was last amended in 1992. The Department has 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 last amended. The draft of this update was presented to the Environmental Quality Council in October 2004. The Council voted in favor of the changes, but the Draft Title 119 will need to be approved by the Nebraska Attorney General's Office and signed by the Governor before becoming effective.

The requirements for storm water permitting under the federal Phase II Storm Water Rule and the new Combined Animal Feeding Operation (CAFO) Rule are two new regulations that are required to be in place by January 2005. Storm water permitting will continue to be addressed in the proposed Title 119. The new CAFO Rule will be addressed in Title 130 with the exception of the Public Participation Process relating to permit issuance, public notice and participation that are applicable to all NPDES permits and which are already included in Title 119.

In addition, the Draft 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 a POTW 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 documents and construction documents for municipal, industrial, and commercial wastewater treatment facilities and sanitary sewer lines. These reviews utilize technical sanitary engineering principals to ensure that wastewater facilities are designed to protect the public health and achieve compliance with environmental requirements. This program 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 assisted with the Nebraska Environmental Partnership Program.

For SFY04, a total of 253 construction permits were issued for wastewater facilities. Considerable time was spent this year working with owners of industrial wastewater treatment facilities to assure that their wastewater facilities have adequate capacity. The Section has continued to complete a major revision to NDEQ Title 123, *Rules and Regulations for Design, Operation and Maintenance of Wastewater Treatment Works* during the year. The Department intends to submit the revised Title 123 to the Environmental Quality Council for approval during SFY05.

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 $26,250 in grants and matched it with $8,750 of state funds in FY04. This training is focused on assisting the operator to improve operation and maintenance of wastewater treatment plants. In addition the Department received $22,500 in homeland security grants for security assessment training.

The 104(g) federal on-site assistance program for wastewater treatment facility operators provided diagnostic evaluation, initiated training, or continued assistance at Arlington, Davey, Hawaiian Village, Pender, Sidney, Staplehurst, Uehling, Table Rock and Wisner. Short term assistance was given at the following places: Albion, Bancroft, Douglas, Petersburg, and Walthill. Program assistance was completed this year at Ansley, Arlington, Elmwood, Indianola, Malcolm, South Park Estates, and Wymore. 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.

Vulnerability Assessment (homeland security) training has been offered to Nebraska communities, through either on-site training at the municipal wastewater treatment facility, or through one day workshops. Most communities have completed a vulnerability analysis for their drinking water systems as required by the federal government. However, since the vulnerability assessment was not also required for the wastewater treatment facilities, there has been a decline in interest by the communities to attend a workshop or request on-site assistance for wastewater.

On-Site Wastewater Treatment Facilities

The on-site wastewater treatment facilities program includes those systems which are typically not connected to a municipal wastewater treatment system. The two primary types of on-site systems are septic tanks and complete retention lagoons. The program focuses on protecting surface and groundwater in the area of proposed on-site systems through the review of plans and permitting of large systems, systems with non-domestic wastes, and subdivision development. NDEQ has agreements with local governmental agencies which allow them to manage the septic tank program in their jurisdiction. The staff continues to provide information to the public and industry practitioners on the regulations for new on-site systems through individual telephone calls, meetings, and education seminars. Staff meets with local government officials and developers to discuss waste management alternatives for subdivisions and housing developments located outside a municipal sewer system that must be approved by the Department before construction.

The program also works to assure that the design, installation, modification, repair, and maintenance of on-site wastewater systems is performed by qualified, competent professionals who are familiar with the rules and regulations and the proper practices of their trade. Beginning January 1, 2004, new law requires that anyone doing virtually any work associated with on-site wastewater systems be certified by the State of Nebraska. For the first two years of the program, individuals can obtain temporary provisional certification by signing an affidavit that they have the required minimum experience in performing their trade. These temporary provisional certificates will expire at the end of 2005, by which time the individuals will be required to obtain certification by examination. Continuing education will be required to maintain certification. The Department is currently drafting changes to the rules and regulations to implement examination and continuing education requirements.

Another new change implemented January 1, 2004, is the registration of all on-site wastewater systems that are constructed, reconstructed, altered, or modified. This information will be used to develop a statewide inventory of on-site systems which is the first level of management under EPA's voluntary "Guidelines for the Management of Onsite/Decentralized Wastewater Systems."

Current regulations for on-site wastewater systems (Title 124) became effective December 28, 2003. These regulations set minimum design standards for all on-site systems and authorize by rule construction of simple, conforming on-site systems which constitute the vast majority of all new on-site systems. This allows the Department to focus resources on education, review of proposed subdivision developments, review of large systems, and review of systems that receive non-domestic wastes.

Staff work with non-governmental organizations, including the Nebraska On-site Wastewater Association (NOWWA), the Nebraska On-site Wastewater Task Force, 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.

Wastewater Treatment Facility Operator Training and Certification Program

Well-trained and competent operators are the critical component to ensuring that wastewater treatment plants are run in a manner protective of the environment. The life span of treatment facilities can be prolonged and the multi-million dollar investment can be protected through proper operation and maintenance. To accomplish this, the wastewater treatment facility operator training and certification program was established.

This program is responsible for administration of the certification examinations and for certification renewal of operators who have obtained the necessary continuing education. Staff monitor and ensure compliance of those facilities that are required to have certified operators. The wastewater operator training certification program has 815 certified operators.

The Department provides four, five-day classroom training workshops for operators and six testing opportunities throughout the year. Central Community College sponsored two additional training sessions. Next year, the program will provide four regular training sessions and six examinations and will continue to develop continuing education programs.

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 a 1.5-day training workshop offered by Southeast Community Collage and the revision of Title 197 to include mandatory certification of industrial operators. Training and testing of industrial operators will start in SFY 05. A few more testing dates have been added to the schedule to match up with the training Southeast Community College is offering.

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 sixteen years of activity the Fund capitalization level exceeds $132 million: $114 million received from federal grants with the match provided from fees, state general fund appropriations, and $19.6 million in match from NIFA bond issues. There is also $80 million in recycled principal available or re-loaned by the program. The program made loans to 127 municipalities at a total loan amount of $204 million, adjusted to reflect final loan amounts.

CWSRF Source of Funds

FUNDS MADE AVAILABLE	FFY2004	FFY2005 Estimate
Capitalization Grant - CWSRF	6,747,400	6,500,000
NIFA Series 2004B Bond Match	1,080,000	
NIFA Series 2005B Bond match		1,250,000
Administration Cash Match[1]	269,896	260,000
Interest Earnings[2]	2,312,468	2,000,000
Loan Repayments[2]	16,134,944	8,100,000
TOTAL CWSRF	26,544,708	17,900,000
Less Loan Awards & Admin Costs	*9,948,816*	*260,000*
Available for Loans	16,595,892	17,340,000

(1) Source of Cash Match is the Administrative Fee Account outside of the SRF

(2) Interest earnings and loan repayments are estimated.

The FY04 program Funds consist of $6.7 million CWSRF capitalization grant, $ 1.125 million NIFA bond match and about $19 million in repayments and interest. The program disbursed $13.5 million for wastewater treatment project construction costs. Loan contracts were signed with 12 communities for a total obligation of $33 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 FY2004.

Municipalities Receiving CWSRF Loans in FY2004

MUNICIPALITY	LOAN DATE	LOAN AMOUNT	SMALL TOWN GRANT AMOUNT
Omaha	7/18/03	20,000,000	
Aurora	8/12/03	600,000	
Paxton	9/30/03	1,615,750	100,000
Coleridge	10/13/03	70,000	
Falls City	2/4/04	4,000,000	100,000
Madison	2/25/04	2,035,000	100,000
Ruskin	3/18/04	105,500	100,000
Bertrand	3/22/04	900,000	100,000
Verdigre	3/23/04	135,500	
Sidney	3/29/04	825,000	
West Point Amd. #1	4/1/04	2,000,000	
Howells	6/16/04	500,000	
Nickerson	6/30/04	221,000	

Eleven SRF wastewater projects completed construction and initiated operation in SFY04: Adams, Aurora, Coleridge, Crab Orchard, Dannebrog, Exeter, Holbrook, Lindsay, Meadow Grove, North Platte, and Omaha. Twelve projects are under construction: Bertrand, Butler Co. SID#1, Cook, Gering, Howells, Murray, Omaha CSO, Paxton, Ruskin, Schuyler, 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 $3.43 million in grant funding for 37 projects in conjunction with a CWSRF loan during the fourteen 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.

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	FFY2004	FFY 2005 ESTIMATE
Capitalization Grant DWSRF	8.303,100	8,000,000
NIFA Series 2004A Match Bonds	1,660,620	
Future NIFA Bonds		1,600,000
Loan Repayments	3,750,597	1,170,000
TOTAL DWSRF	13,714,317	10,770,000
Less Loan Awards and Set-Asides	5,548,294	860,000
Available for Loans	8,166,023	9,910,000

The FY2004 DWSRF capitalization grant allocation totaled $8.3 million from FY04 federal appropriations. The program disbursed $13.2 million for drinking water project construction. Loan contracts were signed with 18 communities for a total obligation of $15.1 million including Loan Forgiveness. The following chart shows the municipalities receiving Drinking Water State Revolving Fund loans in FY2004.

Municipalities Receiving DWSRF Loans in FY2004

MUNICIPALITY	LOAN DATE	LOAN AMOUNT	LOAN FORGIVENESS
Bassett	7/1/03	146,067	
Bloomington	7/11/03	160,000	
Aurora	8/12/03	400,000	
Ainsworth	8/13/03	1,202,500	
Maywood	8/14/03	479,000	
Barneston	8/26/03	35,000	
Stamford	8/27/03	100,000	100,000
Pender	9/9/03	1,217,000	100,000
Bancroft	9/12/03	591,000	
Big Springs	9/17/03	636,000	
Plattsmouth	9/30/03	300,000	100,000
Dodge	2/5/04	63,345	46,155
Sidney	3/29/04	6,350,000	
Fairbury	4/22/04	800,000	100,000
David City	5/3/04	700,000	
DeWitt	5/4/04	655,000	
Scotia	5/20/04	400,000	
Arapahoe	5/20/04	450,000	100,000

Ten DWSRF projects completed construction and initiated operation in SFY04: Ainsworth, Aurora, Bassett, Bloomfield, Bloomington, Boyd County RWD#2, Maywood, Paxton, Stanton Co. SID#1, Tekamah, and Wausa. Eighteen projects are under construction, including those who have received loans so far during SFY2005: Arapahoe, Auburn, Bancroft, Barneston, Beaver Lake Association, Benedict, Big Springs, David City, DeWitt, Duncan, Fairbury, Giltner, North Platte, 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%) will be used for DWSRF program administration. These activities 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.

Under the Source Water Protection Implementation set-aside (15%) NDEQ and HHSR&L will use two-thirds ($1,282,400) of the funds from the FFY97 grant to delineate and assess source water protection areas as required under Section 1453. In FY2004, $200,000 is allocated for community assessments and preliminary engineering reports, and $200,000 is allocated for wellhead protection project grants. The Nebraska Environmental Partnerships program will oversee the grants provided for community assessments and preliminary engineering reports.

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 (3.61%). 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 3.61% set-aside eligibility by using program overmatch dollars for federal fiscal years 1993 to 1997. No additional state dollars will be required for the 3.61% 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

	CAPITALIZATION GRANT ALLOCATION PERCENTAGE			
	LEGAL LIMIT	INTENDED USE LEVEL	FEDERAL	STATE
FY2004				
DWSRF			7,436,938	1,600,620
DWSRF Administration	4%	0%	0	
Small System Technical Assistance	2%	2%	166,062	
Source Water Protection Implementation	15%	4.82%	400,000	
Public Water System Program Administration	10%	3.61	300,000	
TOTAL			8,303,000	1,600,620
2004 Loan Forgiveness	30%	6.02%	500,000	
FY2005 Projected Funding				
DWSRF			7,140,000	1,600,000
DWSRF Administration	4%	0%	0	
Small System Technical Assistance	2%	2%	160,000	
Source Water Protection Implementation	15%	5%	400,000	
Public Water System Program Administration	10%	3.75%	300,000	
TOTAL			8,000,000	1,600,000
2005 Loan Forgiveness	30%	6.25%	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. Additionally, a strategic plan has been drafted that will enable us to provide assistance in a more holistic manner.

- 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, with considerable assistance from the Department's Information Technology Division, has implemented a system enabling facilities subject to Community Right to Know reporting regulations to file required reports on-line. Subsequently more time has been devoted to working with Local Emergency Planning Committees. Additionally, the program has played a much larger role in the Department's Homeland Security efforts.

- The Release Assessment program has been intimately involved in enhancing 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 Release Assessment program also played a key role in the Department's response to the severe storms that hit Lancaster, Gage, and Saline counties in May.

- 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. Like last year, a primary focus of attention has been the promotion of methane generation from livestock facilities. The Partnership also sponsored the first conference between energy producers and the environmental agency on various items of mutual interest including climate change. Opening, and improving upon, the dialogue between the energy producers and the Department is particularly significant.

- 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 2003, approximately 2,200 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This is comparable to previous recent years.

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 55% 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 Nebraska 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 Environmental Partnerships 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 less. Community Assessment grants are normally the starting point for assistance that consists of a snapshot analysis of the community's current environmental health infrastructure, discussion of the analysis results, prioritizing issues and finding solutions.

To date, the program has implemented its community-based team process and provided some form of customized assistance to more than 230 small communities throughout Nebraska. More than 100 communities have received grants to perform community environmental assessments. The Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF) have allocated $50,000 a year for the next two years to fund Community Assessments, The allocations are received in two-year cycles, and are expected to be ongoing.

The Environmental Partnerships program partners with the DWSRF to administer a grant program that will allow Community Assessments to be upgraded to Preliminary Engineering Reports (PERs). These 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 Environmental Partnerships program also partners with the CWSRF to administer a facility planning grant program that will provide financial assistance to high priority Publicly Owned Wastewater Treatment Works. The facility planning grants may be provided to municipalities with populations of 5,000 inhabitants or fewer 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 meetings throughout the state. The Nebraska Environmental Partnerships program continues to seek additional funds for alternative technology projects and case studies.

The program is creating a training curriculum to take to Nebraska's small communities. 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 has presented 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 chart on the next page shows the number of spills that were reported, by material type.

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.

Four teams were formed within the agency to deal with specific facets of Homeland Security. Efforts by the Planning Team have concentrated on updating the State Emergency Operations Plan. The Exercise Team developed both an in house exercise, which was conducted in October 2004, and was an active participant in the planning of a statewide exercise, which took place on November 4, 2004. The Training Team has been examining various available courses and ensuring that those involved with Homeland Security activities have the required knowledge, skills and abilities. The Web/Information Team has been assessing information to determine if it is appropriate to be on the Department's external web site.

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

As described in Nebraska's Low-Level Radioactive Waste Disposal Act, the Department of Environmental Quality has had the regulatory responsibility to conduct an independent technical review of any proposal to build and operate a LLRW disposal facility in the state for the Central Interstate Low-Level Radioactive Waste Compact region. The Compact is comprised of Nebraska, Kansas, Arkansas, Oklahoma and Louisiana. US Ecology, a contractor for the Compact, submitted a license application for a facility in Boyd County, Nebraska on July 27, 1990.

The application review was a cooperative effort between the NDEQ and the Nebraska Department of Health and Human Services Regulation & Licensure. The department's Low-Level Radioactive Waste Program organized a team of technical professionals from government, the university and private organizations to assist in the review of the license application. After a comprehensive review, US Ecology's license application was denied on December 18, 1998.

Settlement Agreement

On August 17, 2004, a court-approved settlement was reached between the State of Nebraska and the Central Interstate Compact Commission following several years of litigation regarding the State's decision.

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 it's 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 $140.5 million 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.

Program Activities

As a result of this agreement, the agency plans to close out its Low-Level Radioactive Waste Program activities. The Department has not requested additional general funds to operate the program. In addition to activities related to program closeout, current Low-Level Radioactive Waste program staff have assumed other duties in the agency. 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 2004 and outlines budget projections for fiscal year 2005. 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 FY04 expenditures for each federal grant, including the state match.

Chart B lists actual FY04 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 FY05 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. As in FY02, a portion of the required match for the air program is provided by local funding.

Chart D lists proposed FY05 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 Expenditure for Each Federal Grant for State Fiscal Year 2004

Grant Program / Title	Assistance ID #	Grant	Match	Total
Pollution Prevention Performance Partnership	BG997322-03	$1,096	$2,901	$3,997
Performance Partnership	BG997325-A1	$1,426,433	$481,686	$1,908,119
Performance Partnership	BG997325-04	$2,286,147	$731,297	$3,017,445
Wetlands Protection	CD997676-01	-$2,482	-$534	-$3,016
Joint State Atrazine Study	CP997369-01	$27,991		$27,991
Clean Water State Revolving Fund	CS310001-XX	$5,443,334	$1,773,303	$7,216,637
604 B Water Quality Management	C6007328-12	$39,531		$39,531
604 B Water Quality Management	C6007328-13	$74,217		$74,217
319 H Non-Point Source	C9007403-XX	$3,687,464	$103,232	$3,790,696
Improved Public Access	EA997978-01	$142,532		$142,532
Drinking Water State Revolving Fund	FS997573-97	$917,854		$917,854
Drinking Water State Revolving Fund	FS997805-XX	$9,825,810	$2,513,922	$12,339,732
Underground Injection Control	G987092-03	$21,297	$23,664	$44,960
Underground Injection Control	G987092-04	$54,845	$42,340	$97,185
Hardship Grant	HG997067-01	$242,473	-$63	$242,410
Water 106 Supplemental Grant	I997743-01	$15,741		$15,741
Leaking Underground Storage Tanks	LS007449-02	$534,138	$28,660	$562,798
Leaking Underground Storage Tanks	LS987161-01	$699,727	$53,515	$753,242
Long Pine Rural Clean Water Program	NA	$4		$4
Department of Defense	NE-02	-$21		-$21
Department of Defense	NE-03	$123,893		$123,893
Network Readiness	OS830276-01	$51,489		$51,489
Network Readiness	OS831312-01	$143,574		$143,574
PM 2.5 Ambient Air Monitoring	PM997968-01	$242,729	$109,312	$352,041
PM 2.5 Ambient Air Monitoring	XA987417-01	$36,579		$36,579
Operator Training	T987163-01	$29,429	$2,895	$32,324
Superfund Core	VC987267-01	$174,988	$10,263	$185,250
Superfund Core / Voluntary Cleanup	V997530-02	$30,389	$4,075	$34,464
Superfund Management Assistance	V997531-02	-$483		-$483
Superfund Management Assistance	V997531-03	$135,700		$135,700
Superfund Site Assessment	V997532-01	-$1,471		-$1,471
Superfund Site Assessment	V997532-02	$272,847		$272,847
Class V Project	X6987390-01	$11,291		$11,291
TMDL Bacteria Monitoring Equipment	X987382-01	$95,036		$95,036
NDEQ TMDL	X987008-01	$6,706	$2,500	$9,206
MST for TMDLS	X987093-01	$35,493		$35,493
Pollution Prevention Technical Assistance	X987189-01	$62,730		$62,730
Homeland Security Grants	2003-MU-TS-0008	$8,969		$8,969
Totals		$26,898,018	$5,882,968	$32,780,986

Grants Listed with a Grant Number XX contain more than two grants with the same prefix. These grants were combined
Performance Partnership BG997325-A1 is made up of Water 106, Air 105, Groundwater, RCRA 3011 and TSCA Grants
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

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 2004. 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 2004 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 2004, 56 Litter Reduction and Recycling grants were awarded, totaling $1,133,159. The grants were awarded in three categories: Public Education, $408,159; Cleanup, $134,320; and Recycling, $590,680. 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 2004, 117 projects totaling $3,130,288 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 2004, $103,022 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 $79,297 in rebates were awarded in fiscal year 2004.

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. Nearly $82 million has been disbursed since the program began. The program provided $6,581,861 to 374 sites for investigation and cleanup in FY2004.

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 FY2004, loans totaling $33 million were allocated, and $13.5 million was disbursed.

The Drinking Water State Revolving Fund provides funding assistance on Drinking Water projects. In FY2004, loans totaling $8.3 million were allocated, and $13.2 million was disbursed.

The construction of wastewater and drinking water facilities is a multi-year process. There are projects which have been approved in previous fiscal years which have may received funds in fiscal year 2004. Conversely, projects approved in fiscal year 2004 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 FY2004 included: $2,651,000 for large projects; $49,455 for small projects; $2,004,317 for community lake restoration projects; $492,700 for wellhead area management projects; and $200,000 for urban run-off management.

Nebraska Environmental Partnerships

The Nebraska Environment Partnerships program used Clean Water State Revolving Fund administrative cash funds to provide financial assistance to eligible municipalities for facility planning reports for wastewater treatment system improvement projects that will seek funding through the Water Wastewater Advisory Committee (WWAC) Common Preapplication Process in the SFY2005 and SFY2006. In its first year of funding, 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 90% of the eligible facility plan project cost, but cannot exceed $12,500. Grant awards for SFY2004, totaling $75,460, were allocated to seven communities: Brock, Cody, Indianola, Loomis, Lorton, Palmer, and Stamford. Funds have been disbursed to four 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. Grant awards for SFY2004, totaling $113,800, were allocated to twelve communities: Bartley, Bertrand, Boelus, Central City, Henderson, Imperial, Indianola, Lancaster County SID #6 (Emerald), Palisade, Stromsburg, Sutherland, and York.

Since its inception in SFY2002, the Nebraska Environmental Partnerships program, through the Drinking Water State Revolving Fund, has allocated planning grants to 37 communities, for a total of $363,800. To date, funds have been disbursed to 14 of the communities.

CHAPTER 11:
Staffing Issues

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 2004.

Staff retention continues to be an important goal for the agency. Turnover creates a lack of continuity in the department's programs and enforcement activities, and causes additional taxpayer dollars to be spent 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 is provided to interested staff.

Reaching Affirmative Action goals also remains a challenge. The department monitors the 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 2004 are from October 1, 2003 through September 30, 2004.

	94	95	96	97	98	99	00	01	02	03	04
Director/Deputy Director/Assistant Director/ Division Administrator	0	1	0	0	1	4	0	0	0	0	1
Section Supervisor	0	1	3	0	0	0	3	0	2	0	0
Unit Supervisor/Records Manager	0	0	3	1	3	0	4	3	0	2	2
Human Resources	1	2	0	1	8	7	6	3	0	0	1
Federal Aid Administrator, Financial Assurance Coordinator	0	0	1	0	1	2	0	0	2	1	2
Clerical/Accounting	3	3	4	8	9	7	0	4	5	1	5
Information Technology/Public Information/Research Analyst	0	5	0	3	2	2	3	1	0	1	1
Attorney	0	0	0	0	0	1	0	0	1	0	1
Environmental Engineer	4	7	3	4	9	6	5	3	3	2	2
Field Data Specialist	0	0	0	0	0	0	0	0	0	0	0
Compliance Specialist	1	5	1	1	4	7	0	0	0	0	1
Programs Specialist	4	9	7	9	21	5	12	6	6	7	2
Geologist, Groundwater	4	1	1	0	2	0	0	1	1	1	4
Environmental Assistance Coordinator										1	1
TOTALS	17	36	23	27	60	41	33	21	20	16	23

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.

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (LF)							
Alliance Landfill	Alliance	MSWDA	03/17/94	$ 2,539,245	$ 1,021,546	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	$ 121,030	$ 121,030	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	$ 2,619,870	$ 2,619,870	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	04/09/96	$ 2,859,157	$ 1,099,836	Trust Fund	Cornerstone Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	$ 10,126,344	$ 10,126,344	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	07/01/96	$ 2,794,251	$ 1,354,259	Trust Fund	Cornerstone Bank
Gering Landfill	Gering	MSWDA	02/13/96	$ 570,481	$ 342,855	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	$ 3,840,922	$ 1,627,682	Trust Fund	Security Natl. Bank
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	$ 6,171,314	$ 1,751,719	Enterprise Fund	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	08/12/96	$ 3,238,395	$ 1,140,898	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	$ 259,200	$ 20,632	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	$ 2,151,077	$ 787,117	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	$ 2,071,184	$ 2,071,184	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	$ 1,440,618	$ 1,351,223	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	$ 1,118,740	$ 304,475	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	$ 1,783,387	$ 647,695	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road	Lincoln	MSWDA	04/01/96	$ 12,410,150	$ 12,410,150	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	$ 2,008,416	$ 406,299	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	$ 888,256	$ 74,950	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	$ 337,996	$ 67,963	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	07/01/96	$ 1,302,993	$ 346,211	Trust Fund	Cornerstone Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	$ 9,628,821	$ 2,285,682	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	$ 17,011,607	$ 17,011,607	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	$ 6,022,090	$ 5,903,400	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	$ 2,127,026	$ 391,743	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	9/25/97	$ 889,272	$ 255,959	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	$ 1,096,142	$ 207,674	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	$ 1,772,029	$ 630,981	Enterprise Fund	City of York
		Construction/Demolition Landfills					
Abe's Trash Service	Blair	Const./Demol.	03/30/98	$ 100,981	$ 100,981	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	$ 114,690	$ 9,773	Enterprise Fund	City of Alliance
Anderson Excavating	Omaha	Const./Demol.	10/19/98	$ 211,826	$ 211,826	Surety Bond	Employers Mutual Cas. Co.
Arnold C & D	Arnold	Const./Demol.	07/24/00	$ 14,678	$ 4,168	Enterprise Fund	Village of Arnold
Bud's Sanitary Service	Newman Grove	Const./Demol.	06/01/97	$ 29,350	$ 29,350	Letter of Credit	First Natl. Bank Newman Gr
Butler County	David City	Const./Demol.	06/01/97	$ 171,011	$ 171,011	Surety Bond	Evergreen Ntl. Indemnity Co.

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Gage County	Beatrice	Const./Demol.	02/23/98	$ 177,019	$ 177,019	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction	Omaha	Const./Demol.	3/9/96	$ 64,082	$ 64,123	Surety Bond	Fireman's Fund Ins. Co.
KGP Services	Norfolk	Const/Demol.	11/06/03	$ 35,091	$ 35,091	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	$ 34,234	$ 8,884	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	$ 67,045	$ 63,738	Trust Agreement	First Natl. Bank, Omaha
Lincoln North 48th St.	Lincoln	Const./Demol.	04/01/96	$ 1,063,720	$ 1,063,720	Financial Test	City of Lincoln
Loup Central C & D	Elba	Const./Demol.	04/09/96	$ 21,169	$ 10,161	Trust Fund	Citizens Bank & Tr. St. Paul
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	$ 119,459	$ 119,459	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	$ 51,052	$ 12,672	Enterprise Fund	City of O'Neill
PAD LLC	Hastings	Const./Demol.	06/05/02	$ 131,860	$ 132,119	Letter of Credit	Five Points Bank
Plainview C & D	Plainview	Const./Demol.	09/26/00	$ 23,339	$ 19,226	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	$ 87,726	$ 19,658	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	$ 36,331	$ 5,509	Enterprise Fund	City of Imperial
Stewart C & D	Indianola	Const./Demol.	07/25/00	$ 67,581	$ 13,167	Trust Agreement	Adams Bank & Trust
		Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills					
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	$ 5,087,296	$ 5,087,296	Financial Test	Ash Grove
Hastings Utilities	Hastings	FFCA	2/1//01	$ 280,313	$ 194,506	Enterprise Fund	City of Hastings
Fremont Utilities	Fremont	FFCA	05/28/96	$ 226,073	$ 340,000	Enterprise Fund	City of Fremont
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	$ 773,523	$ 773,523	Financial Test	NPPD
NPPD Sheldon Station 3	Sheldon	FFCA	04/01/95	$ 113,842	$ 113,842	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	$ 410,871	$ 410,871	Financial Test	NPPD
OPPD NE City	NE City	FFCA	04/04/95	$ 3,800,871	$ 3,800,871	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	$ 1,580,600	$ 1,580,600	Financial Test	OPPD
Platte Generation	Grand Island	FFCA	08/25/97	$ 179,878	$ 179,878	Enterprise Fund	City of Grand Island
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	$ 259,754	$ 259,754	Financial Test	OPPD
Clean Harbors Technology	Kimball	Monofill	08/01/95	$ 2,720,757	$ 2,720,757	Insurance Policy	Steadfast Insurance Co.
Waste Management	Bennington	Indus. Waste	04/01/02	$ 2,622,908	$ 2,622,908	Surety Bond	Evergreen Ntl. Indemnity Co.
			Transfer Stations				
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	$ 7,635	Surety Bond	Capitol Indemnity Corp
Custer Transfer Station	Broken Bow	Transfer Station	06/27/94	$ 6,867	$ 6,867	Letter of Credit	NE State Bank & Trust
Waste Management of NE	Bridgeport	Transfer Station	08/15/03	$ 6,869	$ 6,869	Surety Bond	Evergreen Ntl. Indemnity Co.
Fremont CRD, Inc.	Fremont	Transfer Station	04/09/96	$ 12,875	$ 12,875	Surety Bond	American Guar & Liability Co
King Transfer Station	Walthill	Transfer Station	04/02/96	$ 552	$ 552	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

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Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Seneca Sanitation	Dubois	Transfer Station	03/07/96	$ 3,700	$ 3,700	Letter of Credit	First Natl. Bank, Centralia
Waste Management of NE	Gering	Transfer Station	08/15/03	$ 9,455	$ 10,204	Surety Bond	Evergreen Ntl. Indemnity Co.
Saunders County San. Inc.	Wahoo	Transfer Station	07/02/03	$ 5,372	$ 5,372	Surety Bond	Capitol Indemnity Corp
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	12/15/99	$ 51,400	$ 51,400	Letter of Credit	Clarkson Bank
			RCRA Closure and RCRA Post-Closure (PC)				
3-D Incorporated	Alda	RCRA Closure	01/25/93	$ 22,640	$ 22,640	Trust Fund	Bank of Doniphan
Behlen Manufacturing Co.	Columbus	RCRA PC	08/30/94	$ 364,800	$ 364,800	Financial Test	Behlen Mfg. Co.
Clean Harbors Technology	Kimball	RCRA Closure	05/10/95	$ 9,869,544	$ 9,869,544	Insurance Policy	Steadfast Insurance Co.
Curtis Metals	Curtis	RCRA PC	05/07/87	$ 200,000	$ 200,000	Corporate Guarante	Burlington Northern
Douglas County Landfill	Omaha	RCRA PC	03/08/85	$ 881,109	$ 881,109	Trust Fund	First Natl Bank of Omaha
Eaton Corporation	Omaha	RCRA PC	03/27/84	$ 4,463,158	$ 4,463,158	Letter of Credit	Key Bnk Ntl. Assoc.
Lockwood Corporation	Gering	RCRA PC	09/29/87	$ 137,869	$ 137,869	Trust Fund	US Bank
Malnove Corporation	Omaha	RCRA PC	10/05/89	$ 370,000	$ 370,000	Letter of Credit	Wells Fargo
Nucor Steel - Nebraska	Norfolk	RCRA Closure	06/19/03	$ 1,500,000	$ 1,500,000	Financial Test	Nucor Corporation
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	$ 161,315	$ 161,315	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	$ 362,578	$ 362,578	Insurance Policy	Indian Harbors Insurance Co.
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
			Underground Injection Control (UIC)				
Crow Butte Resources, Inc.	Crawford	UIC		$ 14,909,670	$ 14,909,670	Letter of Credit	Royal Bank of Canada
			Scrap Tire Sites				
B & R Wallrock	Weeping Water	Scrap Tire	04/10/00	$ 2,500	$ 2,500	Surety Bond	Union Insurance Co.
Butler County Landfill	David City	Scrap Tire	05/16/97	$ 234,900	$ 234,900	Surety Bond	American Guar & Liability Co
Central American Tire Salvag	Kansas C, KS	Scrap Tire	12/17/02	$ 2,500	$ 2,500	Letter of Credit	Union Bank
Champlin Tire Recycling Inc	Concordia KS	Scrap Tire	10/04/96	$ 2,500	$ 2,500	Letter of Credit	Gold Bank
Don's New & Used Tires	Lincoln	Scrap Tire	03/13/03	$ 2,500	$ 2,500	Surety Bond	Old Republic Surety Co.
EnTire Recycling Inc	Nebraska City	Scrap Tire	04/21/96	$ 2,500	$ 2,500	Escrow Account	The First National Bank
Kenny Frazier	Edmond OK	Scrap Tire	05/26/04	$ 2,500	$ 2,500	Escrow Account	Bank of America, Inc.
Gerdes & Sons	Talmage	Scrap Tire	01/08/97	$ 2,500	$ 2,500	Surety Bond	Union Insurance Co.
GreenMan Tech of IA	Des MoinesIA	Scrap Tire	11/21/02	$ 2,500	$ 2,500	Surety Bond	BancInsure Inc.
GreenMan Tech of MN	Savage MN	ScrapTire	07/01/97	$ 2,500	$ 2,500	Surety Bond	BancInsure Inc.
Industrial Services Inc	Lincoln	Scrap Tire	12/20/96	$ 2,500	$ 2,500	Surety Bond	Old Republic Surety Co.
J & M Steel	Hastings	Scrap Tire	08/27/98	$ 2,500	$ 2,500	Letter of Credit	1st Bank & Trust,Clay Center

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
ABC Tire LLC	Kansas C, KS	Scrap Tire	10/25/00	$ 2,500	$ 2,500	Surety Bond	Travelers Casualty & Surety
Andrew LaBeau III	Dix	Scrap Tire	01/05/00	$ 2,500	$ 2,500	Letter of Credit	American Nat'l Bank
Marty Lukassen	Mitchell	Scrap Tire	03/03/03	$ 2,500	$ 2,500	Surety Bond	Union Insurance Co.
Lee Pester	Lincoln	Scrap Tire	07/01/96	$ 2,500	$ 2,500	Guarantee Bond	Old Republic Surety Co.
Leo Porter	Oshkosh	Scrap Tire	06/09/00	$ 2,500	$ 2,500	Letter of Credit	Nebraska State Bank
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	$ 2,500	$ 2,500	Letter of Credit	First State Bank, Ness Cy,KS
River City Recycling	Omaha	Scrap Tire	09/07/99	$ 72,900	$ 72,900	Letter of Credit	US Bank, Minneapolis, MN
Stan's Recycling	Geneva	Scrap Tire	02/15/02	$ 2,500	$ 2,500	Letter of Credit	Geneva State Bank
Tire Cutters	Centralia KS	Scrap Tire	11/10/03	$ 2,500	$ 2,500	Letter of Credit	1st Natl. Bank, Centralia
Tire Recycling Centers USA	Lincoln	Scrap Tire	01/09/01	$ 6,405	$ 6,405	Escrow Account	First American Bank, IA
Tire Town, Inc.	Leavenworth	Scrap Tire	03/15/96	$ 2,500	$ 2,500	Letter of Credit	First Commercial Bank