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CHAPTER 1:

Agency Overview

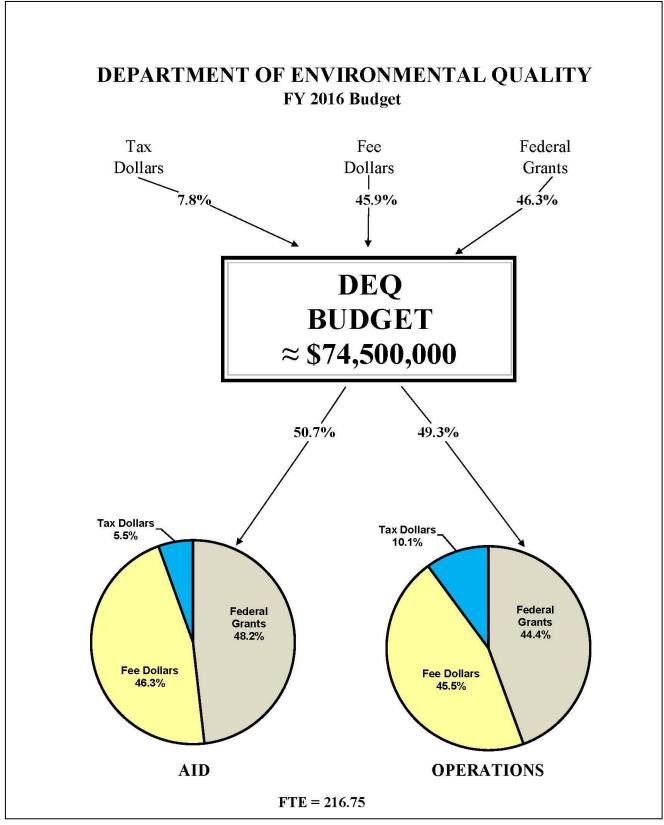
The Nebraska Department of Environmental Quality (NDEQ) was created with passage of the Nebraska Environmental Protection Act in 1971. The Department has grown and been given additional responsibilities over the years, but its mission has remained the same — the protection of Nebraska's air, land and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

The NDEQ has an FY16 total annual budget of approximately \$74.5 million. This includes money from federal grants, state taxes and fees. Of that amount, \$37.8 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans).

The table below breaks down NDEQ funding by fund type. The columns listed as aid represent the agency's budget redistributed to other entities as grants and loans. The columns listed as operations represent amounts used for agency operation and contracts for such things as investigations and cleanups.

Funding Type	Operations: \$ Amount	Percent of Operations Budget	Aid: \$ Amount	Percent of Aid Budget
Federal Funds (Grants)	\$16.3 million	44.4%	\$18.2 million	48.2%
State General	ψ10.3 Hillion	77.770	ψ10.2 HillioH	40.270
Funds (Tax \$)	\$3.7 million	10.1%	\$2.1 million	5.5%
Cash Funds				
(Fees)	\$16.7 million	45.5%	\$17.5 million	46.3%
Total	\$36.7 million		\$37.8 million	

The following graphic depicts NDEQ's FY16 budget by funding source and percent anticipated to be expended by fund type and activity (aid or operations).



I. Significant Topics in 2015

The following are some of the significant topics, challenges and accomplishments that NDEQ addressed in 2015:

New Agency Director Appointed

On March 2, 2015, Governor Pete Ricketts announced that Jim Macy of Jefferson City, Missouri would serve as the next Director of the Nebraska Department of Environmental Quality. After an interview process, the Environmental Quality Council forwarded finalists to Governor Ricketts who selected Macy as the department's new director.

From 2012 to 2014, Macy served as the Director for the Missouri Department of Natural Resources' Financial Assistance Center, which provides funding for drinking water and wastewater infrastructure projects.

Previously, Macy has served in a variety of capacities throughout the Missouri Department of Natural Resources, including roles as the Environmental Compliance Section Chief, the Division Director of Field Services and the Regional Director of the Kansas City Regional Office.



Macy holds a Bachelor of Science in Agriculture with an emphasis in Animal Science and a Master's in Education with a focus on Vocational/Technical Education from the University of Missouri-Columbia. In 2001, Macy received the EPA National Notable Achievement Award for Outstanding RCRA Stakeholder Involvement Team of the Year.

Macy has set three initial goals for the department.

- Providing exceptional service,
- Focusing on compliance assistance, and
- Demonstrating accountability through performance measures

Since his appointment, Macy has been engaging Nebraska leadership in all sectors to open a dialogue with the department.

New Federal Air Rule, Nebraska's Carbon Mitigation Efforts

On Aug. 3, 2015, the U.S. Environmental Protection Agency (EPA) released its final rule on carbon mitigation, called the Clean Power Plan. The EPA Plan is a set of standards designed to reduce carbon emissions from power plants, and would directly affect some Nebraska facilities. The plan requires states to submit state plans by September 6, 2016. States may request extensions that, if granted, would extend the date for submission of final state plans to September 6, 2018.

As of November 1, 2015, Nebraska is in the process of analyzing the 1,600-page rule and meeting on a regular basis with affected industry to develop a framework for addressing carbon emissions in Nebraska. NDEQ will also be seeking additional input from the interested public, and will coordinate review efforts with the Nebraska Department of Energy, in the development of a carbon mitigation strategy. For more information about NDEQ's Air Quality Programs, see page 19.

Chapter 1 Agency Overview

Petroleum Remediation Equipment Re-use Program

NDEQ's Petroleum Remediation Program oversees investigation and cleanup of petroleum contamination sites. The program administers financial assistance to responsible parties for conducting these cleanup efforts.

As sites are undergoing cleanup, NDEQ pays for the purchase of remedial equipment. When sites are cleaned up and closed, NDEQ seeks to reuse that equipment at other sites. Over the last ten years, NDEQ has reused hundreds of pieces of equipment, thus greatly reducing the need to buy new equipment. This reuse program has saved Nebraska taxpayers nearly \$4 million in new equipment costs and allowed that money to be used for cleanup of



Through the Equipment Reuse Program, NDEQ reduces cleanup costs by reusing equipment from one project to another.

additional sites. For more information about the Petroleum Remediation Program, see page 51.

Monthly Performance Metrics

In July 2015, NDEQ initiated a monthly metrics report. NDEQ established the report to measure agency accomplishments, to set annual and longer-term goals, and to evaluate these goals against accomplishments to ensure continuous process improvements. The primary focus in the first reports has been on permits issued, compliance inspections and response to complaints. The monthly report also contains a description of issues and accomplishments that occurred in the previous month.

NDEQ provides the report to the Governor's Office as part of the Governor's ongoing analysis of agencies' performance and to develop goals for greater efficiency. In addition, NDEQ provides this information to staff in the agency for internal review and posts the monthly data on our web site, http://deg.ne.gov, under the heading "Monthly Metrics."

Development of Air Quality General Permits, Process Improvements

NDEQ's Air Quality Division has been taking steps to reduce permit backlogs in both the construction and operating permit programs. NDEQ is examining options to address the operating permit backlog, including: retaining private consultants to review permits, staff hiring and retention strategies, and examining internal processes. The Division is considering regulatory revisions – specifically, extending the length of permit terms.

Recent regulatory revisions will help reduce the backlog in air construction permits. These revisions provide facilities with an option to apply for general permits. The Air Quality Division began evaluating potential groups that might be suitable for general construction permits. The groups chosen include: concrete batch plants, hot mix asphalt plants, aggregate crushing and sorting operations, diesel-fired emergency engines and incinerators. Applicants will be able to complete an online application and, if eligible, obtain expedited coverage under a general permit. This expedited

process will create time savings for staff, which will allow more time to review more complicated or site-specific permitting and compliance issues. For more information about NDEQ's Air Quality Programs, see page 19.

Online Environmental Quality Permitting

In November 2015, NDEQ announced the launch of online applications for storm water construction permits. The online application can be found at http://deq.ne.gov by clicking on "Permits and Authorizations." The time savings gained by streamlining the application process for these storm water permits not only shortens the turnaround time, but also will allow agency staff to focus on expediting review of more complicated or site-specific permitting and compliance issues."

Coordinated Response on Avian Influenza

Through the summer months of 2015, poultry operations in Nebraska and other Midwestern states were impacted by outbreaks of Avian Influenza. To prevent spread of the influenza, six sites in Nebraska depopulated over four million chickens. NDEQ participated in a coordinated response with the Nebraska Department of Agriculture. NDEQ focused on environmental issues, including the proper handling and disposal of animal carcasses. Disposal involved onsite composting of the carcasses.

NDEQ and the Nebraska Department of Agriculture coordinated a "Heartland Avian Influenza Workshop" on August 11-12, 2015. Fifty-five staff from the



Temperature is measured at a compost pile at one of the locations in Nebraska where poultry carcasses were composted onsite. High temperatures in the compost piles destroy any potential avian influenza viruses.

environmental and agriculture agencies in Iowa, Kansas, Missouri, Minnesota and Wisconsin participated. The purpose of the workshop was to exchange best management practices used in addressing Avian Influenza and to identify areas of concern.

Voluntary Cleanup Program - Beatrice

On August 25, 2015, the City of Beatrice and Centel jointly applied to participate in NDEQ's Voluntary Cleanup Program to clean up environmental contamination from a former manufactured gas plant. The application followed extensive discussions between NDEQ and Beatrice to determine the best approach to address the contamination at the site. NDEQ is pursuing cleanup at several sites across the state where historic operations of manufactured gas plants have resulted in hydrocarbon contamination of groundwater. Many years ago, these plants used coal as a feedstock to produce coal gas used in homes and businesses for light and power.

Many Nebraska businesses have turned to the state's Voluntary Cleanup Program as a more efficient and streamlined alternative than participating in the federal cleanup program known as Superfund. Under the Voluntary Cleanup Program, applicants have the responsibility, under close



Currently, there are 22 sites in the VCP Program

state oversight, to complete the investigation, determine the best cleanup option and conduct the cleanup actions. The state program has resulted in shorter timeframes to complete the cleanup and lower state oversight costs.

Currently, there are 22 sites in the program. Under state oversight, 17 sites have been cleaned up and completion letters have been issued. For more information about the VCP program, see page 35.

II. 2015 Legislative Summary

The Nebraska Legislature enacted three pieces of legislation passed in 2015 had an impact on NDEQ:

LB 207 - This legislation amends the Nebraska Chemigation Act to increase the civil penalty for the following: 1) chemigating without first obtaining a chemigation permit from the NRD; 2) chemigating with a suspended or revoked chemigation permit; 3) willfully tampering with or otherwise willfully damaging any chemigation equipment; 4) a permitholder failing to notify the NRD and NDEQ of any actual or suspected accident resulting from the use of chemigation; or 5) for any other violation of the Chemigation Act for which a penalty is not provided. The penalty for the first offense is \$1,000 per site; for subsequent violations, the penalty range is between \$1,000 to \$5,000 each day and at each site where a violation occurs.

LB 413 – National Pollutant Discharge Elimination System (NPDES) permits issued or reissued to political subdivisions is the focus of this legislation. This legislation authorizes NDEQ to exercise all possible discretion allowed by the EPA to enable political subdivisions requesting an NPDES permit to maintain environmental infrastructure in a way that is both sustainable and within the financial capability of the political subdivision. NDEQ, at the request of a political subdivision, may conduct an evaluation to determine the extent to which a political subdivision must comply with the permit. The NDEQ determination may affect the level of treatment or pollution control, the length of time

necessary for compliance, or both. Political subdivisions requesting the evaluation are required to submit an application fee. NDEQ is authorized to create a tiered fee schedule in cases of financial hardship. LB 413 also amends the Wastewater Treatment Facilities Construction Assistance Act to give NDEQ authority to provide grants or an additional interest subsidy on loans for municipalities if the project contains a sustainable community feature, measurable energy use reductions, low impact development, or special assistance needs as identified through the department's evaluation.

LB 469 –EPA recently adopted new federal Clean Air Act rules, commonly referred to as the Clean Power Plan, to regulate carbon dioxide emissions from covered electric generating units. LB 469 requires NDEQ to submit the state plan it develops to address the new federal requirements to the Nebraska State Energy Office prior to submitting it to the EPA. If the EPA extends the submission deadline, the department must provide the plan to the State Energy Office at least 120 days prior to the extended deadline. The State Energy Office is required to prepare a report that assesses the plan's effects and submit it to the Legislature within 30 days of receipt of the NDEQ plan. If the Legislature is in session when they receive the State Energy Office report, the Legislature may vote on a nonbinding resolution regarding its findings. The bill clarifies that nothing in the law should prevent NDEQ from complying with the federal submission deadlines. NDEQ is also required to submit a copy of the state plan to the Legislature after the plan is submitted to EPA.

LB 469 also incorporates provisions of LB 583 and LB 205. LB 583 amends laws regarding the State Energy Office to add new duties. Among those new duties is the requirement to develop a strategic state energy plan. LB 205 amends aeronautics laws to add requirements for meteorological evaluation towers.

III. State and Federal Actions Affecting Agency Staffing

The following is a breakdown of legislation over the past 10 years that has affected NDEQ staffing requirements. 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).

2006 (217 FTE)

State Legislation/Federally Mandated

- Livestock Waste Management Act
- · Stormwater Grants
- Emission Trading

2007 (218 FTE)

State Legislation/Not Federally Mandated

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

2008 (218 FTE)

State Legislation/Not Federally Mandated

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

2009 (218 FTE)

State Legislation/Not Federally Mandated

- Livestock Waste Management Act
- · Integrated Solid Waste Management Act
- · Waste Reduction and Recycling Incentive Fund
- · Waste Reduction and Recycling Incentive Fund

2010 (215.25 FTE)

State Legislation/Not Federally Mandated

LB1 Special Session

2011 (215.25 FTE)

State Legislation/Not Federally Mandated

- LB28 Nebraska Chemigation Act
- LB29 Emergency Response
- LB30 Integrated Solid Waste Management Act
- LB156 Clean Air Act

2012 (216 FTE)

State Legislation/Not Federally Mandated

Deficit Funding Bill 1 FTE

2013 (216 FTE)

State Legislation/Not Federally Mandated

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

2014 (216.75 FTE)

State Legislation/Not Federally Mandated

· LB514 Clean Water State Revolving Fund

CHAPTER 2:

Administration/Legal/ Management Services

The Administrators, Legal and Management Services provide administrative, legal and day-to-day support services to the effective operations of the Department.

I. Administrators

The Administrators of NDEQ provide oversight and policy direction in all areas of NDEQ's activities. The Administrators include the Director, Deputy Directors, Legal Counsel, Assistant Director, Associate Program Directors, Government Relations Program Manager and Division Administrators. The Director and Deputy Directors are responsible for the overall function and coordination of NDEQ activities.

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

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

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

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

II. Legal Division

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

- > Preparing legal opinions interpreting federal and state laws and regulations,
- Advising the Director and NDEQ staff on duties and program responsibilities,
- Preparing administrative orders and other enforcement actions for NDEQ,
- Representing NDEQ 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 NDEQ documents, and
- Representing the Director and NDEQ as requested by the Director.

During FY2015, the Director issued 13 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled seven civil judicial cases and judgments were entered for a total of \$125,250 in civil penalties with deferments possible in many cases for subsequent compliance. In addition, these judgments included \$39,250 for supplemental environmental projects. Copies of these administrative orders and judicial cases are available for viewing on the NDEQ website.

III. Management Services

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

Fiscal Services

The Fiscal Services Section is responsible for agency budgeting and finance functions, which includes managing NDEQ spending, purchasing, receipting, accounting and auditing responsibilities. The section has six staff, who offer financial advice and assistance to programs and also conduct financial reviews of grantees.

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

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

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

The Section also assists collection, tracking and reporting applicable fees for the Integrated Solid Waste Management, Livestock and Title V air emission programs.

Major accomplishments during fiscal year 2015:

- Assisted in implementation of a fully integrated Loan and Grants Tracking System, which
 provides real time access to State Revolving Fund loan program financial and programmatic
 information by project.
- Assisted in implementation of an electronic grant application and payment system working with the Electronic Content Management (ECM) platform for the Litter and Waste Grant programs.
 This system will become functional in fiscal year 2016 for other programs within NDEQ, with

- the goal to fully integrate the invoicing, routing, coding, approval and payment system within the ECM.
- Successfully completed a fiscal year 2014 audit during 2015, which resulted in a clean financial audit report, with no fiscal findings.

Human Resources

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

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

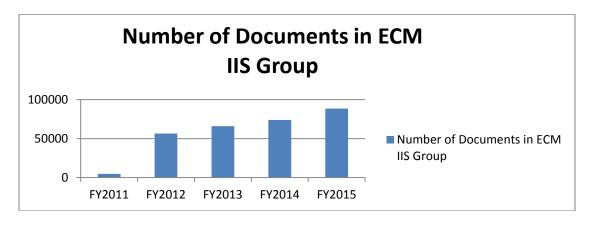
Specifically, Human Resources consults with supervisors and employees to: process employee pay and benefits; coordinate hiring; conduct new employee orientation and employee exit interviews; coordinate NDEQ's medical monitoring program; participate in the Health & Safety Committee; manage the classification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

Human Resources added a Training Coordinator position in 2015. This position responsible for analyzing training needs, developing curriculum and consulting with the managers and supervisors of the agency to assess training needs and to develop programs to match these needs. The position will continually evaluate procedures to monitor and analyze course effectiveness and update curriculum as needed. This position will also be ultimately responsible for implementing a succession plan for future agency needs.

Records Management/Database Administration

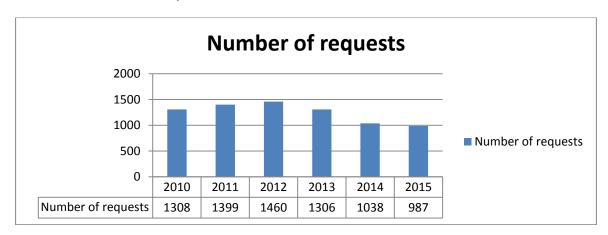
The Records Management Section is responsible for managing NDEQ's paper and electronic records. The section also operates the agency's centralized mail handling process and other support functions for the agency. This includes, but is not limited to: ordering supplies, staffing the main reception and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

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



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

Facility-related document images residing in the ECM were made available to the public through NDEQ's webpage in December 2012. The change in public accessibility to NDEQ documents means staff increasingly fulfills requests for information by providing instructions to access the images from the Internet. Public records requests have declined as documents are scanned into the ECM.



Staff spends less time gathering and organizing files for review, disassembling and reassembling files, photocopying documents and preparing invoices and packages to mail. The time to respond to public records requests is expected to decline further as new documents are scanned into the ECM. Requests for historical images are handled on a case-by-case basis.

The focus of the Section has been managing records related to facilities and certifications. The ECM has been expanded to facilitate management of other types of documents received and generated by NDEQ, including agreements, payroll, invoice processing, waste grants, legal and other project documents.

Future projects for the Section include an update of written policies and procedures for handling NDEQ records as well as training staff to properly manage the records and information they produce.

Database Administration manages facility data for NDEQ's Integrated Information System (IIS), resolving discrepancies and providing accurate descriptive and locational information for a database of over 51,000 facilities. A new GIS map application was deployed in late 2012 and is available from

the agency web site (http://deqims2.deq.state.ne.us/deqflex/DEQ.html). Viewers have the ability to find facilities and to view facility-related documents with this application.

Information Technology

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

The agency has developed an Integrated Information System (IIS) which is a centralized, shared database containing descriptive, locational, program specific and paper file information for all facilities and other items under the agency's jurisdiction. Nationally, NDEQ is among the leaders within state environmental agencies regarding information integration. Over the past 16 years, the program has implemented EPA grants to improve the network and information systems. These funds have been and continue to be used in efforts to integrate data that is shared among environmental agencies, to provide greater public access to this information and to build additional information systems. In addition, the agency made available its first web-based reporting application at the end of 2003, to replace the more traditional paper-based reporting process.

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

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

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

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

Public Information Office

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

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

The Public Information Office is responsible for the writing and distribution of news releases on a wide range of environmental topics that are of importance to the public. The office is also involved in the production of a number of other publications, including this annual report, brochures, fact sheets and guidance documents.

These publications can be obtained by contacting the Public Information Office or by visiting NDEQ's website, http://deq.ne.gov. The website has grown considerably in recent years and provides a wide array of information to the public relating to the agency, including:

Environmental Alerts NDEQ News Contact Us/Report a Problem

Rules and Regulations Publications Requests for Proposals

Topics of Interest Program Information Public Notices
Enforcement Resolutions Assistance Cleanups
Compliance Financial Maps and Data

Permits and Authorization Calendar of Events

An important component of the website is to promote two-way communication. As part of those efforts, the agency's main e-mail address is provided at numerous locations on our website. That e-mail address is: NDEQ.moreinfo@nebraska.gov The Public Information Office coordinates responses to those e-mails. The site also features "Report a Problem," with a link to the e-mail address to report an environmental issue of concern at NDEQ.problem@nebraska.gov, The site also includes phone information and procedures relating to reporting a spill or complaint.

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

Grants/Contract Coordination

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

Funding of Management Services

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

CHAPTER 3:

Environmental Quality Council

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



The Environmental Quality Council considers amendments to regulations at a hearing on Oct. 16, 2014.

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

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

Although the Council is responsible for review and adoption of rules and regulations, it does not have involvement in NDEQ's administrative functions or day-to-day responsibilities. The NDEQ Director is responsible for administration of NDEQ and the rules and regulations adopted by the Council.

Following are two tables. The first lists the council members, the second summarizes Council actions during FY2015.

Council Members

Representing	Council member	Term expires
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2017
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2015
Automotive/Petroleum Industry	John Dilsaver Ralston	June 22, 2017
Biologist	Mark Czaplewski Grand Island	June 22, 2017
Chemical Industry	Jeremy Buhl Omaha	June 22, 2019
Conservation	John C. Turnbull York	June 22, 2019
County Government	Hilary Maricle Albion	June 22, 2019
Food Products Manufacturing	Michelle Bucklin Omaha	June 22, 2017
Heavy Industry	John Kinter Norfolk	June 22, 2019
Labor	Robert Hall Wahoo	June 22, 2017
Livestock Industry	Alden Zuhlke Plainview	June 22, 2017
Minority Populations	Mohamed Dahab Lincoln	June 22, 2017
Municipal Government	Vacant	June 22, 2019
Municipal Government	Lance Hedquist South Sioux City	June 22, 2017
Physician	Ronald Sheppard Callaway	June 22, 2019
Power Generating Industry	Joseph Citta, Jr., Columbus	June 22, 2017
Professional Engineer	Dennis Grams Lincoln	June 22, 2019

FY 2015 Environmental Quality Council Actions

Council Meeting Date	Regulation	Action
October 16, 2014	Amendment of Title 128 – Nebraska Hazardous Waste Regulations	Approved
	Amendment of Title 117 – Nebraska Surface Water Quality Standards	Approved
February 11, 2015	Amendment of Title 195 – Chemigation Regulations	Approved
	Program Priority System for the Waste Reduction and Recycling Incentive Grants Fund	Approved
	Rulemaking Petition to Amend Title 128 – Nebraska Hazardous Waste Regulations	Approved
June 4, 2015	Amendment of Title 195 – Chemigation Regulations	Approved
	2016 Intended Use Plan for Clean Water State Revolving Fund and Drinking Water State Revolving Fund	Approved
	Amendment to Title 129 – Nebraska Air Quality Regulations	Approved

CHAPTER 4:

Air Quality Division

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



This solar-powered monitor near Weeping Water, is one of two NDEQ air monitoring sites that are powered totally through renewable energy sources. See page 26 for more information.

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

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

Permitting Section

During FY15, the NDEQ proposed revisions to Title 129 to allow for the implementation of General Construction Permits (the proposed revisions were approved and became effective in July 2015). The NDEQ has continued its permitting of Title V and Prevention of Significant Deterioration (PSD) sources in accordance with EPA's July 24, 2014, memorandum in response to the June 23, 2014 U.S. Supreme Court decision (Utility Air Regulatory Group v. Environmental Protection Agency). This memorandum states that greenhouse gases should only be regulated under Title V and PSD if the facility triggers permitting due to emissions of other pollutants (e.g., sulfur dioxide, nitrogen oxides, particulate matter).

Construction Permit Program

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

Pending July 1, 2014	Applications Received	Applications Processed	Pending June 30, 2015
51	59	55	55

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

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

During FY06-08, NDEQ received an increasing number of air quality construction permit applications largely due to new or expanded business ventures across the state, including ethanol plants, power plants and grain processing facilities. Applications declined during the slower economy of FY09 through FY12 and then increased during FY13 through FY15.

	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Construction Permit Applications Received	53	55	52	54	61	64	59

In FY15 the Construction Permits Unit began evaluating source groups to determine which might be suitable for general construction permits. The initial source groups chosen for general permits were primarily construction-related industries and include: concrete batch plants; hot mix asphalt plants; aggregate crushing and sorting operations; diesel-fired emergency engines;

and incinerators. The construction permitting group will focus efforts in FY16 on general construction permits. The Department also started work on an online application process. This combination will greatly shorten the permitting timeframe for eligible sources for those covered construction related activities, providing the affected industries an avenue to more rapidly respond to a growing economy.

Operating Permit Program

The air quality 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. Operating permits authorized by this legislation are issued for both large and small sources of air pollution. These permits have a five year renewable term.

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

Pending as of	Operating	Operating	Pending as of
June 2014	Permit	Permit	June 2015
	Applications	Applications	
	Received	Processed	
123	32	28	127

Air operating permits are issued for five-year terms. This has resulted in correspondingly wide variations in the numbers of operating permits up for renewal each year. The following table summarizes air operating permit applications received from FY09 through FY15 (applications for all application types, including applications for permit revisions, general operating permits, permit-by-rule, etc.).

	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Number of Operating Permit Applications Received	75	61	32	43	60	71	32

Compliance Section

Ambient Air Quality Monitoring Program

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

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

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

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

- Particulate Matter
 - ➤ With a diameter of 10 micrometers or less (PM₁₀)
 - ➤ With a diameter of 2.5 micrometers or less (PM_{2.5})
- Sulfur Dioxide (SO₂)
- Nitrogen Dioxide (NO₂)
- Carbon Monoxide (CO)
- Ozone (O₃)
- Lead (Pb)

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

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

Most of the sites in the monitoring network evaluate pollutants for which standards are established (i.e., PM2.5, PM10, CO, SO2, Lead, Ozone or TRS). There are two additional types of sites in the network: Interagency Monitoring of Protected Visual Environments (IMPROVE) and National Atmospheric Deposition Program/National Trends Network (NADP/NTN) sites. (See maps on pages 24 and 25 for locations.)

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

The National Trends Network (NTN) of the National Atmospheric Deposition Program (NADP) is a nationwide network of sites that monitor for deposition constituents in precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride and base-cations (e.g., calcium, magnesium, potassium and sodium). There are two NADP/NTN sites in Nebraska: one near Mead and one near North Platte. Both have been operational for over 20 years. These sites are operated by the University of Nebraska, with analytical and data

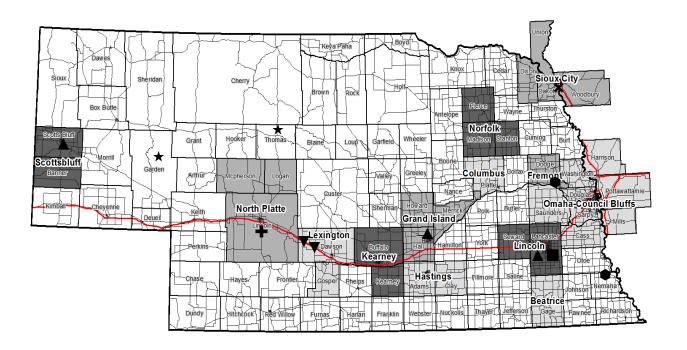
development support from the NADP. The Mead site was upgraded to include mercury (Hg) deposition monitoring and was part of the NADP/Mercury Deposition Network (MDN). Both sites maintain the NADP monitoring. The monitoring in Mead is made possible through cooperative efforts of the NDEQ and the University of Nebraska. Additional information about the NADP/NTN can be found at: http://nadp.sws.uiuc.edu/NADP/

Monitoring Information On-Line

Ozone and continuous PM2.5 data from Lincoln and Omaha is reported hourly to the EPA AirNow system, which makes contemporaneous air quality information available to the public on web at http://www.airnow.gov/. The Douglas County Health Department also participates in the ENVIROFLASH program that allows members of the public to sign up to receive air quality alerts via email.

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

Nebraska Monitoring Sites Outside the Omaha Metropolitan Statistical Area



 $PM_{2.5}$

PM₁₀

Ozone **TRS**

Lead

IMPROVE

NADP/NTN

Lincoln, 3140 N Street

Grand Island, 2124 North Lafayette Avenue

Scottsbluff, Highway 26 & 5th Avenue

Cozad, 215 West 8th Street

Gothenburg, 9th Street

Ozone

1st & Maple Street (Davey)

Dakota City, 501 Pine Street

Lead

Fremont

Auburn

NADP/NTN

Maxwell, North Platte Agricultural Experiment Station

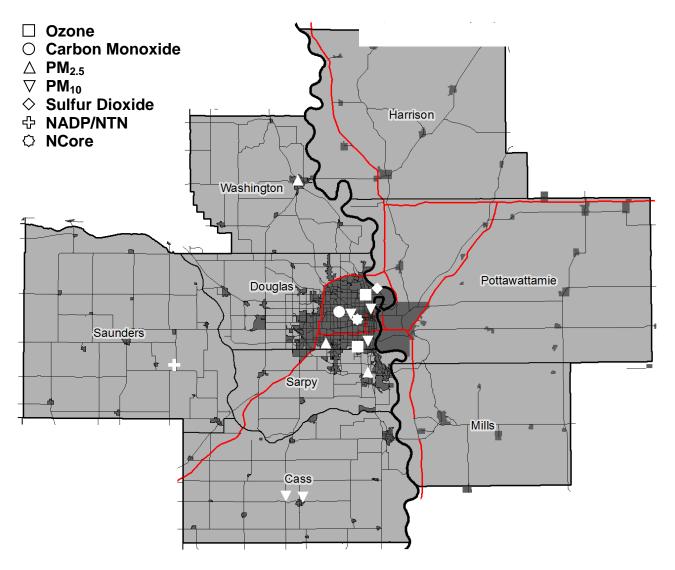
IMPROVE

Garden County, Crescent Lake Wildlife Refuge Thomas County, Nebraska National Forest

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

The Omaha Metropolitan Statistical Area map on the next page shows the location of the 14 monitoring sites located in the Nebraska portion of the Omaha Metropolitan Statistical Area. Eleven of these sites, located in Douglas, Sarpy and Washington Counties, are operated by the Douglas County Health Department with NDEQ oversight. The two PM₁₀ sites near Weeping Water in Cass County are operated by the NDEQ. The National Atmospheric Deposition Program site at Mead is operated by the University of Nebraska.

Omaha-Council Bluffs Metropolitan Area Monitor Locations



O Carbon Monoxide

4102 Woolworth Avenue (NCore Trace Monitor) 7747 Dodge Street, Omaha

♦ Sulfur Dioxide

4102 Woolworth Avenue (NCore Trace Monitor) 1616 Whitmore Street

⊕ NADP/NTN

Mead, Saunders County

\triangle PM_{2.5}

4102 Woolworth Avenue (NCore) 9225 Berry Street 2912 Coffey Avenue (Bellevue) 2242 Wright Street (Blair)

□ Ozone

4102 Woolworth Avenue (NCore) 1616 Whitmore 2411 O Street

∇ PM₁₀

4102 Woolworth Avenue (NCore) 19th & Burt Streets 46th & Farnam Streets 2411 O Street 102 P Street (Weeping Water) 5102 Highway 2 (Weeping Water)

♦ NCore

4102 Woolworth Avenue

Renewable Powered Monitoring Sites

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

Inspections and Facility Compliance

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

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

2015 Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD*	OAQC*
On-site Inspections	216	73	41
Facility Stack Tests Conducted On-site Observations Conducted	94 51	4 4	0
Continuous Emission Monitoring Audits Conducted On-site Observations Conducted	40 21	2 1	0
Complaints Received	30	129**	81
Burn Permits Issued Burn Permits Denied	183 1	106 5	56 0

^{*}LLCHD - Lincoln Lancaster County Health Department; OACC - Omaha Air Quality Control

^{**}Includes LLCHD complaints re: noise, open burning, fugitive dust, and odors

Grants, Planning, and Outreach Unit

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

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

Emission Inventory and Emission Fees

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

The Department attempts to set the fee rate at the minimum level needed to pay reasonable direct and indirect costs of developing and administering the air quality permit program. An analysis detailing how the Department arrived at the fee rate is made available to fee payers and is on the NDEQ's website. The rate for 2014 emissions was \$70 per ton; the rate for 2013 emissions was \$67 per ton.

Air Issues for Nebraska

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

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

The sulfur dioxide (SO₂) standard was changed from a 24-hour and annual primary standard to a 1-hour standard in 2010. To determine attainment with the new standard, the EPA developed an attainment demonstration that includes monitoring and modeling exercises around large SO₂ emitters, and which requires modeling around major emitters in Nebraska. In 2015, NDEQ made its recommendations to EPA concerning attainment designations in the areas of three major emitters; the only one of these not directly recommended for attainment – Sheldon Station in Lancaster County – was recommended as unclassifiable, with a consent decree in place assuring attainment status by the July 2016 deadline. On October 1, EPA issued its final ozone primary and secondary standards; both standards were set at 70 parts per billion. Based upon the most recent data available, it appears that all areas of Nebraska meet these standards at this time. Nebraska is currently considered in attainment with all the National Ambient Air Quality Standards.

EPA released the final rule for its Clean Power Plan on August 3, 2015. The regulation is designed to reduce carbon pollution from power plants. Each state may either develop its own plan to reduce carbon pollution, join with other states to develop mutli-state plans, or defer the plan to EPA. A state plan may either directly adopt emission standards for natural gas combined cycle and coal power plants or be designed to meet a rate- or mass-based statewide goal. NDEQ is meeting with interested stakeholders and developing ongoing outreach plans as we begin to approach to this new regulation.

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

CHAPTER 5:

Waste Management Division

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



Staff of NDEQ, the City of Lincoln and its contractor observe remediation at the West Haymarket Voluntary Cleanup Program site in Lincoln, See page 35 for more information on the Voluntary Cleanup Program.

Resource Conservation and Recovery Act (RCRA) Program

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

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

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

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

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

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

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

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

Program Funding

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

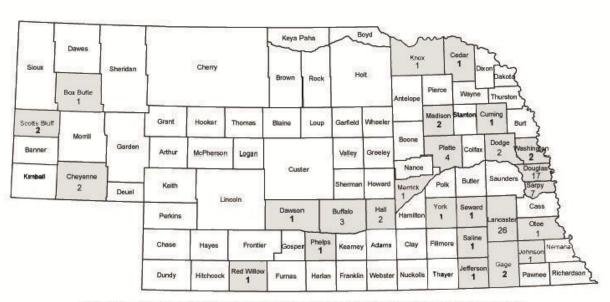
Additionally, NDEQ can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. No new facilities have been proposed in Nebraska since 1994, and that is the last time this fee was collected. There were no new facilities proposed in FY15.

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

Currently, the RCRA Program oversees:

- 87 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month) See map below.
- 392 Small Quantity Generators (between 220 and 2200 pounds generated per month)
- 1050 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
 - 1 Hazardous Waste Incinerator Facility
- 32 Treatment, Storage or Disposal Facilities (active and inactive)
- 14 Hazardous Waste Transporters

Location of Large Quantity Generators in Nebraska Regulated Under RCRA



Note: The number in each county indicates the number of Large Quantity Generators located in that county

A of invited	Stata	EPA
Activity	State	EPA
Compliance Assistance		
On-site Visits	2	*
Direct Assistance Contacts	559	*
Public Outreach Presentations (total <u>600</u> in attendance)	5	*
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	2	1
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	2	0
Facility Self-Disclosure	0	0
Large Quantity Generator	12	5
Small Quantity Generator	4	4
Conditionally Exempt Small Quantity Generators	4	5
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	2	0
Permits Issued/Renewed	1	0
Modifications	6	0
EPA Corrective Action Orders	N/A	0
RCRA Record Reviews		
Financial Assurance	22	2
*Data not available		

Superfund Program

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) became federal law in 1980. CERCLA established what has commonly become known as Superfund to deal with known or suspected contamination at inactive commercial/industrial/military facilities or so-called "uncontrolled hazardous waste or abandoned sites." The nation's most contaminated sites are listed on the National Priorities List. Nebraska currently has 15 sites on the National Priorities List. One site, the Waverly Groundwater Contamination Site, was removed from the National Priorities List on November 20, 2006 as the cleanup goals for the site have been achieved. Twelve of the sites are in the cleanup phase and three sites (West Highway 6 & 281 in Hastings, York PCE/TCE Northeast Contamination site, and the York PCE Southeast Contamination site) are relatively new to the National Priority List and are in the site study stage. Numerous other non-National Priorities List sites with known or suspected releases of hazardous substances exist in the state, but are not being addressed through the federal Superfund process.

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

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

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

During the past year, NDEQ has performed work on four pre-screening assessments, five abbreviated preliminary assessments, one site investigation, one vapor intrusion evaluation and one expanded site investigation. NDEQ and the City of Beatrice have been examining options to most effectively address groundwater contamination resulting from operations at a legacy manufactured gas plant. Beatrice has elected to enter into NDEQ's Voluntary Cleanup Program (VCP), which many businesses consider a more efficient and streamlined alternative to pursuing the remediation under the federal Superfund National Priorities List program (more information on VCP can be found on page 35). A similar voluntary cleanup approach may also be taken at the manufactured gas plant located in Norfolk.

The EPA Region 7 Superfund program continues to investigate the Former Northwestern Metals site at 900 T Street in Lincoln that historically operated a lead smelter at the property. A decision on whether nearby residential yard cleanup is necessary is expected in the spring of 2016. NDEQ also performed sampling of residential yards at the other Former Northwestern Metals site at North 27th Street in Lincoln that also historically operated a lead smelter following decommissioning of the 900 T

Street facility. The results of the sampling did not detect elevated lead levels in any of the residential yards. NDEQ also reviewed numerous site assessments conducted by EPA in the state and provided recommendations on the need for followup action.

NPL Site Management Assistance — The Superfund Management Assistance program provides management and technical support to the EPA at priority sites in Nebraska. This assistance includes reviewing technical documents and participating in the Superfund remedy selection process. As the most heavily contaminated sites in the nation, Superfund National Priority List sites are generally large and complex, because they often involve more than one contaminated media and have multiple subunits 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. NDEQ also participates in public meetings with citizens and local officials in the development of cleanup plans.

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

Active National Priority List Sites in Nebraska

Cornhusker Army Ammo Plant (Grand Island)

http://www.epa.gov/region07/cleanup/npl_files/ne2213820234.pdf

Hastings Groundwater Contamination (Hastings)

http://www.epa.gov/region07/cleanup/npl_files/ned980862668.pdf

Lindsay Manufacturing Co. (Lindsay)

http://www.epa.gov/region07/cleanup/npl_files/ned068645696.pdf

Nebraska Ordnance Plant (Mead)

http://www.epa.gov/region07/cleanup/npl_files/ne6211890011.pdf

10th Street Site (Columbus)

http://www.epa.gov/region07/cleanup/npl_files/ned981713837.pdf

Cleburn Street (Grand Island)

http://www.epa.gov/region07/cleanup/npl_files/ned981499312.pdf

Ogallala Groundwater Contamination Site (Ogallala)

http://www.epa.gov/region07/cleanup/npl_files/ned986369247.pdf

Bruno Coop Association (Bruno)

http://www.epa.gov/region07/cleanup/npl_files/ned981713829.pdf

Sherwood Medical (Norfolk)

http://www.epa.gov/region07/cleanup/npl_files/ned084626100.pdf

Omaha Lead Site (Omaha)

http://www.epa.gov/region07/cleanup/npl_files/nesfn0703481.pdf

Parkview Well Site (Grand Island)

http://www.epa.gov/region07/cleanup/npl_files/nen000704456.pdf

Garvey Elevator (Hastings)

http://www.epa.gov/region07/cleanup/npl_files/nen000704351.pdf

West Highway 6 & 281 (Hastings)

http://www.epa.gov/region07/cleanup/npl_files/nen000704738.pdf

York PCE/TCE Northeast Contamination

http://www.epa.gov/superfund/sites/npl/nar1887.htm

York PCE Southeast Contamination

http://www.epa.gov/superfund/sites/npl/nar1886.htm

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

Nebraska Voluntary Cleanup Program

The Remedial Action Plan Monitoring Act (RAPMA), initially created in 1995, established the Nebraska Voluntary Cleanup Program (VCP). The Voluntary Cleanup Program provides property owners and parties responsible for contamination with a mechanism for developing voluntary environmental cleanup plans that are reviewed and approved by NDEQ. 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.

NDEQ has a Memorandum of Agreement with EPA Region 7 which provides federal approval of voluntary cleanup programs. Under this agreement, any site that joins the voluntary cleanup program and successfully completes the cleanup action is assured that EPA will not pursue federal enforcement under CERCLA.

To date, 45 sites have entered the voluntary cleanup program. Currently, 18 sites are active in the voluntary cleanup program. Two sites have been referred to the EPA Superfund program. Five sites withdrew from the program. Five sites have been terminated from the program due to lack of activity in completing the investigation and/or cleanup. Fifteen sites have successfully completed cleanup requirements and have received "No Further Action" letters from NDEQ.

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

Manufacturing in Beatrice. Cleanup activities were commenced in 2015 at the Dettmer Lease Property in Auburn. Cleanup activities were completed in 2015 at the CVS Pharmacy in south Lincoln. Cleanup activities are anticipated to commence in 2016 at Nebraska Machine Products in Omaha and the Lynch Park FMGP site in Omaha. Cleanup activities are anticipated to be completed in 2016 at the former Pfizer facility in Omaha, the West Haymarket Redevelopment Site North in Lincoln, and the two former FMGP sites in Blair and Plattsmouth.

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

Voluntary Cleanup Program Sites and Status

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

Solvent Site		

Site	Location	Date of Entry into RAPMA Program	Status
Archer Daniels Midland	Lincoln	11/3/08	Active
Plaza North Station LLC	Omaha	7/14/09	Completed 2/11/14
Former Pfizer Facility	Omaha	7/28/09	Active
CVS Pharmacy	Lincoln	10/13/10	Completed 1/28/15
West Haymarket Redevelopment Site North	Lincoln	10/27/10	Active
Izaak Walton Trap Range	Fremont	10/28/10	Completed 4/6/12
Magnolia Metal Corporation	Auburn	3/9/11	Completed 10/31/13
Dettmer Lease Property	Auburn	4/7/11	Active
Hoover Manufacturing	Beatrice	5/27/11	Active
Blair FMGP	Blair	6/28/11	Active
Plattsmouth FMGP	Plattsmouth	6/28/11	Active
Former USDA CCC Grain Bin Sites	Multiple Sites	3/16/12	Active
Vishay Dale Electronics	Norfolk	4/2/12	Active
Lewis and Clark Landing	Omaha	4/20/12	Active
West Haymarket Redevelopment Site South	Lincoln	6/11/12	Active
Quality Analytical Services	Omaha	8/2/12	Withdrawn 6/3/14
Nebraska Machine Products	Omaha	9/18/12	Active
Lynch Park FMGP	Omaha	11/20/12	Active
Appleton Electric	Columbus	3/1/13	Active
Magnus Farley	Fremont	8/14/14	Active
Beatrice FMGP	Beatrice	Under review	Under review

Brownfield Assessments and Cleanups — A Brownfield site is a vacant or under-used industrial or commercial property where expansion or redevelopment is complicated by unresolved contamination concerns. The Voluntary Cleanup Program performs assessments and cleanups at Brownfield sites in Nebraska. These assessments and cleanups are performed by NDEQ, typically with federal funds, at no cost to interested parties in Nebraska communities. A Brownfield assessment is a preliminary investigation to evaluate the environmental conditions at a property, similar to a Phase I and Phase II Environmental Site Assessment. The Brownfield assessment can also include surveys of existing building structures on the property for the presence of lead-based paint or asbestos.

Cleanups can involve a variety of measures that are implemented to contain and reduce contamination at a site. During the past year, NDEQ has performed 14 Phase I assessments, five Phase II assessments, one lead-based paint survey and five asbestos surveys. In addition, NDEQ provided partial cleanup assistance at four sites for removal of asbestos prior to building renovation or demolition.

Solid Waste Program

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

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

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

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

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

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

Total Permitted Facilities in FY 2015		
Municipal Solid Waste Disposal Areas (Landfills)	23	
Solid Waste Compost Sites	9	
Transfer Stations	38	
Materials Recovery Facilities	4	
Construction & Demolition Waste Disposal Areas	31	
Delisted Waste Disposal Area	1	
Processing Facility	1	
Fossil Fuel Combustion Ash Disposal Areas	8	
Emergency Carcass Disposal	1	
Total	116	

The following table indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2015:

Summary of Activities: FY2015		
Compliance		
Facility Inspections (General)	111	
Complaints Received	81	
Complaints Investigated	81	
Complaints Closed	78	
Permitting		
New Permits Issued	3	
Permit Renewals	16	
Major Permit Modifications	5	
Public Hearings	0	
Permits Transferred	1	
Financial Assurance Reviews	152	
Facilities Closed	2	

Assessment Monitoring and Remedial Measures

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

The first phase is detection monitoring. During this phase, a landfill will monitor for a discrete number of contaminants that would be indicative of a potential release from the facility. If one or more of the parameters being monitored exceed background levels, the facility then begins assessment monitoring. During assessment monitoring, a landfill will monitor for a more extensive list of contaminants. If during the assessment monitoring phase contaminant concentrations are detected above a groundwater protection standard, the landfill may then be required to characterize the nature and extent of the release. In FY2015, ten active municipal solid waste disposal areas and two closed municipal solid waste disposal areas conducted assessment monitoring.

Following the assessment monitoring phase, a landfill may be required to assess and conduct remedial measures. In FY2015, remedial measures were conducted at two sites.

Title 118 Groundwater Investigations and Remedial Actions

Several municipal solid waste disposal areas that closed prior to 1993 have conducted groundwater investigations and remedial actions pursuant to NDEQ *Title 118 – Groundwater Quality Standards and Use Classification*. In FY2015, groundwater investigations were conducted at three sites and remedial actions were conducted at seven sites.

Financial Assurance and Fees

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

Program Funding

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

Waste Tire Management Program

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

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

Compliance assistance is an important aspect of this program. Program activities include responding to telephone inquiries, letters and contacts from other states, developing guidance

documents, conducting site visits and providing technical advice. NDEQ has developed guidance documents to explain the proper use of waste tires for blow-out and bank stabilization. Direct financial assistance is also available through the Waste Reduction and Recycling Incentives Grant program, which is described later in this chapter.

Waste Tire Permit Totals, FY2015		
Permitting		
Renewed Hauler Permits	21	
New Permits Issued	3	

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

Planning and Aid

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

Main responsibilities of the Planning and Aid Unit include:

- Oversight and review The Unit reviews grants submissions; performs compliance inspections; monitors the activities, budgets and equipment purchases of grantees; and conducts quarterly performance reviews.
- Outreach The Unit promotes the availability of grant funding, coordinates the ranking process, coordinates grant awards and provides integrated waste management information to the public.

New Online Processes

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

Expected Service Life

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

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

Waste Reduction and Recycling Incentive Grants Program

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

There are three sources of revenue for this program:

- A business fee on sales of tangible personal property, which generates about \$500,000 annually.
- ➤ A \$1 per tire fee on the retail sale of new tires in Nebraska, which generates about \$1.9 million annually;
- Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.2 million annually for grant awards.

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

Fund Summary Waste Reduction and Recycling Fund July 1, 2014 - June 30, 2015

Fund Balance June 30, 2014	\$ 5,717,580
Revenues:	
New Tire Fees	2,124,388
Business Fees	478,173
Solid Waste Disposal Fee	1,376,575
Interest, Grant Returns	105,877
Net Collections for Year	\$ 4,085,013
Expenditures:	
Administration	383,588
Grant Funds Expended*	4,300,178
Total Expenditures FY 2015	\$ 4,683,766
Fund Balance June 30, 2015	\$ 5,118,826

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

Summary of Activities - For FY2015, NDEQ awarded \$4,316,790 for Waste Reduction and Recycling Incentive Grants to 162 projects. This is an increase of over \$20,000 granted from the previous year. Sixteen of these grants were awarded from the Business Fee category (\$822,233), 20 were awarded from the Disposal Fee category (\$1,435,558), and 126 received grants from the funds prioritized for scrap tire projects (\$2,058,999). The following lists indicate the locations across Nebraska that received funds.

Waste Reduction & Recycling Grants for FY2015

Business Fee \$ 888,233 16 grants, including, 2 statewide, 3 regional Disposal Fee \$ 1,435,558 20 grants, including, 1 statewide, 2 regional

Business Fee

Chadron Lincoln
Columbus Oakland
Fremont Omaha
Grand Island Red Cloud
Gretna Sidney

Kimball

Disposal Fee

Bassett McCook
Crawford Minden
Fremont Omaha
Hebron Schuyler
Kearney Scottsbluff
Lexington South Sioux City

Lincoln Verdigre Lyman Wayne

Deconstruction Grants for FY2015

There were no deconstruction grants applied for or granted in FY2015.

Scrap Tire Grant Awards for FY 2015

122 local grants and 4 regional grants for an award total of \$2,059,000.

Alliance, 2 local Kearney
Amherst Lawrence
Arlington, 1 regional Lexington
Atkinson, 3 local Lincoln, 7 local

Auburn, 2 local Lyons
Aurora, 3 local Madison
Bassett McCook
Beaver City Murray

Bloomfield Nebraska City

Blue Hill Neligh
Broken Bow Nelson
Burwell Norfolk
Cairo North Platte
Center Ogallala, 2 local
Chadron, 1 local, 1 regional Omaha, 25 local

Columbus Ord David City Oxford

Edgar Papillion, 2 local

Elkhorn, 12 local Pender

Elwood Petersburg

Emerald, 1 regional Pierce

Fairbury Plattsmouth

Filley Red Cloud

Firth Scotia

Fremont Seward, 2 local

Fullerton Sidney

Gibbon South Sioux City
Grand Island St. Edward
Hartington Tecumseh
Hastings Trenton
Hickman Valley
Holdrege, 2 local, 1 regional Walthill
Hubbard Wayne

Hyannis Wilber, 2 local

Jackson Wisner

<u>Litter Reduction and Recycling Grant Program</u>

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

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

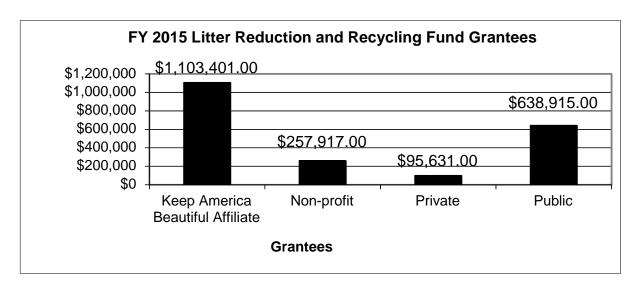
The annual litter fee is imposed on products in the following categories:

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

Fund Summary Litter Reduction and Recycling Fund July 1, 2014 - June 30, 2015

Fund Balance June 30, 2014	\$669,404
Revenues:	
Litter Taxes Collected	\$1,874,341
Interest, Grant Returns	\$75,913
Net Collections for Year	\$1,950,254
Expenditures:	
NDEQ Administration	\$314,911
Grant Funds Expended	\$772,600
Total Expenditures FY 2015	\$1,087,511
Fund Balance June 30, 2015	\$1,532,147

In FY2015 \$2,095,864 was awarded from the Litter Reduction and Recycling Grant Program. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling. Below is a chart reflecting FY2015 grantees.



FY 2015 Grant Allocations

Litter Reduction and Recycling Fund

In FY2015, NDEQ gave 58 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

Public Education	(39%)	21 grants	\$ 821,346
Cleanup	(5%)	14 grants	\$ 97,938
Recycling	(56%)	23 grants	<u>\$ 1,176,580</u>
Totals	(100%)	58 grants	\$ 2.095.864

Public Education

In FY2015, 21 grants totaling \$821,346 were awarded under the category of Public Education. The Public Education programs educate citizens in the areas of litter reduction, cleanup and recycling through a variety of individual and community activities. The citizens of Nebraska are cultivating a greater awareness of their impact on the environment through their purchasing and disposal actions. The educational programs are an excellent means of providing information on proper waste disposal, recycling and available products that contain recycled material. Priority is given to programs that promote markets for recycled materials or purchasing products made from recycled materials. The following list indicates the locations that received funds.

FY 2015 Public Education Grant Awards

Total Awarded - \$821,346 21 total grants

3 Regional Grant Awards 1 Statewide Grant Award

Cities

Alliance Norfolk
Beatrice North Platte

Chadron Ogallala (Keep Keith County Beautiful)

Fremont Omaha
Grand Island Schuyler

Kimball Scottsbluff / Gering

Lexington Sidney

Lincoln

Louisville (Keep Cass County Beautiful)

Regional Areas

Burwell – Regional Keep Loup Basin Beautiful / Loup Basin RC&D, (13 County area:

Blaine, Loup, Garfield, Wheeler, Custer, Valley, Greeley, Sherman and Howard. Since 2013, added Holt, Rock, Boyd and Cherry counties.)

Plainview - Regional Keep Northeast NE Beautiful (9 County area;, Knox, Antelope, Pierce, Cedar,

Dixon, Wayne, Dakota, Cuming, Thurston)

Statewide Areas

Product Stewardship Institute Statewide

Cleanup

In FY2015, fourteen (14) grants totaling \$97,938 were awarded under the category of Cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska's highways, waterways, recreation lands, urban areas and other public-use areas within the state. Not only are the public areas improved through the removal of litter and debris, but also much of the material collected during the cleanups is recycled. The recycling proceeds are often utilized to benefit the respective programs. The following list indicates the locations that received funds.

FY 2015 Cleanup Grant Awards

Total Awarded - \$97,938 14 total grants

Cities

Beatrice Omaha Chadron Schuyler

Lexington Scottsbluff / Gering Lincoln (2) South Sioux City

North Platte Steinauer Ogallala Wakefield

Regional Areas

Burwell – Regional Keep Loup Basin Beautiful / Loup Basin RC&D, (13 County area:

Blaine, Loup, Garfield, Wheeler, Custer, Valley, Greeley, Sherman and Howard. Since 2013, added Holt, Rock, Boyd and Cherry counties.)

Recycling

In FY2015, 23 grants totaling \$1,176,580 were awarded under the category of Recycling. The recycling programs provide an alternative to the disposal of solid waste in Nebraska's landfills. The programs recycle more than just aluminum, paper, glass and plastic. Materials such as electronic computer components, paint, aerosol cans, fertilizer, pesticides and household hazardous waste are collected and either reprocessed to be used again or are disposed of in an environmentally friendly manner. Recycling conserves our natural resources, landfill space and energy. Jobs are created and revenue is generated through the opportunities that recycling provides. Recycling efforts that promote the purchase of recycled content products continue to receive priority for funding. This support helps to "close the loop" and enhance the recycling efforts in Nebraska. The following list indicates the locations that received funds.

FY 2015 Recycling Grant Awards

Total Awarded - \$1,176,580 23 total grants

6 Regional Grant Awards 2 Statewide Grant Award

Cities

Alliance Lincoln Chadron Lyons

Columbus Nebraska City
Holdrege North Platte
Imperial Ogallala
Kimball Schuyler
Wisner

Regional

Chadron (Solid Waste Agency of Northwest Nebraska – SWANN)

Omaha (Green Recycling Enterprises)

Red Cloud (Trailblazer RC&D)
Tekamah (Papio-Missouri NRD)
Valentine (Mid-Niobrara NRD)
York (4 Corners Health Dept.)

Statewide

Lincoln (2) (Nebraska Farmers Union)

(WasteCap NE)

Illegal Dumpsite Cleanup Program

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

Funding for this program is limited to five percent of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. Approximately \$140,000 is available annually. NDEQ encourages municipalities, counties and other political subdivisions to submit applications for the reimbursement of cleanup efforts. NDEQ provided information to all of the counties in Nebraska in an effort to make the program known statewide and to utilize more of the available funds. In FY2015, the program provided 18 grants, totaling \$29,395 to six recipients. In FY2015, funds were provided to:

Otoe County
Seward County
Village of Otoe
City of Lincoln

City of Omaha Lancaster County Omaha Fire Department

Landfill Disposal Fee Rebate Program

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

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

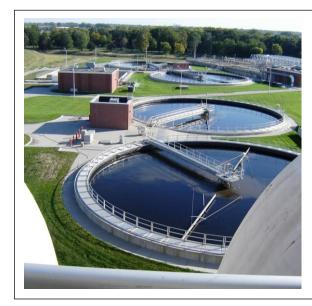
In FY2015, the program provided \$94,271 to five counties and six cities participating in the program. In FY2014, NDEQ offered to provide letters and forms to the participants through email instead of the postal service. Eight of the eleven participants chose this option furthering our waste reduction efforts and increasing efficiency.

David City	\$141	Jefferson County	\$1,215
Lincoln	\$28,041	Seward County	\$1,572
Omaha	\$47,402	Saline County	\$2,834
Grant	\$114	Buffalo County	\$5,223
South Sioux City	\$547	Butler County	\$3,455
North Platte	\$3,727	•	

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 programs administered by the Water Quality Division, including: petroleum remediation programs, agriculture programs, surface water and groundwater monitoring and assessment programs, water quality planning, wastewater permitting and certification programs, and financial assistance programs.



Nebraska's municipalities and industries that discharge wastewater need to obtain permits through NDEQ. More information about NDEQ's wastewater programs can be found on

page 74.

Petroleum Remediation Program

Activities regarding the Petroleum Remediation Program involve two interrelated areas:

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

Investigation and Cleanup

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

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

The program has incorporated risk-based corrective action (RBCA) procedures into regulations and accompanying guidance. The RBCA process allows evaluation of all petroleum release sites based on the risk they pose to human health and the environment. Those that pose

no significant risk are closed; those that pose significant risk are prioritized for further work. Since 1999, the program has been initiating many new investigations to collect information needed for Tier 1, the first step in the RBCA process. The plan is to continue investigating additional sites until eventually the information necessary for a RBCA Tier 1 evaluation has been collected at all sites. Sites that fail Tier 1 are activated for Tier 2, which is a more detailed investigation and the next step in the RBCA process. If sites fail Tier 2, they are normally scheduled for cleanup.

Financial Assistance – Petroleum Release Remedial Action Reimbursement Fund

When contamination has been found at a site, and the NDEQ has determined that more investigation and/or cleanup are required, NDEQ will also determine the "responsible person(s)." This term refers primarily to those who owned or operated the site when the leak occurred. Those who are determined to be the responsible persons may be eligible for reimbursement through the Petroleum Release Remedial Action Reimbursement Fund.

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

"Orphan" Sites

In situations involving "orphan" sites (sites where the person or business that caused the contamination either cannot be identified or located or does not have the resources to pay for their share of cleanup costs), investigation and remediation costs are paid with federal and/or state funds. In FY2015, 51 orphan sites were activated for investigation and/or cleanup. As of September 24, 2015, there were 454 orphan sites on the inactive list.

Pay for Performance

Some orphan sites are selected by the state to be cleaned up through a different process known as "Pay for Performance." Under the Pay for Performance program, pre-qualified contractors are invited to submit bids to clean up specific petroleum-contaminated sites. NDEQ has signed 36 Pay for Performance contracts since the program's inception. Of these projects, 12 have been successfully completed, 19 were terminated prior to completion, and five are still in the cleanup phase. This program saves the state time and money by using this procedure to clean these sites up.

Equipment Reuse

As sites are undergoing cleanup, NDEQ pays for the purchase of remediation equipment. When sites are cleaned up and closed, NDEQ seeks to reuse that equipment at other sites. Over the last ten years, NDEQ has reused hundreds of pieces of equipment, thus greatly reducing the need to buy new equipment. This reuse program has saved Nebraska taxpayers nearly \$4 million in new equipment costs and allowed that money to be used for cleanup of additional sites.

Program Statistics

From June 1999, through June 24, 2015, 2,762 Tier 1 site investigations have been initiated. Of the 2,464 Tier 1 field investigations completed, 1,533 (62%) were closed, and 931 (38%) were

determined to need a more detailed Tier 2 investigation. Since April 2002, 829 Tier 2 investigations have been completed; 581 (70%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, 325 (13%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

Revenue going into the cleanup fund in FY15 was about \$11.9 million. As of June 30, 2015, \$197,867,265 has been disbursed since the program began. During FY15, NDEQ reimbursed \$4,017,078 to responsible persons (or their designees) for work done at 203 different sites.

The 37 sites listed below are all currently active sites that have received a total reimbursement of more than \$600,000 each. Once the statutory limit is reached, the responsibility of funding the remainder of cleanup necessary reverts to the responsible person. Some closed sites also reached the statutory limit but are not shown.

Responsible Person	City	Reimbursed amount as of June 30, 2015	Has Statutory Limit Been Reached?*
Burlington Northern & SFR	Alliance	\$975,000.00	yes
Burlington Northern & SFR	Mc Cook	\$975,000.00	yes
Konecky Oil	Mead	\$975,000.00	yes
Ag Valley Coop	Bartley	\$975,000.00	yes
Burlington Northern & SFR	Lincoln	\$974,300.47	yes
Conoco Phillips	Sidney	\$973,919.00	yes
Burlington Northern & SFR	Alliance	\$973,682.45	yes
Burlington Northern & SFR	Alliance	\$973,302.50	yes
Western Cooperative Co.	Alliance	\$973,291.30	yes
Burlington Northern & SFR	Alliance	\$972,578.98	yes
Elkhorn Valley Coop	Snyder	\$970,688.80	no
Unocal Corporation	Ogallala	\$959,107.07	yes
Magers Service	North Platte	\$947,669.57	no
Wortman Motor Co.	Doniphan	\$909,425.48	no
Western Cooperative Co.	Alliance	\$862,267.70	no
Flying J Inc	Gretna	\$860,438.24	no
Coastal Refining & Market	Chester	\$857,421.86	no
Neitzel Oil Co.	Springfield	\$851,686.82	no
IBP ATV(at The Verticals)	Dakota City	\$842,715.15	no
City Of Lincoln	Lincoln	\$816,100.41	no
Foote Oil Company	Hastings	\$805,599.60	no
Leigh Oil Co	Leigh	\$791,716.58	no
Sandhill Oil	Thedford	\$785,129.97	no
Roesener Oil Co	Cook	\$783,469.66	no
Ag Valley Coop	Curtis	\$757,507.62	no
Indianola Oil Company	Indianola	\$743,925.74	no
Lohr Petroleum Co	Columbus	\$736,109.73	no
Sinclair Oil Corp.	Grand Island	\$710,609.04	no
Lexington Coop Oil	Eddyville	\$697,110.23	no
I-90 Truck Haven	Norfolk	\$682,779.47	no
Burlington Northern & SFR	Columbus	\$662,844.39	no
Farmers Union Coop	Dannebrog	\$628,285.40	no
UPRR	North Platte	\$620,988.51	no
Kaneb Pipeline Co	Geneva	\$613,831.72	no
Crystal Oil Co	South Sioux City	\$608,818.50	no

Wauneta-Palisade PS	Wauneta	\$607,582.41	no
Former Farmers Coop	Cedar Bluffs	\$607.091.97	no

^{*} Those with a yes indicate that the statutory limit was reached prior to June 30, 2015 The total reimbursed amount may have been reduced due to noncompliance.

Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. To date, 226 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

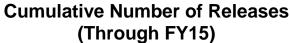
The following is a chart of end-of-year totals for the past four years relating to Petroleum Remediation sites in Nebraska. The chart provides information relating to:

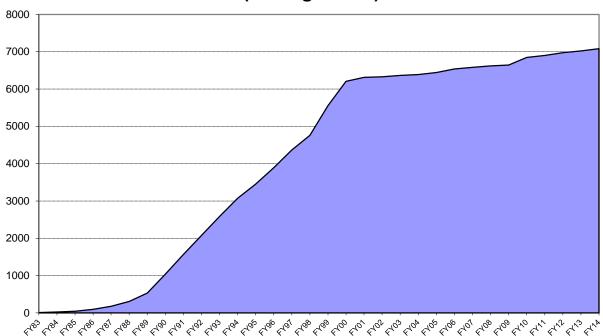
- Closed Sites: Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary.
- **Backlogged Sites:** Sites identified as potentially needing cleanup, but are on a waiting list for further investigation.
- > Active Sites: Sites that are currently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

Petroleum Remediation Trends: End-of-Year Totals, FY12-FY15

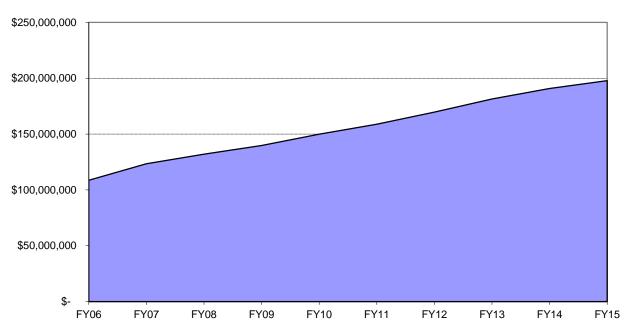


The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.





Cumulative Title 200 Disbursements (last 10 years through FY15)



Agriculture Section

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

LIVESTOCK WASTE CONTROL PROGRAM

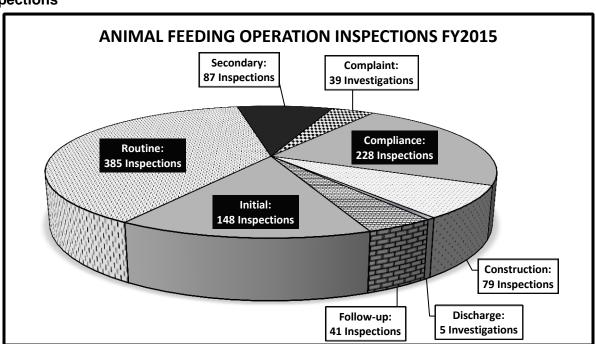
Overview

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

To accomplish this responsibility, the program administers *Title 130 - Livestock Waste Control Regulations*. The LWC program primarily focuses on the 795 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,000 Medium AFOs. The LWC Program uses inspections, permitting, and periodic monitoring to fulfill this responsibility. The permitting includes administering the National Pollutant Discharge Elimination System (NPDES) program for CAFOs.

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

Inspections



The LWC Program staff conducted a total of 1,012 livestock waste control inspections and investigations in FY2015 (including complaint and discharge investigations). The chart above illustrates the breakdown by type of inspection or investigation. A concerted effort was made

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

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

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

<u>Post Construction Inspection</u>. Upon completion of any required construction of a LWCF, program staff conduct a post-construction inspection to verify the waste control facility was constructed as approved by NDEQ.

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

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

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

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

<u>Complaint Investigations</u>. When a complaint is received, LWC Program staff will investigate the complaint and may conduct an on-site complaint investigation.

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

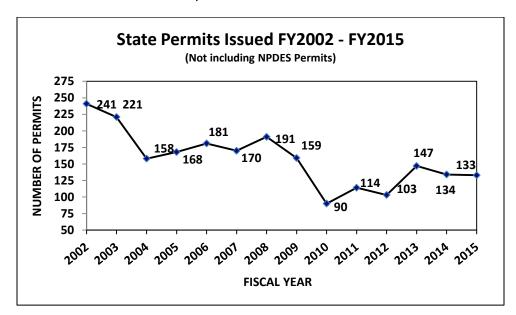
State Permitting

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

NDEQ received a total of 133 permit applications and issued 133 permits during FY2015, as shown in the table to the right. The

Construction and Operating Permits – FY2015			
Type of Application or Permit	Applications Received	Permits Issued	
New permits	40	51	
Modified permits	54	54	
Transfer permits	39	28	
TOTAL	133	133	

totals do not include applications received or permits issued for any NPDES permits. The chart below shows the total number of state permits issued annually for livestock waste control facilities since FY2002. There were more Construction and Operating Permits issued than applications received because NDEQ updated some existing Construction Permits, Construction Approvals and Operating Permits to Construction and Operating Permits if the AFOs updated their nutrient management plans to current Title 130 standards. The updates were mainly in conjunction with NPDES Permit renewals or transferred permits.



Once a permitted AFO has completed its construction project, NDEQ conducts a post-construction inspection. If the post-construction inspection shows the construction was completed as approved, NDEQ notifies the AFO that operation of the new livestock waste control facility is approved. In FY2015, NDEQ gave approval to 135 AFOs for operation of their new or expanded LWC facilities.

National Pollutant Discharge Elimination System (NPDES) Permit

The LWC Program also oversees the NPDES permitting process for livestock, issuing coverage under individual NPDES permits to CAFOs, as well as coverage under a NPDES General Permit for Open-Lot Cattle Operations. Both permits expire every five years, and permittees are required to submit a reissuance application to continue NPDES permit coverage.

The table below summarizes the number of NPDES applications received and permits issued for livestock waste control facilities in FY2015.

NPDES PERMITS – FY2015			
Type of NPDES Application/Permit	Applications	Permits	
7,111	Received	Issued	
GENERAL PERMIT FOR OPEN LOTS			
New Coverage	96	50	
Modified or Transferred	28	16	
SUBTOTAL GENERAL PERMIT:	124	66	
INDIVIDUAL PERMITS			
New Coverage	4	1	
Modified or Transferred	2	4	
Reissued	6	2	
SUBTOTAL INDIVIDUAL PERMIT:	12	7	
NPDES TOTALS:	136	73	

Fees

An annual fee is assessed on all permitted Large CAFOs and all CAFOs covered under an NPDES permit. The fee is determined based upon the number of head of livestock for which the operation has a permit. The fees provide 20% of NDEQ's costs to administer the livestock waste control program, as required by statute. NDEQ received \$246,454 in annual permit fees from 712 permitted large AFOs. In addition, NDEQ received \$52,650 in initial inspection fees (156 inspections), \$43,700 in permit application fees (212 applications), and \$24,750 in late payment fees (eight operation), for a total of \$367,554 in fees.

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

CHEMIGATION PROGRAM

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

The NRDs inspect irrigation systems and issue site permits for specific safety equipment that is required to be installed on systems that chemigate. Chemigation permits for chemigation sites are issued annually, and are reported to NDEQ on a calendar-year basis. Since permitting began in 1987, the total number of annual permits issued has followed an upward trend with NRDs issuing 24,162 chemigation permits in 2014, a two percent increase over 2013 permits issued.

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

In calendar year 2015, 2,091 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 5,220 applicators. Information about chemigation applicator training dates and certified applicators is available after January 1 of each year on NDEQ's web site, http://deg.ne.gov.

On February 14, 2014, the Governor signed Legislative Bill 272 (2014), and on March 18, 2015 the Governor approved Legislative Bill 207 (2015) both of which changed provisions related to the Nebraska Chemigation Act. Specifically, LB 272 requires that the Natural Resources Districts establish permit fees in the amount to pay the reasonable costs of administering the permit program. LB 207 (2015) proposed changes to the natural resources districts' penalty authority. Title 195 -- Chemigation Regulations were amended to become consistent with the amended Nebraska Chemigation Act. The new regulations became effective September 16, 2015.

AGRICULTURAL CHEMICAL CONTAINMENT PROGRAM

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

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

NDEQ and the Nebraska Department of Agriculture have a cooperative agreement that outlines the procedure for coordinating inspection activities between the two agencies. The agreement enhances the communication between the agencies and provides specific protocols to be followed when investigating Agricultural Chemical Containment complaints. In FY2015, Agriculture Section staff conducted a total of eight complaint investigations of suspected releases related to agricultural chemical containment systems.

Water Quality Monitoring and Assessment Programs

Surface Water Assessment Programs

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

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

Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs are provided below. Additionally, a more detailed overview of the programs are provided in NDEQ's annual Water Quality Monitoring Programs Report: http://deq.ne.gov/publica.nsf/pages/WAT223

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

2015 -- Lower Platte and Nemaha River basins;

2016 -- Elkhorn and Missouri Tributaries River basins:

2017 -- White River-Hat Creek, North Platte, and South Platte River basins;

2018 -- Big Blue, Little Blue and Republican River basins;

2019 -- Middle Platte and Loup River basins: and

2020 -- Niobrara River basin.

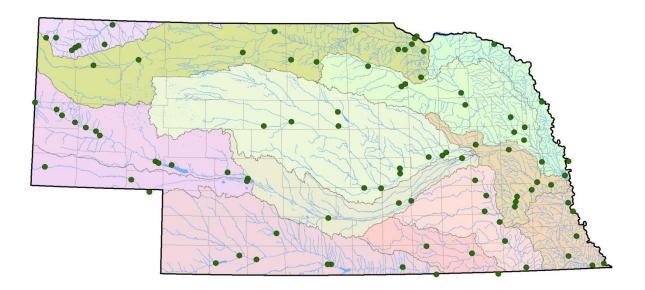
In 2015, a total of 43 stream and four lake sites in the Lower Platte and Nemaha basins were sampled weekly from May through September. The lake sites were sampled for *E. coli* bacteria and field measurements including temperature, pH, oxygen, conductivity and turbidity, while the stream sites were also analyzed for physical/chemical parameters including the nutrients, total suspended solids, chlorides and select pesticides. The data is used to document existing water quality conditions, identify water quality problems, identify pollutant(s) of concern and their sources, and estimate pollutant loadings. The Nemaha Natural Resources District assisted NDEQ in collecting water samples in 2015. During 2015, 946 stream samples plus 88 lake samples were collected for a total of 1,034 samples.

White-Hat 2017 Niobrara Missouri Tributaries 2020 2016 Elkhorn 2016 Loup North Platte 2019 2017 Lower Platte South Platte 2015 2017 Middle Platte Big Blue 2019 2018 Nemaha Republican Little Blue 2015 2018 2018

Six-year basin rotation monitoring schedule

Ambient Stream Monitoring Program — The Ambient Stream Monitoring Program has a network of 97 fixed stations located on main stem and tributary streams across the state (see map below for locations). The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 major river basins and link assessments of status and trends with natural and human factors that affect water quality. Fifty-eight of the 97 sites are located on main stem streams with six of the sites located on the Missouri River. Ecoregion and land use considerations were used in selecting many of the stream locations. Samples are collected monthly and analyzed for traditional chemical and physical parameters and include select pesticides and heavy metals. During 2015, approximately 1,160 water samples were collected for this program. The Middle Niobrara and South Platte NRDs as well as the U.S. Army Corps of Engineers assisted NDEQ in collecting water samples for the 2015 Ambient Program. Three monitoring stations will be added to this program in 2016. These stations will be located in the Missouri Tributaries basin, bringing the number of sites within that basin to four.

Locations of NDEQ Ambient Stream Monitoring Program Sites



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

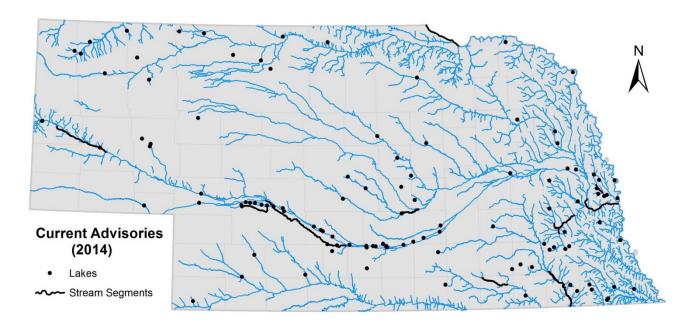
In 2015, monitoring occurred weekly at 53 beaches on 50 different lakes from May through September. Several monitoring partners assisted NDEQ in collecting these samples, including Natural Resources Districts, Nebraska Public Power District, Central District Health Department, and the U.S. Army Corps of Engineers. Over 1,200 samples were assessed for each parameter. NDEQ's collection protocols allow for samples to be collected, analyzed and reported to the public weekly before the weekend when lakes typically experience the most usage. Results are posted to the NDEQ website by Thursday afternoon with press releases on affected lakes being sent to area newspapers Friday morning.

Levels of microcystin above 20 ppb result in public health alerts being issued and signs are then posted recommending full-body contact activities in the water be avoided. In 2015, health alerts were issued on five different lakes and the amount of time the lakes were on alert ranged from two to nine weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site http://deg.ne.gov.

Fish Tissue Monitoring Program — The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2015, a total of 120 fish tissue samples were collected from 10 streams and 51 lakes within the Lower Platte and Nemaha River basin's for analysis of pollutants. The UNL School of Natural Resources assisted in collecting tissue samples from the Missouri River. This information is used to assess pollutant trends, identify potential problem areas, and to inform the public about health risk concerns identified through fish consumption advisories. Nebraska began issuing fish consumption advisories in 1990. The data is received from the EPA lab approximately six months after collections and therefore the final report on the 2015 is anticipated in the spring of 2016.

The report "Regional Ambient Fish Tissue Program – 2013-2014 Data Assessment Report" (contains 2013 and 2014 data) and current list of advisory sites can be found at DEQ's web site, http://deq.ne.gov. The report is located at Publications and Forms/Water Publications/Water Publications by Type/Reports. The direct URL is: http://deq.ne.gov/Publica.nsf/Pages/WAT225. A summary of fish advisory information is easily located at DEQ's web site by entering "fish" in the Search NDEQ Web box located on the right side of the Home page. The direct URL is: http://deq.ne.gov/NDEQProg.nsf/OnWeb/FCA.

Currently, Nebraska has 127 state-issued advisories. The primary contaminants of concern in fish tissue in Nebraska and most other states are mercury and polychlorinated biphenyl compounds (PCBs). See map below for current advisory locations.



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

Stream Biological Monitoring Program — This program is used to evaluate the health of streams by evaluating the composition and numbers of resident aquatic macroinvertebrate and fish communities. These biological communities display varying habitat requirements and water quality tolerances making them excellent indicators of stream health. In 1997, NDEQ added a probabilistic monitoring design that involved the sampling of randomly selected sites in order to address statewide and regional questions about water quality. Assessments are made by comparing the biological communities of "reference condition" streams where there are no significant disturbances, to the communities collected from randomly selected stream sites. During 2015, a total of 34 stream sites were sampled in the Lower Platte and Nemaha River basins.

Sampling is conducted in conjunction with the basin rotation monitoring strategy. Data from 2014 are being assessed and will be used to verify the biological criteria used in evaluating the health of aquatic life populations in Nebraska streams. The current approach allows evaluations of aquatic life health to be made with greater confidence even though fewer samples are collected.

Lake Monitoring Program — In 2015, 46 lakes and reservoirs were sampled for physical /chemical parameters by NDEQ and its lake-monitoring partners which currently includes the USACE and Nemaha NRD. Monitoring involves the collection of monthly water samples from May through September. These data are used to document existing water quality conditions, evaluate long-term trends, design watershed and lake restoration/protection projects and evaluate project effectiveness. Monitoring focuses on nutrients, sediment, pesticides, heavy metals, dissolved oxygen, pH, temperature, conductivity and water clarity. In 2015, approximately 230 samples were collected at deep water locations with additional profiles collected from mid-lake locations. In addition, some inlet streams are sampled during periods of significant precipitation to provide information on nutrient, sediment and pesticide loadings to lakes during runoff events.

Fish Kill and Citizen Complaint Investigations — The Surface Water Unit (SWU) responds to reports of fish kills and other environmental concerns of citizens related to surface water. On-site investigations are conducted, as needed, to document existing water quality conditions, surface water quality standards violations and identify pollution sources and responsible parties. A total of nine fish kills were reported between July 1, 2014 and June 30, 2015. This compares to seven during the same time period the year before. Four of the reported fish kills were attributed to low dissolved oxygen levels within the waterbody, whereas three were the result of disease and two were the result of an undetermined pollutant.

Between July 1, 2014 and June 30, 2015 the SWU received 46 notifications of complaints concerning surface water issues. This compares to 43 notifications during the same time period the year before. While many of these cases were referred to other agency programs that more closely relate to the problem, sometimes the SWU would assist by providing observations or samples to help document conditions.

Stream Nutrient Assessment Pilot Study – In the summer of 2015, NDEQ piloted a methodology to assess impacts from nutrients on the biology of streams based on the State of Ohio's Stream Nutrient Assessment Protocol (SNAP). Rather than rely on nutrient values, which can be transient and highly variable, SNAP integrates stream biology, dissolved oxygen variability, and chlorophyll a measurements to directly indicate whether nutrients may have adversely impacted the aquatic life uses of a stream. The purpose of this year's pilot program was to see whether the methodology could be successfully implemented in Nebraska and whether meaningful data could result from the effort. Seven Basin Rotation Monitoring Program sites were chosen to collect metrics on fish, aquatic macroinvertebrates, 24-hour dissolved oxygen variation, habitat, and benthic chlorophyll a and algal composition. Field collection methodologies were successful, but data have yet to be assessed.

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

Nebraska Water Monitoring Programs Report — A report summarizing the monitoring programs performed by NDEQ called the "Nebraska Water Monitoring Programs Report" was prepared again in 2014. This report describes the numerous monitoring programs NDEQ is involved with, its partners, and several highlights of recent monitoring efforts. Future enhancements to this report

will include more in-depth examinations of what our monitoring programs are telling us, how we are using them to manage and improve water quality and to inform the public of the trends observed. The 2014 Nebraska Water Monitoring Programs Report is available on the NDEQ's web site http://deq.ne.gov, by selecting Your Environment (Welcome to the NDEQ box located in the center of Home page)/Water Quality Monitoring Report. The report's direct URL is: http://deq.ne.gov/publica.nsf/pages/WAT223

Groundwater Assessment Programs

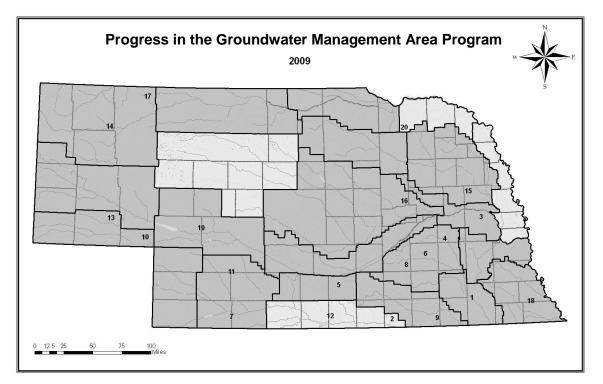
Groundwater Quality Monitoring Report — Legislation passed in 2001 directed NDEQ to issue an annual report to the Legislature concerning the quality of the groundwater in Nebraska. The first of these reports was issued December 1, 2001. These reports summarize the water quality monitoring efforts of the Natural Resources Districts, NDEQ, and other state, local and federal agencies, and can be found on NDEQ's web site, http://deq.ne.gov. (Select Publications, then select Water Quality, then select 2014 Groundwater Quality Monitoring Report. Or, the Water Quality Division reports' index URL is: http://deq.ne.gov/publica.nsf/pages/WAT222.) Statistics and maps showing nitrate-nitrogen groundwater monitoring results as well as four of the 241 agricultural chemicals in the state are presented. The report uses data from the Quality-Assessed Agrichemical Contaminant Database for Nebraska Groundwater, developed cooperatively by the Nebraska Department of Agriculture, University of Nebraska-Lincoln, and NDEQ using federal funding. These data are accessible to the public on the Nebraska Department of Natural Resources web site, http://dnr.ne.gov.

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

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

Groundwater Management Areas — The Groundwater Management Area (GWMA) program focuses on assessing areas where groundwater problems from nonpoint source contaminants (such as agricultural chemicals) exist or are likely to exist. NDEQ 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. NDEQ's conclusions and recommendations are presented at public hearings, during which public comments on the study are also obtained. The Director makes a determination on whether or not to designate the study area as a Groundwater Management Area. The staff works closely with the Natural Resources District (NRD) within whose boundary the area is located throughout the investigation, designation and implementation stages. The NRDs are responsible for implementation of many aspects of this program. In fact, NRDs can designate Groundwater Management Areas acting on their own authority. In addition to the three NDEQ-designated areas, 20 NRDs have designated GWMAs within their jurisdiction. However, if an NRD does not implement a Groundwater Management Area, NDEQ has the responsibility of implementation. NDEQ reviews and comments on all proposed

Groundwater Management Area rules and regulations prior to public notice. The following map shows NDEQ study areas (numbers).



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 1994
- 10. Deuel Co., 1992

- 11. N. Middle Republican, 1995
- 12. Lower Republican, 1996 97
- 13. E. Chevenne Co., 1996
- 14. Box Butte Co./Mirage Flats, 1998
- 15. S. Lower Elkhorn, 1999
- 16. E. Lower Loup, 2000
- 17. E. Sheridan Co., 2001
- 18. Humboldt, 2001
- 19. Keith-Lincoln Co., 2002 2003
- 20. Bazile Triangle, 2004

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

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

Class III wells are used to inject fluids for the purpose of extracting minerals. The only Class III wells in the state are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources operates over 4900 Class III wells as of October 1, 2015.

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

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

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

Wellhead Protection — The State Wellhead Protection program is a voluntary program, which assists communities and other public water suppliers in preventing contamination of their water supplies. State Wellhead Protection Program activities include delineating the zones of influence which may impact public supply wells, training communities on how to inventory all potential sources of pollution within these vulnerable zones, working with the local officials to identify options to manage these potential pollution sources, working on monitoring plans, and helping develop contingency plans to provide alternate water supplies and site new wells. All community public water supplies have a Wellhead Protection Area map as of October 1, 2009. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. One hundred nine community water supplies have approved Wellhead Protection Plans as of October 1, 2015.

Water Quality Planning

Surface Water Quality Standards

NDEQ develops water quality standards that designate the beneficial uses to be made of surface waters and the water quality criteria to protect these assigned uses. Title 117 - Nebraska Surface Water Quality Standards forms the basis of water quality protection for all surface water quality programs conducted by NDEQ. The federal Clean Water Act specifies that states review their water quality standards and revise where appropriate once every three years.

Revisions that were adopted by the Environmental Quality Council on October 16, 2014 were approved by Governor Heinemann and made effective on December 13, 2014. These revisions involved new water quality criteria for ammonia and carbaryl and the addition of newly constructed reservoirs and nine additional lakes under public management to the list of lakes and reservoirs. The criteria revisions followed the U.S. Environmental Protection Agency's (EPA) new Clean Water Act Section 304(a) criteria recommendations.

These revisions were subsequently submitted to the EPA for approval under Section 303(c) of the Clean Water Act. EPA approval of these revisions was granted on March 20, 2015, at which time they became valid for Clean Water Act purposes. Nebraska became the first state in the nation to adopt and gain approval of their revised ammonia criteria.

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

Section 401 Water Quality Certification

The Water Division Planning Unit administers the Water Quality Certification Program in accordance with Section 401 of the Clean Water Act. This program evaluates applications for federal permits and licenses that involve a discharge to Waters of the State and determines whether the proposed activity complies with Nebraska Surface Water Quality Standards. If the activity is likely to violate the standards, conditions for complying with the standards will be issued with the certification, or certification will be denied. The U.S. Army Corps of Engineers Section 404 Dredge and Fill Permits and Federal Energy Regulatory Commission licenses are examples of federal regulatory programs that require State Water Quality Certification before federal permits or licenses can be issued. NDEQ reviewed 331 Section 404 permit applications during FFY2015.

The U.S. EPA and the U.S. Army Corps of Engineers, promulgated the Clean Water Rule (also known as Waters of the U.S. or WOTUS) on August 28, 2015. On August 27, 2015, the District Court of North Dakota found that it had jurisdiction, granted the request of 13 states, and issued a decision preliminarily enjoining the Clean Water Rule. Under the order issued by the District Court of North Dakota, the parties that obtained the preliminary injunction are not subject to the new Clean Water Rule, and instead continue to be subject to the prior regulation. On Oct. 9, the U.S. Sixth Circuit Court of Appeals granted a national stay on the new Clean Water Rule. Nebraska has had a comprehensive definition of Waters of the State since 1971.

Although NDEQ has no permitting mechanism to authorize projects in advance of their implementation, procedures have been developed to assist project sponsors who wish to avoid violating state water quality standards and potential enforcement actions. Project sponsors are

encouraged to contact NDEQ before implementing their project so that the plans can be discussed in light of requirements of Title 117 - Nebraska Surface Water Quality Standards.

Impaired Waters and Total Maximum Daily Loads (TMDLs)

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

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

TMDL Category	TMDL Name	# of Waterbodies Pollutant		Status
4a	a			
	Bazile Creek	1	E. coli	Draft Under Review
	Buck and Duck Creeks	3	E. coli	Draft Under Review
	Conestoga Reservoir	1	Phosphorous	Draft Under Review
	Conestoga Reservoir	1	Sediment	Draft Under Review
4c				
	State-Wide	34	Selenium	Draft Under Review
5-alt				
	Elkhorn River Basin Plan	8	E. coli	NDEQ & LENRD Developing Draft
	Nemaha River Basin Plan	7	E. coli	NDEQ & NNRD Developing Draft
	Papio-Missouri River Tributaries Plan	3	E. coli	NDEQ & PMRNRD Developing Draft
	South Loup River Basin Plan	4	E. coli	NDEQ & LLNRD Developing Draft
	White River Basin Plan	5	E. coli	NDEQ & UNWNRD Developing Draft

(LENRD = Lower Elkhorn NRD; NNRD = Nemaha NRD; PMRNRD = Papio-Missouri River NRD; LLNRD = Lower Loup NRD; UNWNRD = Upper Niobrara White NRD)

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 and involves a multitude of federal, state and local agencies and organizations.

The Nonpoint Source Management Program emphasizes watershed and groundwater management area planning, targeting of 303(d)-listed impaired waters, community participation in project development and implementation, and installation of management practices in smaller areas of manageable size. Prioritization of eligible projects and activities were refined in the 2015 Section 319 request for proposals to emphasize implementation of watershed management plans.

Major components of the nonpoint source management program include implementation of nonpoint source pollution management projects through Section 319 grant funding, nonpoint source pollution monitoring and assessment, and program administration. 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 2015-2030." This guidance document was updated and approved by EPA in 2015. While the updated guidance was written for the years 2015-2030, it is scheduled to be updated every five years per EPA requirements. Nonpoint source monitoring activities conducted during the past year included investigative water quality evaluations, detailed watershed assessments, and effectiveness evaluations of implemented nonpoint source management measures.

In FFY 2015, the Nonpoint Source Management Program provided and managed 60 Section 319 grants to local sponsors of eligible projects in the two categories: 1) Large Competitive Projects (generally under \$300,000) and 2) Small Project Assistance (under \$15,000). Of the 60 grants managed, 48 were large multi-year projects, with total funds of all projects equaling \$6,464,104. Twelve small projects were managed with total funds equaling \$119,857. A total of 233 large projects have been funded through Section 319 funds since the beginning of the program in 1990 and have addressed both surface water and ground water quality concerns. The amount of 319(h) grants funds received by NDEQ between 1990 and 2015 totals \$67,346,514.

Source Water Assessment and Protection

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

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

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

Beginning in SFY2004, funds were set aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide. Funds are provided to political subdivisions that operate a public water system serving a population of 10,000 or less. Eligible

activities address drinking water quality, quantity, and/or education within the source water protection area. To date, Source Water Protection funds have been distributed to complete 84 separate Source Water Protection projects throughout the state. In SFY2015, Source Water Protection funds were distributed to the following public water systems: Bridgeport, Wilber, and York. The total amount available in SFY2015 was \$100,000.

Water Quality Data Handling and Storage

NDEQ has implemented the STORET electronic storage system for water quality data. This will make Nebraska surface water quality information available to anyone who has an internet connection. The web site for this information is www.epa.gov/storet. During FY2015, NDEQ continued to add monitoring results to the STORET database, monitoring results conducted on surface waters of the state. The end result will be the centralization of NDEQ's previous and current surface water quality monitoring information.

Wastewater Permitting and Certification Programs

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

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

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

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

design should better fit the community's predicted population 15 years from now. The facility will have a long-term compliance schedule and use temporary irrigation and limited discharges to achieve compliance until the community achieves no discharge from the lagoon. This project is slated to save this community's 177 residents \$160,000 to \$200,000.

Onsite Wastewater Treatment Facilities Program

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

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

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

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

The Onsite Program is focused on the protection of surface and groundwater in the area of proposed onsite systems through the use of standardized design requirements, the certification of onsite professionals, review and approval of plans for subdivision development, and review of plans and issuance of permits for large onsite systems.

A certification by examination is required for professionals to obtain initial certification. Currently, 568 people hold onsite wastewater certificates. Some professionals obtain certification in multiple categories. The categories of certification are: Installer (Master and Journeyman), Pumper (Master and Journeyman), Inspector, and Soil Evaluator. Current certificates expire December 31, 2015, and may be renewed via continuing education requirements or re-examination. Certificates must be renewed every two years.

The registration requirement for onsite wastewater systems provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, nearly 17,800 systems have been registered, with 1,496 systems registered in FY15.

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

There were 213 new onsite-related complaints in FY15 and program staff resolved a total of 170 complaints, which includes both old and new complaints. Notices of Violation were issued to 57 entities and there were four enforcement resolutions in FY15. Typical types of complaints that are investigated include: failed systems that have a surface discharge, and which may pose a threat to public health or the environment, and installation or performance of work on onsite wastewater systems by individuals who are not certified by NDEQ.

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

Department engineers review construction/operating permit applications for systems that do not meet requirements for Authorization by Rule. Title 124 also provides for Department approval prior to construction of any subdivision with any lot less than three acres where onsite wastewater treatment is proposed. In the past year, the program received 52 applications for construction/operating permits and eight applications (totaling 80 subject lots) for subdivision review and approval.

The Private Onsite Wastewater Treatment System Advisory Committee advises NDEQ on administration of the Act and proposed rules and regulations. Program staff have worked and continue to work with many organizations to educate the public about the importance of proper installation and maintenance of onsite wastewater treatment systems and to improve the knowledge and skills of the various practitioners who install and maintain onsite systems. These groups include: local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association, the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, Nebraska Realtors, Nebraska Association of County Officials, and the Groundwater Foundation,

In FY15, NDEQ staff continued the implementation of an annual inspection program, in order to assess compliance with construction, registration, and record-keeping requirements. The inspection program is focused on the evaluation of reporting and construction activities of certified installers to ensure that Title 124 requirements are met.

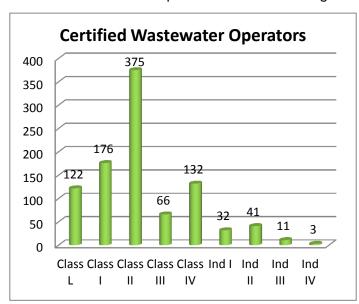
Wastewater Treatment Facility Operator Certification Program

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

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

Municipal, commercial, compatible industrial facilities, and non-compatible industrial facilities are required to employ certified operators based on the point rating assigned to each facility by NDEQ. The point rating for each facility is based on the design flow, type of treatment, instrumentation and control systems, and laboratory analysis requirements at each location. Certified Operators for municipal, commercial, and compatible industrial facilities are classified under the following categories: Class L (lagoons), Class I, Class II, Class III, and Class IV, according to the type of facility and its point rating. Certified operators for non-compatible industrial facilities are classified under the following categories: Industrial I, Industrial II, Industrial III, and Industrial IV, according to the type of facility and its point rating.

The Wastewater Operator Certification Program currently has 871 certified operators with



municipal/compatible certificates. In addition, there are currently 87 certified operators with industrial certificates (see chart at left for a breakdown of certified wastewater operators by category).

NDEQ also reviews applications and issues operator certification exemptions for towns and other entities that have full-retention non-discharging lagoon wastewater treatment facilities that may not require qualified operators due to very limited maintenance and operational needs. The exemption is for a fixed four-year period and the period under current review will end at the end of 2016. NDEQ has contacted a total of 252 facilities potentially eligible for the exemption and, of these, issued four-year operator exemptions to 216 facilities.

In FY15, NDEQ provided 10 Discharge Monitoring Report training sessions and eight operator certification examination sessions. Testing of municipal and industrial wastewater treatment facility operators will continue in FY16.

Wastewater Construction Permit Program

The Wastewater Section administers Nebraska's construction permit program for wastewater facilities built in the state. Industries, commercial entities, and municipalities are required to submit the plans and specifications for their projects to NDEQ for review and approval. The construction documents are reviewed to make sure that the collection systems and treatment facilities will function properly and protect the public and the environment from adverse effects.

In FY2015, DEQ reviewed and approved designs for a wide range of projects, including a treatment facility for an Omaha combined sewer overflow, a golf course irrigation system using treated municipal wastewater, a small-diameter pressure sewer in a residential neighborhood, an industrial wastewater evaporation system, and a variety of commercial wastewater facilities. For FY2015, a total of 210 wastewater projects were submitted to NDEQ for review and approval.

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

Title 123 also contains basic rules for the operation and maintenance of collection systems and treatment facilities. One chapter has rules for the proper abandonment of wastewater facilities which have been removed from service. The abandonment rules are intended to protect the public from unsafe site conditions and allow the property to be redeveloped for other uses.

A considerable amount of time was spent last year working with communities that need to upgrade their facilities. Section engineers met regularly with municipal officials, funding agencies, and consulting engineers to develop affordable projects for Nebraska's communities. AWIN principals were used to evaluate the scope of projects for small communities. The section also met with food processing industries, power generating plants, manufacturing facilities, and with several groups who plan to anaerobically digest organic waste products and capture the methane.

Engineering staff continue to have quarterly meetings with the City of Omaha to discuss their combined sewer separation project. The meetings have provided an excellent forum for reviewing regulatory and engineering issues. Over an 18-year period, Omaha is expected to develop about 90 separate construction projects, each of which must be reviewed and approved by DEQ.

National Pollution Elimination System (NPDES) and Related Programs

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

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

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

NPDES Permits

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

NDEQ 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 NDEQ and NDEQ *Title 119 - Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System.* The Nebraska NPDES program encompasses a number of different types of discharges including: municipal, commercial, and industrial wastewater discharges; livestock waste control; industrial discharges to public wastewater treatment systems (also known as the Nebraska Pretreatment Program); municipal combined sanitary and storm sewer overflows; and industrial and municipal storm water discharges. The graph on the next page titled "NPDES Discharge Authorizations" shows the distribution of permits issued to various types of NPDES dischargers, except Livestock. Information regarding Livestock NPDES permits is found on page 58 of this report.

Most NPDES permits limit the discharge of pollutants by establishing effluent limitations for specific pollutants such as carbonaceous biochemical oxygen demand, total suspended solids, and ammonia, among others. The permittee is then responsible for testing their wastewater discharge to ensure that the limits are not exceeded. Permits may also limit toxicity in effluents and permittees may be required to demonstrate that their wastewater is not toxic to aquatic organisms

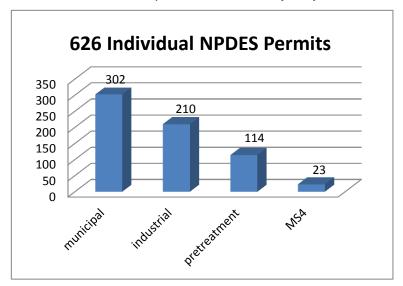
(e.g., daphnia or fathead minnows). The permit may also require development of Best Management Practices Plans to reduce or control pollutant discharges.

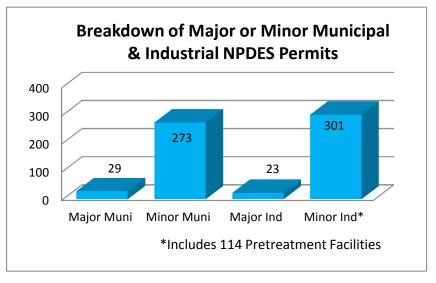
The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology-based standards or water quality-based standards. Technology-based standards reflect effluent quality that can be achieved using treatment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

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

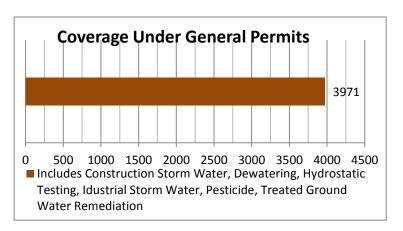
Permits may be developed and issued on an individual site-specific basis, or they may be

developed and issued to apply to facilities with similar activities or effluent characteristics. These two types of permits are respectively referred to as individual permits and general permits. To date, NDEQ has developed and issued general permits for the following activity categories: hydrostatic testing, dewatering, land application of concrete grooving/grinding slurry, pesticides applications to, over, and near waters of the state, gasoline contaminated groundwater remediation projects. petroleum product contaminated groundwater remediation projects, construction site storm water, and industrial site storm water. Municipal Separate Storm Sewer System (MS4) permits have been issued to entities, including metropolitan areas and counties that meet the criteria of the NPDES Storm Water Program. There currently are 22 metropolitan areas and counties in Nebraska that have received MS4 permits, and one MS4 permit for the University of Nebraska-Lincoln. The Construction Storm Water General Permit was reissued January 1, 2008. It is currently under extension, being drafted, and is expected to be reissued soon. The Industrial Storm Water General Permit was issued on July 1, 2011.





There are 626 facilities with discharge authorizations under individual permits (municipal, industry and pretreatment), and 23 municipal storm water permits (MS4). There are 3971 active facilities authorized to discharge under other general permits. The general permits include authorizations for 2822 sites under the construction general storm water permit, 161 under dewatering including Omaha, 46 under hydrostatic testing, 845 under industrial storm water, 40 under pesticide, and 38 under the treated ground water remediation discharge general permit.



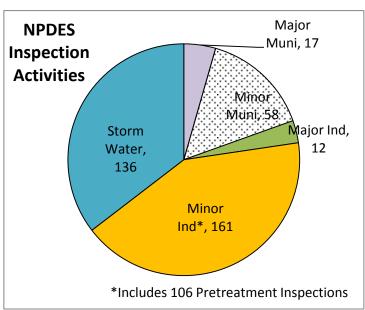
Municipal and Industrial Facilities

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.

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 NDEQ; typically this is done on a quarterly basis. However, monitoring results that indicate non-compliance with permit requirements must be reported verbally within 24 hours. Records of all monitoring activities must be kept for a period of three years.

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

During on-site inspections, section personnel walk through the facility and review operational procedures and records. Major industrial and municipal facilities receive annual on-site inspections. The priority of minor facilities inspections is based on discharge compliance histories, incident reports and complaints. Inspectors performed 384 NPDES inspections in Fiscal Year 2015. A breakdown of those inspections is provided in the pie chart. In addition, the inspectors completed 51 inspections of non-discharging wastewater lagoons. During effluent monitoring inspections, effluent samples are collected and analyzed by NDEQ to compare with self-monitoring results. Facilities targeted for effluent monitoring inspections are chosen



based upon pollution potential, past compliance or incident report histories, complaints, and/or Basin Management Approach priorities.

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

Combined Sewer Overflows

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

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

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

The City of Plattsmouth separated their storm and sanitary sewer lines. Separation projects began on July 1, 2010 and the City's re-issued permit, effective October 1, 2010, included a schedule for completion of this work in the next five years. As with Omaha, this schedule was modified due to the 2011 Missouri River flood. Separation work was completed on November 30, 2012. On or before September 1, 2016, the City of Plattsmouth was required to complete the Post Construction Compliance Monitoring Plan that would ascertain the effectiveness and completeness of the sewer separation project and send a final report to the NDEQ. Plattsmouth completed this work in 2013.

Wastewater Treatment Sludge and Biosolids Disposal

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

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

Storm Water Program

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

The cities of Omaha and Lincoln were subject to the Municipal Separate Storm Sewer System (also known as the MS4) Program with the implementation of Phase I. Lincoln was issued an MS4 Permit on September 1, 2002 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.

NDEQ determined that the communities of Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Lexington, Norfolk, North Platte and Scottsbluff were exempt as of December 20, 2002. However, new approved Total Maximum Daily Loads and a review of the criteria for each municipality, made all subject to Phase II regulations for MS4s. A statewide general permit was issued January 1, 2006. The Storm Water Management Plans for all of these cities have been received, public noticed and each of these communities was authorized under this general permit. These permittees have entered into a cooperative agreement to form the Phase II Storm Water Cooperative. Their Storm Water Management Plans are being coordinated so that development work and implementation plans can be shared between them. The NDEQ is working closely with this group. The re-issuance of the statewide general permit for small MS4s is scheduled in Fiscal Year 2016. Dakota County, South Sioux City, and Dakota City will also be covered under this statewide permit when it becomes effective.

Nearly \$1.825 million in grant funds was awarded in FY2015 to MS4 permittees. This program, established by Legislative Bill 1226 in 2006, is awarded annually for implementation of the MS4 communities' Storm Water Management Plans. The grant is distributed by population and requires a matching 20% from each of the grantees. Funds are distributed near the end of each calendar year.

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

Nebraska Pretreatment Program Permits

The Nebraska Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industrial dischargers. The pretreatment regulations are found in Title 119. The rules and regulations set forth prohibited discharge

standards that apply to all industrial users of publicly owned wastewater treatment facilities and require permits for significant industrial users. The significant industrial users are determined by one of several means: 1) the existence of an industrial category for which pretreatment discharge standards are established in NDEQ Title 119; 2) the volume or strength of the wastewater discharged from the facility; or 3) the potential of the industrial user to adversely affect the wastewater collection or treatment facilities.

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

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

State Revolving Loan Fund Programs

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

Clean Water State Revolving Loan Fund

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

The CWSRF program receives an annual federal EPA capitalization grant. A 20% state match, required to obtain the federal grant, is provided through Nebraska Investment Finance Authority (NIFA) bond issues. After 27 years of activity, the Fund's Net Assets have reached \$275 million. Since its inception, the program has made loans totaling \$571 million to 186 municipalities for 273 projects.

In SFY2015, the CWSRF funded projects totaling \$69,508,033 in loans and \$1,567,704 in principal forgiveness and grant funds.

The EPA awarded the 2014 capitalization grant in the amount of \$7,144,000 in July of 2014. A \$1,430,000 bond was used to match this federal grant.

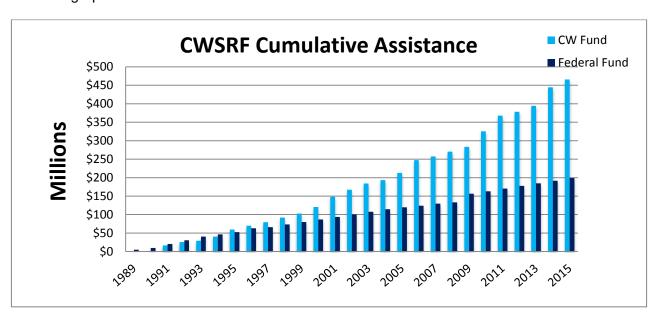
Initiatives in 2015 for the State Revolving Fund Program include:

- The Program is implementing Northbridge loan and grant-tracking software purchased with the 4% set-aside funds from both CWSRF and DWSRF. Installation is being completed in phases. In July 2014, the first phase was completed and utilization of the financial tracking part of the software was begun. It may take until the end of SFY16 to complete all the phases.
- In 2014, the Legislature passed LB514, which authorizes the creation of a Clean Water Linked Deposit Program. The bill authorizes a process of working with private lending institutions to provide low-interest loans for private uses associated with nonpoint source pollution control such as: septic tank repair and replacement; certain livestock waste control facilities; and agricultural best management practices, among others.
- Also included in LB 514 is a provision for refinancing previous debt used for the construction of wastewater treatment facilities.
- NDEQ is currently revising Title 131 to include the LB 514 changes and plans on presenting these to the EQC in SFY16.
- The Water Resources Reform and Development Act of 2014, a major federal infrastructure reform bill, was signed into law on June 10, 2014. Among its provisions are amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act, including provisions affecting the CWSRF. Some of these federal amendments include expanded eligibility for funding projects, extended financing terms for loan recipients, and an increase in the amount of CWSRF money that may be used by the State to administer the program. NDEQ is currently working on proposing state statute amendments to reflect the federal amendments.

Municipalities Receiving CWSRF Loans in SFY2015

Municipality	Loan Date	Loan Amount	Principal Forgiveness Amount	Small Town Grant Amount	Total
Sprague Amd #1	6/30/2015	\$60,840		\$ 14,160	\$75,000
Sidney	6/25/2015		\$100,000		\$100,000
Loup City	6/25/2015		\$100,000		\$100,000
Culbertson	6/19/2015		\$100,000		\$100,000
Chester	6/17/2015			\$158,990	\$158,990
Jansen Amd #1	6/17/2015	\$13,394		\$13,394	\$26,788
Cody	6/17/2015	\$202,290	\$97,710	·	\$300,000
Anselmo	4/28/2015	\$37,140	\$37,140		\$74,280
Big Springs	4/16/2015	\$86,190	\$13,810		\$100,000
Wayne	3/25/2015	\$1,838,650	\$100,000		\$1,938,650
Grand Island Amd #1	3/25/2015	\$28,000,000			\$28,000,000
Chappell	3/24/2015	\$2,440,125	\$100,000	\$250,000	\$2,790,125
Bruno	3/11/2015	\$82,500	\$82,500		\$165,000
Kearney Amd #1	1/10/2015	\$750,000			\$750,000
Broken Bow	1/5/2015	\$745,000	\$100,000		\$845,000
Winside	12/19/2014	\$1,060,000			\$1,060,000
Platte County SID #7	11/18/2014	718,000			\$718,000
Hebron	10/30/2014	\$684,000	\$100,000		\$784,000
Wisner	10/29/2014	\$332,200	\$100,000		\$432,200
Gretna	9/19/2014	\$2,100,000			\$2,100,000
Grand Island	9/12/2014	\$1,000,000			\$1,000,000
Grand Island	9/12/2014	\$6,000,000			\$6,000,000
Sutherland	9/5/2014	\$1,085,000			\$1,085,000
Hartington	8/26/2014	\$780,000	\$100,000		\$880,000
Omaha Amd #1	8/26/2014	\$15,000,000			\$15,000,000
Kearney	8/12/2014	\$4,705,000			\$4,705,000
Sprague	8/7/2014	\$220,000			220,000
TOTAL		\$67,940,329	\$1,131,160	\$436,544	\$69,508,033

The graph reflects the cumulative loan assistance of CWSRF.



Construction Administration Fund Small Community Matching Grants

In addition to and concurrent with loans, the CWSRF provides small community matching grants to financially distressed municipalities with a population of 10,000 or less. This program has provided \$8.3 million in grant funding for 72 projects concurrent with a CWSRF loan during the 27 years of the program. Many small municipalities find that needed projects are too costly without the additional grant subsidy provided concurrent with the CWSRF loan. During FY2008, legislation was passed providing NDEQ with authority to allocate up to 65% of prior-year revenue from fees collected on CWSRF loans to the various grants. This legislation also increased the population level for eligible communities to 10,000 or less. NDEQ intends to provide increased funding to as many qualifying projects as possible; therefore, for FY2015, up to \$436,544 was available for small community grants, and any one community could receive a maximum of \$250,000. The program provided a total of \$436,544 in small community grants to the communities of Chappell, Jansen, Chester, and Sprague.

In FY 2015, five planning grants for a total of \$100,000 from the Administrative Cash Fund were awarded to small communities. These communities identified wastewater treatment facility project needs. They were listed on the Project Priority List, have not received a planning grant in the previous five years, and have a population of 10,000 or less.

Drinking Water State Revolving Loan Fund

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

The DWSRF is similar to the Clean Water State Revolving Fund in that both obtain the required 20% state match through Cash Funds or revenue bonds, give low interest loans, and will be self-sustaining. The DWSRF is unique in that loans may be awarded to privately-owned public water supplies. Other program differences include set-asides for program administration, technical assistance, wellhead protection, capacity development, and operator certification. After 18 years of activity, the Fund's Net Assets have reached \$163 million.

DWSRF Set Aside Funds and Administration Cash Fund

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

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

In FY2015, under the Source Water Protection Implementation set-aside (15%), four agreements for preliminary engineering reports totaling \$70,000 were awarded to high priority

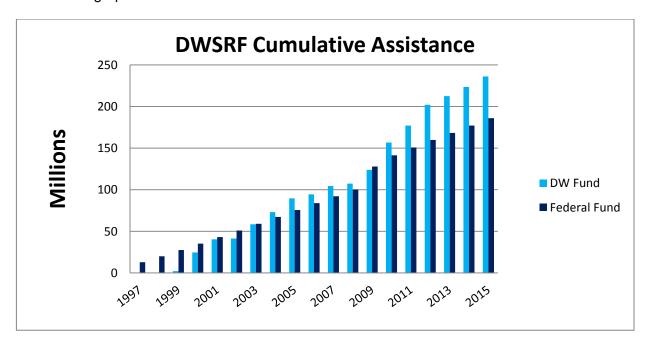
ranked communities to address public health issues associated with public water supplies, and \$100,000 for source water protection project agreements. The NDEQ administers these programs.

The DHHS-DPH has utilized \$1,234,500 for the Public Water Supply Supervision program which includes management, development, and implementation of a capacity development strategy and a water operator certification program, from the 10% set-aside. The state must provide a one-to-one match. DHHS-DPH has determined the set-aside eligibility by using program match and overmatch dollars for federal fiscal year 1993, cash, and in-kind contribution funds.

Municipalities Receiving DWSRF Loans in SFY2015

Municipality		Loan Date	Loan Amount	Principal Forgiveness	Total
Wood Lake		6/19/2015	\$81,250	\$43,750	\$125,000
Cortland Amd #1	(30 year loan)	6/1/2015	\$101,642	\$25,411	\$127,053
Maxwell	(10 year loan)	4/30/2015	\$60,000		\$60,000
Garland	(30 year loan)	3/16/2015	\$976,000	\$244,000	\$1,220,000
Bayard Amd #1		2/11/2015	\$29,127	\$7,282	\$36,409
Valley		12/22/2014	\$581,834	\$193,166	\$775,000
Tobias	(30 year loan)	12/9/2014	\$480,000	\$120,000	\$600,000
Bayard		11/21/2014	\$160,000	\$40,000	\$200,000
South Sioux City		11/17/2014	\$3,128,000		\$3,128,000
Wisner		9/8/2014	\$192,550		\$192,550
Kearney		8/15/2014	\$427,000		\$427,000
TOTAL			\$6,217,403	\$673,609	\$6,891,012

The graph reflects the cumulative loan assistance of DWSRF.



The FY2014 DWSRF capitalization grant allocation totaled \$8,845,000. In FY2015, the DWSRF entered into nine binding commitments to communities and provided financial assistance to PWS projects totaling \$6,891,012, of which disadvantaged communities received \$673,609 in forgiveness funding. Further, the Federal Fiscal Year (FFY) 2014 capitalization grant required that a minimum of 20% of the grant be reserved for additional subsidization (e.g., principal forgiveness).

In addition, from the FFY 2014 capitalization grant \$2,035,700 was allocated to the 2% (\$176,200), 10% (\$1,234,500), and 15% (\$625,000) Set-Asides. More details on the programs associafted with these Set-Asides can be found in the Drinking Water State Revolving Fund Annual Report for SFY 2015 at http://deq.ne.gov/.

CHAPTER 7:

Field Services and Assistance Division

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



NDEQ Emergency Response Team members helped deploy oil containment boons to control releases associated with heavy rains at Burlington Northern's Hobson Yard in May, 2015. See page 94 for more information about NDEQ Emergency Response efforts.

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

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

- Avian Influenza incidents in northeast Nebraska. The Division played a coordinating role
 working primarily with the Waste Management Division and the Nebraska Department of
 Agriculture. The Division had the lead role in the conduct of an Avian Influenza
 Workshop attended by environmental and agricultural agencies of the six states most
 impacted by the disease.
- The Division continues to coordinate environmental partnership efforts with NPPD and the Nebraska Methane Workgroup. The Partnership with NPPD began in 2000 and was created to enhance communications between our organizations and to examine ways in which our joint resources can be used effectively. One of the primary Partnership projects has been the annual Power Summit, which brings electric utilities and associated local, state, and federal regulators together to discuss issues of mutual interest.

The Nebraska Methane Workgroup is a product of the NPPD and NDEQ Environmental Partnership. NDEQ and NPPD examined the potential for capturing energy from

Nebraska's confined animal feeding operations and sought expertise from a number of additional organizations and entities. The workgroup developed a white paper documenting the energy potential Nebraska's confined animal feeding operations possess.

- The Field Services and Assistance Division devotes significant resources to the coordination of the review of and response to submissions pursuant to the National Environmental Policy Act (NEPA). The environmental assessments are conducted by five NDEQ programs: Air Quality, Waste Compliance, Storm Water, Wastewater, and Water Quality. The purpose of the assessments is to ensure related projects are conducted in an environmentally responsible manner and to give the project sponsors an early awareness of any potential permits that will be needed for a successful project. During FY2015, NDEQ received 72 new project notifications for NEPA review.
- The Community Right-to-Know Program works with Local Emergency Planning Committees in planning efforts, such as planning and participating in emergency response exercises. The program also participates in educational activities. The Program participated in 12 local emergency management agency meetings over the last year and on the State Emergency Response Commission Education/Outreach Committee.
- The Emergency Response Program enhances NDEQ's ability to respond
 to releases into the environment by securing equipment and coordinating and providing
 additional training for NDEQ's Emergency Response Team. Additionally, the Emergency
 Response Coordinator serves as NDEQ's Complaint Coordinator. The Complaint Coordinator
 implements the Department-wide notification system. The system is designed to increase the
 effectiveness and bring consistency to NDEQ's response to notifications and complaints.
- The Division, primarily through the efforts of the Small Business and Public Assistance Coordinator, is responsible for the planning of NDEQ's annual Environmental Update – a oneday conference held for the regulated community and environmental consultants to provide an opportunity for NDEQ programs to present updates and explain new developments. In FY2015, the Environmental Update was also held in North Platte. The additional session was well received and continued expansion of the Environmental Update will occur in FY2016.
- The Division, through the Small Business and Public Assistance Coordinator, arranges "One Stop Permit Meetings" with businesses, city representatives, or the Nebraska Department of Economic Development, to help facilitate any environmental regulatory permitting requirements an incoming business may have.
- The Field Office Section Supervisor conducts one-on-one informal visits with small community Municipal Clerks. Clerks often receive requests for information associated with NDEQ's various programs, and providing them with knowledge of NDEQ's programs, and letting the Clerks know who to contact in given situations, benefits the citizens of the state.

Field Offices

The NDEQ Field Office Section is responsible for conducting compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency's Air Quality, Waste Management and Water Quality Divisions. The number of inspections and other duties performed by field office staff is incorporated in the charts and graphs provided by other divisions in the previous chapters. There are 15 employees in six field offices around the state. In the fiscal year of 2015-2016, another office is proposed in Grand Island. This does not add new positions to NDEQ, but moves one position from the Holdrege office to Grand Island. This will improve our efficiency and reduce travel time related to inspections. The field offices enable the agency to provide the public with greater access to NDEQ staff, provide more timely response to issues raised by the public. Additionally, because Field Office staff live and work in their respective Field Office areas, they are able to help the Lincoln Office develop a better understanding of local issues.

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

Small Business and Public Assistance Program

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

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

The Program includes site visits, development of outreach materials, workshops, and helping the regulated community to understand their obligations under state and federal law. The Program Coordinator answered questions from over 40 individuals regarding air, waste water, or solid and hazardous waste issues. The Program Coordinator is also responsible for NDEQ's annual Environmental Update workshops, held this year in Lincoln on April 14th and in North Platte on April 16th. This was the first year the Environmental Update workshop was held outside of Lincoln. The workshops had a combined attendance of 163 attendees.

The Program Coordinator continued to work with representatives of the Nebraska Public Power District to organize and host the annual Power Summit. Sponsored by the NDEQ and Nebraska

Public Power District Environmental Partnership, the Power Summit provides those in the power-generating industry and those responsible for the implementation of the associated environmental regulations an opportunity to exchange information related to power production, environmental policies, programs, and issues in Nebraska. A primary objective of the Summit is to enhance the dialogue that has been established between the power industry and the associated regulatory agencies. The 2014 Power Summit was held November 19th in Lincoln, and had 70 in attendance.

The One-Stop Permit Assistance Program was established to offer information and permit application assistance to the regulated community. The One-Stop Program is applicable to all programs in NDEQ. The One-Stop Program provides the customer with an initial point of contact. A primary objective of the Program is to ensure businesses are aware of the permits they are required to apply for, know information they will need to provide in the application process, and ensure that inquiries receive a timely response. The Program Coordinator conducted meetings with nine potential project sponsors between July 1, 2014 and June 30, 2015.

The Public Advocate serves as the ombudsman for purposes of the Clean Air Act requirements, receiving requests for regulatory information or environmental complaints from the public and ensuring NDEQ is accessible and responsive to public concerns. In this role, the Program Coordinator provided outreach to individuals to address specific questions and concerns. From July 2014 through June 2015, the Program Coordinator worked with two Nebraska businesses that had concerns regarding NDEQ's interpretation of environmental requirements affecting their operations.

The Small Business Compliance Advisory Panel resulted from the Clean Air Act Amendments of 1990 and amendments to the Nebraska Environmental Protection Act of 1992. The Panel is composed of seven members: two representatives from the general public selected by the Governor, four representatives from small businesses selected by the Legislature, and one representative selected by the Director. The panel evaluates the effectiveness of the Program, providing feedback on outreach and education methods and identifying program obstacles. The Panel members met with NDEQ staff to discuss several issues during their annual meeting in October 2014, and provided their annual report to the Governor in December 2014. The following is an excerpt from the 2014 report, regarding NDEQ's compliance assistance efforts: "...we see the need for the Department's outreach and assistance efforts; and encourage NDEQ, in partnership with the Panel and other organizations, to continue engaging Nebraskans in a proactive, helpful way."

Community Right-To-Know Program

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

The Community Right-To-Know Program distributes outreach materials, responds to public requests for information, and receives and stores information required under this act. The information that facilities are required to provide NDEQ, 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 2015, a total of 2,840 Nebraska facilities reported Tier II information on regulated chemicals above EPA-established thresholds. This was consistent with previous years.

Facilities required to report information pursuant to the Community Right-to-Know Program are able to access, view, change and report their chemical information online. Approximately 97% of the facilities reported online in Nebraska in 2015. The information stored electronically is much more usable and enhances the ability of Local Emergency Planning Committees to access the data for use in their local emergency plans.

Additionally, the Community Right-To-Know Coordinator has been active in establishing relationships with Local Emergency Planning Committees by attending their meetings and making presentations at related conferences. In FY 15, the Community Right-to-Know Coordinator attended 12 local meetings, assisted with local emergency exercises and provided information regarding chemicals at facilities in their communities. The Community Right-to-Know Coordinator assisted with the planning of the 2016 Nebraska Local Emergency Planning Committee Conference in Kearney. This event will provide information and training to over 100 First Responders and Local Emergency Planning Committee members. Finally, the Community Right-to-Know Coordinator served on the planning committee for the EPA Region VII Local Emergency Planning Committee/Tribal Emergency Planning Committee Conference held at the Lied Conference Center in Nebraska City. The Regional Conference provided training and information to over 200 First Responders and Emergency Planners in EPA Region VII.

Emergency Response Program

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

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

The Emergency Response Program Coordinator is also responsible for operations of the Department's Notification System. The Notification System is a database for receipt and filing of notifications made to NDEQ regarding spills and releases of materials into the environment as well as general complaints.

Homeland Security

NDEQ has been actively involved in the state's Homeland Security efforts, which are directed by the Lieutenant Governor. NDEQ's Deputy Director of Programs represents the Department on the Lieutenant Governor's Homeland Security Leadership Group. The Field Services and Assistance Division has been active in planning for the annual Nebraska Infrastructure Protection Council Conference sponsored by the Lieutenant Governor. The Community Right to Know Coordinator has participated in planning for the state-wide Terrex 2015 exercise. Additionally the Coordinator has participated in a number of Local Emergency Response Committee exercises. These exercises helped Local Emergency Planning Committees identify training needs for their area. Most significantly, those exercises included incidents related to releases of anhydrous ammonia, pipeline releases, and responding to and mitigating spills of materials into the surface waters of our state.

Quality Assurance Program

The function of the Quality Assurance Program is to ensure that environmental data used NDEQ in regulatory and decision-making activities is properly documented and sufficiently reliable. NDEQ is committed to ensuring that environmental data are sufficiently precise, accurate, and complete to carry out NDEQ's responsibilities. In the last year, NDEQ's Quality Assurance Manager and Quality Assurance team members have reviewed 18 Quality Assurance Project Plans to ensure adequate planning for environmental data collection. Additionally, the Quality Assurance Manager initiated the required five-year review of the Agency Quality Management Plan.

CHAPTER 8:

Expenditure and Budget Summary

The following information summarizes department expenditures for fiscal year 2015 and outlines budget projections for fiscal year 2016. 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 FY15 expenditures for each federal grant, including the state match.

Chart B lists actual FY15 expenditures of programs funded by state general funds and/or cash funds. This chart lists expenditures by activity. Activity in this case is not considered a program activity, but is a category of expenditure. Activities listed in this chart are personal services, operating expenses, travel, capital outlay, contracting and distribution of aid.

Chart C outlines the proposed FY16 budget for each federal grant. Chart C also lists proposed match for each program for which a non-federal match is required. Additionally, match for the 319H grant is provided by in-kind services in the Groundwater Management Area program.

Chart D outlines proposed FY16 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. As in Chart B, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, contracting and distribution of aid.

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

Chart A -- Actual Expenditure for Each Federal Grant for State Fiscal Year 2015

Grant / Program Title	Grant	Match	Total
Performance Partnership	5,124,207	1,300,931	6,425,138
Clean Water State Revolving Fund	18,172,247	1,084,701	19,256,948
Exchange Network	73,454	-	73,454
604 B Water Quality Management	99,796	-	99,796
319 H Non-Point Source	3,082,694		3,082,694
Drinking Water State Revolving Fund	14,198,771	505,986	14,704,757
Leaking Underground Storage Tanks	472,070	60,992	533,062
Clean Diesel	68,948	-	68,948
Section 106 Monitoring	295,397	-	295,397
Department of Defense	120,446	-	120,446
PM 2.5 Ambient Air Monitoring	288,707	-	288,707
Superfund UNL Mead	5,436	-	5,436
Superfund Core	133,602	24,166	157,768
Superfund Management Assistance	193,745	-	193,745
Superfund Site Assessment	169,632	-	169,632
Section 128 (a) State Response	490,435	-	490,435
Totals	\$ 42,989,587	\$ 2,976,776	\$ 45,966,363

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

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

An indirect rate of 58.01% was negotiated with EPA for FY15 and charged to programs against its direct payroll cost to cover agency administrative expenses

Chart B - A	Chart B - Actual Expenditure of State Funds for State Programs for Fiscal Year 2015 Including Aid											
Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total		
Integrated Solid Waste Management	004	С	1,268,303	515,358	31,635	-	8,547	1,823,843	-	1,823,843		
CLEAR / Environmental Trust	011	С	=	=	=	-	14,650	14,650	=	14,650		
Ag - Livestock	016	G/C	1,507,067	36,435	54,312	-	4,601	1,602,415	-	1,602,415		
Air Construction Permits	020	С	115,970	53,161	3,200	-	-	172,331	-	172,331		
Superfund State Cost Share	023	G/C	2,190	772	=	-	14,335	17,296	305,589	322,886		
Litter Reduction	024	С	116,207	46,725	508	-	151,471	314,911	772,600	1,087,511		
Mineral Exploration	029	С	78,920	36,802	10,365	-	-	126,087	=	126,087		
Private Onsite Wastewater Cert & Registration	030	С	206,907	90,112	11,007	-	25,901	333,926	-	333,926		
Environmental Official Training	031	С	=	7,873	6,103	-	-	13,976	=	13,976		
Emission Inventory - Title V	033	С	1,856,502	757,117	33,515	-	22,210	2,669,344	-	2,669,344		
Chemigation	034	С	26,520	13,966	195	-	49,713	90,394	-	90,394		
Groundwater Management Areas	035	G	28,006	2,069	2	-	-	30,077	-	30,077		
Remedial Action Plan Monitoring Act	036	С	88,076	34,214	840	-	492	123,622	-	123,622		
Private Onsite Wastewater Permit & Approval	037	С	31,109	11,870	=	-	-	42,978	=	42,978		
Operator Certification	040	С	54,441	26,002	1,172	-	7,130	88,745	-	88,745		
Community Right to Know	041	G	91,761	547	1,190	-	903	94,402	=	94,402		
Petroleum Release Remedial Action Act	051	С	923,857	502,396	12,481	106,320	2,746,407	4,291,460	4,182,695	8,474,155		
Emergency Response	057	G/C	70,462	34,102	4,206	-	353	109,123	-	109,123		
Engineering Reviews	061	G	268,664	3,023	300	-	282	272,269	-	272,269		
Stormwater Grants	067	G	6,297	-	-	-	-	6,297	1,824,995	1,831,292		
Waste Reduction & Recycling	091	С	220,045	98,836	3,141	-	61,566	383,588	4,339,089	4,722,677		
Superfund Special Projects	095	G	369	97	-	-	-	466	-	466		
Agency Organizational Dues	099	G	-	11,124	-	-	-	11,124	-	11,124		
Totals			\$ 6,961,672	\$ 2,282,600	\$ 174,172	\$ 106,320	\$ 3,108,561	\$ 12,633,325	\$ 11,424,969	\$ 24,058,293		

FUND TYPE LEGEND

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

An indirect rate of 58.01% was negotiated with EPA for FY15 and charged to programs against it's direct payroll cost to cover agency administrative expenses.

Chart C - Proposed Budget for Each Federal Grant Program for State Fiscal Year 2016

Grant / Program Title	Grant	Match	Total
Performance Partnership	4,421,803	1,212,660	5,634,463
Clean Water State Revolving Fund	7,114,943	2,288,576	9,403,519
604 B Water Quality Management	101,761	-	101,761
319 H Non-Point Source	2,583,235	-	2,583,235
Drinking Water State Revolving Fund	13,674,056	1,759,418	15,433,474
Leaking Underground Storage Tanks	779,755	89,780	869,535
Clean Diesel	79,000	-	79,000
Section 106 Monitoring	209,500	-	209,500
Department of Defense	171,660	-	171,660
PM 2.5 Ambient Air Monitoring	231,424	-	231,424
Superfund UNL Mead	5,369	-	5,369
Superfund Core	129,106	14,345	143,451
Superfund Management Assistance	217,668	-	217,668
Superfund Site Assessment	232,477	-	232,477
Section 128 (a) State Response	555,977	-	555,977
Totals	\$ 30,507,734	\$ 5,364,779	\$ 35,872,513

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

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

An indirect rate of 56.22% was negotiated with EPA for FY16 and charged to programs against it's direct payroll cost to cover agency administrative expenses.

509,023 35,200 34,652 - 42,173 84,470 114,931 852,969 4,791 1,650 42,009	39,000 55,700 350 - 1,500 16,785 6,900 31,000 200 300 500	- - - - - - -	15,000 8,000 - 576,765 121,000 1,500 400 25,000 27,000	1,887,695 1,703,379 97,492 591,417 274,178 264,192 398,745 3,094,013 40,089 34,270	- - - 416,445 2,000,000 - - - - -	398,745 3,094,013 40,089
34,652 - 42,173 84,470 114,931 852,969 4,791 1,650 42,009	350 - 1,500 16,785 6,900 31,000 200 300	- - - - - - -	576,765 121,000 1,500 400 25,000 27,000	97,492 591,417 274,178 264,192 398,745 3,094,013 40,089	•	97,492 1,007,862 2,274,178 264,192 398,745 3,094,013 40,089
42,173 84,470 114,931 852,969 4,791 1,650 42,009	1,500 16,785 6,900 31,000 200 300	- - - - - -	121,000 1,500 400 25,000 27,000	591,417 274,178 264,192 398,745 3,094,013 40,089	•	97,492 1,007,862 2,274,178 264,192 398,745 3,094,013 40,089
84,470 114,931 852,969 4,791 1,650 42,009	16,785 6,900 31,000 200 300	- - - - - -	121,000 1,500 400 25,000 27,000	274,178 264,192 398,745 3,094,013 40,089	•	2,274,178 264,192 398,745 3,094,013 40,089
84,470 114,931 852,969 4,791 1,650 42,009	16,785 6,900 31,000 200 300	- - - - -	1,500 400 25,000 27,000	264,192 398,745 3,094,013 40,089	2,000,000 - - - - -	264,192 398,745 3,094,013 40,089
114,931 852,969 4,791 1,650 42,009	6,900 31,000 200 300	-	400 25,000 27,000	398,745 3,094,013 40,089	- - - -	264,192 398,745 3,094,013 40,089 34,270
852,969 4,791 1,650 42,009	31,000 200 300	- - -	25,000 27,000	3,094,013 40,089	- - -	3,094,013 40,089
4,791 1,650 42,009	200 300	- - -	27,000	40,089	- - -	40,089
1,650 42,009	300	- -	-	,	-	
42,009		-		34,270	=	34.270
·	500	_				
0.005			-	150,787	=	150,787
8,685	-	-	=	32,612	=	32,612
26,149	1,150	-	7,500	96,326	-	96,326
1,250	4,950	-	1,000	110,590	-	110,590
488,009	12,100	250,000	5,636,502	7,351,838	8,775,000	16,126,838
94,270	4,850	-	1,000	313,693		313,693
2,200	750	-	300	193,206	-	193,206
400	800	-	-	18,786	1,824,996	1,843,782
99,079	4,975	-	2,000	334,443	4,000,000	4,334,443
11,000	-	-	-	11,000	-	11,000
	•	· · · · · · · · · · · · · · · · · · ·				

FUND TYPE LEGEND

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

An indirect rate of 56.22% was negotiated with EPA for FY16 and charged to programs against it's direct payroll cost to cover agency administrative expenses.

CHAPTER 9:

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 Programs for construction of wastewater treatment facilities and drinking water systems.

WASTE MANAGEMENT AID PROGRAMS

Following is a summary of funds provided in FY 015 through the Waste Grants programs managed in the Waste Planning and Aid Unit.

A. Litter Reduction and Recycling

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

In FY2015, 58 Litter Reduction and Recycling grants were awarded, totaling \$2,095,864. The grants were awarded in three categories: Public Education, \$821,346; Cleanup, \$97,938; and Recycling, \$1,176,580. These grants were awarded to both public and private entities.

B. Waste Reduction and Recycling

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

In FY2015, 162 projects totaling \$4,316,790 were funded from the Waste Reduction and Recycling Incentive Grants Program.

C. Illegal Dumpsite Cleanup Program

The Illegal Dumpsite Cleanup Program, established in 1997, provides funding for political subdivisions to clean up solid waste disposed of along public roadways or ditches. Potential funding is limited to five percent of the total revenue from the disposal fee collected in the preceding fiscal year. In FY2015, the program provided \$29,395 to six recipients.

D. Landfill Disposal Fee Rebate Program

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund. In FY2015, the program provided \$94,271 to 11 recipients.

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

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

WATER QUALITY AID PROGRAMS

A. Petroleum Remediation

The Petroleum Remediation program provides aid through the Petroleum Release Remedial Action Fund to assist in paying the cost of cleanup of sites where petroleum has leaked from tanks, generally service stations. Funding to this program is primarily provided by a fee on petroleum sold in Nebraska. Over \$197 million has been disbursed since the program began. The program provided \$4,017,078 to 203 sites for investigation and cleanup in FY2015.

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

B. State Revolving Loan Fund Program

- I. Clean Water (Wastewater) State Revolving Loan Fund Program -- Grant and loan programs administered by DEQ related to wastewater facilities, which are funded through the Clean Water State Revolving Fund program, include:
- The Clean Water State Revolving Loan Fund provides low interest loans and loan forgiveness to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems. The sources of funding for this program include federal grants and funds from the Nebraska Investment Financial Authority (NIFA) through bond issuance. In FY2015, the CWSRF funded projects totaling \$69,508,033 in loans and \$1,567,704 in principal forgiveness and grant funds.
- Clean Water Construction Administration Small Community Matching Grants provide matching grants to eligible communities with populations of 10,000 or less. In FY2015, \$436,544 was allocated for small community grants.
- Planning Grants totaling \$100,000 were awarded to five small (under 10,000) communities in FY2015. These communities were listed on the Project Priority List and used the grants to identify wastewater treatment facility project needs.

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

II. Drinking Water State Revolving Fund Program -- The Drinking Water State Revolving Fund provides low-interest loans and loan forgiveness to owners of public water systems. In FY2015, the program provided financial assistance to public water system projects totaling \$6,217,403, of which disadvantaged communities received \$673,609 in forgiveness funding.

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

C. Nonpoint Source Management

The Nonpoint Source Management program provides pass-through funding for the prevention and abatement of nonpoint source water pollution and the restoration of watershed resources under Section 319 of the federal Clean Water Act. This funding is provided to units of government, educational institutions, and non-profit organizations, for projects that facilitate implementation of the state Nonpoint Source Management Plan.

In FFY 2015, the Nonpoint Source Management Program provided and managed 60 Section 319 grants to local sponsors of eligible projects in the two categories: 1) Large Competitive Projects (generally under \$300,000) and 2) Small Project Assistance (under \$15,000). Of the 60 grants managed, 48 were large multi-year projects, with total funds of all projects equaling \$6,464,104. Twelve small projects were managed with total funds equaling \$119,857.

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

D. Storm Water Grants

In 2006, the Nebraska Legislature passed LB1226, which established the Storm Water Management Plan Program. This grant program provides funding to cities and counties to implement their local Storm Water Management Plans (SWMPs). In FY2015, nearly \$1.825 million was awarded to 25 communities for implementation of their Storm Water Management Plans. The grant recipients must provide a 20% cash match for any funds received and submit annual reports for the duration of the project.

Additional information about this program can be found on page 83.

CHAPTER 10: Staffing

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

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

Recruiting qualified and experienced employees for positions that require extensive education and experience remains a focus. NDEQ feels very fortunate to have recruited excellent staff in 2014/2015.

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

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

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

Chapter 10 Staffing Issues

Employees Assuming Agency Positions

These figures include new hires, promotions, transfers and classification upgrades for a one-year period. Figures for 2015 are from October 1, 2014 through September 30, 2015.

2009	2009	2010	2011	2012	2013	2014	2015
0	0	0	0	0	0	0	1
4	4	0	0	0	1	5	0
5	5	2	0	2	1	1	2
0	0	1	0	0	0	0	0
							1
0	0	2	1	1	0	0	0
9	9	3	5	0	2	4	4
3	3	0	1	0	0	0	0
0	0	1	0	0	0	2	0
4	4	0	3	2	2	7	2
0	0	0	0	0	1	0	0
17	17	8	9	11	10	7	11
3	3	2	0	2	4	2	3
0	0	0	1	1	1	0	0
45	45	20	20	19	22	28	24
	_	45	45 20	45 20 20	45 20 20 19	45 20 20 19 22	45 20 20 19 22 28

CHAPTER 11:

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, and the Livestock Waste Management Act, unless a class of permittees is exempted by the Council. The purpose of financial responsibility is for an applicant to provide funds to be used in the event of abandonment, default or other inability of the permittee to comply with terms or conditions of its permit or license. State statutes also identify types of funding mechanisms that applicants can use to meet the requirements.

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

		NDEQ	FINANCIA	4L	ASSURA	N	CE		
Facility Name	Location	Permit Type	Initial Date		Obligated Amount	D	Current Amount Demonstrated	FA Mechanism	Guarantor
	•	Solid Waste Dis	<u> </u>	/ISV			•	<u> </u>	
Alliance Landfill	Alliance	MSWDA	03/17/94	\$	3,445,542			Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	\$	156,500			Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$	4,063,500			Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	\$	11,011,872	\$	3,961,408	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$	12,504,182	\$	12,504,182	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	\$	9,622,869	\$	2,773,553	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$	2,089,834	\$	1,050,271	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$	6,026,364	\$	3,118,270	Trust Fund	Premier Trust
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$	9,899,212	\$	9,899,212	Financial Test	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	03/18/13	\$	6,006,891	\$	3,027,608	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$	154,996	\$	28,561	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$	3,083,771	\$	1,874,730	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$	4,426,332	\$	4,426,332	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	\$	6,888,997	\$	2,991,043	Trust Fund	Wells Fargo Bank
Kimball Landfill	Kimball	MSWDA	05/10/96	\$	1,623,012	\$	1,188,057	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$	618,217	\$	274,524	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$	2,469,732	\$	2,212,535	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	\$	21,861,060	\$	21,861,060	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$	2,333,561	\$	860,104	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	\$	591,668	\$	126,211	Faith & Credit	City of McCook
Minden Disposal Area	Minden	Sanitary LF	11/18/96	\$	34,851	\$	85,005	Faith & Credit	City of Minden
NE Ecology Landfill	Geneva	MSWDA	10/03/08	\$	2,367,851	\$	813,938	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$	19,516,384	\$	5,616,837	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$	24,740,999	\$	24,740,999	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$	7,212,957	\$	7,182,126	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$	2,337,397	\$	918,544	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	\$	1,474,316	\$	685,111	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	\$	1,746,178	\$	557,922	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	\$	76,615	\$	11,269	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$	3,502,865	\$	1,514,557	Enterprise Fund	City of York
*MSWDAs are landfills that are operating									
**Sanitary LFs are closed facilities that	nave post-closure mo	onitoring and mainten	ance.						

	NDEQ FINANCIAL ASSURANCE											
Facility Name	Location	Permit Type	Initial Date		Obligated Amount		Current Amount emonstrated	FA Mechanism	Guarantor			
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	<u> </u>	261,619			Escrow Account	Bank of Bennington			
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$	150,668			Enterprise Fund	City of Alliance			
Anderson Excavating C & D	Omaha	Const./Demol.	10/19/98	\$	906,763			Surety Bond	Employers Mutual Cas. Co.			
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	\$	46,496	\$		Enterprise Fund	Village of Arnold			
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	\$	1,001,600	\$		Financial Test	City of Beatrice			
Benkelman C & D Landfill	Benkelman	Const/Demol.	10/15/06	\$	63,897	\$		Enterprise Fund	City of Benkelman			
Broken Bow C & D Landfill	Broken Bow	Const/Demol.	11/23/07	\$	110,126			Enterprise Fund	City of Broken Bow			
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$	36,171	\$		Letter of Credit	First Natl. Bank Newman Gr			
Butler County C & D Landfill	David City	Const./Demol.	06/01/97	\$	35,495		35,495	Surety Bond	Evergreen Ntl. Indemnity Co.			
Eco-Storage C & D Landfill	Omaha	Const./Demol.	04/01/09	\$	91,438			Trust Agreement	Security Natl. Bank			
Franklin C&D Landfill	Franklin	Const./Demol.	11/08/10	\$	23,219			Enterprise Fund	City of Franklin			
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	\$	193,621	\$		Letter of Credit	1st Natl. Bank, Beatrice			
Hawkins Construction C & D	Omaha	Const./Demol.	01/03/02	\$	376,955	\$	376,955	Surety Bond	Hartford Fire Ins. Co.			
Holdrege C & D Landfill	Holdrege	Const/Demol.	05/01/09	\$	303,954			Enterprise Fund	City of Holdrege			
KGP Services C & D	Norfolk	Const/Demol.	11/06/03	\$	82,819			Escrow Account	Elkhorn Valley Bank & Trust			
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$	52,064	\$		Enterprise Fund	City of Kimball			
Lead Waste Mgmt C&D Landfill	Waterbury	Const./Demol.	05/28/14	\$	37,439	\$		Letter of Credit	Adrian State Bank			
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	\$	171,540	\$		Enterprise Fund	Lexington Area SW Agency			
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$	1,023,647	\$		Financial Test	City of Lincoln			
Loup Central C & D Landfill#1	Elba	Const./Demol.	01/28/01	\$	3,111	\$	5,951	Trust Fund	Citizens Bank & Tr. St. Paul			
Loup Central C & D Landfill#2	Elba	Const./Demol.	01/28/01	\$	94,196			Trust Fund	Citizens Bank & Tr. St. Paul			
L.P. Gill Landfill C & D	Jackson	Const/Demol.	04/09/96	\$	135,772	\$		Trust Fund	Premier Trust			
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$	246,287	\$		Financial Test	NPPD			
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$	76,565	\$		Enterprise Fund	City of O'Neill			
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	\$	168,130	\$		Escrow Account	Five Points Bank			
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	\$	45,189	\$		Enterprise Fund	City of Plainview			
Rainwood Hill LLC C & D	Omaha	Const/Demol.	05/29/15	\$	194,338	\$		Surety Bond	Hudson Insurance Co.			
Schmader C & D Landfill	West Point	Const/Demol.	07/27/12	\$	137,774	\$		Letter of Credit	Charter West Ntl Bank			
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	\$	96,855			Enterprise Fund	City of Sidney			
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	\$	144,140			Enterprise Fund	City of Imperial			
Three Valleys C & D Landfill	Indianola	Const./Demol.	02/24/10	\$	76,549			Letter of Credit	McCook Ntl Bank			
York C & D Landfill	York	Const/Demol.	12/01/07	\$	745,883			Enterprise Fund	City of York			

		NDEQ	FINANCIA	AL	ASSURA	N(CE						
Facility Name	Location	Permit Type	Initial Date		Obligated Amount	De	Current Amount emonstrated	FA Mechanism	Guarantor				
	Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills th Grove Cement Co. Louisville Indus Waste 03/01/03 \$ 4.232.077 \$ 4.232.077 Financial Test Ash Grove												
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$	4,232,077	\$	4,232,077	Financial Test	Ash Grove				
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$	3,394,079	\$	3,394,079	Insurance Policy	Indian Harbors Insurance Co.				
Fremont Utilities	Fremont	FFCA	05/28/96	\$	222,116	\$	500,000	Enterprise Fund	City of Fremont				
Hastings Utilities	Hastings	FFCA	02/01//01	\$	5,141,900	\$	654,865	Enterprise Fund	City of Hastings & PPGA				
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	\$	2,245,802	\$	2,245,802	Financial Test	NPPD				
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	\$	650,221	\$	650,221	Financial Test	NPPD				
OPPD NE City 1	NE City	FFCA	04/04/95	\$	4,421,714	\$	4,421,714	Financial Test	OPPD				
OPPD NE City 2	NE City	FFCA	06/30/09	\$	1,229,554	\$	1,229,554	Financial Test	OPPD				
OPPD North Omaha	Omaha	FFCA	04/04/95	\$	1,886,600	\$	1,886,600	Financial Test	OPPD				
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$	174,069	\$	174,069	Financial Test	OPPD				
Platte Generation	Grand Island	FFCA	03/18/14	\$	353,962	\$	353,962	Financial Test	City of Grand Island				
Waste Management of NE	Bennington	Indus. Waste	04/01/02	\$	1,368,898	\$	1,368,898	Surety Bond	Evergreen Ntl. Indemnity Co.				
Transfer Stations, Material Recovery Facilities, Compost Sites													
AltEn LLC	Mead	Compost	04/01/07	\$	188,466			Escrow Account	American Ntl Bank				
Bud's Sanitary Service	Newman Gr.	Transfer Station	07/08/94	\$	3,937		3,937	Letter of Credit	First Natl. Bank, NG				
Custer Transfer Station	Broken Bow	Transfer Station	12/23/08	\$	10,693		10,693	Letter of Credit	Great Western Bank				
Doernemann Const. Co.	Clarkson	Compost	12/15/99	\$	101,013		101,013	Letter of Credit	Clarkson Bank				
Edgetown Properties LLC	Madison	Transfer Station	06/27/12	\$	7,500		7,500	Escrow Account	Frontier Bank				
Fremont CRD, Inc.	Fremont	Transfer Station	07/02/03	\$	12,627	\$		Surety Bond	Capitol Indemnity Corp				
King Transfer Station	Walthill	Transfer Station	04/02/96	\$	1,182	\$	1,187	Escrow Account	First Natl. Bank, Walthill				
Prairieland Dairy LLC	Firth	Compost	08/01/15	\$	313,830	\$	313,830	Letter of Credit	First State Bank Nebraska				
Recycling Enterprises of NE, Inc.	Lincoln	Mat. Recovery	08/30/12	\$	60,390	\$		Letter of Credit	CityBank & Trust Co.				
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$	55,920	\$	55,920	Escrow Account	US Bank Ntl Assoc				
Sarpy County	Papillion	Transfer Station	04/17/12	\$	98,643	\$		Surety Bond	Travelers Surety Co. of Amer.				
Seneca Sanitation	Dubois	Transfer Station	02/01/04	\$	4,224	\$		Letter of Credit	First Natl. Bank, Centralia				
Stericycle	Lincoln	Processing Fac	07/01/12	\$	52,457	\$	53,000	Surety Bond	Westchester Fire Ins. Co.				
Waste Connections of NE	Bridgeport	Transfer Station	08/15/03	\$	3,956	\$	3,956	Surety Bond	Evergreen Ntl. Indemnity Co.				
Waste Connections of NE	Gering	Transfer Station	08/15/03	\$	10,076	\$	14,740	Surety Bond	Evergreen Ntl. Indemnity Co.				
Waste Connections of NE	Ord	Transfer Station	07/02/03	\$	8,387	\$	8,387	Surety Bond	Capitol Indemnity Corp				
Waste Connections of NE	Wahoo	Transfer Station	07/02/03	\$	7,190	\$	7,190	Surety Bond	Capitol Indemnity Corp				
Waste Connections of NE	Central City	Transfer Station	05/30/13	\$	9,223	\$	9,223	Surety Bond	Platte River Ins Co.				

	NDEQ FINANCIAL ASSURANCE											
Facility Name	Location	Permit Type	Initial Date		Obligated Amount	D	Current Amount Demonstrated	FA Mechanism	Guarantor			
RCRA Closure and RCRA Post-Closure (RCRA PC)												
Loveland Products	Fairbury	RCRA PC	03/13/14	\$	630,697	\$	630,697	Letter of Credit	Royal Bank of Scotland			
Agromac International	Gering	RCRA PC	12/11/07	\$	8,258	\$	8,258	Escrow Account	Platte Valley Ntl. Bank			
Behlen Manufacturing Co.	Columbus	RCRA PC	02/29/12	\$	82,750	\$		Financial Test	Behlen Mfg			
Bosch Security Systems	Lincoln	RCRA PC	06/02/09	\$	10,344	\$		Letter of Credit	Bank of Montreal			
Clean Harbors Technology	Kimball	RCRA Closure	09/16/13	\$	25,293,877	\$	25,293,877	Insurance Policy	Indian Harbors Insurance Co.			
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$	234,640	\$	265,706	Trust Fund	First Natl Bank of Omaha			
Eaton Corporation	Omaha	RCRA PC	06/08/09	\$	4,463,158	\$	4,463,158	Letter of Credit	JP Morgan/Chase Bank			
Safety Kleen	Grand Island	RCRA Closure	10/15/01	\$	140,770	\$	140,770	Insurance Policy	Indian Harbors Insurance Co.			
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$	372,965	\$	372,965	Insurance Policy	Indian Harbors Insurance Co.			
Tenneco Automotive Inc.	Cozad	RCRA PC	09/17/97	\$	50,630	\$	50,630	Letter of Credit	Canadian Imperial Bank			
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	\$	2,627,776	\$	2,627,776	Letter of Credit	1st State Bank Webster City IA			
Crow Butte Resources, Inc.	Crawford	UIC	Underground		jection Contr 44,719,032			Letter of Credit	Royal Bank of Canada			
	Waste Tire Sites											
ABC Tire LLC	Kansas C, KS	Waste Tire	06/24/13	\$	10,000	\$		Surety Bond	Nationwide Mutual Ins.			
B-Rose Transportation	Alvo	Waste Tire	04/16/15	\$	5,000	\$		Surety Bond	Merchants Bonding Co.			
Butler County Landfill	David City	Waste Tire	05/16/97	\$	50,000	\$		Surety Bond	Travelers Casualty & Surety			
Champlin Tire Recycling Inc	Concordia KS	Waste Tire	10/04/96	\$	10,000	\$		Letter of Credit	United Bank & Trust			
David's Tire	Nevada, MO	Waste Tire	10/22/09	\$	10,000	\$		Surety Bond	Ohio Casualty Ins. Co.			
D & B Enterprise LLC	Correctville, IA	Waste Tire	11/17/08	\$	10,000	\$		Surety Bond	Great American Ins.Co.			
Don's Used Tires	Lincoln	Waste Tire	03/13/03	\$	5,000	\$		Surety Bond	Old Republic Surety Co.			
EnTire Recycling Inc	Brock	Waste Tire	04/18/13	\$	10,000	\$	10,000	Letter of Credit	Great Western Bank			
Gill Hauling Inc.	Jackson	Waste Tire	02/04/09	\$	10,000	\$	10,000	Letter of Credit	Dakota County State Bank			
Hackbart Brothers, Inc	Seward	Waste Tire	08/03/15	\$	10,000	\$		Letter of Credit	Jones Natl. Bank & Trust			
Hoke Transport LLC	Gering	Waste Tire	04/04/12	\$	5,000	\$		Surety Bond	Old Republic Surety Co.			
J & M Steel	Hastings	Waste Tire	01/15/15	\$	5,000	\$	5,000	Letter of Credit	Five Points Bank			
Kenny Frazier	Edmond OK	Waste Tire	05/26/04	\$	5,000	\$		Escrow Account	Bank of America, Inc.			
LAL Enterprise, LLC	Alvo	Waste Tire	04/16/15	\$	5,000	\$		Surety Bond	Merchants Bonding Co.			
Leo Porter	Oshkosh	Waste Tire	02/21/08	\$	5,000	\$	- ,	Escrow Account	Nebraska State Bank			
Liberty Tire Services of Ohio	Savage, MN	Waste Tire	03/09/09	\$	10,000	\$		Surety Bond	Evergreen Ntl. Indemnity Co.			
New Horizons Enterprises LLC	Lincoln	Waste Tire	05/11/12	\$	5,000	\$		Surety Bond	Granite Re, Inc.			
Omaha Casing Co. Inc	Omaha	Waste Tire	12/05/14	\$	5,000	\$			Security Natl. Bank			
Resource Management Co	Brownell, KS	Waste Tire	01/17/06	\$	10,000	\$		Letter of Credit	First State Bank, Ness Cy,KS			
River City Recycling	Omaha	Waste Tire	04/05/12	\$	43,750	\$	43,750	Letter of Credit	Mutual of Omaha Bank			
Russell Brandenburgh	Beaver Crossing	Waste Tire	02/25/13	\$	10,000	\$	10,000	Letter of Credit	Citizens State Bank			

NDEQ FINANCIAL ASSURANCE							
Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Waste Tire Sites							
Tire Cutters	Centralia KS	Waste Tire	05/13/06	\$ 5,000	\$ 5,000	Letter of Credit	1st Natl. Bank, Centralia, KS
Tire Town, Inc.	Leavenworth,KS	Waste Tire	06/11/15	\$ 10,000	\$ 10,000	Letter of Credit	Bank of the Prairie
Uribe Scrap Tires, LLC	Lincoln	Waste Tire	01/06/14	\$ 5,000	\$ 5,000	Surety Bond	Ohio Casualty Ins. Co.
Winnebego Tribe of Nebraska	Winnebago	Waste Tire	09/15/10	\$ 5,000	\$ 5,000	Letter of Credit	Charter West National Bank