

CHAPTER 5:

Land Management Division

The Land 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.

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 product 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, the Department can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. A new facility, the Heritage Disposal and Storage, LLC, Hazardous Waste Storage and Incinerator Facility, has been proposed in Hall County near Alda. The applicant began the facility siting process in April and submitted a fee to pay for the siting committee activities.

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

Currently, the RCRA Program oversees the following active sites:

- 98 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month) See map below.
- 373 Small Quantity Generators (between 220 and 2200 pounds generated per month)
- 1361 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
 - 1 Hazardous Waste Incinerator Facility
 - 3 Treatment, Storage or Disposal Facilities
 - 18 Hazardous Waste Transporters

Location by County of Large Quantity Generators in Nebraska Regulated Under RCRA

Adams	1	Jefferson	1
Boone	1	Kimball	1
Buffalo	3	Lancaster	29
Burt	1	Madison	2
Cedar	1	Otoe	1
Cheyenne	2	Phelps	1
Cuming	1	Platte	4
Dodge	2	Red Willow	1
Douglas	23	Sarpy	12
Franklin	1	Scotts Bluff	2
Gage	1	Seward	1
Hall	2	York	1
Holt	1	Washington	2

Summary of FY2016 Activities		
Activity	State	EPA
Compliance Assistance		
On-site Visits	2	*
Direct Assistance Contacts	540	*
Public Outreach Presentations (total <u>600</u> in attendance)	7	*
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	1	0
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	2	0
Facility Self-Disclosure	0	0
Large Quantity Generator	13	1
Small Quantity Generator	9	6
Conditionally Exempt Small Quantity Generators	16	4
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	1	0
Permits Issued/Renewed	1	0
Modifications	3	0
EPA Corrective Action Orders	N/A	0
RCRA Record Reviews		
Financial Assurance	20	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 Superfund National Priorities List. Nebraska has 16 active and one proposed National Priorities List sites. 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 Priorities List and are in the site study stage. One site, the Iowa-Nebraska Light and Power Co. site in Norfolk was finalized on the National Priorities List in April, 2016. An additional site, the Old Highway 275 and North 288th Street site in Valley, was proposed for the National Priorities List in September, 2016. A final decision on listing this site will be made in 2017. 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, and one vapor intrusion evaluation. 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 2017. 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 Superfund National Priorities List 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, National Priority List sites are

generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The investigation and cleanup activities at these sites are organized into several phases, including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. NDEQ also participates in public meetings with citizens and local officials in the development of cleanup plans.

Below is a list of the 16 active and one proposed National Priorities 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, the York PCE/TCE Northeast Contamination site, and the York PCE Southeast Contamination site are currently in the site studies phase. The Iowa-Nebraska Light and Power Co. site in Norfolk recently became final on the National Priorities List in April, 2016. An additional site, the Old Highway 275 and North 288th Street site in Valley was proposed for the National Priorities List in September, 2016. A final decision on listing this site will be made in 2017.

The Superfund law seeks to identify those responsible for contamination to pay for the cleanup. If it is not possible to identify the responsible party, or if the responsible party is insolvent, cleanup is paid for by a combination of Federal and State funds. Of the 16 active sites on the National Priorities List, seven are being addressed by the responsible party and nine are being addressed as fund lead by Superfund dollars. For fund lead sites, the State of Nebraska enters into contracts with EPA and agrees to pay 10% of the capital costs of constructing the cleanup system, 10% of initial startup operation costs, and 10% of on-going operation and maintenance costs for the first 10 years of the project. After the initial 10 years, the State pays 100% of the operation and maintenance costs. In January, 2016, the State began paying 100% of the operation and maintenance costs for the 10th Street Site in Columbus. In the next year, the State will begin paying 100% of the operation and maintenance costs for the Ogallala Groundwater Contamination Site and the Hastings Second Street subsite of the Hastings Groundwater Contamination Site.

Active National Priorities List Sites in Nebraska

- Cornhusker Army Ammo Plant (Grand Island)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702020>
- Hastings Groundwater Contamination (Hastings)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701973>
- Lindsay Manufacturing Co. (Lindsay)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701913>
- Nebraska Ordnance Plant (Mead)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702031>
- 10th Street Site (Columbus)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702001>
- Cleburn Street (Grand Island)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701986>
- Ogallala Groundwater Contamination Site (Ogallala)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702287>
- Bruno Coop Association (Bruno)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702000>
- Sherwood Medical (Norfolk)
<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702086>
- Omaha Lead Site (Omaha)

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0703481>

Parkview Well Site (Grand Island)

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704456>

Garvey Elevator (Hastings)

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704351>

West Highway 6 & 281 (Hastings)

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704738>

York PCE/TCE Northeast Contamination

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706105&msspp=med>

York PCE Southeast Contamination

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706200&msspp=med>

Iowa-Nebraska Light and Power Co. (Norfolk)

<https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0702377&msspp=med>

Proposed National Priorities List Sites in Nebraska

Old Highway 275 and North 288th Street (Valley)

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704272&msspp=med>

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 12 formerly used defense sites. Military munitions response activities are being performed at two 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, 47 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. Seventeen sites have successfully completed cleanup requirements and have received "No Further Action" letters from NDEQ.

NDEQ continues to have significant interest from applicants enrolling properties or sites into the voluntary cleanup program. New applicants include the former Omaha Steel Castings facility in Omaha and the former Textron Turf Care and Specialty Products facility in Lincoln. NDEQ also anticipates the International Sensor Systems, Inc. facility in Aurora will enroll in the program in the near future. Investigation activities commenced this year at the former York USDA grain bin site to fully characterize the nature and extent of carbon tetrachloride in groundwater in the York area. 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 commenced in 2016 at the Nebraska Machine Products site in Omaha and the Lynch Park FMGP site in Omaha. Cleanup activities were completed in 2016 at the two former FMGP sites in Blair and Plattsmouth. Cleanup activities are anticipated to commence in 2017 at the Beatrice FMGP site. Cleanup activities are anticipated to be completed in 2017 at the former Pfizer facility in Omaha, the West Haymarket Redevelopment Site North in Lincoln, and the West Haymarket Redevelopment Site South in Lincoln.

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

Site	Location	Date of Entry into RAPMA Program	Status
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 Solvent Site	Grand Island	2/23/07	Active
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	Completed 4/4/16
Plattsmouth FMGP	Plattsmouth	6/28/11	Completed 4/4/16
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

Site	Location	Date of Entry into RAPMA Program	Status
Beatrice FMGP	Beatrice	11/17/15	Active
Omaha Steel Castings	Omaha	4/26/16	Active
Former Textron Turf Care and Specialty Products	Lincoln	Under review	Under review

Brownfields Assessments and Cleanups — A Brownfields 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 Brownfields 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 Brownfields 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 four Phase I assessments, six Phase II assessments, and three asbestos surveys. In addition, NDEQ provided partial cleanup assistance at two sites for removal of asbestos prior to building renovation or demolition.

Brownfields Program Enhancement and Public Outreach — Program enhancement and public outreach are key components that serve to educate the public on what a brownfield is and promote how our program can be used by communities for economic development. Workshops are arranged with a goal to increase knowledge and understanding of the environmental stigma attached to brownfield properties and how our resources can serve as a catalyst to bring these properties back to productive reuse. These workshops serve to connect stakeholders of Nebraska communities with resource providers and consist of presentations from a variety of people that play an important role in economic development. In the past year, NDEQ organized two brownfield resources workshops: one in Lincoln and one in Kearney. In addition to workshops, the Brownfields Coordinator was invited to speak about NDEQ resources at a Redevelopment Resources for Panhandle Communities workshop in Scottsbluff and at a Village of Taylor board meeting. These outreach activities sparked an onset of brownfield assessment and asbestos abatement applications. Upcoming promotional events include an NDEQ sponsored workshop to be held in Norfolk in October and a presentation to be given at an upcoming Southeastern Nebraska Resource Networks (SERN) quarterly meeting.

Program enhancement activities initiated this year include updates to the Voluntary Cleanup Program Guidance Document and development of a new guidance document on management strategies for addressing free product at cleanup sites. In addition, a state-wide inventory is being conducted of facilities that may have used or produced perfluorinated alkyl acids such as perfluorooctane sulfonates (PFOS) and perfluorooctanoic acids (PFOA) which are considered emerging contaminants that can have adverse health effects if found in drinking water supplies.

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 areas, fossil fuel combustion ash disposal areas, industrial and delisted hazardous waste disposal areas, 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 2016	
Municipal Solid Waste Disposal Areas (Landfills)	23
Solid Waste Compost Sites	8
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	0
Total	114

The following table indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2016:

Summary of Activities: FY2016	
Compliance	
Facility Inspections (General)	116
Facility Closure Inspection	1
Facility Construction Inspections	2
Facility Comprehensive Renewal Inspections	11
Complaints Received	59
Complaints Investigated	59
Complaints Closed	58
Permitting	
New Permits Issued	0
Permit Renewals	18
Major Permit Modifications	7
Public Hearings	1
Permits Transferred	0
Financial Assurance Reviews	148
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. During FY2016, assessment monitoring continued at ten active and two closed municipal solid waste disposal areas and ended at one closed municipal solid waste disposal area.

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 and if necessary assess and conduct remedial measures. In FY 2016 remedial measures continued at one closed site, were initiated at two active sites and were completed at one close site.

Accomplishments for FY2016 included 1) termination of post-closure care at the Minden Landfill following a successful demonstration by the facility that the remaining wastes and groundwater contamination pose no continued threat to human health and the environment; and 2) completion of remedial measures at the closed McCook Landfill.

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 FY2016, groundwater investigations continued at three sites and remedial actions continued at seven sites.

Financial Assurance and Fees

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

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 as well as 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, FY2016	
Permitting	
Renewed Hauler Permits	21
New Permits Issued	4
Financial Assurance Reviews	14

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 Grant Application and Reporting Processes

In FY2014, applications for the Waste Reduction and Recycling Incentive Grants Program and the Litter Reduction and Recycling Grant Program were converted from paper-based to an online process. Applications are now 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. For FY2017, two more applications will become available online: (1) Deconstruction of Abandoned Buildings and (2) Cost-sharing for Civil Engineering Uses of Scrap Tires. These changes have resulted 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.

New Legislation

LB 1101, passed in 2016, directs the Department of Environmental Quality to conduct a study to examine the status of recycling and solid waste management programs operated by the department. The study will look at the current litter, waste reduction and recycling programs and conduct a needs assessment with regard to recycling and composting programs in the state. Potential funding sources, including public-private partnerships, will also be included in the study.

LB 1101 authorizes NDEQ to create an advisory committee comprising no more than nine people. The committee will provide a report of its findings to the Legislature by December 15, 2017.

Expected Service Life

The Planning and Aid Unit grant programs utilize an expected service life procedure for grant-funded equipment. The expected service life determines how long the grantee is responsible for 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, 2015 - June 30, 2016

Fund Balance June 30, 2015	\$5,118,826
Revenues:	
New Tire Fees	\$1,579,417
Business Fees	\$657,604
Solid Waste Disposal Fee	\$1,043,010
Interest, Grant Returns	\$117,556
Net Collections for Year	\$3,097,587
Expenditures:	
Administration	\$341,384
Grant Funds Expended*	\$4,278,783
Total Expenditures FY 2016	\$4,620,167
Fund Balance June 30, 2016	\$3,596,249

* 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 FY2016, NDEQ awarded \$5,536,014 for Waste Reduction and Recycling Incentive Grants to 165 projects. This is an increase of over one million dollars from last fiscal year. Twenty four of these grants were awarded from the Business Fee category (\$1,338,426), 13 were awarded from the Disposal Fee category (\$2,116,399), and 128 received grants from the funds prioritized for scrap tire projects (\$2,081,189). The following lists indicate the locations across Nebraska that received funds.

Waste Reduction & Recycling Grants for FY2016

Business Fee \$ 1,338,426 24 grants, including, 3 statewide, 3 regional
 Disposal Fee \$ 2,116,399 13 grants, including, 0 statewide, 4 regional

Business Fee

Ceresco	Lincoln 3
Chadron	North Platte
Columbus 2	Oakland 2
Falls City	Ogallala
Fremont	Omaha 6
Gretna	Scottsbluff
Kimball	Mexico, MO

Disposal Fee

Fremont	Omaha
Gering	South Sioux City
Lexington	Valentine
Lincoln 5	Wayne
McCook	

Deconstruction Grants for FY2016

There were no deconstruction grants applied for or granted in FY2016.

Scrap Tire Grant Awards for FY 2016

122 local grants and 5 regional grants and 1 statewide grant for an award total of \$2,081,189.

Albion, City of	KKO Invest/Going Vertical - Omaha
Arcadia Public Schools	Kloefkorn Elementary PTO - Lincoln
Atkinson, City of	Knox County
Axtell Community Schools	Little Blue NRD (2)
Bassett, City of	Loomis, Village of
Beatrice, City of	Lower Elkhorn NRD (Regional)
Bellevue, City of	Lower Loup NRD (2) (Both Regionals)
Bierman, Mike - Falls City	Lower Republican NRD (3)
Blair Community Schools	Madrid (2) , City of
Bloomfield, City of	Milford Public Schools
Cairo, Village of	Millard Public Schools
Cambridge Public Schools	Mullen, Village of
Cass County Dept. of Roads	Nebr. Game & Parks Commission (Statewide)
Cedar County	Neligh-Oakdale Schools
Central City, City of	Nemaha County
Central City Public Schools	Neumeister, Justin - Auburn
Central Valley Public Schools - Greeley	Norfolk Catholic School
Chase County	North Central Dev. Center - Ainsworth
College View Academy - Lincoln	North Platte, City of
Columbus, City of	North Platte Public Schools (2)
Concordia University - Seward	Northeast NE Shooting Assn. - Norfolk
Creighton University - Omaha	Nuckolls County
Crete, City of	Omaha, City of
Dakota County (2)	Omaha Public Schools (10)
Davenport, City of	Ord Public School
Diller-Odell Public Schools	Papio-Missouri River NRD
District 145 Eagle Elementary	Paxton Consolidated Schools
District 145 Hamlow Elementary - Waverly	Pierce County
Dixon County	Prague Improvement & Maintenance
Elkhorn Public Schools (2)	Ralston Public Schools (2)
Elm Creek Public Schools	River City Recycling Omaha
Falls City Sacred Heart	St. Johns' Lutheran School - Alliance
Fillmore County	St. Johns' Lutheran School - Seward
Fremont, City of	St. Paul, City of
Fremont Public Schools (3)	Saline County
Frontier County	Sandhill Plastics - Kearney
Gage County	Saunders County
Gothenburg Public Schools	Sherman County
Hastings Family YMCA	Shickley Public Schools
Havco Kids One, Inc. - Lincoln	Shickley, Village of
Head Start CFDP - Hastings	Sidney, City of
Heartland Community Schools - Henderson	South Central NE USD #5 - Lawrence
Holdrege Public Schools	Stapleton, Village of (Regional)
Humphrey Public Schools (2)	Stella, Village of
Hyannis, Village of	Sterling Public Schools
Jefferson County	Superior Public Schools
Johnson County	Solid Waste Agency of NW Nebr. -Chadron (Regional)
Kearney, City of	Trenton, Village of
Kearney County - Minden	UNL Athletics - Lincoln
Kearney Public Schools	Valentine Community Schools
Keep Alliance Beautiful (2)	Van Winkle, Shauna - Beatrice
Kenesaw Public Schools	Wayne, City of
Kidnect Child Development - La Vista	
Kimball, City of	

Litter Reduction and Recycling Grant Program

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

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

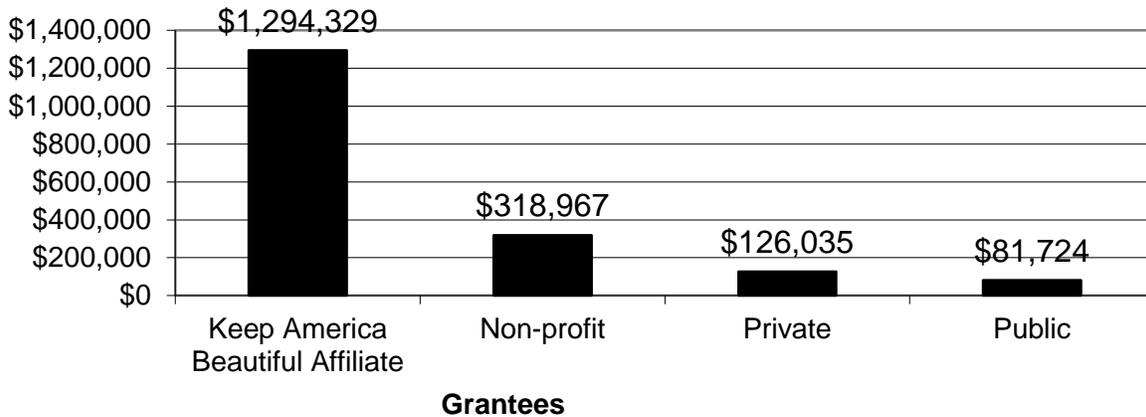
- Food for human consumption, beverages, soft drinks, carbonated water, liquor, wine, beer and other malt beverages, unless sold by retailers solely for consumption indoors on the retailer's premises;
- Food for pet consumption;
- Cigarettes and other tobacco products;
- Household paper and household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

Fund Summary Litter Reduction and Recycling Fund July 1, 2015 - June 30, 2016

Fund Balance June 30, 2015	\$1,532,147
Revenues:	
Litter Taxes Collected	\$2,071,754
Interest, Grant Returns	\$64,718
Net Collections for Year	\$2,136,472
Expenditures:	
NDEQ Administration	\$320,040
Grant Funds Expended	\$1,635,601
Total Expenditures FY 2016	\$1,955,641
Fund Balance June 30, 2016	\$1,712,978

In FY2016 \$1,821,055 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 FY2016 grantees.

FY 2016 Litter Reduction and Recycling Fund Grantees



FY 2016 Grant Allocations - Litter Reduction and Recycling Fund

In FY2016, NDEQ gave 54 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

FY 2016 (July 1, 2015 – June 30, 2016)

Public Education	(45%)	18 grants	\$ 819,597
Cleanup	(6%)	12 grants	\$ 108,483
Recycling	(49%)	24 grants	\$ 892,975
Totals	100%	54 grants	\$ 1,821,055

Public Education

In FY2016, 18 grants totaling \$819,597 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 2016 Public Education Grant Awards

Total Awarded - \$819,597 18 total grants
 2 regional grant awards 1 statewide grant award

Cities

Alliance	Lincoln (2)
Beatrice	Louisville – Keep Cass County Beautiful
Chadron	Norfolk
Columbus	Ogallala
Fremont	Omaha
Grand Island	Schuyler
Kimball	Scottsbluff/Gering
Burwell (Regional)	Plainview (Regional)
Product Stewardship Institute (Statewide)	

Regional grants:

Burwell 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 Keep Northeast NE Beautiful (9 County area:, Knox, Antelope, Pierce, Cedar, Dixon, Wayne, Dakota, Cuming, Thurston)

Statewide grant:

Product Stewardship Institute

Cleanup

In FY2016, 12 grants totaling \$108,483 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 2016 Cleanup Grant Awards

Total Awarded - \$108,483 12 total grants

Cities

Beatrice	North Platte
Burwell (Regional)	Ogallala – Keep Keith County Beautiful
Chadron	Omaha
Grand Island	Scottsbluff/Gering
Lincoln	South Sioux City
Louisville – Keep Cass County Beautiful	Steinauer Community Club

Regional grant:

Burwell 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 FY2016, 23 grants totaling \$892,675 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 2016 Recycling Grant Awards

Total Awarded - \$892,975	24 total grants
2 regional grant awards	3 statewide grant awards

Cities

Alliance	La Vista	Village of Roca
Chadron	Lexington	Schuyler
Firth	Lincoln (3) (2 Statewide)	Scottsbluff/Gering
Grand Island (Statewide)	North Platte (3)	Sidney
Imperial	Ogallala (3)	Tekamah (Regional)
Kimball	Omaha	York (Regional)

Regional grants:

Tekamah	Papio-Missouri NRD
York	4 Corners Health Department

Statewide grants:

Lincoln	Nebraska Farmers Union
Lincoln	WasteCap NE
Grand Island	Nebraska State Fair

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.

One large site that was cleaned up was discovered near Franklin. It originally was the dumpsite for the Franklin area before 1992 legislation prohibited these small town dumps. Previously, towns with less than 5,000 people were allowed to have unregulated dumps. The Integrated Solid Waste Management Act eliminated these small town dumps, and solid waste now must go to permitted Subtitle D permitted landfills. This site built up over the years, and by the time NDEQ staff came across it in 2015, 771 tons of waste had piled up in the ravine. With the oversight of NDEQ staff and a coordinated effort with Franklin County and the private property owner, an agreement was reached, and a contractor was hired to clean up the site. The total request for reimbursement through the Illegal Dumpsite Cleanup Fund was \$108,000.00, and the work was completed within a two-week timeframe in June 2016. In addition to removing and properly disposing of the waste at the site, Franklin County put up fencing, built berms and posted signage to prevent future dumping at the location.

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. NDEQ encourages municipalities, counties and other political subdivisions to submit applications for the reimbursement of cleanup efforts. In FY2016, the program provided 26 grants, totaling \$162,535.82 to 6 recipients. In FY2016, funds were provided to:

City of Lincoln	City of Omaha	Seward County
Lincoln/Lancaster County	Washington County	Franklin County

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 FY2016, the program provided \$94,409 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.

Buffalo County	\$ 5,551	Butler County	\$ 648	City of David City	\$ 216
City of North Platte	\$ 3,807	City of Lincoln	\$33,588	Saline County	\$ 2,101
City of Omaha	\$45,604	South Sioux City	\$ 571	Jefferson County	\$ 959
Seward County	\$ 1,252	City of Grant	\$ 112		