

CHAPTER 5:

Land Management Division

The Land Management Division protects human health and the environment from disposal or contamination on the ground, both on the land surface, or spills that migrate below the land surface. This division regulates both solid waste and hazardous waste. The division is comprised of: Planning and Aid, which is comprised of several waste-related grant programs; Voluntary Cleanup Program (VCP) and Brownfields; the hazardous waste Resource Conservation and Recovery Act (RCRA) program; Superfund; and the Integrated Waste Management (IWM) programs.

Planning and Aid Section

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

Responsibilities of the Land Planning and Aid Section include:

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

Online Grant Application and Reporting

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. These changes have resulted in time and material savings to both NDEQ and the grant program recipients. Online information is located on the Department's web site at <http://dee.ne.gov>. Select the "Land and Waste" tab and then select the "Waste Planning and Aid Programs" tab.

Nebraska Department of Environmental Quality/Nebraska Environmental Trust Partnership

In July 2018, the Nebraska Department of Environmental Quality and the Nebraska Environmental Trust entered into a Partnership to ensure agency resources are managed in a fiscally responsible manner by agreeing to:

- Participate in the grant review process on those projects where there is a potential for grant awards from both organizations.
- Appoint individuals that will ensure coordination occurs between our organizations.
- Commit to revising the Partnership anytime there is a personnel change, new grant programs are created, or existing programs end or are substantially modified.
- Share information on grant awards and grantees that are non-compliant with award conditions or environmental regulatory requirements.

- Meet annually as well as when critical program or project needs arise for the purpose of discussing issues of mutual concern and opportunities to enhance the Partnership.

Percentage Allocation

At the Environmental Quality Council meeting on November 15, 2018, a hearing was held to decide the 2019 Litter Percentage Allocation. Each year, the Environmental Quality Council establishes the percentage of how the funds will be allocated for each grant category. The Department's recommended percentage allocations for 2019 were based on the actual applications received:

Category	2019 Eligible Requests	
Recycling	52.50%	\$1,443,698.00
Public Education	43.60%	\$1,196,857.00
Cleanup	3.90%	\$106,220.00
Totals	100%	\$2,746,775.00

The Department asked for the ability to adjust the percentages by up to 10% for the 2019 grant year, if warranted. The Environmental Quality Council granted the Department the ability to adjust the percentages by up to 20%. Prior to the hearing, the Department received nine letters in support of flexibility from 15% to 18%. One person gave testimony at the hearing, reading one of the letters that had been previously submitted.

New Grant Application Guidance

Grant application guidance was prepared in 2018 to provide direction and set limits on grant fund expenses. The purpose is to provide fair and equitable reimbursements, especially when requests exceed the amount of grant funding available. The guidance document was discussed by a subcommittee of the Nebraska Environmental Quality Council in the fall of 2018, and accepted at the November 15, 2018 Environmental Quality Council meeting. The guidance affects grant applications received after January 1, 2019.

Alignment of the Waste Reduction and Recycling Incentive Grant Program and Litter Reduction and Recycling Grant Program grant terms to a calendar year

Beginning with 2020 awards, the Waste Reduction and Recycling Incentive grant term changed from a fiscal year to a calendar year. With this change, both the Litter Reduction and Recycling and Waste Reduction and Recycling Incentive grant programs will be on a calendar year. This change will allow our grant programs to more closely align with the grant application period of the Nebraska Environmental Trust. Scrap tire grant applicants wanting to hold a scrap tire collection event, or who plan to do construction projects (artificial turf, running tracks, or playground surfaces) will have notification of their grant award in December, rather than late spring, or early summer. To make the transition to a calendar year, the 2019 awards for the Waste Reduction and Recycling Incentive grant program (which includes Scrap Tire Grants) were awarded for a six-month grant term, from July 1 through December 31, 2019. All 2020 grant terms will be from January 1 through December 31, 2020.

Expected Service Life

The Planning and Aid Section 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. At the end of the grant period, the grantee is provided a sticker to properly identify the equipment and is notified of the length of the expected service life.

Equipment Redistribution

When grant-funded equipment with an existing expected service life is no longer being used, it is made available for redistribution to other users. One redistribution of equipment and one change in ownership were made in 2019.

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 \$2.4 million annually;
- Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.4 million annually for grant awards.

The Waste Reduction and Recycling Incentive Fund provides grants to private, non-profit, and government organizations 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
- Food waste composting
- Yard waste composting and composting with sewage sludge
- Waste reduction and waste exchange
- Household hazardous waste programs (HHW)
- Electronic waste collections
- Pharmaceutical collections
- The consolidation of solid waste disposal facilities and use of transfer stations
- Incineration for energy recovery

A portion of the grant funds are obligated to fund scrap tire recycling and/or reduction projects, and another portion of the grant funds are available to smaller cities and counties for abandoned building deconstruction.

Fund Summary Waste Reduction and Recycling Fund July 1, 2018 - June 30, 2019	
Fund Balance June 30, 2018	\$601,284
Revenues:	
New Tire Fees	\$2,397,910
Business Fees	\$516,155
Solid Waste Disposal Fee	\$1,384,709
Interest, Grant Returns	\$21,129
Miscellaneous	\$2,757
Operating Transfers Out	(\$960,000)
Net Collections for Year	\$3,362,660
Expenditures:	
Administration	\$296,014
Grant Funds Expended*	\$2,859,163
Total Expenditures FY 2019	\$3,155,177
Fund Balance June 30, 2019	\$808,767

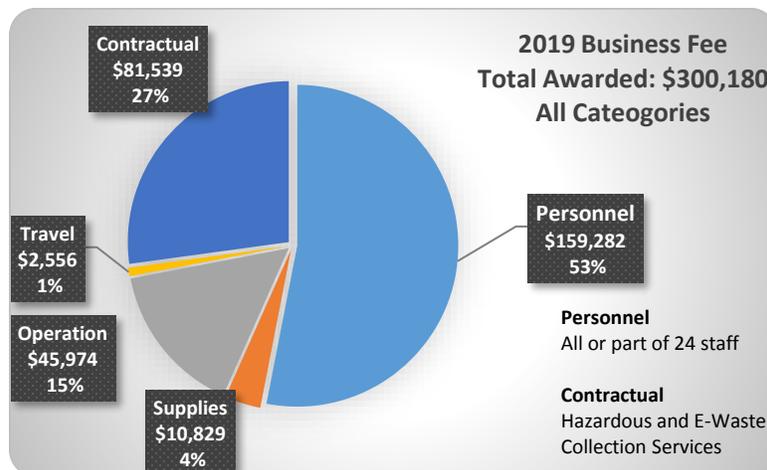
* Because grants funds are expended on a reimbursement basis, total grant funds expended in a fiscal year will differ from the amount of grants awarded in that fiscal year.

For FY2019, NDEQ awarded \$1,729,302 for Waste Reduction and Recycling Incentive Grants to 83 projects. Thirteen of these grants were awarded from the Business Fee category (\$300,180), seven were awarded from the Disposal Fee category (\$461,365), and 63 were awarded from the funds prioritized for scrap tire projects (\$967,757).

These awards represent funding for six months. Beginning in 2020, Waste Reduction and Recycling Incentive Grants will be awarded on a calendar year, and funding will be for 12 months. The following lists indicate the locations across Nebraska that received funds.

Business Fee: \$300,180 for 13 grants			
Alliance	Keep Alliance Beautiful	\$61,006	Funds to operate the Alliance recycling center and provide waste reduction and recycling education programs for residents of Alliance, Box Butte County, and the surrounding area.
Chadron	Keep Chadron Beautiful	\$3,186	Funds toward a one-day electronic waste recycling event for residents of Chadron and surrounding communities.
Chadron	Keep Chadron Beautiful	\$25,877	Funding to collect recyclable office paper and cardboard from offices, businesses, and individuals in Chadron. Nearly 94 tons of cardboard and paper were diverted from the landfill last year.
Fremont	Keep Fremont Beautiful, Inc.	\$20,225	Hold a one-day household hazardous waste collection event, one all metals market drop-site collection event, and provide recycling opportunities at public events for Fremont and Dodge County.

Grand Island	Grand Island Area Clean Community System	\$61,562	Funds to operate the Betty Curtis Household Hazardous Waste Facility in Grand Island, serving Hall, Hamilton, Howard, Merrick, and Adams Counties.
Kimball	Keep Kimball Beautiful	\$10,212	Funds to increase recycling by providing collection services to rural residents and businesses. Also provide residential alley recycling collection and recycling trailers for local towns and events.
Lexington	Lexington Area Solid Waste Agency	\$16,964	Hold three household hazardous waste collection events within a 10-county area in central Nebraska.
Lincoln	Keep Nebraska Beautiful	\$21,882	Funding for three statewide programs: 1) Nebraska Materials Exchange – saved landfill space by recycling nearly 5,500 tons of materials last year; 2) Nebraska Food Waste Reduction Program – encourage diversion of food from landfills through composting; and 3) Nebraska Waste Oil Collection Program – collected over 92,000 gallons of oil in 2018.
Lincoln	Lincoln Public Schools	\$17,051	Continue established recycling and composting programs in Lincoln schools. Expect to divert 700,000 pounds of recyclables and 720,000 pounds of cafeteria waste during the six-month period while expanding composting programs to more schools.
Lincoln	Nebraska Recycling Council	\$40,000	Create an online recycling community tool kit for elected leaders, solid waste management professionals, and environmental advocates in rural communities to achieve better recycling outcomes. Continue Hub & Spoke work in northeast and north central Nebraska.
Louisville	Keep Cass County Beautiful	\$1,006	Advertising, educational materials, personnel, and travel expenses for two electronic waste recycling events in Cass County.
Oakland	Nebraska Loess Hills RC&D	\$6,500	Hold an electronic waste collection event in Homer for residents of Burt, Cuming, Dodge, Dakota, Thurston, and Washington counties. Expect to collect 16,000 pounds of electronic waste.
Oakland	Nebraska Loess Hills RC&D	\$14,709	Hold three household hazardous waste (HHW) events in Wisner, Oakland, and Dakota City to serve Burt, Cuming, Dakota, Dodge, Thurston, and Washington counties. Expect to collect 27,500 pounds of HHW.

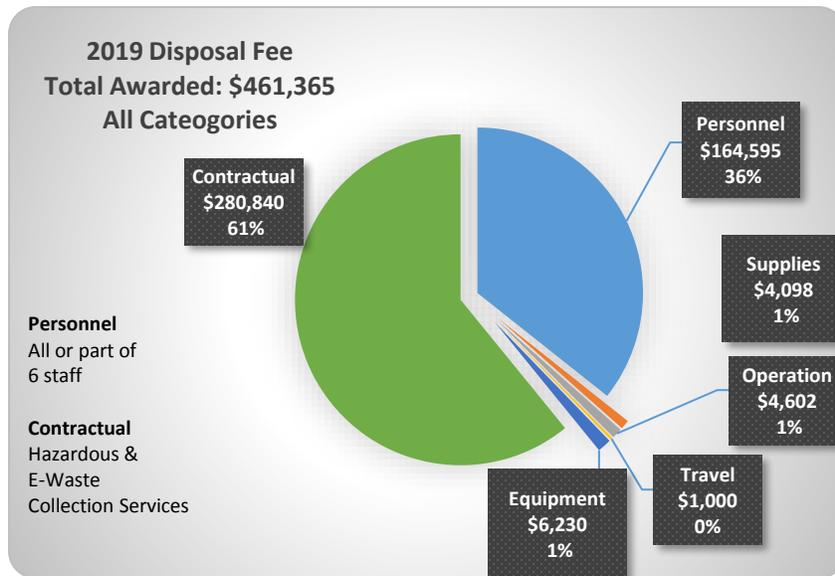




Photos provided by Lincoln Public Schools, who were awarded a Business Fee grant to establish a composting program in Lincoln Schools. During the 2018-19 school year, Lincoln Public Schools collected over 1.25 million pounds of material for recycling from 67 sites and nearly 1.27 million pounds of organic material for composting from 53 sites. The above photos were taken in Pound Middle School.

Disposal Fee: \$461,365 for 7 grants			
Lincoln	Lincoln-Lancaster County Health Department	\$95,000	Funds to operate Lincoln’s household hazardous waste facility, the HazToGo marketing plan, and toxics reduction education (including a green cleaning kit project) for residents of Lancaster County.
Lincoln	City of Lincoln – Solid Waste Management Division	\$93,965	Funding for year three of the public education Recycling Right program for proper disposal of cardboard and recyclables.
McCook	Red Willow County	\$80,000	Hold a minimum of 21 collection events and 10 pick-ups/disposals to collect and properly dispose of \$125,000 pounds of household hazardous waste.
Nebraska City	City of Nebraska City	\$7,500	Funds to rent a tree grinder to process trees, brush, and yard waste. Mulch will be used at the Arbor Day Farm, local orchards, and city parks.
Omaha	City of Omaha – UnderTheSink HHW Facility	\$171,875	Year four of a five-year grant for Omaha’s UnderTheSink household hazardous waste facility serving Douglas and Sarpy counties.

Thedford	Upper Loup Natural Resources District	\$6,230	Funds to purchase a recycle trailer to be kept in the Village of Purdum. Will transport paper and cardboard monthly to Thedford, and then on to Broken Bow. Residents are currently burning these materials or sending them to the landfill.
Wayne	City of Wayne	\$6,795	Hold one electronic waste collection event to clean up approximately 20,000 pounds of electronic waste from Wayne and surrounding areas.



Photos provided by the City of Wayne, who was awarded a Disposal Fee grant to hold one electronic waste collection event. The photos above are from this event, which was held on Sept. 14, 2019. Over 110 households and 10 businesses attended.

Deconstruction of Abandoned Buildings Grants

There were no deconstruction applications in FY 2019.

The Deconstruction of Abandoned Buildings grant program, part of the Department’s Waste Reduction and Recycling Incentive grant program, provides funding to assist in the removal of abandoned

structures. Building deconstruction means the physical dismantlement of a building’s components to recover the materials for reuse or recycling. The process decreases the amount of demolition material lawfully disposed of in landfills or improperly disposed of elsewhere. Nebraska cities of the second class, villages, and counties with a population of 5,000 or less are eligible to apply for funding. The buildings selected must not be on, or eligible to be on, the National Register of Historic Places.

Scrap Tire Grants

The scrap tire grants are funded by the \$1 per tire fee on retail sales of new tires. In FY2019, \$967,757 was awarded to 63 projects.

- Scrap tire cleanup events: 21 grants, \$513,626 awarded
- Completed projects for the partial reimbursement of the purchase of tire-derived products and/or crumb rubber: 40 grants, \$450,816 awarded
- Proposed projects for the partial reimbursement for the purchase of tire-derived products and/or crumb rubber: 2 grants, \$3,315

Awarded Scrap Tire Cleanup Events

Funding for tire collection site cleanups for political subdivisions. Twenty-one scrap tire cleanup grants were awarded in FY2019 to political subdivisions. The grants totaled \$513,626 and proposed to clean up 4,125 tons of scrap tires.



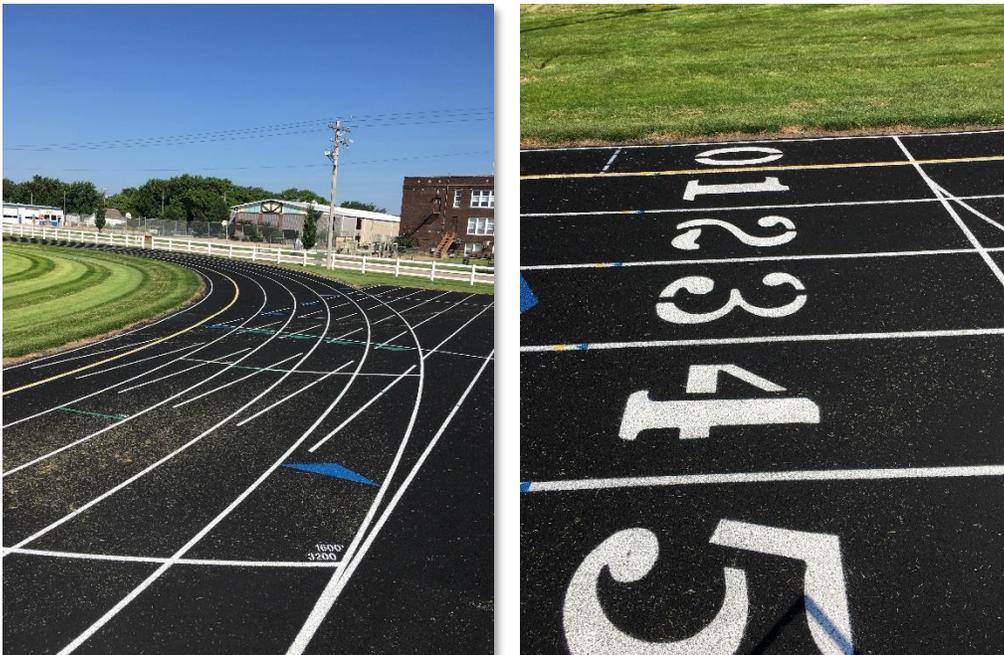
Photos provided by the Cass County Dept. of Roads, from their 2019 scrap tire cleanup event located in Weeping Water, NE.

Scrap Tire Cleanup Events: 21 grants, \$513,626 awarded			
Atkinson	City of Atkinson	\$23,662	Proposed 200-ton scrap tire cleanup near Atkinson for Holt County.
Center	Knox County	\$12,538	Proposed 100-ton scrap tire cleanup in Center for Knox County.

Chadron	Solid Waste Agency of Northwest Nebraska	\$15,716	Proposed 100-ton scrap tire cleanup for Dawes, Sioux, and Sheridan counties.
Columbus	City of Columbus	\$26,352	Proposed 250-ton scrap tire cleanup in Columbus for Platte County.
Curtis	Frontier County	\$12,891	Proposed 100-ton scrap tire cleanup near Eustis for Frontier County.
Fremont	City of Fremont	\$33,132	Proposed 400-ton scrap tire cleanup in Fremont for Dodge and parts of Saunders, Douglas, and Washington counties.
Grand Island	Hall County Highway Department	\$18,404	Proposed 150-ton scrap tire cleanup in Grand Island for Hall County.
Hartington	Cedar County	\$32,521	Proposed 275-ton scrap tire cleanup in Hartington for Cedar County
Hubbard	Dakota County Road Department	\$10,377	Proposed 80-ton scrap tire cleanup in Hubbard for Dakota County.
Kimball	City of Kimball	\$19,108	Proposed 150-ton scrap tire cleanup in Kimball for Kimball County.
Nelson	Nuckolls County	\$14,700	Proposed 120-ton scrap tire cleanup in Nelson for Nuckolls County.
North Platte	City of North Platte	\$12,778	Proposed 100-ton scrap tire cleanup in North Platte for Lincoln County.
Ogallala	Keith County	\$32,000	Proposed 250-ton scrap tire cleanup in Ogallala for Keith County and the surrounding area.
Omaha	City of Omaha	\$61,264	Proposed 300-ton scrap tire cleanup in Omaha for Douglas County.
Ord	Lower Loup Natural Resources District	\$42,804	Proposed 350-ton scrap tire cleanup in Burwell for 13 counties: Blaine, Boone, Custer, Garfield, Greeley, Holt, Howard, Loup, Rock, Sherman, Thomas, Valley, and Wheeler.
Pawnee City	Pawnee County	\$6,426	Proposed 75-ton scrap tire cleanup in Pawnee City for Pawnee County.
Tecumseh	Johnson County	\$7,027	Proposed 75-ton scrap tire cleanup in Tecumseh for Johnson County.
Tekamah	Papio Missouri River NRD	\$84,800	Proposed 600-ton cleanup in Arlington for 10 counties: Burt, Colfax, Cuming, Dakota, Dodge, Douglas, Sarpy, Stanton, Thurston, and Washington.
Wahoo	Saunders County Highway Dept	\$15,026	Proposed 150-ton scrap tire cleanup in Wahoo for Saunders County.
Weeping Water	Cass County Department of Roads	\$15,690	Proposed 150-ton scrap tire cleanup in Weeping Water for Cass County.
Wilber	Saline County	\$16,410	Proposed 150-ton scrap tire cleanup near Dorchester for Saline County.

Scrap Tire Partial Reimbursement for Purchase of Tire-Derived Products and/or Crumb Rubber Grants

In fiscal year 2019, \$454,131 was awarded to 42 projects, to partially reimburse the purchase of tire-derived products and/or crumb rubber. Of the completed projects, 1,801,856 pounds of Nebraska recycled tire rubber were used, representing over 90,000 passenger tires.



Photos provided by McCool Junction Public School, who were awarded partial reimbursement of the installation of an athletic track base mat at the high school, which was made from 56,000 pounds of recycled tire rubber.



Photos provided by Perkins County Schools, who were awarded partial reimbursement of the purchase of 118,950 pounds of rubber playground mulch and 23 swing mats, made from 1,730 pounds of recycled tire rubber, for the elementary playground.

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber-Completed Projects: 40 grants, \$450,816 awarded			
Alliance	Keep Alliance Beautiful	\$6,473	50% reimbursement for 39,000 lbs. of rubber mulch for Box Butte County residents and businesses.
Arlington	Arlington Public Schools	\$10,788	25% reimbursement for 3,000 sq. ft. of bonded rubber playground surfacing made from 39,000 lbs. of recycled tire rubber.

Bartley	Southwest Public Schools	\$393	25% reimbursement for 5,850 lbs. of rubber mulch for the playground at Southwest Elementary School in Indianola, NE.
Bloomfield	Bloomfield, City of	\$11,084	50% reimbursement for 52,267 lbs. of rubber mulch and 25% reimbursement of 6 picnic tables made from 810 lbs. of recycled tire rubber.
Broken Bow	Broken Bow Schools	\$4,462	50% reimbursement for 33,150 lbs. of rubber mulch for playgrounds at Custer and North Park Elementary Schools.
Crete	Doane University	\$60,137	25% reimbursement for an athletic track surface using 26,000 lbs. of recycled tire rubber.
Elkhorn	Lord of Life Lutheran Church	\$3,396	25% reimbursement for 1,512 sq. ft. of rubber tiles for the playground made from 8,278 lbs. of recycled tire rubber.
Elwood	Hope Lutheran Church	\$2,200	50% reimbursement for 15,600 lbs. of rubber mulch for the playground at Hope Lutheran Church in Smithfield, NE.
Fairbury	Fairbury, City of	\$2,875	50% reimbursement for 19,500 lbs. of rubber mulch for the playground in McNish Park.
Fairbury	Faith Lutheran Church	\$4,125	50% reimbursement for 38,000 lbs. of rubber mulch for the playground.
Fremont	Fremont Public Schools	\$4,237	50% reimbursement for 34,000 lbs. of rubber mulch for the Bell Field Elementary School playground.
Gibbon	Gibbon Baptist Church	\$1,575	50% reimbursement for 11,700 lbs. of rubber mulch for the playground.
Grand Island	Cedar Hollow School Parent Teacher Organization	\$2,887	50% reimbursement for 21,450 lbs. of rubber mulch for the playground at Cedar Hollow School.
Grant	Perkins County Schools	\$13,069	50% reimbursement for part of 118,950 lbs. of rubber mulch and 25% reimbursement of 23 swing mats made from 1,730 lbs. of recycled tire rubber for the elementary playground.
Greeley	Central Valley Public School	\$7,672	50% reimbursement for 56,500 lbs. of rubber mulch and 25% reimbursement of 12 swing mats made from 902 lbs. of recycled tire rubber for playgrounds in Wolbach and Scotia.
Hebron	Hebron, City of	\$12,535	50% reimbursement for 85,000 lbs. of rubber mulch and 25% reimbursement of 7 swing mats made from 525 lbs. of recycled tire rubber for the playground.
Hershey	Hershey Public Schools	\$3,412	50% reimbursement for 25,350 lbs. of rubber mulch for the K-3 playground.
Humboldt	Humboldt, City of	\$9,400	50% reimbursement for 64,000 lbs. of rubber mulch for a city playground.
Kearney	Bowman, Mary	\$562	50% reimbursement for 3,900 lbs. of rubber mulch for a playground.
Kearney	First Baptist Preschool	\$18,007	25% reimbursement for 4,890 sq. ft. of rubber playground tiles for the playground, made from 37,907 lbs. of recycled tire rubber.
Kearney	Timm Grandview, LLC	\$5,250	50% reimbursement for 39,000 lbs. of rubber mulch for a playground.
Lewiston	Lewiston Consolidated Schools	\$3,200	50% reimbursement for part for 46,000 lbs. of rubber mulch for a playground. Expenses were partially reimbursed in 2018.
Lincoln	Lincoln Christian School	\$11,348	25% reimbursement for an athletic track maintenance coating system, using 6,000 lbs. of recycled tire rubber.

Lincoln	Loving Hearts Child Development Center	\$3,172	25% reimbursement for 1,340 sq. ft. of bonded rubber playground surfacing made from 6,500 lbs. of recycled tire rubber.
Lincoln	University of Nebraska Athletics	\$89,700	25% reimbursement for artificial turf for the Gass practice field, using 223,432 lbs. of recycled tire rubber.
Loomis	Loomis High School	\$12,075	50% reimbursement for 89,700 lbs. of rubber mulch for the elementary playground.
McCook	McCook Elementary School	\$652	50% reimbursement for 3,900 lbs. of rubber mulch for the school playground.
McCool Junction	McCool Junction Public School	\$19,002	25% reimbursement for an athletic track base mat at the high school, made from 56,000 lbs. of recycled tire rubber.
North Platte	North Platte Public School District	\$2,100	50% reimbursement for 15,600 lbs. of rubber mulch for the playground at Lincoln Elementary School.
Omaha	College of St. Mary	\$67,782	25% reimbursement for an artificial turf soccer field, using 262,000 lbs. of recycled tire rubber.
O'Neill	St. Mary's Catholic School	\$17,183	50% reimbursement for 122,835 lbs. of rubber mulch for the playground.
Oshkosh	Garden County Schools	\$1,969	50% reimbursement for 13,650 lbs. of rubber mulch for the elementary playground in Oshkosh, NE.
Oxford	Southern Valley Schools	\$2,300	50% reimbursement for 10,000 lbs. of rubber mulch for the elementary playground.
Palmer	Palmer Public School	\$1,125	50% reimbursement for 7,800 lbs. of rubber mulch for the preschool playground.
Plattsmouth	Beaver Lake Association	\$3,750	50% reimbursement for 23,880 lbs. of rubber mulch for the playground.
Polk	High Plains Community Schools	\$1,734	50% reimbursement for 11,700 lbs. of rubber mulch for the elementary playground in Clarks, NE.
Ralston	St. Gerald Catholic School	\$6,650	50% reimbursement for 44,000 lbs. of rubber mulch for the playground.
Ravenna	Ravenna Public Schools	\$21,346	25% reimbursement for an athletic track surface, using 78,000 lbs. of recycled tire rubber.
Trenton	Hitchcock County Agriculture Society	\$799	25% reimbursement for four picnic tables made from 540 lbs. of recycled tire rubber for the fairgrounds in Culbertson, NE.
Wilber	Gingerbread House, The	\$390	50% reimbursement for 1,950 lbs. of rubber mulch for the playground.

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber- Proposed Projects: 2 projects, \$3,315 Awarded			
Omaha	Faith Westwood United Methodist Church	\$765	Proposed 50% reimbursement for 3,900 lbs. of rubber mulch for the Love and Learn Child Development Center playground.
Potter	Potter, Village of	\$2,550	Proposed 50% reimbursement for 17,550 lbs. of rubber mulch for the Railroad Park playground.

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 \$2 million is received annually.

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

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

Fund Summary Litter Reduction and Recycling Fund July 1, 2018 - June 30, 2019	
Fund Balance as of June 30, 2018	\$ 906,646
Revenues	
Litter Taxes Collected	\$2,263,848
Interest, Grant Returns	\$37,834
Miscellaneous	\$0
Operating Transfer Out	<u>(\$720,000)</u>
Net Collections for FY 2019	\$1,581,682
Expenditures	
Administration	\$366,499
Grant Funds Expended*	<u>\$1,070,280</u>
Total Expenditures FY 2019	\$1,436,779
Fund Balance June 30, 2019	\$1,051,549

** 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.*

Grant Allocations - Litter Reduction and Recycling Fund

In FY2019, \$1.3 million was awarded to 49 Litter Reduction and Recycling Grant recipients. 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.

The breakdown is as follows:

Public Education	(64%)	21 grants	\$ 826,761
Cleanup	(4%)	11 grants	\$ 49,716
Recycling	(32%)	17 grants	\$ 423,523
Totals	100%	49 grants	\$ 1,300,000

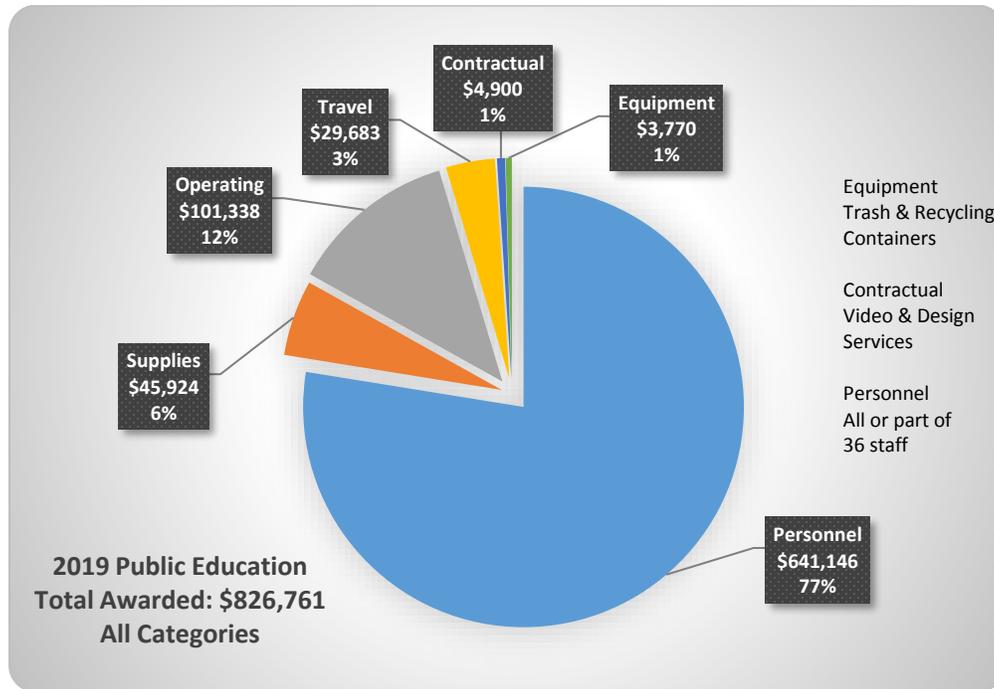
Public Education

In FY2019, 21 grants totaling \$826,761 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 following list indicates the locations that received funds.

Public Education Awards: \$826,761 for 21 grants			
Alliance	Keep Alliance Beautiful	\$62,404	Provide litter/waste reduction and recycling education for elementary and middle schools in Box Butte County.
Beatrice	Keep Beatrice Beautiful	\$40,805	Partner with local government and organizations to educate on what and where to recycle, and the importance of buying recycled content products. Promote "Use Less Stuff" in schools. Coordinate litter-free events.
Burwell	Loup Basin RC & D/ Keep Loup Basin Beautiful	\$46,706	Public education program for youth and adults in central and north central Nebraska on recycling, litter prevention, and proper waste disposal.
Chadron	Keep Chadron Beautiful	\$49,773	Public education to establish new attitudes and behaviors toward litter reduction and recycling. Present information to public and home schools, local clubs, and civic organizations.
Columbus	Keep Columbus Beautiful	\$33,543	Provide public education for increasing recycling and to raise awareness for litter prevention in Columbus and Platte County.
Fremont	Keep Fremont Beautiful	\$58,467	Public education on proper waste handling practices. Sponsor material collection events and a local campaign to reduce litter and increase recycling. Respond to population/demographic changes that may occur with construction of new area poultry plant.
Grand Island	Grand Island Area Clean Community System	\$38,728	Provide education to schools and at public events on how to recycle, reuse/repurpose. Education on proper disposal and alternatives to home chemicals. Provide recycling containers at local events.

Grand Island	Literacy Council of Grand Island, Inc	\$26,850	Implement an environmental literacy project with 600 English learning students and the greater community. Coordinate an Earth Day Festival and conduct a public education campaign about composting and recycling.
Kimball	Keep Kimball Beautiful	\$21,360	Provide environmental education for Kimball and the surrounding area on litter prevention and waste management. Work with Kimball Public Schools to educate on waste diversion and how a landfill works.
Lexington	Keep Lexington Beautiful	\$15,703	Provide recycling and litter education to one middle and four elementary schools, two nursing homes, and two assisted living facilities. Provide recycling trailers for local community events.
Lincoln	Lincoln-Lancaster County Health Department	\$75,021	Education program to promote litter reduction and an increase in recycling. Purchase nine ashtray receptacles.
Lincoln	University of Nebraska-Lincoln	\$7,741	Increase recycling education at UNL. Purchase 30 recycling containers for outdoor events. Volunteers will hand out recycling bags to tailgaters and return to pick up the bags to put in recycling containers.
Louisville	Keep Cass County Beautiful	\$40,710	Promote waste reduction, the importance of litter prevention and of reducing, reusing, repurposing, and recycling in Cass County. Will provide recycling bins and cigarette receptacles at local community events.
Nebraska City	Keep Nebraska City Beautiful	\$22,019	Educational program for students and adults on the harmful effect of litter in the community. Provide waste reduction tips, including food waste and the importance of recycling.
Norfolk	Keep Norfolk Beautiful	\$17,683	Public education to promote litter reduction and recycling through school and community presentations. Provide recycling containers at public events and organize litter-free events and cleanups.
North Platte	Keep North Platte and Lincoln County Beautiful	\$62,194	Public education program to encourage waste reduction and a litter-free environment. Help non-recyclers to recycle and seek out environmental stewards and passionate volunteers to make the community a cleaner place with less waste going to the landfill.
Ogallala	Keep Keith County Beautiful	\$51,494	Public education program including source reduction, recycling right, food waste elimination, and sustainable waste management, for residents and visitors in six counties. The mission is to eliminate litter and increase recycling.
Omaha	Keep Omaha Beautiful	\$73,344	Environmental education on litter prevention, waste reduction, and recycling. Conduct activities at local schools and events. Mark storm drains with "No Dumping" decals. Coordinate a "Recycle Right" campaign.
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$28,816	Provide public education on waste reduction, litter prevention, and recycling. Partner with NRD's, local govt., the Nat'l Park Serv., and schools to promote a litter-free community and reduce materials going to the landfill. Host household hazardous waste and pharmaceutical take-back events.

Sidney	Keep Sidney Beautiful	\$13,983	Partner with business and community members to provide public education on recycling and waste reduction. The goal is to keep the community clean for prospective businesses to come to the city.
South Sioux City	Keep Northeast Nebraska Beautiful	\$39,417	Educational programs to students, businesses, and residents of an 11-county area. Stress the importance of litter reduction and participating in recycling and cleanup programs, including the annual Missouri River cleanup for area school children.



Photos provided by Keep Fremont Beautiful, who was awarded a public education grant to promote public education on proper waste handling practices and sponsor material collection events and a local campaign to reduce litter and increase recycling. The photo on the left was taken at the Fremont area Eco-Fair, for 4th grade students. The photo on the right was taken during a 2nd grade presentation on "Is it Recyclable?"

Cleanup

In FY2019, 11 grants totaling \$49,716 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. The Cleanup grants will clean up litter from 715 road-side miles and 679 acres of public areas. The following list indicates the locations that received funds.

Cleanup Awards: \$49,716 for 11 grants			
Beatrice	Keep Beatrice Beautiful	\$6,000	Clean up 100 roadside miles and 60 acres in Gage County.
Chadron	Keep Chadron Beautiful	\$5,060	Clean up 100 roadside miles in Dawes County through a mini-grant program.
Crofton	City of Crofton	\$790	Clean up 9 roadside miles and 34 acres in Crofton.
Grand Island	Grand Island Area Clean Community System	\$6,000	Clean up 95 roadside miles and 75 acres in Hall, Hamilton, and Merrick counties through a mini-grant program.
Lincoln	Lincoln-Lancaster County Health Department	\$6,000	Clean up 100 roadside miles and 100 acres in Lancaster County. Some cleanup will be done by Lancaster Co. Corrections inmates; other projects include mini-grants done through high school litter projects.
Louisville	Keep Cass County Beautiful	\$1,600	Clean up 16 roadside miles and 80 acres in Cass County through a mini-grant program.
North Platte	Keep North Platte and Lincoln County Beautiful	\$6,000	Clean up 120 roadside miles in Lincoln County through a mini-grant program.
Ogallala	Keep Keith County Beautiful	\$2,800	Clean up 50 roadside miles and 30 acres in Keith County through a mini-grant program.
Omaha	Keep Omaha Beautiful	\$6,000	Clean up five roadside miles and assist in 475 cleanup events and programs.
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$5,466	Clean up 100 roadside miles in Scotts Bluff County through an adopt-a-spot mini grant program, including trails along the Scotts Bluff National Monument.
Wakefield	Education Service Unit #1	\$4,000	Clean up 20 miles and 300 acres in Cedar, Dakota, Dixon, Knox, Thurston, and Wayne counties. Work will be done by special education students from 24 school districts.

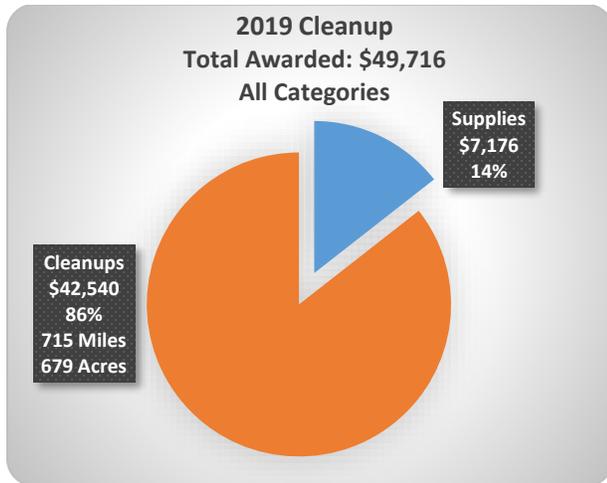


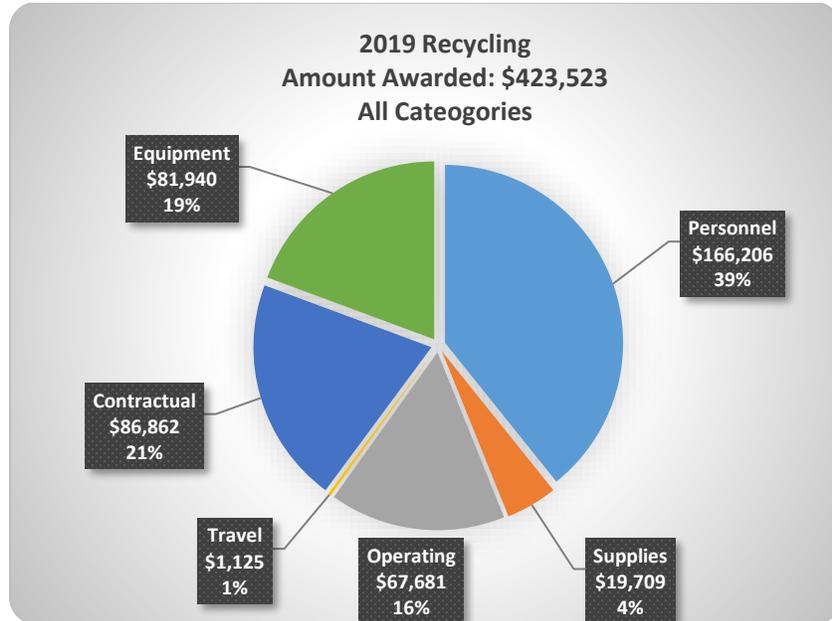
Photo provided by Keep Chadron Beautiful, who was awarded a cleanup grant to clean up 100 roadside miles in Dawes County, through a mini grant program.

Recycling

In FY2019, 17 grants totaling \$423,523 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. Materials are either reprocessed to be used again or are disposed of in an environmentally friendly manner. The following list indicates the locations that received funds.

Recycling Awards: \$423,523 for 17 grants			
Alliance	Keep Alliance Beautiful	\$37,922	Funds to operate the recycling center in Alliance serving Box Butte County and surrounding area.
Chadron	Keep Chadron Beautiful	\$4,539	Hold a one-day electronic recycling event for Chadron residents. An estimated 15,000 lbs. of electronic waste will be collected.
Hebron	Trailblazer Resource Conservation and Development	\$12,481	Hold four household hazardous waste collections for Clay, Thayer, Nuckolls, Webster, Franklin, Fillmore, and Harlan County residents.
Kimball	Keep Kimball Beautiful	\$27,689	Funds to operate the Kimball Recycling Center, the only recycling option for households within a 50-mile radius. Have diverted 250 tons of material from the landfill in the past two years.
Lexington	Keep Lexington Beautiful	\$2,972	Purchase four replacement bins for Lexington’s recycling trailers and perform recycling trailer maintenance.

Lincoln	Nebraska Recycling Council	\$43,595	Provide waste reduction, reuse, and recycling programs for communities, recyclers, processors, and individuals across Nebraska. Provide zero waste training and consultation, offer live educational webinars on current topics, and maintain the Nebraska Recycling Guide.
Lincoln	City of Lincoln	\$77,353	Purchase thirteen food and beverage replacement recycling containers for Lincoln and the surrounding area.
North Platte	Keep North Platte and Lincoln County Beautiful	\$18,139	Work on drop-off, residential curbside, school, and business recycling program to reduce waste generated and increase recyclables collected through reputable end-markets.
Ogallala	Keep Keith County Beautiful	\$6,324	Funds to collect and process materials from 10 recycling containers located around Lake McConaughy during the summer. Over the 2018 Fourth of July weekend, 30 tons of recyclables and 70 tons of trash were collected at the lake, representing a 30% recycling rate.
Ogallala	Western Resources Group	\$43,622	Maintain and expand recycling programs in Keith County. Make and sell animal bedding made from recycled cardboard and newspaper. 500 tons of cardboard sold yearly.
Omaha	Angels on Wheels, Inc dba Cross Training Center	\$48,597	Hold 10 electronic collection events at Omaha-area schools. Distribute printed classroom curriculum to teachers on how to reduce, reuse, and recycle.
Omaha	Habitat for Humanity of Omaha	\$4,022	Purchase 7,000 reusable tote bags to give to customers at the two Habitat ReStore outlets in Omaha. The totes will reduce litter produced by one-time plastic bags. The stores in Omaha sell over 300,000 items to 15,000 consumers annually.
Rushville	City of Rushville	\$38,518	Funds to crush up to 9,000 tons of concrete and use it for maintenance of Rushville's gravel roads, parking lots, and alleys.
Schuyler	Keep Schuyler Beautiful	\$23,884	Operating expenses for the Colfax County recycling facility. The facility accepts materials from Schuyler and Colfax counties, and parts of Butler, Platte, and Dodge counties.
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$17,871	Hold a pharmaceutical collection event, Earth Day celebration, "Recycle your Cycles," and Christmas tree recycling to promote proper disposal, recycling, and reuse of unwanted materials.
Tekamah	Papio Missouri River NRD	\$13,080	Conduct four electronic waste collections in Washington, Burt, Thurston & Dakota Counties to collect an estimated 65,000 lbs. of e-waste. Over 95% of materials will be recycled or reused. Collection promotions will educate the public about the benefits of recycling and hazards of improper disposal.
Wood River	Crane Trust	\$2,915	Purchase a bottle filling station to reduce disposable plastic and encourage use of reusable bottles. Also buy two hand dryers for the restrooms to reduce paper towel waste. 35,000 visitors during the spring migration now produce four bags of trash/day.



Pictured is the Colfax County Recycling facility. Photos provided by Keep Schuyler Beautiful, who was awarded a recycling grant for operating expenses for the recycling facility.

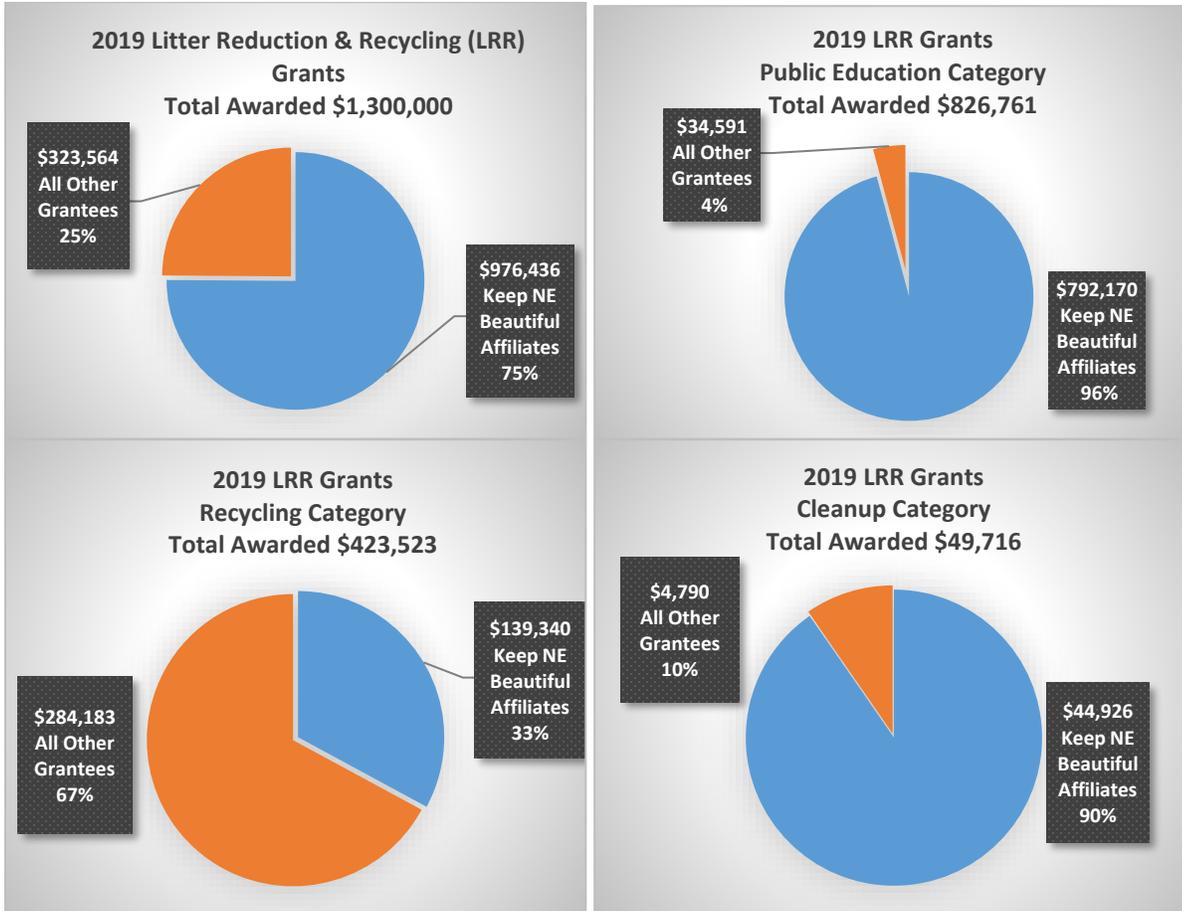


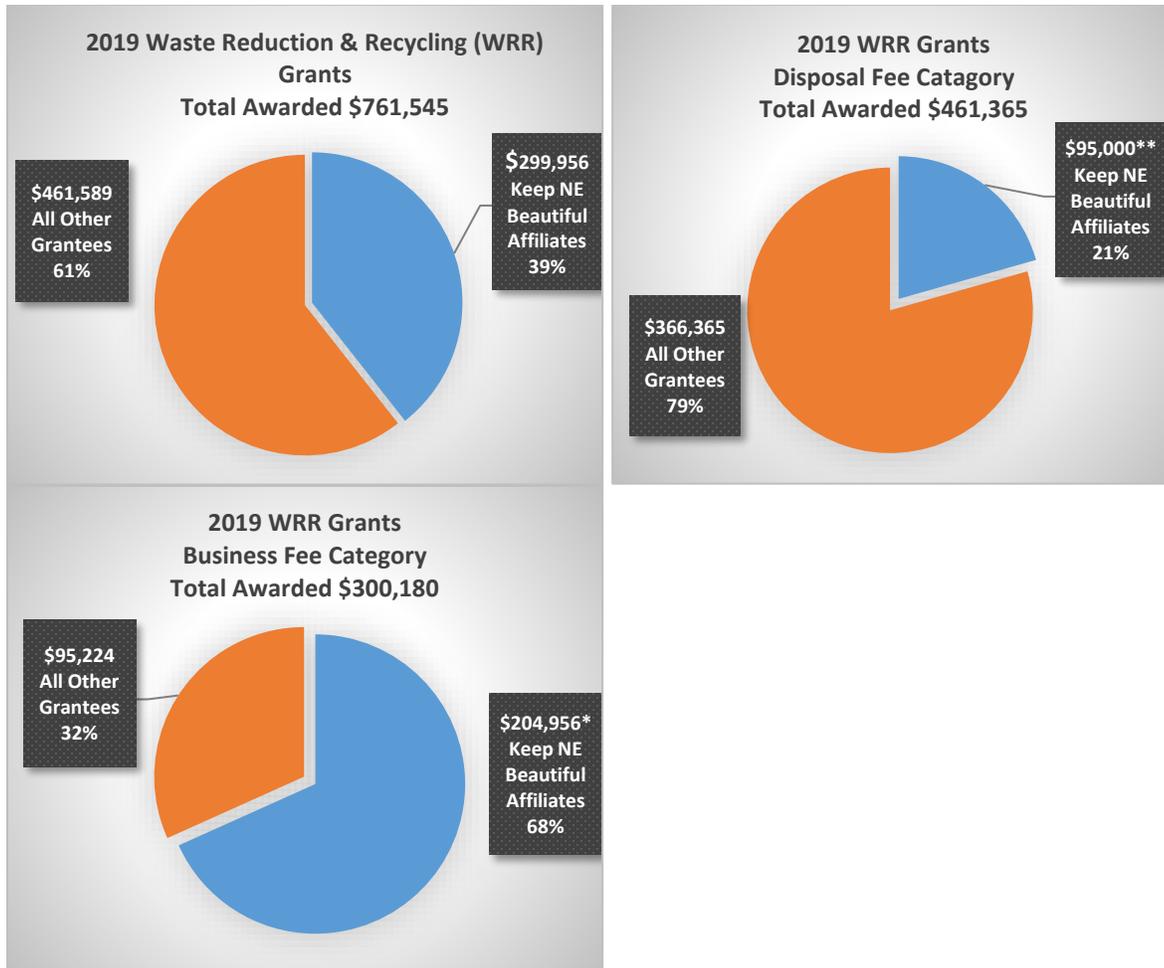
Keep America Beautiful Nebraska Affiliate Funding for 2019

Keep America Beautiful (KAB) is a national non-profit public education organization. Keep Nebraska Beautiful is a statewide affiliate of KAB. There are 20 local KAB affiliate communities in Nebraska.

Many of the KAB affiliates receive grant funding from the Litter Reduction and Recycling grant program under the public education category to cover expenses such as personnel and operating expenses. The affiliates teach the importance of reuse, recycling, and reducing waste and litter through school and community-wide education programs.

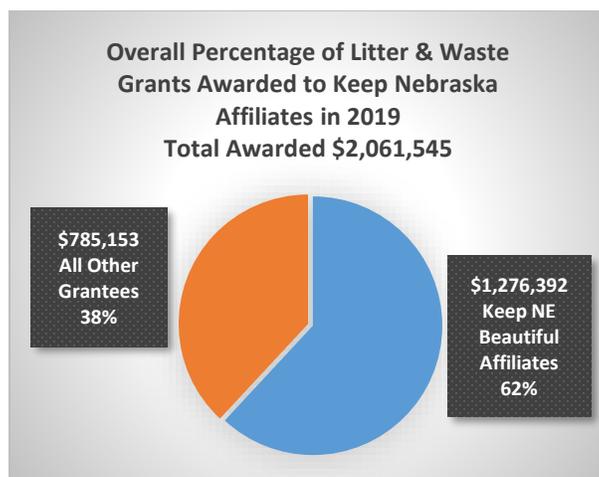
The Litter grant program also includes the cleanup category, which covers expenses to pick up litter along roadways and in public areas. Recycling is the third category under the Litter grant program, and is similar to the Business Fee category of the Waste Reduction and Recycling Incentive Grant Program. Through these last two categories, the KAB affiliates have received funding to operate recycling facilities and household hazardous waste (HHW) facilities. They have also held HHW, electronic waste, and pharmaceutical collections. These events are important because they make sure the materials collected are managed and/or disposed of properly. Although they are not eligible for direct grant funding, some KAB affiliates have worked with local political subdivisions (cities and counties) to organize scrap tire cleanup events.





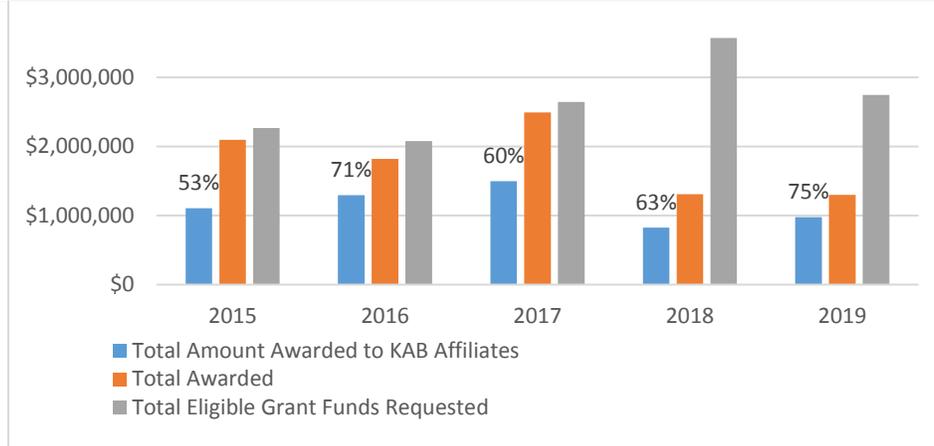
* The Business Fee Category award included a \$61,562 grant to the Grand Island Clean Community System to operate the Household Hazardous Waste Facility in Grand Island.

** The Disposal Fee Category amount included a \$95,000 grant to the Lincoln Lancaster County Health Department to operate the Household Hazardous Waste Facility in Lincoln.



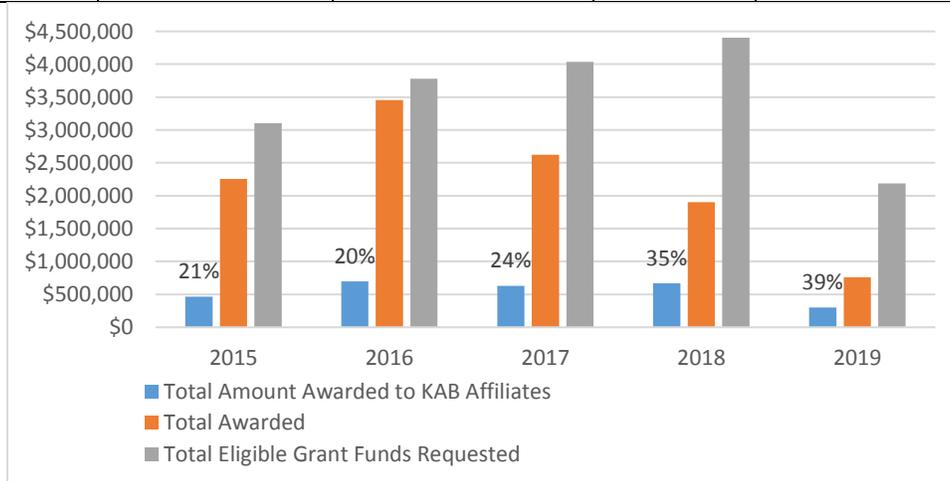
2015-2019 Awarded Litter Reduction and Recycling Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2015	\$1,106,901	53%	\$2,095,864	\$2,266,267
2016	\$1,294,329	71%	\$1,821,055	\$2,079,033
2017	\$1,499,123	60%	\$2,491,087	\$2,644,088
2018	\$823,506	63%	\$1,306,370	\$3,571,584
2019	\$976,436	75%	\$1,300,000	\$2,746,775



2015-2018 Awarded Waste Reduction and Recycling Incentive Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2015	\$466,234	21%	\$2,257,791	\$3,101,500
2016	\$696,947	20%	\$3,454,825	\$3,781,465
2017	\$627,484	24%	\$2,623,217	\$4,036,801
2018	\$668,415	35%	\$1,900,000	\$4,402,481
2019	\$299,956	39%	\$761,545	\$2,188,344



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, household waste, white goods, construction and demolition waste, tires, furniture, yard waste, and some hazardous wastes 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. NDEQ encourages municipalities, counties and other political subdivisions to submit applications for the reimbursement of cleanup efforts. In FY2019, the program provided 21 grants, totaling \$14,935.74. In FY2019, funds were provided to:

Illegal Dumpsite Cleanup Awards		
City of Lincoln - 11	City of Omaha – 3	Seward County - 3
Red Willow 1	Washington County - 3	

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 FY2019, the program provided \$91,630 to five counties and six cities participating in the program. Eight of the eleven participants processed their requests through email. This option helps to meet our agency’s goals for waste reduction efforts and process improvement.

Landfill Disposal Rebate Recipients					
Buffalo County	\$ 5,482	Butler County	\$ 3,317	City of David City	\$ 240
City of North Platte	\$ 3,683	City of Lincoln	\$26,142	Saline County	\$ 2,861
City of Omaha	\$ 47,291	South Sioux City	\$ 615	Jefferson County	\$ 554
Seward County	\$ 1,335	City of Grant	\$ 110		

Ten-Year Grant History of Amounts Awarded and Requested

Amounts Awarded and Requested for Litter Reduction and Recycling Grant (LRR) Categories

Grant Year	Awarded Recycling	Awarded Public Education	Awarded Cleanup	Total Awarded (All LRR Categories)	Total Eligible Grant Funds Requested (All LRR Categories)
2010	\$1,269,074	\$547,595	\$76,575	\$1,893,244	\$3,317,183*
2011	\$1,125,000	\$323,789	\$60,000	\$1,508,789	\$3,730,926*
2012	\$852,500	\$620,003	\$81,675	\$1,554,178	\$2,044,451*
2013	\$821,092	\$751,559	\$109,937	\$1,682,588	\$2,499,447*
2014	\$1,052,402	\$887,141	\$67,164	\$2,006,707	\$3,083,431*
2015	\$1,176,580	\$821,346	\$97,938	\$2,095,864	\$2,266,267*
2016	\$892,975	\$819,597	\$108,483	\$1,821,055	\$2,079,033*
2017	\$1,326,206	\$1,037,895	\$126,986	\$2,491,087	\$2,644,088
2018	\$603,867	\$651,968	\$50,569	\$1,306,404	\$3,571,584
2019	\$423,523	\$826,761	\$49,716	\$1,300,000	\$2,746,775
Total Amounts				\$17,659,916	\$27,983,185*

*Estimate

Amounts Awarded and Requested for Waste Reduction and Recycling Incentive Grant (WRR) Categories

Grant Year	Awarded Disposal Fee	Awarded Business Fee	Total Awarded (Both WRR Categories)	Total Eligible Grant Funds Requested (Both WRR Categories)
2010	\$1,019,827	\$423,075	\$1,442,902	\$4,473,857*
2011	\$791,488	\$349,395	\$1,140,883	\$2,446,958*
2012	\$916,461	\$774,715	\$1,691,176	\$2,387,797*
2013	\$816,990	\$549,524	\$1,366,514	\$2,388,515*
2014	\$1,012,371	\$1,107,888	\$2,120,259	\$3,083,431*
2015	\$1,435,558	\$822,233	\$2,257,791	\$3,101,500*
2016	\$2,116,399	\$1,338,426	\$3,454,825	\$3,781,465
2017	\$1,789,483	\$833,734	\$2,623,217	\$4,036,801
2018	\$964,113	\$935,887	\$1,900,000	\$4,402,481
**2019	\$461,365	\$300,180	\$761,545	\$2,188,344
Total Amounts			\$18,759,112	\$32,291,149

*Estimate

** FY2019 Grant awards were for a 6-month grant term.

Amounts Awarded for Deconstruction, Illegal Dumpsite, and Landfill Disposal Rebates

Grant Year	Awarded Deconstruction Grants	Awarded Illegal Dumpsite	Awarded Landfill Disposal Rebate
2010	\$58,800	\$60,065	\$74,017
2011	\$10,080	\$83,533	\$82,653
2012	\$291,500	\$42,468	\$118,662
2013		\$44,841	\$108,674
2014		\$49,792	\$101,810
2015		\$28,058	\$94,859
2016		\$162,536	\$80,872
2017		\$75,599	\$100,892
2018		\$40,433	\$99,341
2019		\$14,935	\$91,630
Total	\$360,380	\$602,260	\$953,410

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, 58 sites have entered the voluntary cleanup program. Currently, 20 sites are active in the voluntary cleanup program. Two sites have been referred to the EPA Superfund program. Six 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. Twenty-five 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. A new applicant includes the Former Farmland Industries UAN Terminal in Doniphan. Investigation activities are ongoing at the J.A. Woollam, Co. site in Lincoln, the Former Citizens Gas FMGP

(former manufactured gas plant) site in McCook, the International Sensor Systems, Inc. site in Aurora, and the former Bladen, Bradshaw, Eustis and York USDA grain bin sites. Cleanup activities are ongoing at the Archer Daniels Midland facility in Lincoln, the Beatrice FMGP site, the Dettmer Lease property in Auburn, Hoover Manufacturing in Beatrice, the Lynch Park FMGP site in Omaha, the former Nebraska Solvents Company site in Grand Island, the Vishay Dale Electronics site in Norfolk, the Appleton Electric site in Columbus, and the former



Excavation of contaminated soil impacted by coal tar waste in the below grade gas holder at the FMGP site in Beatrice.

Murdock and Utica USDA grain bin sites. Cleanup plans were approved at the Omaha Steel Castings site in Omaha. Cleanup activities were completed at the Nebraska Machine Products site in Omaha, the

West Haymarket Redevelopment Site South in Lincoln, and the Magnus Farley site in Fremont. Post-remediation monitoring is ongoing at the Lynch Park FMGP site in Omaha. Issuance of “No Further Action” letters are anticipated to be completed next year at the Beatrice FMGP site and the Omaha Steel Castings site in Omaha. The work completed to date on the Beatrice FMGP site is an excellent example of efficiently completing cleanup in a streamlined State program in lieu of listing the site on the Superfund National Priorities List. The City of Beatrice and Centel, the applicants conducting the cleanup at the site, are to be commended for their significant commitment to protection of human health and the environment. One site – Former Textron Turf Care and Specialty Products – withdrew from the program.

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			
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	Omaha-Riverfront - 3 sites	5/18/01	Completed 6/18/03, 12/9/03, 11/9/04
Sanford & Son	Lincoln-North	1/22/02	Terminated 4/18/07

Voluntary Cleanup Program Sites and Status			
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	Completed 5/18/16
CVS Pharmacy	Lincoln	10/13/10	Completed 1/28/15
West Haymarket Redevelopment Site North	Lincoln	10/27/10	Completed 12/29/16
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 (Bladen, Bradshaw, Eustis, Murdock, Utica, York)	3/16/12	Active – 6 sites
Vishay Dale Electronics	Norfolk	4/2/12	Active
Lewis and Clark Landing	Omaha	4/20/12	Completed 12/29/16
West Haymarket Redevelopment Site South	Lincoln	6/11/12	Completed 9/18/18
Quality Analytical Services	Omaha	8/2/12	Withdrawn 6/3/14
Nebraska Machine Products	Omaha	9/18/12	Completed 3/26/18
Lynch Park FMGP	Omaha	11/20/12	Active
Appleton Electric	Columbus	3/1/13	Active
Magnus Farley	Fremont	8/14/14	Completed 8/28/18
Beatrice FMGP	Beatrice	11/17/15	Active
Omaha Steel Castings	Omaha	4/26/16	Active

Voluntary Cleanup Program Sites and Status			
Former Textron Turf Care and Specialty Products	Lincoln	10/26/16	Withdrawn 6/11/19
International Sensor Systems, Inc.	Aurora	3/2/17	Active
J.A. Woollam Co., Inc.	Lincoln	2/26/18	Active
Former Citizens Gas FMGP	McCook	6/4/18	Active
Former Farmland Industries Doniphan UAN Terminal	Doniphan	10/9/2018	Active

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 Section 128(a) Brownfields 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 consist of asbestos abatement and can also involve a variety of measures that are implemented to contain and reduce contamination at a site. During the past year, NDEQ has performed eight Phase I assessments, six Phase II assessments, seven asbestos surveys, and four lead-based paint surveys. NDEQ received two applications this year for partial cleanup assistance for removal of asbestos prior to building renovation or demolition.



NDEQ used Section 128(a) Brownfields funding to complete a Phase I and Phase II Environmental Site Assessment and an Asbestos-containing Materials (ACM) Survey at the former fire hall building in the Village of Walthill. After the assessments were completed, additional funding was used to assist the village in properly removing and disposing of all ACM identified in the building. Having all of the environmental hurdles and uncertainties resolved allowed the small village to move forward and raise money for their new public library project.

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 and held workshops in Scottsbluff and Wood River. The Brownfields Coordinator was invited to speak at the Mayor of Lincoln's Environmental Task Force Round Table meeting and presented at the Nebraska Economic Developers Association Conference in Wayne. In addition to NDEQ workshops and speaking engagements, conferences and training events provide a great opportunity to network and gain knowledge that can help enhance the program. The Brownfields Coordinator attended and



NDEQ's Brownfields Coordinator, Taryn Serwatowski, speaks with the Executive Director of Main Street Beatrice (a local non-profit organization) during a Resource Providers Information Session in Beatrice. Photo courtesy of the Beatrice Daily Sun.

participated in a Resource Providers Information Session at Southeast Community College in Beatrice; the EPA Region 7 and 8 Tribal Response Program Workshop in Omaha; the Connecting Entrepreneurial Communities Conference in Beatrice; and sponsored an informational booth at the Nebraska Planners Conference in Kearney. The Coordinator is a member of the NDEQ-NPPD Partnership and was actively involved in one partnership meeting and attended the annual NPPD Power Summit. The Coordinator is also the Region 7 representative for the ASTSWMO Brownfields Focus Group and actively participates in monthly conference calls, creating educational materials to share with the public, and organizing national meetings and symposiums. Specific activities for this year included working on the ASTSWMO Sec 128(a) Research Tool project, planning and moderating a session on Brownfields Pioneers at the ASTSWMO joint Superfund/Brownfields Symposium in Jacksonville, FL, and attending and participating in the ASTSWMO Mid-year Meeting in New Brunswick, NJ.

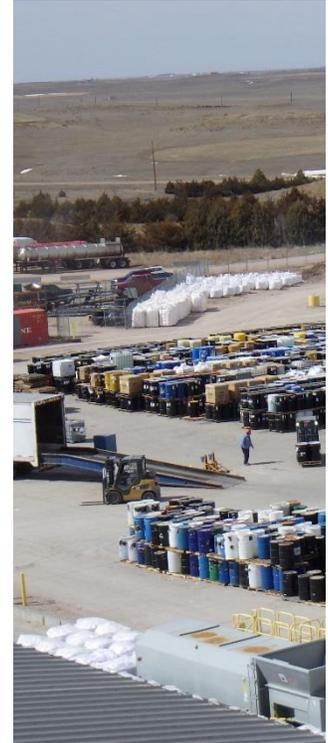
Other program enhancement activities included completing the updated Voluntary Cleanup Program Guidance Document, an internal Institutional Control Guidance Document for conducting audits at sites that have institutional control in place, and creation of new poster boards for future informational booths and sessions. Ongoing activities include developing a new guidance document on management strategies for addressing free product at cleanup sites, drafting a fact sheet for the public that will provide information on next steps for property redevelopment after completing a Phase II Environmental Site Assessment, and creating new banners, pamphlets, and other outreach materials.

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,
- permitting and regulating through the RCRA Corrective Action program, the clean-up of hazardous waste that has been released to the environment,
- 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. NDEQ has administered the RCRA Corrective Action Program since January of 2017. Significant corrective action accomplishments during FY2019 include:



- Completed interim soil cleanup work and remedial investigation at Loveland Products, Inc.
- Completed remedial investigation at Snyder Industries.
- Reached agreement with Tenneco to complete site investigation and remedy selection under the RCRA FIRST, a process improvement initiative.
- Completed institutional control audits, which are equivalent to EPA's long term stewardship (LTS) inspections, at two facilities.

EPA developed an e-manifest module that is part of the national RCRAInfo database. Nebraska sees the new e-manifest system as providing an efficient way for tracking the shipment of hazardous waste in an electronic process. It provides a notification system so that those in the chain (generator, transporter and disposal facility) can see and manage the movement of wastes, as well as for States and EPA to lessen the time spent reviewing paper manifests. The reduction in the use of paper as the system is implemented will ultimately reduce costs and this provides multiple benefits including less chance to lose copies, less solid waste and a reduction in the need to have storage space for all that paper. The public also will benefit as it will be able to have a clearer understanding of wastes generated and disposed and the process it followed to disposal. The Land Management Division conducted three public training sessions on the new e-manifest system.

Also developed by EPA is the myRCRAID module, also within the national RCRAInfo database. Nebraska has opted in to allow the facility hazardous waste managers to request permission to prepare their 8700-12 Hazardous Waste notification form electronically. We currently have 381 facilities that

have requested and received permission to file electronically. NDEQ approves the requests electronically saving NDEQ and the hazardous waste facilities time, which equates to money saved.

As a process improvement plan, the RCRA Section has been emailing confirmations to 8700-12 Hazardous Waste notification changes and to contingency plan submittals. In the past, a formal letter was prepared and mailed certified for each request. To date we have saved around \$4,700 in postage alone. Additional savings are in time and supplies used.



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. One new hazardous waste treatment facility was proposed in 2017. The facility, near Alda, has completed the siting committee activities but has yet to submit a RCRA permit application.

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:

82 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month)

316 Small Quantity Generators (between 220 and 2200 pounds generated per month)

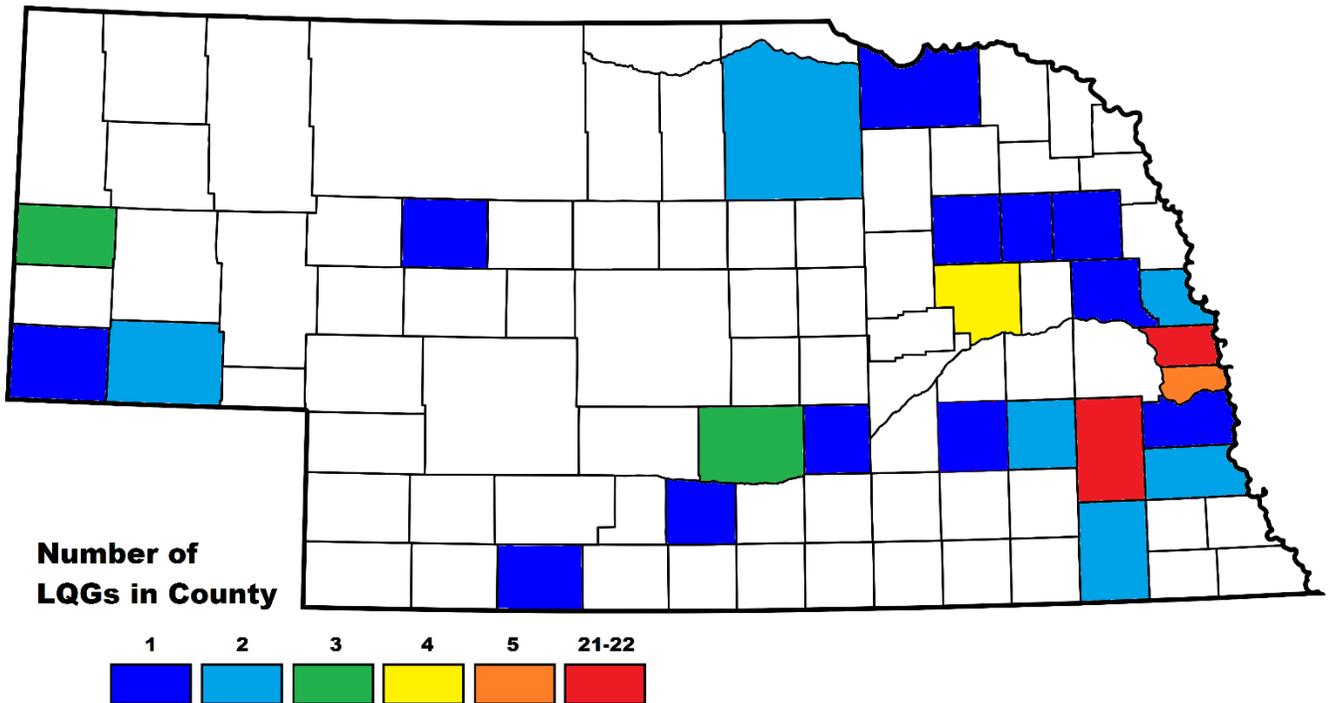
948 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)

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			
Buffalo 3	Gage 2	Lancaster 22	Sarpy 5
Cass 1	Hall 1	Madison 1	Scotts Bluff 3
Cuming 1	Hooker 1	Otoe 2	Seward 2
Cheyenne 2	Holt 2	Phelps 1	Stanton 1
Dodge 1	Kimball 1	Platte 4	Washington 2
Douglas 21	Knox 1	Red Willow 1	York 1



Summary of FY2019 Activities		
Compliance Assistance	State	EPA
On-site Visits	2	*
Direct Assistance Contacts	723	*
Public Outreach Presentations (total 325 in attendance)	7	*
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	0	1
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	0	0
Large Quantity Generator	6	1
Small Quantity Generator	9	4
Conditionally Exempt Small Quantity Generators	6	1
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	1	0
Permits Issued/Renewed	0	0
Modifications	4	0
EPA Corrective Action Orders	1	0
RCRA Record Reviews		
Financial Assurance Closure/Post Closure	27	0
Corrective Action	2	0

* 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 17 active 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. Thirteen of the sites are in the cleanup phase and four sites (York PCE/TCE Northeast Contamination site, York PCE Southeast Contamination site, Iowa-Nebraska Light and Power Co. site in Norfolk, and the Old Highway 275 and North 288th Street site in Valley) are relatively new to the National Priorities List and are in the site study stage.

Nebraska Superfund National Priorities List (NPL) Sites



- | | | |
|---|--|--|
| 1- 10th Street Site (Columbus) | 7- Hwy 275 and N 288th Street (Valley) | 13- Parkview Well (Grand Island) |
| 2- Bruno Co-op Grain Association (Bruno) | 8- Iowa-Nebraska Light and Power CO (Norfolk) | 14- PCE Southeast Contamination (York) |
| 3- Cleburn Street Well (Grand Island) | 9- Lindsay Manufacturing CO (Lindsay) | 15- PCE/TCE Northeast Contamination (York) |
| 4- Cornhusker Army Ammunition (Grand Island) | 10- Nebraska Ordnance Plant (Mead) | 16- Sherwood Medical CO (Norfolk) |
| 5- Garvey Elevators Incorporated (Hastings) | 11- Ogallala Ground Water Contamination (Ogallala) | 17- West Hwy 6 and Hwy 281 (Hastings) |
| 6- Hastings Ground Water Contamination (Hastings) | 12- Omaha Lead (Omaha) | |
-
- | | | |
|---|----------------------------|------------------------------------|
| ○ Potentially Responsible Party (PRP)-lead Superfund Site | □ Fund-lead Superfund Site | ◇ PRP and Fund-lead Superfund Site |
|---|----------------------------|------------------------------------|

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.

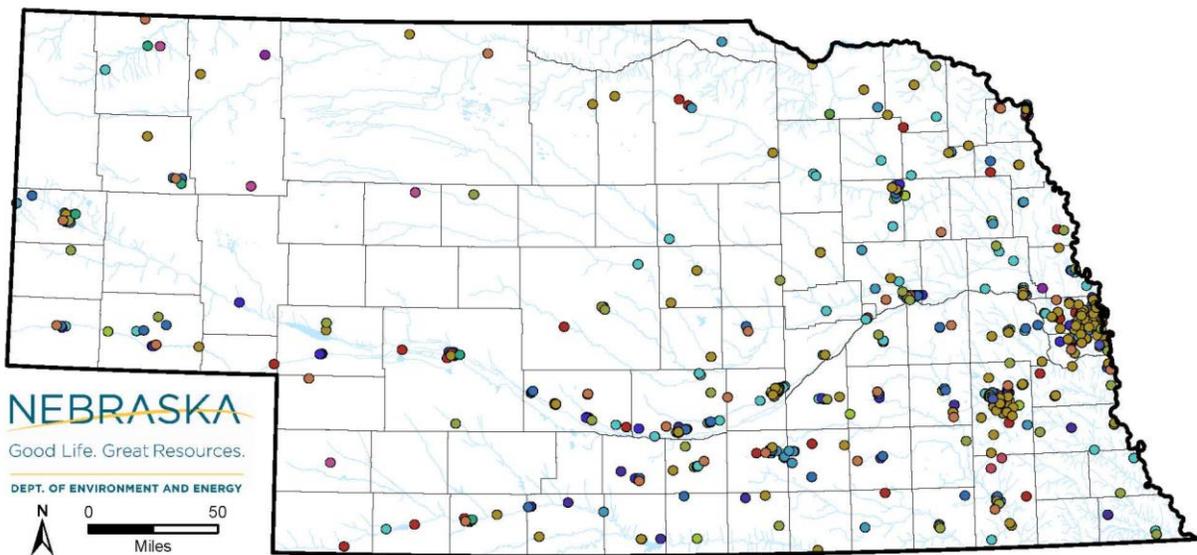
The investigation and remediation of contaminated sites under CERCLA are the primary responsibility of the EPA and other federal agencies. NDEQ participates in the Superfund process by serving as a technical support agency to the EPA and as the environmental representative for the State of Nebraska. 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 seven pre-screening assessments, one abbreviated preliminary assessments, two site investigations, one expanded site investigation, and one site reassessment. Based on NDEQ’s 2017 Statewide Inventory of per- and polyfluoroalkyl substances (PFAS), such as perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), which are

Nebraska Statewide Inventory Per- and Polyfluoroalkyl Substances



Industries:

- Chemicals & Allied Products
- Cutlery & Handtool Manufacturing
- Electrical Machinery, Equipment, & Supplies
- Electroplating, Polishing, & Anodizing of Metals
- Fire Training Areas
- Leather & Leather Products
- Military Bases
- Municipal Airports
- Municipal Solid Waste Landfills
- Paper & Allied Products
- Petroleum Refining & Related Industries
- Photographic Equipment & Supplies
- Professional & Scientific Instruments
- Rubber & Plastics Products
- Textile Mill Products
- Transportation Equipment
- Wastewater Treatment Plants

considered emerging contaminants that can have adverse health effects if found in drinking water supplies, three of the pre-screening assessments consisted of sampling private wells for PFAS compounds. Results of this sampling did not show PFAS compounds above levels of concern. Two of the three PFAS private well sampling projects were conducted at the Grand Island and Kearney municipal airports. Airports commonly use firefighting foams for fire suppression which contains PFAS. NDEQ also initiated pre-screening assessments at municipal airports in Alliance, North Platte and Scottsbluff and has plans for future pre-screening assessments at municipal airports in Chadron, Lincoln, McCook and Omaha. NDEQ has coordinated with the Nebraska Department of Transportation – Aeronautics Division on the PFAS sampling at municipal airports related to the historical use of firefighting foam and to assist with communication and outreach to the airports on NDEQ sampling activities. NDEQ has also formed an internal PFAS Coordination Team consisting of various regulatory programs within the Agency to communicate and share information on PFAS activities occurring in the State and at a national level.

NDEQ also requested federal assistance from the EPA Region 7 Superfund Removal program to install vapor mitigation systems at several commercial properties near a former dry cleaner in Holdrege where a release of tetrachlorethylene (PCE), which was commonly used in the dry *cleaning* industry, was found

What is Vapor Intrusion?

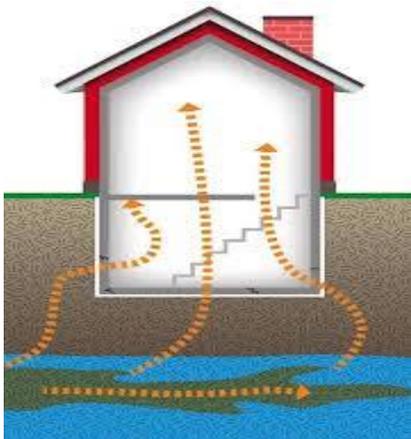


Photo courtesy of the Minnesota Pollution Control Agency

Volatile organic compounds, or VOCs, are a class of chemicals that are volatile (evaporate easily) and form a vapor in the air. Vapor intrusion is a way that these volatile chemicals in soil and groundwater near and under buildings can enter and build up inside the buildings, similar to how radon can enter a home. Common uses of VOCs included dry cleaning, treatment of stored grain, and industrial operations. Breathing in certain VOCs at elevated levels can cause adverse health effects based on overall age and health, the length of exposure, and the type of chemical.

Pictured right: An installed vapor mitigation system at a residence; view is of the installed fan (top) and protective cover (bottom).



in soil and groundwater at the site. The vapor mitigation systems are being installed due to unacceptable levels of PCE) in the indoor air of building structures. Vapor mitigation systems are similar to radon control systems where the system captures and redirects the vapor from below the building foundation before it enters the indoor air.

The former B&T Metals site in Gering was also referred to the EPA Region 7 Superfund Removal program. The City of Gering utilized an EPA Brownfields Assessment Grant to characterize the extent of soil and groundwater contamination at the site with the intent to purchase and redevelop the property. Based on the results of the characterization, significant levels of lead contamination in soil were found that would require cleanup. Neither the current property owner nor the City of Gering had the resources to perform the cleanup so the site was referred to the EPA Region 7 Superfund Removal program.

NDEQ also reviewed numerous site assessments conducted by EPA in the state and provided recommendations on the need for follow-up action.



Metal scrap and debris at the B&T Metals site in Gering.

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.

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 17 active sites on the National Priorities List, seven are being addressed by the responsible party and eight are being addressed as fund lead by Superfund dollars, and two are being addressed as both responsible party and fund lead. 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. Initially, NDEQ funded these costs with Legislative appropriations of general funds. During 2004-2007, NDEQ received Nebraska Environmental Trust grant funding to pay these costs. Beginning in FY18, NDEQ was authorized to fund these costs through a transfer of up to \$1.5 million from the Petroleum Release Remedial Action Cash Fund into the Superfund Cost Share Cash fund. For FY19, a total of \$1,030,454 was transferred to pay for these costs. Future projections of these costs range from approximately \$1,115,000 in FY20, \$1,172,000 in FY21 and \$2,218,000 in FY22.

During the last two years, the State has paid 10% of the costs for the capital construction and operation and maintenance costs for the in-situ thermal source control remedy at the Cleburn Street site in Grand Island. In-situ thermal treatment utilizes heat to vaporize and remove chemicals in soil and groundwater. This site is the first use of an in-situ thermal remedy in the State and was

What is In Situ Thermal Treatment?

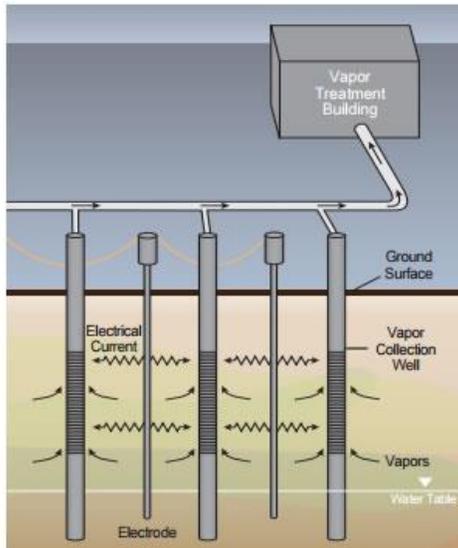


Photo courtesy of the EPA

In-situ thermal treatment uses heat to mobilize chemicals in soil and groundwater. Some chemicals are destroyed underground by the heating process. The remaining chemicals will move toward wells, where they are collected and treated aboveground using other methods.



Pictured right: Photos of the in-situ thermal remedy at the Cleburn Street site in Grand Island. During the remedial action, part of the thermal system was installed beneath Eddy Street (top). The installation included electrode wells, temperature wells, extraction wells, and monitoring wells. Heat is generated by the passage of electrical currents between the electrodes (bottom).

successfully completed this year. NDEQ believes this remedy will save the State a significant amount of future operation and maintenance costs to achieve the cleanup goals for the site.

The State began paying 100% of the operation and maintenance costs for the 10th Street Site in Columbus in January, 2016, the Ogallala Groundwater Contamination Site in December 2016, and the Hastings Second Street subsite of the Hastings Groundwater Contamination Site in June, 2017. For the Columbus 10th Street site, NDEQ has entered into an Intergovernmental Agreement with the City of Columbus for City personnel to operate and maintain the groundwater extraction and treatment system and beneficially reuse the treated water for City of Columbus drinking water. NDEQ's annual costs under this agreement have decreased from approximately \$195,000 to \$135,000 under the new two year agreement beginning July 1, 2019.

What is Groundwater Extraction and Treatment?

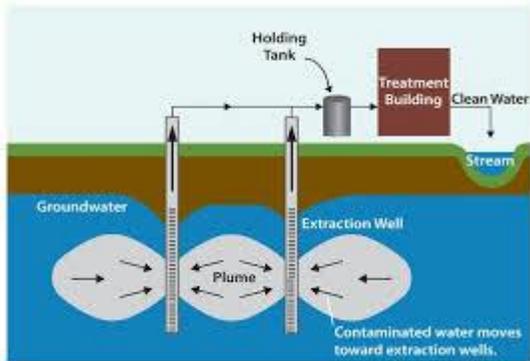


Photo courtesy of the EPA

Groundwater extraction and treatment uses extraction wells to pump groundwater to an aboveground treatment system. Once treated water meets regulated standards, it is discharged for disposal or further use.



Pictured right: The remedy at the Columbus 10th Street site includes a groundwater extraction and treatment system. Treated groundwater is then either beneficially reused as a municipal drinking water supply, or discharged to the Loup River.

Below is a list of the 17 active National Priorities List sites. Below each name is an EPA web address that provides more detailed information about the 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
Old Highway 275 and North 288 th Street (Valley) https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704272&msspp=med

During the spring 2019 bomb cyclone and subsequent flooding disaster, many rivers in the state were at record flood stage levels. In response to this flooding, NDEQ evaluated the above Superfund NPL sites for flood inundation that could potentially impact the constructed cleanup systems, mobilize contaminated groundwater, and increase potential human exposure pathways. Flood inundation maps were overlain with the locations of the NPL sites to evaluate these potential impacts. Two pathways for potential human exposure could occur from the flood inundation: (1) the intrusion of contaminated groundwater into area structures, causing a direct contact or inhalation risk; and (2) the potential mobilization of contaminated groundwater, causing impacts to public and private drinking water wells.

Only one site, the Old Highway 275 and North 288th Street site in Valley appeared to have been inundated by flood waters. EPA Region 7 Superfund Program personnel conducted indoor air sampling at several residential structures impacted by flood waters and did not detect contaminants exceeding health-based levels. Although not inundated by flood waters, the constructed groundwater extraction

and treatment system at the former Nebraska Ordnance site in Mead was shut down for three days to mitigate the contribution of treated groundwater discharged to overflowing nearby creeks. Other sites were impacted by standing water as a result of precipitation and snow melt, or had impacts to access roads and highways to the sites. Long-term evaluation of groundwater monitoring data will need to be performed to evaluate any potential mobilization of contaminated groundwater from the flooding event.

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 the Lincoln Air National Guard Base in Lincoln, 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 five 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.

During the last year, PFAS sampling was conducted at both the Lincoln Air National Guard Base and Offutt Air Force Base. Significant levels of PFAS compounds were detected in soil, groundwater, surface water and sediment at both sites. NDEQ requested that the Air Force conduct private drinking water well sampling near the bases to determine any impacts to drinking water.

For the Lincoln Air National Guard Base, the Air Force declined to perform this sampling as they did not believe any wells were at risk of contamination. NDEQ, in coordination with the Lincoln-Lancaster County Health Department conducted sampling of eighteen private wells in the area, as well as surface water and sediment samples from Oak Creek and a tributary to Oak Creek. PFAS chemicals were not detected in any of the private wells above the EPA Health Advisory Limit of 70 parts per trillion for PFOA/PFOS. PFAS chemicals were detected in the surface water and sediment samples, however, there are no regulatory standards for comparison at this time. Future site investigation to further characterize the extent of PFAS contamination at this site will be conducted by the Air Force, however, this site will be a low priority nationally for the Air Force as there are no threats or impacts to any public or private drinking water supplies.



NDEQ's contractor collects a sediment sample from Oak Creek (west of I-80 in Lincoln) for the analysis of PFAS.

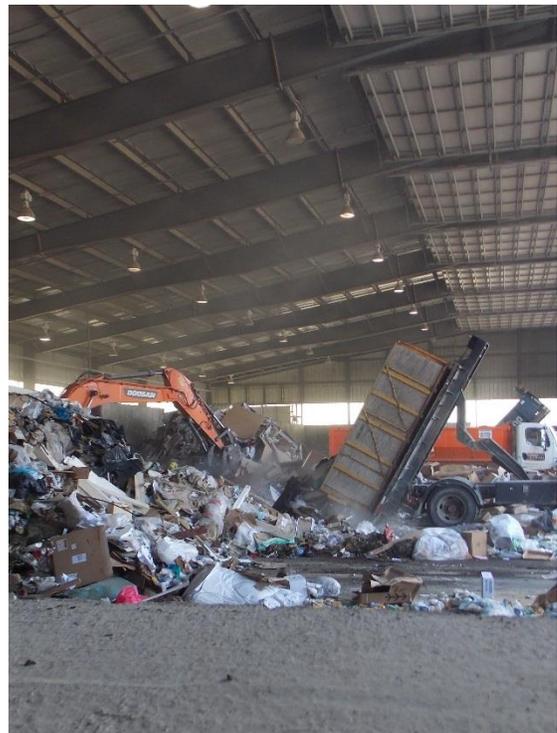
The Air Force has committed to conducting private well sampling at Offutt Air Force Base and will prioritize this site as a higher priority site for further site investigation. As a result of the ongoing flooding along the Missouri River, the residences with private wells are currently uninhabitable and do not have any power to the residence. The Air Force has committed to performing the private well sampling as soon as the residences are inhabited and power is restored.

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 FY2019	
Municipal Solid Waste Disposal Areas (Landfills)	23
Solid Waste Compost Sites	8
Transfer Stations	36
Materials Recovery Facilities	4
Construction & Demolition Waste Disposal Areas	32
Delisted Waste Disposal Area	1
Processing Facility	2
Fossil Fuel Combustion Ash Disposal Areas	8
Total	114

The following table indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2019:

Summary of FY2019 Activities	
Compliance Assistance	
Facility Inspections (General)	120
Facility Closure Inspection	1
Facility Construction Inspections	9
Facility Comprehensive Renewal Inspections	18
Complaints Received	196
Complaints Investigated	196
Complaints Closed or Referred	180
Permitting	
New Permits Issued	1
Permit Renewals	18
Major Permit Modifications	6
Public Hearings	2
Permits Transferred	1
Financial Assurance Reviews	174
Facilities Closed	1

Assessment Monitoring and Remedial Measures

All solid waste disposal areas (facilities) 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 facility 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, the facility will monitor for a more extensive list of contaminants. During FY2019, 16 operating facilities (11 landfills and 5 coal ash disposal areas) and 3 closed landfills conducted assessment monitoring.

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 2019 remedial measures continued at two active and one closed landfills.



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 FY2019, groundwater investigations continued at two sites, and remedial actions continued at eight 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, FY2019 Permitting	
Renewed Hauler Permits	23
New Permits Issued	1
Financial Assurance Reviews	11

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.



Significant Accomplishments

Significant accomplishments in the Solid Waste Program during FY2019 included the following:

- NDEQ allowed 2 coal ash disposal facilities, during their 5-year permit renewals, to revise their groundwater monitoring requirements to reflect their voluntary compliance with portions of the 2015 Coal Combustion Residuals (CCR) Rule
- NDEQ provided assistance to local emergency managers, NEMA and FEMA and local officials as part of flood response activities to the largest flooding experienced in the State. This included providing emergency managers with situation reports for activities occurring in their counties and communities and specific compliance assistance in order to help them deal with debris, sand, carcasses, orphan containers and other miscellaneous activities related to cleanup.
- NDEQ participated in numerous Nebraska Department of Agriculture and Nebraska Emergency Management activities related to the planning and preparation for Animal Disease response on the potential carcass disposal from disease.

