CHAPTER 5:

Land Management Programs

The Land Management Programs' objectives are to ensure solid and hazardous wastes are properly managed, assess and remediate contaminated sites, facilitate the redevelopment and reuse of contaminated properties and administer grant programs that advance waste reduction and recycling practices throughout the state. This chapter will begin discussion with the waste grant programs, the voluntary cleanup program, and is followed by activities performed by the hazardous waste (RCRA), Superfund and solid waste management programs.

Waste Grants Programs

The Grants Section manages the Waste Reduction and Recycling Incentive Grants Program and the Litter Reduction and Recycling Grant Program; Illegal Dumpsite Cleanup Program; and Landfill Disposal Fee Rebate Program.

The Section's responsibilities include:

- Awards financial aid to public and private partners reviews grant submissions; performs compliance inspections; monitors the activities, budgets, and equipment purchases of grantees; and conducts quarterly performance report reviews.
- Outreach Promotes the availability of grant funding, coordinates the ranking process, coordinates grant awards, and provides integrated waste management information to the public.

Nebraska Department of Environment and Energy/Nebraska Environmental Trust Partnership

In July 2018, the Nebraska Department of Environmental Quality (now NDEE) and the Nebraska Environmental Trust entered 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 who will ensure coordination occurs between the 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 and when critical program or project needs arise for the purpose of discussing issues of mutual concern and opportunities to enhance the partnership.

Litter Percentage Allocation

At the Environmental Quality Council meeting on November 16, 2021 a hearing was held to decide the 2022 Litter Percentage Allocation. Each year, the Council establishes the percentage of how the funds will be allocated for recycling, public education, and cleanup programs or projects. The Department's recommended percentage allocations for 2022 were based on the actual applications received:

Category	202	2022 Eligible Requests		
Recycling	32%	\$740,681		
Public Education	66%	\$1,542,174		
Cleanup	2%	\$48,996		
Totals	100%	\$2,331,851		

The Department asked for the ability to adjust the percentages by up to 20% for the 2022 grant year, if warranted. The Environmental Quality Council approved this request.

New Grant Application Guidance Updates

To address common issues with grant recipients, the Section created grant application guidance in 2018 to provide direction and set limits on grant-funded expenses. The purpose is to provide fair and equitable reimbursements, especially when requests exceed the amount of grant funding available. A subcommittee of the Nebraska Environmental Quality Council reviewed the guidance in the Fall of 2018 and accepted it at the November 15, 2018, Environmental Quality Council meeting. The guidance affects grant applications received after January 1, 2019. Further updates were made in 2022 to clarify eligible reimbursements for personnel and other expenses.

The Litter Reduction and Recycling and Waste Reduction and Recycling Incentive grant programs are awarded on a calendar year basis starting January 1 through December 31. This allows our grant programs to more closely align with the grant application period of the Nebraska Environmental Trust. The application period is open for several weeks mid-summer each a calendar year. Applicants are able to apply through an online application process.

Expected Service Life

The Grants Section programs utilize an expected service life procedure for grant-funded equipment. The expected service life determines how long the grantee is responsible for reporting the status of grant-funded equipment to NDEE and how long NDEE maintains a financial 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 grant-funded 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.

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 (HHW) programs
- 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 July 1, 2021 - June 30, 202	
Fund Balance June 30, 2021	\$2,005,808
Revenues:	
New Tire Fees	\$2,450,200
Business Fee	\$498,157
Solid Waste Disposal Fee	\$1,617,197
Interest, Grant Returns	\$35,386
Miscellaneous	\$56,010
Operating Transfers Out	\$-180,000
Net Collections for Year	\$4,476,950
Expenditures:	
Administration	\$356,345
Grant Funds Expended*	\$3,804,370
Total Expenditures FY 2022	\$4,160,715
Fund Balance June 30, 2022	\$2,322,044

^{*} 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 calendar year 2022, \$4,499,736 was awarded for Waste Reduction and Recycling Incentive Grants to 104 projects. There were 18 grants awarded from the Business Fee category (\$948,373), 9 were awarded from the Disposal Fee category (\$1,218,800), and 77 were awarded from the funds prioritized for scrap tire projects (\$2,332,563).

Funds received in the Business Fee, Disposal Fee, and Tire Fee categories are represented by the following graphs. Locations across Nebraska that received funds are represented by the following lists.

Waste Reduction & Recycling Grants for FY 2022

Business Fee





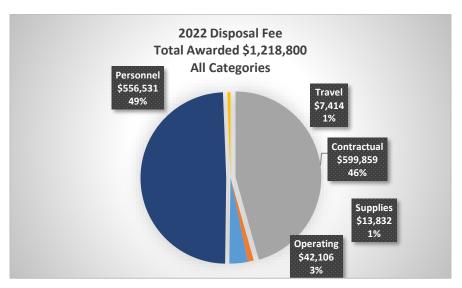
(Photos provided by Dave Haldeman) Keep Scottsbluff-Gering Beautiful was awarded funding for events which took back pharmaceuticals and household hazard waste for residents of Scottsbluff, Gering, and surrounding areas.



Business	Fee: \$948,373 for	18 grants	
Alliance	Keep Alliance Beautiful	\$108,637	Funds for the recycling center operations for Box Butte Co., and surrounding areas, and waste reduction and recycling education programs. To date KAB has collected 394,334 of recycled materials.
Bassett	North Central RC&D	\$11,098	Funds for three HHW events in Spencer, Stuart, and O'Neill, Nebraska.
Chadron	Keep Chadron Beautiful	\$63,776	Funds to continue the paper and cardboard recycling program in Chadron.
Columbus	Keep Columbus Beautiful	\$24,515	Funds to host a household hazardous waste (HHW) collection for residents of Platte County.
Columbus	Keep Columbus Beautiful	\$12,549	Funds to host an E-Waste event for the City of Columbus.
Fremont	Keep Fremont Beautiful, Inc	\$29,221	Household hazardous waste collection event for over 36,500 residents of Dodge County.
Grand Island	Grand Island Area Clean Community System	\$148,217	Funds to operate the Household Hazardous Waste (HHW) facility for Hall, Hamilton, Howard, Merrick, and Adams counties.
Kimball	Keep Kimball Beautiful	\$17,094	Funds to increase recycling by providing collection services for rural residents and residential alley recycling. Program serves Kimball and Banner counties.
Lexington	Lexington Area Solid Waste Agency	\$28,242	Funds to hold two household hazardous waste collection events to serve 45,000 people in central Nebraska.
Lincoln	Keep Nebraska Beautiful	\$93,098	Funds for the Materials Exchange Program, Food Waste Program (yearlong social media campaign to reduce food waste) and Used Oil Program (collect oil and anti-freeze at 62 sites in 58 counties).
Lincoln	Lincoln Public Schools	\$51,962	Funds to continue funding the recycling program at Lincoln Public Schools and to expand the efforts by purchasing equipment to replace departing contractor's equipment.
Lincoln	Joslyn Institute for Sustainable Communities	\$9,600	Funds to plan the opening of the Lincoln/Lancaster County LNK Conservation Center for Food and construction materials resale markets.
Louisville	Keep Cass County Beautiful	\$1,800	Hold four electronic waste (e-waste) collection events for Cass County residents.
Oakland	Loess Hills RC&D	\$18,022	Conduct 3 hazardous waste collection events in Cuming, Dakota, and Burt Counties.

Ogallala	Western Resources Group	\$191,951	Funds to collect and process recyclables collected from central and western Nebraska.
Ogallala	Western Resources Group	\$65,602	Funds to develop a secondary market for processed cardboard for post-consumer animal bedding.
Ogallala	Keep Keith County Beautiful	\$19584	Continue litter reduction and recycling at Lake McConaughy and continue school and education program.
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$53,405	Hold a pharmaceutical take back and household hazardous waste collection for Scottsbluff, Gering, and surrounding area.

Disposal Fee







(Photo provided by City of Sidney) Keep Sidney Beautiful affiliate and its successful recycling program.

Disposal F	Disposal Fee: \$1,218,800 for 9 grants				
Adams	City of Hastings	\$20,000	Funds to host a two-day E-Waste event for the residents of Adams County, NE. Contractual Services.		
Cheyenne	City of Sydney	\$24,796	Funds to staff City of Sidney's recycling program, assisting with the increase amount of recycled material collected and reduce the amount of waste transported to the landfill. Personnel and supplies.		
Lincoln	Lincoln and Lancaster County Health Department	\$326,162	Maintain and operate the Lincoln Lancaster County Health Department's HazToGo household hazardous waste (HHW) disposal facility. The facility serves over 319,000 residents of Lancaster County.		
Lincoln	City of Lincoln	\$ 231,101	Funds to improve the organic waste diversion for compost in the City of Lincoln.		
Lincoln	University of Nebraska-Lincoln Board of Regents	\$69,372	Program for UNL engineering students to provide technical onsite waste/volume reduction and recycling assistance for Nebraska manufacturing businesses during the summer.		
McCook	Red Willow County	\$169456	Funds to provide residents of central and southwest Nebraska with safe, reliable means to recycle or dispose of household hazardous waste (HHW).		
Omaha	City of Omaha UnderTheSink HHW Facility	\$365,415	Funds for Omaha's UnderTheSink household hazardous waste (HHW) facility serving Douglas and Sarpy counties. In 2019 over 1.3 million lbs. of HHW were collected and processed.		
Wayne	City of Wayne	\$6,622	Funds to offer a convenient household battery recycling program at no charge to the public within the City of Wayne community. Contractual Services.		
Wayne	City of Wayne	\$8,878	Hold an electronic waste (e-waste) event for residents of Wayne and surrounding towns.		

Tire Fee

The scrap tire grants are funded by the \$1 per tire fee on retail sales of new tires. In 2021, \$2,332,563 was awarded to 77 projects.

- Scrap tire cleanup events: 33 grants, \$1,184,155 awarded
- Completed projects for the partial reimbursement of the purchase of tire-derived products and/or crumb rubber: 41 grants, \$1,130,657 awarded
- Proposed projects for the partial reimbursement for the purchase of tire-derived products and/or crumb rubber: 3 grants, \$20,990

Scrap Tire Cleanup Events

Funding is provided to political subdivisions for tire collection site cleanups. Thirty-three scrap tire cleanup grants were awarded in 2021 to political subdivisions. The grants totaled \$1,184,155 and proposed to clean up 8,695 tons of scrap tires.





Photos provided by City of Cozad which was awarded funds for a proposed 100-ton scrap tire cleanup event

Scrap Tire Clea	crap Tire Cleanup Events: 33 grants, \$1,184,155 awarded					
Ainsworth	KBR Solid Waste Committee	\$30,852	Proposed 200-ton of scrap tire cleanup			
Albion	City of Albion	\$13,685	Proposed 100-ton of scrap tire cleanup			
Alma	Lower Republican Natural Resource District	\$11,982	Proposed 100-ton of scrap tire cleanup			
Alma	Lower Republican Natural Resource District	\$20,607	Proposed 175-ton of scrap tire cleanup			
Alma	Lower Republican Natural Resource District	\$17,732	Proposed 150-ton of scrap tire cleanup			
Chadron	Solid Waste Agency of Northwest Nebraska (SWANN)	\$27,383	Proposed 150-ton of scrap tire cleanup			
Columbus	City of Columbus	\$28,852	Proposed 250-ton of scrap tire cleanup			
Cozad	City of Cozad	\$14,806	Proposed 100-ton of scrap tire cleanup			
Davenport	Little Blue Natural Resources District	\$29,232	Proposed 250-ton of scrap tire cleanup			
Davenport	Little Blue Natural Resources District	\$29,232	Proposed 250-ton of scrap tire cleanup			
Davenport	Little Blue Natural Resources District	\$32,107	Proposed 275-ton of scrap tire cleanup			

Hartington	Cedar County	\$69,846	Proposed 550-ton of scrap tire cleanup
Hayes Center	Hayes County	\$20,376	Proposed 125-ton of scrap tire cleanup
Holdrege	City of Holdrege	\$46,161	Proposed 350-ton of scrap tire cleanup
Kearney	City Of Kearney/ Kearney Area Recycling Center	\$40,300	Proposed 325-ton of scrap tire cleanup
Minden	Kearney County	\$25,830	Proposed 200-ton of scrap tire cleanup
Nebraska City	County of Otoe	\$61,006	Proposed 450-ton of scrap tire cleanup
Nelson	Nuckolls County Road Department	\$16,620	Proposed 120-ton of scrap tire cleanup
Ogallala	Keith County Nebraska	\$40,000	Proposed 300-ton of scrap tire cleanup
Omaha	City of Omaha	\$78,100	Proposed 400-ton of scrap tire cleanup
O'Neill	North Central District Health Department	\$41,128	Proposed 300-ton of scrap tire cleanup
O'Neill	North Central District Health Department	\$48,028	Proposed 300-ton of scrap tire cleanup
Palisade	Village of Palisade	\$18,671	Proposed 125-ton of scrap tire cleanup
Papillion	Sarpy County	\$82,250	Proposed 650-ton of scrap tire cleanup
Pawnee City	Pawnee County	\$8,902	Proposed 75-ton of scrap tire cleanup
Pierce	Pierce County	\$15,520	Proposed 150-ton of scrap tire cleanup
Spencer	Village of Spencer	\$49,761	Proposed 325-ton of scrap tire cleanup
Stapleton	Village of Stapleton	\$29,331	Proposed 200-ton of scrap tire cleanup
Stockville	Frontier County	\$20,806	Proposed 150-ton of scrap tire cleanup
Tekamah	Papio Missouri River NRD	\$120,812	Proposed 800-ton of scrap tire cleanup
Wahoo	Saunders County Highway Dept	\$29,201	Proposed 250-ton of scrap tire cleanup
Wilber	Saline County	\$22,660	Proposed 200-ton of scrap tire cleanup
York	York Area Solid Waste Agency	\$43,528	Proposed 350-ton of scrap tire cleanup
	I	I	<u>I</u>

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

In 2021, \$1,151,647 was awarded to 45 projects to partially reimburse the purchase of tire-derived products and/or crumb rubber.



Photo provided by the Wakefield Community School, which was awarded for partial reimbursement of artificial turf made with 375,011 lbs. of crumb rubber for their Gardner Stadium.



The Alliance Recreation Center received a 50% reimbursement for the purchase of 36,000 lbs. of rubber playground mulch.

	sement for the Purcha ects: 41 projects, \$1,1		Derived Products and/or Crumb Rubber-rded
Alliance	Alliance Recreation Center	\$6,100	50% reimbursement for rubber mulch.
Alliance	Keep Alliance Beautiful	\$6,473	50% reimbursement for rubber mulch using 40,000 lbs rubber.
Arlington	Arlington Youth Sports	\$3,097	50% reimbursement for rubber mulch using 34,000 lbs rubber.
Bellevue	Bellevue Public Schools	\$87,471	25% reimbursement for track.
Bloomfield	Bloomfield Community Schools	\$400	50% reimbursement for rubber mulch.
Blue Hill	Blue Hill Community Schools	\$4,035	50% reimbursement for rubber mulch and 25% reimbursement for mats.
Bridgeport	Bridgeport Public Schools	\$6,468	25% reimbursement and 50% reimbursement for rubber mulch.
Cairo	Centura Public Schools	\$6,438	25% for poured in place
Central City	Central City Public Schools	\$1,650	50% reimbursement for rubber mulch.
Dalton	Leyton Public School	\$25,860	25% reimbursement for a new track.
Edgar	City of Edgar	\$620	50% reimbursement for rubber mulch.
Fairfield	Sandy Creek Public School	\$13,040	25% reimbursement to resurface track.
Fort Calhoun	Fort Calhoun Community Schools	\$2,666	25% reimbursement for rubber tiles and turf.
Fremont	Friends of the Fremont Area Parks	\$6,219	25% reimbursement for rubber surface using 21,250 lbs rubber.
Fremont	Growing Hearts Academy	\$2,625	25% reimbursement of a poured-in-place surface using 3,100 lbs rubber.
Geneva	Fillmore Central Schools	\$13,000	25% reimbursement for track using 11,950 lbs of rubber.
Gretna	Gretna Public Schools	\$180,397	25% reimbursement for turf.
Harrisburg	Banner County School	\$1,225	50% reimbursement for rubber mulch.
Hastings	City of Hastings	\$27,602	25% reimbursement for rubber in poured-in-place surface.
Holdrege	Bethel Lutheran Church	\$2,722	50% reimbursement for rubber mulch.
Homer	Village of Homer	\$2,514	50% reimbursement of rubber mulch.
Kearney	New Life Assembly	\$9,157	50% reimbursement for rubber mulch using 2,475 of rubber.
Kearney	Corey Cruzan	\$586	50% reimbursement using 4,000 lbs crumb rubber

Lincoln	Cathedral of the Risen Christ	\$4,648	50% reimbursement for rubber mulch using 32,000 lbs rubber.
		_	
Lincoln	Lincoln Public Schools	\$100,028	25% reimbursement for turf.
Lincoln	Lincoln Public Schools	\$72,998	25% reimbursement for turf.
Lincoln	Nebraska Game & Parks Commission	\$11,122	25% reimbursement for picnic tables.
Lincoln	Lincoln Public Schools	\$72,998	25% reimbursement for turf.
Lincoln	Lincoln Public Schools	\$72,675	25% reimbursement for turf.
Lincoln	Lincoln Public Schools	\$79,375	25% reimbursement for turf.
Loomis	Loomis Public Schools	\$2,025	50% reimbursement for rubber mulch.
Loup City	Bowman Lake Recreation Area	\$319	25% reimbursement for park benches.
Omaha	Millard Public Schools	\$65,360	25% reimbursement for turf.
Oxford	Village of Oxford	\$1,872	50% reimbursement for rubber mulch.
Plattsmouth	Plattsmouth Community Schools	\$29,266	25% reimbursement for new track.
Ralston	Ralston Public Schools	\$103,909	25% reimbursement for track and turf.
Schuyler	Divine Mercy Parish	\$1,248	25% reimbursement for rubber mulch using 4,500 lbs rubber.
Tecumseh	City of Tecumseh	\$1,183	25% reimbursement for the purchase of picnic tables.
Wakefield	Wakefield Community School	\$97,707	25% reimbursement for rubber turf.
Wausa	Thabor Tots childcare Center	\$3,187	50% reimbursement for rubber mulch and rubber boarder.
Wilber	The Gingerbread House	\$372	25% reimbursement for rubber mats and 50% rubber mulch.

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber- Proposed Projects: 3 projects, \$159 awarded							
Cairo Village of Cairo \$6,560 Proposed 50% reimbursement for rubber mulch.							
Oxford	Village of Oxford	\$7,215	Proposed 50% reimbursement for rubber mulch.				
Potter	Potter Village of Potter \$7,215 Proposed 50% reimbursement for rubber mulch.						

Deconstruction of Abandoned Buildings

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 first- and second-class cities, villages, and counties with a population of 99,000 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.



(Photo provided by the City of Oshkosh) A grant was awarded in 2020 to the City of Oshkosh for the deconstruction of the abandoned Midwec Building at 602 Main St.

Illegal Dumpsite Cleanup Program

The Illegal Dumpsite Cleanup Program, established in 1997, is a Waste Reduction and Recycling 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 5% of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. NDEE encourages municipalities, counties, and other political subdivisions to submit applications for the reimbursement of cleanup efforts. In FY2022, the program provided 25 grants, totaling \$30,753. Funds were provided to:

Illegal Dumpsite Cleanup Awards				
City of Lincoln - 5 City of Omaha – 6 Seward County - 5				
Lincoln/Lancaster County - 6	Adams 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 NDEE, 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 FY2022, the program provided \$72,591 to five counties and six cities participating in the program. All 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	\$ 5,878	Butler County	\$ 731	City of David City	\$ 176	
City of North Platte	\$ 2,681	City of Lincoln	\$ 22,458	Saline County	\$ 1,437	
City of Omaha	\$ 36,574	South Sioux City	\$ 500	Jefferson County	\$ 354	
Seward County	\$ 1,688	City of Grant	\$ 114			

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
- Kitchen supplies

Fund Summary Litter Reduction and Recycling Fund July 1, 2021 - June 30, 2022				
Fund Balance June 30, 2021	\$2,480,671			
Revenues:				
Litter Taxes Collected	\$2,656,718			
Interest, Grant Returns	\$34,015			
Miscellaneous Adjustment	\$0			
Operating Transfer Out	\$-190,000			
Net Collections for FY2022	\$2,500,733			
Expenditures:				
NDEE Administration	\$274.672			
Grant Funds Expended*	\$2,016,499			
Total Expenditures FY2022	\$2,291,171			
Fund Balance June 30, 2022	\$2,690,779			

^{*}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

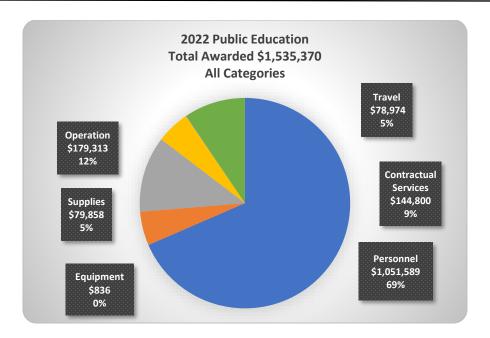
In 2022, \$2,179,271 was awarded to 51 Litter Reduction and Recycling Grant recipients. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling.

The breakdown is as follows:

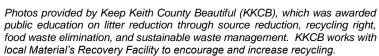
Totals	100%	51 grants	\$ 2,179,271
Recycling	(27%)	18 grants	\$ 587,552
Cleanup	(3%)	11 grants	\$ 56,349
Public Education	(70%)	22 grants	\$ 1,535,370

Public Education

In 2022, 22 grants totaling \$1,535,370 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.









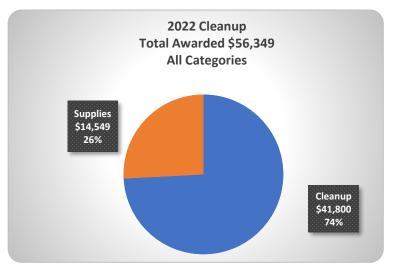
Public Educ	Public Education Awards: \$1,535,370 for 22 grants							
Alliance	Keep Alliance Beautiful	\$68,372	Public education for waste reduction and litter prevention to Box Butte County students and residents. Teach practical habits to reduce, reuse, and recycle.					
Beatrice	Keep Beatrice Beautiful, Inc.	\$35,628	Public education to promote litter reduction and recycling. Partner with the City of Beatrice and Gage County.					
Burwell	Loup Basin RC&D Council/Keep Loup Basin Beautiful	\$47,805	Public education for litter prevention, waste reduction, and recycling in Central and North Central Nebraska.					

	1		Dublic adjustion to actablish new attitudes and
Chadron	Keep Chadron Beautiful	\$73,735	Public education to establish new attitudes and behaviors toward litter reduction and recycling. Conduct community presentations, help with litter-free events, and offer educational after-school programs.
Columbus	Keep Columbus Beautiful	\$39,260	Public education for schools, businesses, and organizations to increase recycling and raise awareness for litter prevention in Platte County.
Fremont	Keep Fremont Beautiful, Inc.	\$78,180	Public education to promote greater public awareness regarding environmental issues, increase community participation in litter reduction, recycling, and proper waste disposal efforts.
Grand Island	Grand Island Area Clean Community System	\$49,486	Public education on litter, recycling, and reuse, and proper disposal of household chemicals through presentations to adults and youth in Hall County.
Kimball	Keep Kimball Beautiful	\$24,928	Public education for Kimball and the surrounding area concerning litter prevention and proper waste management. Work with Kimball Public Schools and Banner County School.
Lexington	Keep Lexington Beautiful	\$31,674	Public education to reduce waste and improve recycling efforts to Lexington Public Schools through afterschool and summer programs.
Lincoln	City of Lincoln	\$163,793	Updated waste characterization study; educational signage for the City and County buildings and education module for the staff. Marketing and educational materials for EarthFuel Compost.
Lincoln	Nebraska Recycling Council	\$91,368	Outreach and education programs that provide recycling and materials management, technical assistance, instructional publications, waste assessment and audits, and develop Nebraska's composting industry.
Lincoln	Lincoln - Lancaster County Health Department	\$133,333	Public education for litter prevention, reduce landfill waste, and proper waste management practices for Lancaster County. Stormwater awareness program, cigarette litter, and illegal dumping prevention.
Lincoln	Keep Nebraska Beautiful	\$106,040	Operate the Litter Hotline to increase community awareness of litter. Educate K-12 students with the litter-free school zones program. Help develop afterschool curriculum focusing on food waste and resource management.
Louisville	Keep Cass County Beautiful	\$58,856	Education and resources for litter prevention and waste reduction; presentations for six school districts and youth groups, environmental fair for 300 fifth graders and other public events.
Nebraska City	Keep Nebraska City Beautiful	\$46,236	Public education to increase recycling, promote litter reduction, and food waste reduction through school programs and community presentations in Nebraska City.
Norfolk	Keep Norfolk Beautiful	\$27,886	Public education to teach youth about the importance of litter prevention, proper recycling practices, and instill proper waste handling habits in Madison County.
North Platte	Keep North Platte and Lincoln County Beautiful	\$102,172	Public education to encourage waste reduction and litter free environment. Focus on purchasing with recycling in mind, food waste reduction, and composting.
Ogallala	Keep Keith County Beautiful	\$135,704	Public education on litter reduction through source reduction, recycling right, food waste elimination, and sustainable waste management.

Omaha	Keep Omaha Beautiful	\$149,850	Public education program focused on litter prevention, waste reduction, recycling, and composting through school based educational programming, community-based outreach and partnership, curriculum certification workshops, and a digital-based "Recycle Right" campaign.
Papillion	Trumble Park Elementary Parent Teacher Organization	\$1,000	Funding for recycling bins and recycling services provided to the elementary school.
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$38,994	Educational programs on litter prevention, waste reduction, recycling, and Earth Day Celebration.
Sidney	Keep Sidney Beautiful	\$31,070	Promote public education and programming for public waste reduction initiatives and large community clean up events.

Cleanup

In 2022, 11 grants totaling \$56,349 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 awarded Cleanup grants propose to clean up litter from 802 road-side miles and 710 acres of public areas.





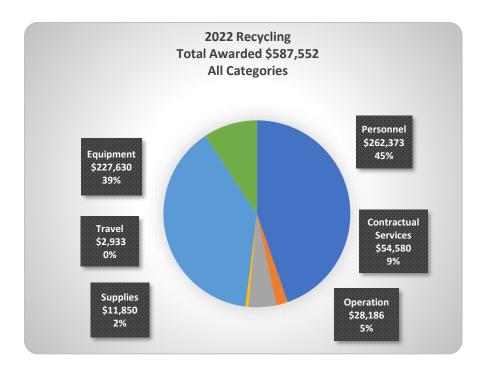


Photos provided by Grand Island Area Clean Community System, which was awarded funding to clean up a proposed 100 miles and 50 acres around Hall County. As of August 1, 2022, GIACCS volunteers have cleaned up over 17,708 lbs. of litter.

Cleanup Awards: \$56,349 for 11 grants						
Beatrice	Keep Beatrice Beautiful, Inc.	\$6,200	Cleanup 100 miles and 60 acres in Gage County.			
Chadron	Keep Chadron Beautiful	\$5,152	Cleanup 100 miles in Dawes County.			
Grand Island	Grand Island Area Clean Community System	\$6,000	Cleanup 100 miles and 50 acres around Hall County.			
Louisville	Keep Cass County Beautiful	\$1,200	Cleanup 12 miles and 60 acres in Cass County.			
North Platte	Keep North Platte and Lincoln County Beautiful	\$16,314	Supplies and cleanup 320 miles within Lincoln County.			
Ogallala	Keep Keith County Beautiful	\$3,000	Cleanup 60 miles in Keith County.			
Omaha	Keep Omaha Beautiful	\$7,235	Supplies to support 500 cleanup events in Omaha.			
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$7,353	Cleanup 100 miles in Scottsbluff County.			
Sidney	Keep Sidney Beautiful	\$465	Funding for supplies to support cleanup activities in Cheyenne County.			
South Sioux City	City of South Sioux City	\$2,930	Supplies to support cleanup in South Sioux City parks.			
Steinauer	Steinauer Community Club/Village of Steinauer	\$500	Cleanup 10 miles in the Village of Steinauer.			

Recycling

In 2022, 18 grants totaling \$587,552, 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.



	1		Funds to operate the recycling center in Alliance
Alliance	Keep Alliance Beautiful	\$60,024	serving Box Butte County.
Columbus	Keep Columbus Beautiful	\$26,930	Provide services to move recyclable materials collected in Columbus to the recycling center in Schuyler.
Crofton	City of Crofton	\$1,999	Funding for recycling program for the City of Crofto
Diller	Village of Diller	\$4,547	Funding for staff to transport the recycling trailer to dispose recycled materials at the City of Beatrice recycling center.
Falls City	Hamilton Recycling & Disposal	\$127,500	Funding for building improvements and equipment for Hamilton Recycling waste management company.
Kearney	Board of Regents University of Nebraska dba UNK	\$1,474	Promote recycling on campus and reduce the over waste on campus through advertisements and different education sessions at campus events.
Kimball	Keep Kimball Beautiful	\$53,711	Funds to operate the Kimball Recycling Center serving Kimball County.
La Vista	Parkview Heights Elementary School	\$1,900	Funding for recycling bins and recycling services provided to Parkview Heights Elementary School.
Lexington	Keep Lexington Beautiful	\$22,047	Conduct two paper shredding events in Lexington, service five recycling trailers, and support cleanups in the area.
Lincoln	Nebraska Recycling Council	\$49,967	Hub & Spoke Program to stabilize the operation of rural recycling centers.
Madison	City of Madison	\$23,481	Funding for 50% of the concrete pad 85'x 86' for their recycling center.
Minden	City of Minden	\$75,000	Funding for a trommel screen to help remove trash and recycle materials from the compost thus making the compost available to the public. The city currently has approximately 1,500 tons of compost filled with litter and recyclable materials mixed.
North Platte	Keep North Platte and Lincoln County Beautiful	\$39,937	Programs to reduce waste generated and increase recyclables collected using reputable end-markets. Partner with schools and businesses. Plan to increase the collection of recyclables, electronics, non-contaminated yard waste, and household hazardous waste.
Omaha	Open Door Mission	\$24,130	Funding for 127 plastic gaylords to process and redistribute donated items.
Omaha	Omaha Hebrew Academy dba Friedel Jewish Academy	\$1,861	Funding to purchase 3 of the three-stream bins for trash, recycling, and composting for the school.
Schuyler	Keep Schuyler Beautiful	\$45,287	Operating expenses for the Colfax County Recyclin Facility.
Tekamah	Papio Missouri River NRD	\$24,300	Funding to conduct four electronic waste recycling collection at NRD/USDA Service Centers in Washington, Curt, Thurston, and Dakota counties.
Verdigre	Village of Verdigre	\$3,457	Funding for part-time employee to aid with the recycling effort.

Grant Reporting

Each grantee is required to submit a report quarterly, even if there is no activity. The reports are approved within 1 business day if there are no issues with the report resulting in its rejection. Here are the top issues for rejection for the reporting from January to June 2022:

- Payroll, benefits, and/or taxes wrong
- Missing invoices or other documents
- Volunteer calculation missing or wrong
- Travel missing documentation
- Requesting ineligible expenses

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)
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
2020	\$325,938	\$1,325,085	\$89,153	\$1,740,176	\$1,827,643
2021	\$586,646	\$1,431,568	\$65,986	\$2,084,200	\$2,105,370
2022	\$587,552	\$1,535,370	\$56,349	\$2,179,271	\$2,331,980
			Total Amounts	\$18,707,352	\$25,155,618*

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)
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
2020	\$1,400,186	\$828,181	\$2,228,367	\$2,481,692
2021	\$1,661,286	\$1,405,815	\$3,067,101	\$3,469,624
2022	\$1,218,800	\$948,373	\$2,100,578	\$3,904,766
	*** F. 204.0 G	Total Amounts	\$23,571,373	\$35,226,416*

^{*}Estimate** FY2019 Grant awards were for a 6-month

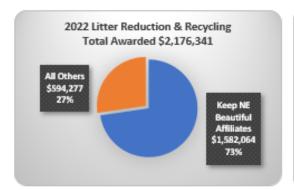
Amounts Awarded for Deconstruction, Illegal Dumpsite, and Landfill Disposal Rebates

Grant Year	Awarded Deconstruction Grants	Awarded Landfill Disposal Rebate	Awarded Illegal Dumpsite
2013		\$44,841	\$108,674
2014		\$49,792	\$101,810
2015		\$28,058	\$94,859
2016		\$162,536	\$80,872
2017		\$75 <i>,</i> 599	\$100,892
2018		\$40,433	\$99,341
2019		\$14,935	\$91,630
2020	\$186,662	\$23,016	\$102,061
2021		\$101,365	\$48,579
2022			
Total	\$478,162	\$583,043	\$947,380

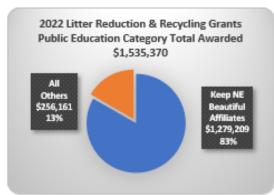
Keep America Beautiful Nebraska Affiliate Funding for 2022

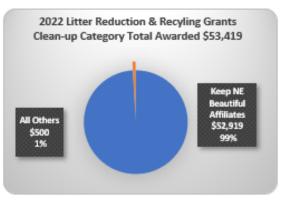
Keep America Beautiful (KAB) is a national non-profit public education organization. Keep Nebraska Beautiful is a statewide affiliate of KAB. There are 20 local KAB affiliate communities in Nebraska. Many of the KAB affiliates receive grant funding from the Litter Reduction and Recycling grant program 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 like 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.











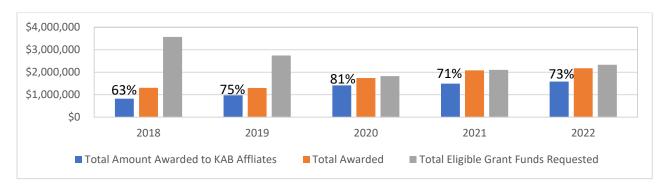






2018-2022 Awarded Litter Reduction and Recycling Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2018	\$823,506	63%	\$1,306,370	\$3,571,584
2019	\$976,436	75%	\$1,300,000	\$2,746,775
2020	\$1,415,978	81%	\$1,740,176	\$1,827,643
2021	\$1,489,598	71%	\$2,084,200	\$2,105,370
2022	\$1,582,064	73%	\$2,176,341	\$2,331,980



2018-2022 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
2018	\$668,415	35%	\$1,900,000	\$4,402,481
2019	\$299,956	39%	\$761,545	\$2,188,344
2020	\$689,675	31%	\$2,228,367	\$2,481,692
2021	\$714,693	23%	\$3,067,101	\$3,469,624
2022	\$778,583	37%	\$2,117,673	\$3,904,767



Nebraska Voluntary Cleanup Program

The Remedial Action Plan Monitoring Act (RAPMA), initially created in 1995, established the Nebraska Voluntary Cleanup Program (VCP). The VCP provides property owners, parties responsible for contamination, and any other entity with a mechanism for developing voluntary environmental cleanup plans that are reviewed and approved by NDEE. It also gives applicants a way to proceed with property cleanup 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.

NDEE has a Memorandum of Agreement with EPA Region 7, which provides federal approval of VCPs. Under this agreement, any applicant that joins the VCP and successfully completes the cleanup action is assured that EPA will not pursue federal enforcement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund.

To date, 72 sites have entered the VCP. Currently, 29 sites are active in the VCP. Two sites have been referred to the EPA Superfund program. Seven 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-eight sites have successfully completed cleanup requirements and have received "No Further Action" letters from NDEE, and one site received an Acknowledgement Letter for cleanup work completed to date, but not an official No Further Action letter.

NDEE continues to have significant interest from applicants enrolling properties or sites into the VCP. New properties enrolled include the Citizens Gas Former Manufactured Gas Plant (FMGP) site in McCook (this site was reenrolled by a new applicant after the previous applicant withdrew from the program in 2020), 48th & Dodge Redevelopment site in Omaha, former Galaxy Laundry site in Grand Island, and former Oak Lake Landfill in Lincoln.

Investigation activities are ongoing at the Omaha Steel Castings Parish School redevelopment site in Omaha, former Goodyear Lease Location in



With redevelopment plans on hold for several years due to environmental concerns, Oak Lake Development, LLC enrolled the former Oak Lake Landfill into the VCP so the property can be safely redeveloped.

Lincoln, AltEn site in Mead, International Sensor Systems, Inc. site in Aurora, Citizens Gas FMGP site in McCook, 48th & Dodge Redevelopment site in Omaha, former Galaxy Laundry site in Grand Island, former Oak Lake Landfill in Lincoln, and the Bladen, Bradshaw, and Eustis Former Commodity Credit Corporation (CCC)/U.S. Department of Agriculture (USDA) grain bin sites.

Cleanup activities are ongoing at the Dettmer Lease Property in Auburn, Vishay Dale Electronics site in Norfolk, J.A. Woollam Co., Inc. site in Lincoln, former Farmland Industries

Urea Ammonium Nitrate (UAN) Terminal in Doniphan, Elster American Meter Company site in Nebraska City, West Haymarket Block 4 site in Lincoln, Former AAA Welding site in Omaha, and the Murdock, Utica, and York Former CC/USDA grain bin sites.

Post-remediation monitoring is ongoing at the New Holland site in Grand Island, Nebraska Solvent site in Grand Island, Archer Daniels Midland site in Lincoln, Hoover Manufacturing site in Beatrice, Appleton Electric site in Columbus, and Former Max I. Walker Cleaners – Baker Square site in Omaha. NDEE is currently reviewing Remedial Action Reports for the Lewis and Clark Landing/Heartland of America Park Redevelopment site in Omaha and Tiny Houses site in Omaha.





The left photo shows the excavation at the Tiny Houses site on March 8, 2022; the right photo shows the completed excavation with backfill on March 11, 2022.

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

Voluntary Cleanup Program Sites and Status					
Site	Location	Date	Progress		
KN Energy	Holdrege	4/3/95	Completed 5/1/97		
Garvey Elevator	Hastings-West	4/13/95	Deferred to EPA Superfund		
American Smelting and Refining Company (ASARCO)	Omaha-Riverfront	2/5/96	Completed 10/11/01		
Burlington Northern Santa Fe (BNSF) Railroad	Lincoln-N. Havelock	1/17/96	Terminated 12/4/06		
Union Pacific Railroad	Omaha-N. Downtown	1/17/96	Withdrawn 3/7/03		
Farmland Industries	Scottsbluff	2/9/96	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		

Voluntary Cleanup Program Sites and Status					
Site	Location	Date	Progress		
Hastings Area wide	Hastings	12/17/97	Withdrawn 6/23/00		
Lincoln Plating Co.	Lincoln	9/17/98	Completed 7/26/12		
Witco Corporation	Omaha-North	1/20/99	Completed 6/29/99		
BNSF Railroad	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 1/3/05		
Brownie Manufacturing	Waverly-Highway 6	4/25/00	Withdrawn 7/19/01		
BNSF Railroad	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		
Union Pacific Railroad 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 Railroad Nebraska Solvent	Grand Island	10/10/07	Active		
Archer Daniels Midland	Lincoln	12/11/08	Active		
Plaza North Station LLC	Omaha	7/17/09	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 4/13/12		
Magnolia Metal Corporation	Auburn	3/9/11	Completed 10/31/13		

Voluntary Cleanup Program Sites and Status					
Site	Location	Date	Progress		
Dettmer Lease Property	Auburn	5/19/11	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 CCC/USDA 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	10/1/12	Completed 3/26/18		
Lynch Park FMGP	Omaha	11/20/12	Acknowledgement Letter issued 10/1/20		
Appleton Electric	Columbus	3/1/13	Active		
Magnus Farley	Fremont	6/16/14	Completed 8/23/18		
Beatrice FMGP	Beatrice	11/13/15	Completed 8/22/19		
Omaha Steel Castings – Saddle Creek Redevelopment	Omaha	4/26/16	Completed 8/24/20		
Omaha Steel Castings – Parish School	Omaha	3/24/17	Active		
Former Textron Turf Care and Specialty Products	Lincoln	10/26/16	Withdrawn 6/11/19		

Voluntary Cleanup Program Sites and Status					
Site	Location	Date	Progress		
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	Withdrawn 7/16/20		
Former Farmland Industries Doniphan UAN Terminal	Doniphan	10/9/2018	Active		
Lewis and Clark Landing/Heartland of America Park Redevelopment	Omaha	8/13/2019	Active		
Elster American Meter Company	Nebraska City	9/19/2019	Active		
Former AmFirst Bank Branch	McCook	11/07/2019	Completed 6/22/20		
West Haymarket Block 4	Lincoln	2/4/2020	Active		
Former Goodyear Lease Location #7522	Lincoln	7/21/20	Active		
Former Max I. Walker Cleaners – Baker Square	Omaha	1/11/21	Active		
Former AAA Welding	Omaha	1/11/21	Active		
Tiny Houses	Omaha	2/1/21	Active		
AltEn, LLC	Mead	6/30/21	Active		
Citizens Gas FMGP	McCook	11/6/2021	Active		
48 th & Dodge Redevelopment	Omaha	12/7/2021	Active		
Galaxy Laundry	Grand Island	2/2/2022	Active		
Oak Lake Landfill	Lincoln	6/28/2022	Active		

Brownfields Assessments and Cleanups

A brownfield site is a vacant or under-used industrial or commercial property where expansion or redevelopment is complicated by the presence or potential presence of hazardous substances, pollutants, or contaminants. Common brownfield properties include historic dry cleaners, former gas stations, auto repair shops, and closed manufacturing facilities. These properties can be contaminated with various chemicals such as tetrachloroethene (PCE) used in dry cleaning, benzene from petroleum fuel, and heavy metals such as lead from manufacturing activities.

NDEE's Section 128(a) Brownfields Program receives funding from EPA to offer various investigations and assistance at no cost to eligible applicants. This includes the following services:

- Phase I Environmental Site Assessments (ESAs) provide a review of historical documents and regulatory databases to determine if there are any environmental concerns associated with the past use of a property (e.g., the property was a gas station in the 1950s) and surrounding land use.
- Phase II ESAs are completed when environmental concerns are identified in the Phase I ESA, and include collecting soil, soil gas, and/or groundwater samples to identify if there has been a release to the environment and the initial extent of contamination onsite.
- Asbestos-containing materials, lead-based paint, and mold surveys can be completed on building materials as part of a Phase I ESA, Phase II ESA, or independently.
- Brownfield property inventories help to document all brownfields properties in a corridor, neighborhood, downtown, or other larger area slated for redevelopment.
- Cleanup planning activities (e.g., an Analysis of Brownfield Cleanup Alternatives report) include cleanup options and cost estimates based on future uses and redevelopment plans. Analysis of Brownfield Cleanup Alternatives reports are required to qualify for federal cleanup grants.
- Cleanup grants provide partial assistance for asbestos abatement or cleanup to contain
 and reduce contamination at a site (e.g., treatment or excavation of contaminated soil).
 Other cleanup assistance may include planning grants to assist with developing a
 cleanup plan for a contaminated site.

During the past year, NDEE has performed 17 Phase I assessments, three Phase II assessments, 21 asbestos surveys, 17 lead-based paint surveys, and eight mold surveys. NDEE provided partial cleanup assistance for asbestos removal to three applicants and committed funding for partial cleanup assistance to the City of Lincoln for planning activities related to an urban agriculture project in the Haymarket area.







The NDEE Brownfields Program helped the City of Blue Hill turn the site of a vacant school building containing asbestos into a new aquatic center. Section 128(a) funding was used to cover the costs to complete an asbestos-containing materials survey and to assist with the asbestos removal and disposal costs. After the environmental hurdles were removed, Blue Hill was able to leverage nearly \$3 million for the project. The new aquatic center officially opened in the summer of 2021.

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 NDEE's Brownfields 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 NDEE's 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.

The NDEE Brownfields Program held its first in-person workshop following the COVID-19 pandemic in McCook on August 31, 2021. The workshop was titled "Flip it! Tips and Tools for Redeveloping Blighted Properties in Your Community" and included presentations from various resource providers and provided an opportunity for community members to discuss their challenging projects with the experts. The workshop was made possible thanks to collaboration with EPA Region 7, Kansas State University Technical Assistance to Brownfields Program (KSU TAB), McCook Economic Development Corporation, and the Benkelman Community Redevelopment Authority.

Other outreach events held in FY2022 include:

 Region 7 Federal Partners Grant Writing Workshop, October and November 2021

– NDEE helped plan and execute a three-part virtual grant writing workshop.



Megan Spargo with the Benkelman Community Redevelopment Authority gives a presentation at the McCook workshop on August 31. Ms. Spargo's presentation highlighted former blighted properties in her community that were successfully cleaned up or redeveloped and discussed how NDEE's Brownfields Program played a significant part in achieving that goal.

- South Central Economic Development webinar series, January 2022 NDEE's Brownfields Coordinator was a featured presenter SCEDD's monthly webinar series called "HomeNE," which aims to educate communities on available resources and successful strategies used to meet local housing needs. The NDEE Brownfields Coordinator's presentation, "Yes! A Home can be a Brownfield," discussed how the NDEE Brownfields Program has assisted Nebraska communities by completing ESAs, building materials surveys, and brownfield inventories on homes and commercial buildings. The webinar also discussed funding available to help with asbestos abatement.
- KSU TAB webinar, March 2022 NDEE again partnered with KSU TAB to hold a live webinar promoting brownfields resources and how the two programs work together to assist in redeveloping blighted properties in Nebraska.
- Nebraska Brownfields Resources Roadshow, June 2022 NDEE partnered with EPA and KSU TAB to hold three Brownfields Resources workshops in a single week in different areas of the state. The roadshow kicked off in Lincoln on June 14, traveled to Minden on June 15, and ended in Chadron on June 17. All three workshops were a great success based on feedback from the attendees and subsequent inquiries and applications for assistance received by NDEE. EPA, KSU TAB, and NDEE made an additional stop in Alliance to meet with city and economic development representatives and University of Nebraska Rural Fellowship program students at the abandoned Alliance Power Plant to discuss potential reuse visions for the plant.

The NDEE Brownfields Program also meets one-on-one with community members as an outreach approach. NDEE, along with KSU TAB and EPA, held three Partnership Resource Review virtual meetings the past year to discuss strategies to help a community develop a competitive EPA 104(k) Brownfields Assessment, Cleanup, or Revolving Loan Fund Grant Proposal, and make communities aware of the funding and technical assistance these programs have to offer. Communities that participated in a Partnership Resource Review meeting included:

- The City of Beatrice
- Southeast Nebraska Development District
- Box Butte Development Corporation including the City of Alliance.

The NDEE Brownfields Program also had separate calls with the following municipalities and organizations to discuss how the Brownfields Program can help bring their projects and vision to fruition:

- Cozad Development Corporation
- Chadron Community Hospital
- Oak Lake Development, LLC
- City of Minden
- Village of Kennesaw
- Village of Winslow
- City of Omaha Planning Department
- inCOMMON Community Development

Outreach efforts by the NDEE Brownfields Program also helped the non-profit, Angel's Share secure a technical assistance grant from the EPA. Angel's Share has been working to transform parts of the former Dana College campus in Blair into a center to accommodate youth who are aging out of foster care. The technical assistance grant will help provide a feasibility study, site planning, and exploration of different use options for the remaining vacant buildings on campus; and will map out all available resources that may assist with the redevelopment financial gaps. Additionally, KSU TAB and the KSU Department of Landscape Architecture and Regional & Community Planning has selected the City of Beatrice and Beatrice Public Schools to be the study area for the 2022 fall semester project. The class spends a semester developing reuse visions for specific brownfield sites. There are typically 4 -5 groups of students, with each group developing their own reuse concepts. The class will be working with the city and the school district to develop reuse ideas for four vacant school buildings.

Leveraged Funding

To facilitate the leveraging of public resources, NDEE's Brownfields Program collaborates with EPA Region 7, KSU TAB, and other partners to identify and make available resources that can be used for brownfields activities. NDEE tracks leveraged resources by evaluating the dollars leveraged, cleanup and redevelopment jobs leveraged, and acres made ready for anticipated reuse. In this Cooperative Agreement period (July 1, 2020 through June 30, 2023), Nebraska has received \$1,520,280 and has leveraged \$1,926,704 in additional cleanup and

LEVERAGED **FUNDING** \$4,000,000 \$3,500,000 ■ Redevelopment \$3,000,000 Leveraged **Funding** \$2,500,000 ■ Cleanup \$2,000,000 Leveraged \$1,500,000 **Funding** \$1,000,000 ■ NDEE Section 128(a) \$500,000 Leveraged \$0 **Funding**

redevelopment funding, 42 cleanup and redevelopment jobs, and 144.65 acres ready for anticipated reuse.

Resource Conservation and Recovery Act (RCRA) Program

The NDEE received authorization from the EPA in 1985 to administer portions of the Resource Conservation and Recovery Act (RCRA) program. Nebraska Administrative Code (NAC) *Title 128 - Nebraska Hazardous Waste Regulations* incorporates the applicable RCRA regulations, which the NDEE updates as Federal 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 the clean-up of hazardous waste that has been released to the environment through the RCRA Corrective Action program
- Maintaining data systems to support decision-making and making information available to the public.

The Compliance Assistance Program helps Nebraska businesses, government entities, and private citizens comply with hazardous and solid waste regulations in a non-enforcement setting. This program works with the regulated community in a partnership and promotes 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 inspecting 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 prevent the release of hazardous substances into the environment. Closure actions are required for treatment, storage, or disposal facilities that discontinue operations or that have operated without a permit. Permits are required for all operating treatment, storage, and disposal facilities. Post-closure permits are required for treatment, storage, and disposal facilities that have gone through closure and have contamination remaining on-site.

There is one operating hazardous waste storage and treatment facility in Nebraska: the Clean Harbors Environmental Services, Inc. incinerator near Kimball, which began operation in 1994. This facility undergoes annual performance test burns to demonstrate proper operation and compliance with applicable regulations and permit requirements. Operational and physical changes at the Clean Harbors incinerator, made to improve the performance of the facility and ensure compliance with applicable regulations, result in numerous permit modifications. In addition, Clean Harbors has announced plans to expand the Kimball facility in 2023. Nebraska also oversees two active hazardous waste storage facilities that do not treat hazardous waste.

Corrective action 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. NDEE has administered the RCRA Corrective Action Program since January of 2017.

Significant Accomplishments

Significant corrective action accomplishments during FY2022 include the reissuance of the Tenneco Automotive Company, Inc. RCRA permit.

EPA continues to move generators to use the e-manifest module that is part of the national RCRAInfo database. Nebraska recommends generators use the e-manifest system, which provides a more 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. 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. This provides the public a clearer understanding of wastes generated and disposed, and the process it followed to disposal.

Nebraska's RCRA program helps generators notify and manage their generator status by having them use the myRCRAID module, also within the national RCRAInfo database. In addition, Nebraska recommends that the facility hazardous waste managers prepare their 8700-12 Hazardous Waste notification form electronically. The Department currently has over 800 facilities that have requested and received permission to file electronically. NDEE approves the requests electronically, which saves NDEE and the hazardous waste facilities time, equating to money saved. Each generator then has electronic notification (email documentation) of the last time their status was updated and by whom.

As a result of process improvement, the RCRA Section emails confirmations to generators who submit 8700-12 Hazardous Waste notification through the US EPA RCRAinfo system and for contingency plan update submittals mailed in to NDEE. The electronic system helps the department save time and reduce costs.

Program Funding

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

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

Currently, the RCRA Program oversees the following active sites:

- 107 Large Quantity Generators (greater than 2,200 pounds of hazardous waste generated per month)
- 427 Small Quantity Generators (between 220 and 2,200 pounds generated per month)
- 1,449 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
- 1 Hazardous Waste Incinerator Facility
- 3 Treatment, Storage or Disposal Facilities
- 19 Hazardous Waste Transporters

Location by County of Large Quantity Generators in Nebraska Regulated Under RCRA				
Buffalo 4	Hall 4	Otoe 1	Seward 3	
Cuming 1	Hooker 1	Phelps 1	Stanton 1	
Cheyenne 1	Holt 2	Platte 7	Washington 2	
Dakota 2	Kimball 1	Red Willow 1	Wayne 1	
Dodge 2	Knox 1	Sarpy 7	York 1	
Douglas 29	Lancaster 26	Saunders 3		
Gage 1	Madison 2	Scotts Bluff 2		

Summary of FY2022 Activities				
Compliance Assistance	State	EPA		
On-site Visits	2	*		
Direct Assistance Contacts	785	*		
Public Outreach Presentations (total 245 in attendance)	4 / 245	*		
Complaints Received	14	*		
Complaints Investigated	14	*		
Complaints Closes	14	*		
	*L	Data not available		
RCRA Inspections				
Land Treatment Facilities	0	0		
Treatment, Disposal, and Storage Facilities	2	1		
Comprehensive Groundwater Monitoring Evaluations	0	0		
Operation and Maintenance Inspections	0	0		
Facility Self-Disclosure	0	0		
Large Quantity Generator	12	1		
Small Quantity Generator	8	2		
Conditionally Exempt Small Quantity Generators	3	4		
Transporters	0	0		
RCRA Permitting	•			
Closure Plans Finalized	1	0		
Permits Issued/Renewed	1	0		
Modifications	2	0		
EPA Corrective Action Orders	0	0		
RCRA Record Reviews	•	•		
Financial Assurance Closure/Post Closure	11	0		
Corrective Action	17	0		

Superfund Program

Thousands of contaminated sites exist nationally due to hazardous waste being improperly managed. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) became federal law in 1980 to clean up these sites, which include manufacturing facilities, processing plants, landfills, and mining sites. Superfund is a federal cleanup program designed to investigate and cleanup sites contaminated with hazardous substances under CERCLA. Sites in the Superfund program that are listed on the National Priorities List (NPL) are considered the most highly contaminated and undergo longer-term remedial investigation and cleanups. These sites pose the highest risk to human health and the environment in the nation.

The EPA, with concurrence from the State of Nebraska, determines whether a site should be listed on the NPL. Nebraska currently has 17 active NPL sites. One site, the Waverly Groundwater Contamination Site, was removed from the NPL on November 20, 2006, upon achieving the cleanup goals for the site. Thirteen of the sites are in the cleanup phase and four sites are relatively new to the NPL and are in the site study stage.



Under the Superfund program, EPA has the authority to mandate the parties responsible for the contamination to either perform the cleanup or provide reimbursement for EPA-led cleanup. If the responsible parties are no longer in business or cannot be identified, then EPA has the authority to finance and perform the cleanup itself. State cost obligations occur when the responsible party lacks the financial resources so federal funds are used to pay for the cleanup.

The investigation and remediation of contaminated sites under CERCLA are the primary responsibility of EPA and other federal agencies. NDEE participates in the Superfund process by serving as a technical support agency to EPA and as the environmental representative for the State of Nebraska. This investigation and remedial work at Nebraska Superfund sites make a visible and lasting difference in communities across the state, giving people healthy places to live and work. NDEE provides technical assistance to EPA Superfund efforts across two programs: the Superfund Site Assessment Program and the Superfund Management Assistance Program.

Superfund Site Assessment Program

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 around contaminated municipal and private drinking water supply wells or where there is a significant potential for groundwater contamination. It is also becoming more common to investigate sites for potential vapor intrusion from contaminated soil or groundwater.

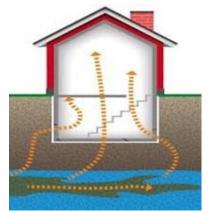


Photo courtesy of the Minnesota Pollution Control Agency

What is Vapor Intrusion?

Volatile organic compounds (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

Site assessment steps:

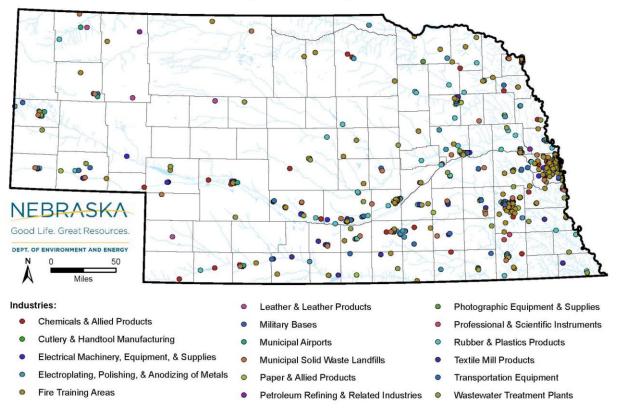
- 1. Pre-CERCLA Screening Assessment. This step is a review of existing information on a potential site to determine whether a release has occurred requiring further evaluation through the Superfund process.
- 2. Abbreviated Preliminary Assessment. This step involves collecting background information such as property ownership, operational history, and geology/hydrogeology, and performing a site reconnaissance.
- 3. Site Inspection. This step involves sampling environmental media, such as soil, soil gas, and groundwater, and evaluating vapor intrusion into indoor air of building structures. In some situations, a combined Preliminary Assessment and Site Inspection is conducted.
- 4. Expanded Site Inspection. This step is performed at large and/or complex sites to collect additional soil and groundwater samples to further define the extent of contamination.

5. Site Re-Assessment. This step is performed at some sites if new information is obtained that indicates that a threat to public health and/or the environment may exist.

During the past year, NDEE has performed work on three Pre-CERCLA Screening Assessments, six Abbreviated Preliminary Assessments, three Site Inspections, two Expanded Site Inspections, and seven Site Re-Assessments.

NDEE often uses inventories to guide its prioritization of site assessment projects. In 2017, NDEE compiled a Statewide Inventory of Per- and Polyfluoroalkyl Substances (PFAS). PFAS are a large group of man-made chemicals that have been used in consumer products, industrial processes, and firefighting foams since the 1940s. PFAS are resistant to heat, oils, stains, grease, and water, and break down very slowly over time. These unique properties contribute to their wide use and persistence in the environment. The figure below illustrates the locations of industries present across the state that potentially used or manufactured PFAS based on the 2017 Statewide Inventory.

Nebraska Statewide Inventory Per- and Polyfluoroalkyl Substances



EPA has identified PFAS as contaminants of emerging concern that can have adverse health effects if found in drinking water supplies. One of the main uses of PFAS is in aqueous film-forming foam (AFFF), which is a commercial surfactant solution used to extinguish hydrocarbon fires. The Federal Aviation Administration requires the storage, use, and testing of AFFF firefighting foams at all airports that have a Federal Aviation Regulation Part 139 Airport

Operating Certificate. Releases of AFFF to the environment may have occurred during routine training and testing exercises, or as a result of a discharge from actual aircraft rescue situations, fixed fire protection (aircraft hangar deluge) systems, or the removal and replacement of AFFF concentrate from vehicles during maintenance. Additionally, residual AFFF/ AFFF wastewater may have drained to existing infrastructure on the airport property to be directed to a wastewater treatment facility. In Nebraska, nine municipal airports have a Part 139 Airport Operating Certificate. During the past two years, NDEE completed Abbreviated Preliminary Assessments at all nine of these sites to evaluate any potential impacts to the environment.

Other high priority processes and facilities identified in the Statewide Inventory include metal and chrome plating facilities and fire training areas. During the past year, NDEE evaluated three sites to determine whether PFAS and VOCs were present in groundwater downgradient of industrial areas with electroplating facilities and fire stations. Fire training areas are areas of interest that will be investigated as Pre-CERCLA Screening Assessments in the future.

NDEE continued to work with the EPA Region 7 Superfund Site Assessment and Removal Programs to investigate the potential for vapor intrusion near former dry cleaners in Bellevue and Norfolk. At both of these sites, tetrachloroethene (PCE) and trichloroethene (TCE), which were commonly used in the dry-cleaning industry, were found in soil and groundwater. In Bellevue, vapor mitigation systems have been 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 site in Bellevue is proposed for the NPL.





Vapor mitigation system at a residence; view is of the protective cover (left) and installed fan (right).

NDEE also assists EPA Region 7 in determining when no further action is warranted at a site in the Superfund Site Assessment Program. During the past year, NDEE received a request from EPA to archive six sites from the Superfund Active Site Inventory. NDEE is continuing its review of these sites to ensure that there will be no impact to human health and the environment if no further remedial action is planned.

Superfund Management Assistance Program

The Superfund Management Assistance program provides management and technical support to EPA at NPL 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, NPL 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. NDEE also participates in public meetings with citizens and local officials in the development of cleanup plans.

EPA 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 Nebraska sites on the National Priorities List, seven are being addressed by the responsible party. The remaining ten sites either are or will be partially or fully financed by Federal and State funds (i.e., "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 ten years of the project. State cost obligations may be waived for a portion of the cleanup if EPA uses funds derived from a settlement (or other instrument) with potentially responsible parties or if funds are provided by the Infrastructure Investment and Jobs Act (IIJA) of 2021. After the initial ten years, the State pays 100% of the operation and maintenance costs.

Initially, NDEE funded these costs with Legislative appropriations of general funds. During 2004-2007, NDEE received Nebraska Environmental Trust grant funding to pay these costs. Beginning in FY18, NDEE 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 FY2022, NDEE's cost share was \$551,278. Future projections of these costs are \$876,689 in FY2023, \$1,029,223 in FY2024, and \$1,390,912 in FY2025.

During the last year, NDEE paid 100% of costs related to cleanup at the Columbus 10th Street site, Hastings Second Street Operable Unit (OU) 20 subsite, Ogallala OU 2 subsite, and Parkview Well site. NDEE expects taking over operation and maintenance of the cleanup at the Cleburn Street site in Grand Island around July 1, 2023.

- At the Columbus 10th Street site, NDEE completed the first Adaptive Management Study pilot in EPA Region 7. This was a collaborative effort with EPA and the City of Columbus to determine when it may be possible to shut down the groundwater extraction and treatment system and utilize an in-situ treatment remedy to clean up the remaining groundwater contamination. NDEE is currently completing a pilot study for in-situ treatment. NDEE also completes ongoing groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections.
- At the Hastings Second Street OU 20 subsite, NDEE decommissioned the in-well aeration system. The in-well aeration system was used as an interim remedy to treat groundwater contamination, but technical and operational issues prevented NDEE

from operating the system. This resulted in a cost savings of ~\$19,000 per year to NDEE. NDEE also completes ongoing groundwater sampling and in-situ treatment.

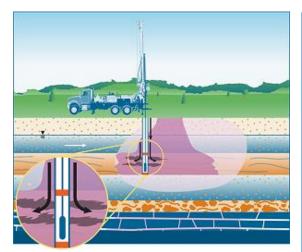


Image courtesy of the Interstate Technology Regulatory Council

What are In-Situ Injections?

In-situ remediation treats contamination "in place" using chemical or biological approaches. This can be done below ground surface and with minimal disturbance by injecting the chemical or biological substrate directly into the groundwater. The substrate is injected at the appropriate depths and locations to allow it to come

- At the Ogallala OU 2 subsite, NDEE is completing ongoing groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections.
- At the Parkview Well OU 1 subsite in Grand Island, NDEE is operating and maintaining a groundwater extraction and treatment system. NDEE also completes ongoing groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections.

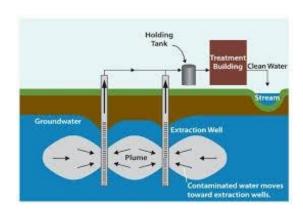


Image courtesy of the Environmental Protection Agency

What is Groundwater Extraction and Treatment?

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.

In FY2023, NDEE will be paying 10% of costs related to cleanup at the Garvey Elevator OU 1 subsite in Hastings. Within the next five years, NDEE expects that IIJA funds will be used for cleanup at the Garvey Elevator OU 1 and OU 2 subsites, Hastings Second Street OU 12 subsite, Parkview Well OU 2 subsite, West Hwy 6 OU 1 and OU 2 subsites in Hastings, and PCE Southeast OU 1 and OU 2 subsites in York. The expected IIJA funds is expected to result in a cost savings of \$4,437,377 in NDEE's cost share.

The Omaha Lead site is associated with two former lead-processing facilities, American Smelting and Refining Company, Inc. (ASARCO) and the Aaron Ferer & Sons Company (later the Gould Electronics, Inc.) lead battery recycling plant. Both the ASARCO and Aaron Ferer/Gould facilities released lead-containing particulates to the atmosphere from their smokestacks, which were deposited on surrounding residential properties. NDEE concurred with the partial delisting of 19 properties this year; the partial deletion rule allows EPA to delist portions of NPL sites provided that deletion criteria are met. This allows portions of a site to be available for productive use before cleanup of the entire site has been completed. To date, a total of 2,281 partial deletions from the NPL have been made at the Omaha Lead site. Overall, 13,464 properties in Omaha have been remediated with just 573 properties remaining to be cleaned up.

Below is a list of the 17 active NPL 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 288th Street (Valley)

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

Federal Facilities

Defense and State Memorandum of Agreement (DSMOA) Program

Under the DSMOA program, NDEE oversees investigation and cleanup of munitions and hazardous substances at current federal facilities, such as Offutt Air Force Base, and formerly used defense sites (FUDS), such as the former Nebraska Ordnance Plant near Mead. The cleanup efforts are conducted by a Department of Defense component, such as the Air Force or the Army Corps of Engineers. Investigation and cleanup of hazardous substances follow the Superfund CERCLA process. Some sites must first be investigated and cleared of munitions and unexploded ordnance before CERCLA work can begin. NDEE also reviews previous nofurther-action decisions for facilities and if needed, provides non-concurrence with recommendations for further work. During FY2022, investigation and cleanup activities for hazardous substances were conducted at 2 active sites and 12 formerly used defense sites, and military munitions response activities were performed at 5 sites.

PFAS were found at Offutt Air Force Base and the Lincoln Air National Guard Base prior to FY2022; however, to date no threats or impacts to public or private drinking water supplies have been found. During FY2022, follow-up investigations were conducted at Offutt Air Force Base.

Former USDA/CCC Grain Storage Facilities

Nebraska contains 332 former U.S. Department of Agriculture/Commodity Credit Corporation (USDA/CCC) grain storage facilities. The soil, groundwater, and soil vapor at and near many of these former grain storage facilities is contaminated with carbon tetrachloride, which was commonly used as a grain fumigant during their operation. The USDA/CCC is

currently prioritizing, investigating, and cleaning up these former grain storage facilities, and installing vapor mitigation systems in occupied buildings as needed. Investigation and cleanup follow the Superfund CERCLA process. NDEE oversees these efforts under a Nebraska Voluntary Cleanup Program agreement with the USDA. During FY2022, remedial actions were conducted at three sites, investigations were ongoing at 3 sites, new groundwater investigations were started at 4 sites, and vapor intrusion investigations were begun at 30 sites.

Solid Waste Program

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

Duties assigned to this program include:

- Permit issuance, renewal, and modification;
- Response to inquiries related to facility operations;
- Compliance inspections and enforcement actions;
- · Investigation of citizen complaints;
- Alternate waste management method approvals;
- Groundwater investigations and groundwater/soil remediation projects at permitted and non-permitted facilities;
- Gas emissions monitoring related to landfills and other permitted sites:
- Closure inspections and monitoring of closure and post-closure activities;
- Conducting public information sessions and hearings related to permits;
- Financial assurance review and monitoring compliance; and
- 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 the disposal (one time and repeated) or treatment of special wastes. In addition, solid waste processing facilities, such as compost sites, material recovery facilities, transfer stations, and medical waste processing facilities are regulated by this program.

Permit modification requests are routinely submitted by permitted facilities. Responses to the modification requests are particularly time-critical since the facility may need to expand or construct new waste disposal cells in order to meet their disposal capacity needs.

A Solid Waste Management Programs Study conducted in 2016 provides a complete description of Nebraska's solid waste programs and reported that the average remaining capacity for waste disposal is approximately 39 years.

The Waste Permit programs coordinate with other NDEE 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, amongst other regulatory requirements.

Currently, the Waste Permit and Waste Compliance Programs oversee the following facilities:

Total Permitted Facilities in FY2022		
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	7	
Total	113	

The following table indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2022:

Summary of FY22 Activities			
Compliance Assistance			
Facility Inspections (General)	120		
Facility Closure Inspection	2		
Facility Construction Inspections	0		
Facility Comprehensive Renewal Inspections	21		
Complaints Received	139		
Complaints Investigated	139		
Complaints Closed or Referred	126		
Permitting			
New Permits Issued	0		
Permit Renewals	21		
Major Permit Modifications	3		
Public Hearings	0		
Permits Transferred	0		
Financial Assurance Reviews	182		
Facilities Closed	2		

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 of contaminants from the facility. During FY2021, 14 operating and 4 closed facilities conducted detection monitoring. If one or more of the parameters being monitored exceed background levels, the facility must begin assessment monitoring, which includes a more extensive list of contaminants. During FY2021, 16 operating and 3 closed facilities conducted assessment monitoring.

If during the assessment monitoring phase, contaminant concentrations are detected above a groundwater protection standard, the facility is required to characterize the nature and extent of the release and, if necessary, assess and conduct remedial measures. In FY2021 investigations or remedial measures were continued at 4 active and 2 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 NAC *Title 118 – Groundwater Quality Standards and Use Classification*. In FY2021, groundwater investigations continued at one site, and remedial actions continued at 9 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 Permit 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 50% 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

The NDEE also administers the waste tire management program. Approved beneficial uses of waste tires are outlined in NDEE regulations. Waste tire haulers are required to obtain

individual permits annually and 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 while maintaining mosquito control and fire prevention measures. Accumulation of more than 500 waste tires at any location is prohibited by rule.

Compliance assistance is an important aspect of this program. Program activities include responding to inquiries from local and state sources, developing guidance documents, conducting site visits, and providing technical advice. The NDEE develops and maintains guidance documents explaining on a wide variety of topics, including 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.

Waste Tire Permit Totals, FY2022 Permitting		
Renewed Hauler Permits	23	
New Permits Issued	1	
Permits Expired	2	
Financial Assurance Reviews	10	

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.