

NDEE Agency Update

2022 Power Summit

Kara Valentine, DEE Deputy Director

Outline

- General Agency
- Legislative Update
- VW Settlement Funding
- IIJA, ARPA, IRA Funding
- Grid Resiliency
- Process Improvement
- Emerging Opportunities/Challenges

Legal	Administration	Inspection and Compliance	Planning and Aid	Permitting and Engineering	Drinking Water and Groundwater	Monitoring and Remediation
Water	PIO, IT, HR, Fiscal, Records, Office Assistants, Emergency Response, Process Improvement	NPDES, Onsite, and Livestock Compliance	Water Planning and SRF	Drinking Water Technical Assistance, NPDES & State (Permits	Drinking Water Monitoring & Compliance, Field Services, Groundwater, & CWA 404	Surface Water Monitoring & Petroleum Remediation
Land		Waste Compliance	Grants	Waste Permits		Remediation
Air		Air Compliance	Air Grants (DERA)	Air Permits		Air Monitoring
Energy				Weatherization, DESL & State Programs		

Legislative Update

LB 809

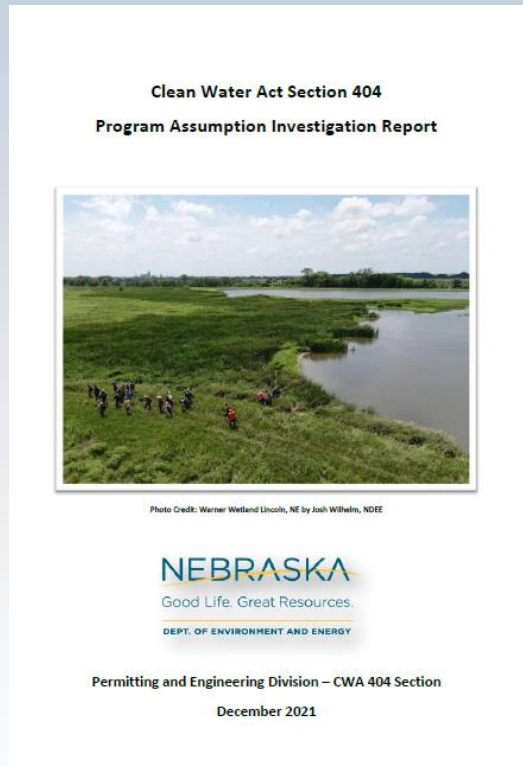
Clean Water Act (CWA) 404 Program Assumption:

- Appropriations Bill \$1.7 million for staff and a permitting portal
- Develop State Program Application according to 40 CFR §233
- Will hire new staff and begin outreach to stakeholders and develop remaining program elements.

State Revolving Loan Fund:

- The ability to refinance Drinking Water SRF loans
- Increasing the allowable percentage of grant and forgiveness assistance for projects, now up to 75% from 50%
- Extending the ability to offer grant and forgiveness assistance to all public water systems for Lead Service Line Replacement projects.

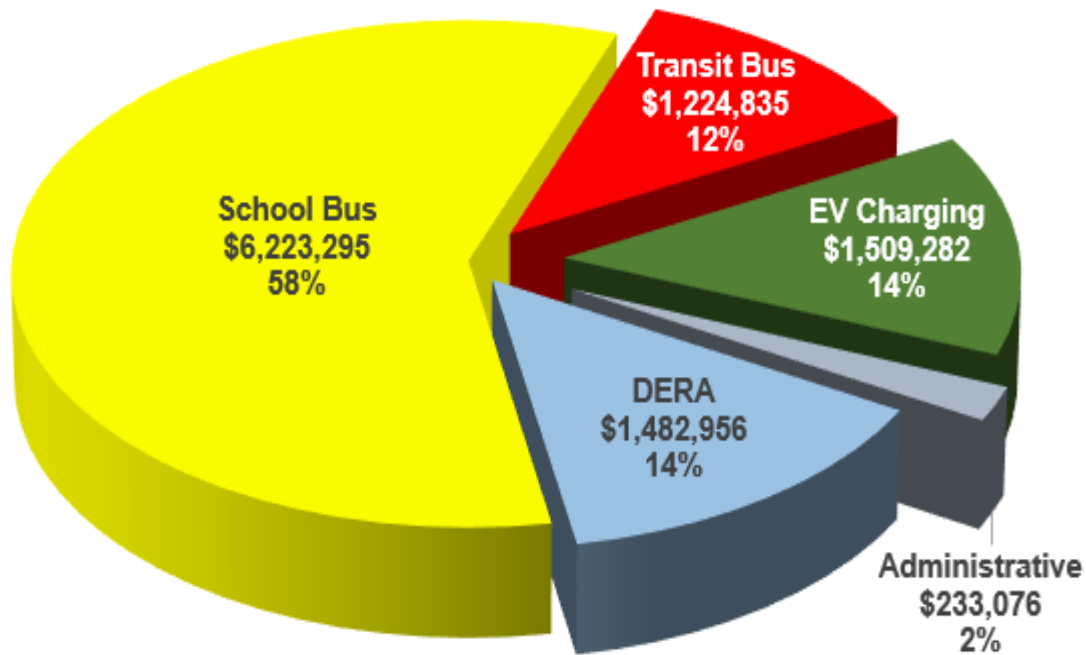
CWA 404 Program Assumption



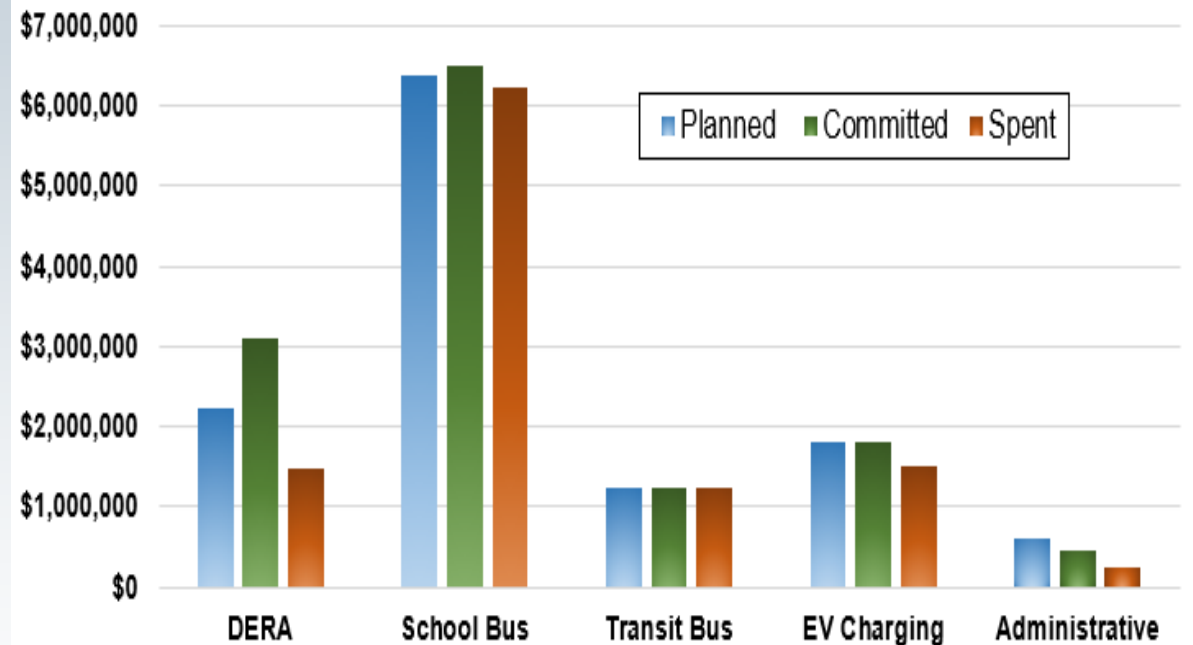
- LB302: Investigated Assumption Feasibility (2019-2021)
 - Analyzed workload, staffing level, implementation costs, funding
 - Complete in 2021, available on our webpage
- LB809: Program Development (2022-2024)
 - Appropriations Bill \$1.7 million for staff and a permitting portal
 - Develop State Program Application according to 40 CFR §233
 - New 404 supervisor is Dane Pauley
 - Will hire new staff and begin outreach to stakeholders and develop remaining program elements.

VW Settlement Funding Update

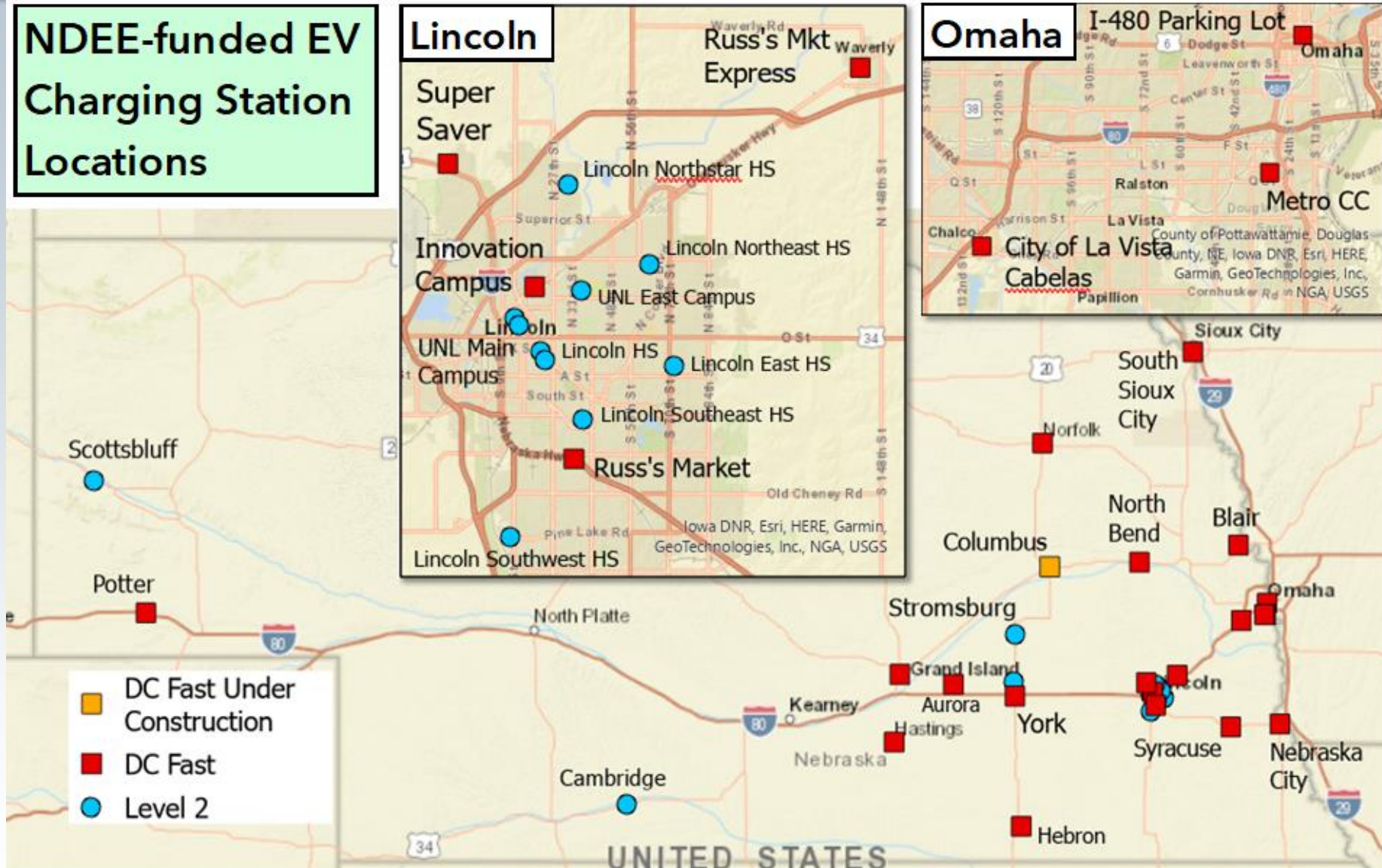
VW Funds Spent by Category as of 6/30/2022



VW Funding Categories: Planned, Committed, & Spent



NDEE-funded EV Charging Station Locations



Funding

- Infrastructure Investment & Jobs Act (IIJA)
- American Recovery Plan Act (ARPA)
- Inflation Reduction Act (IRA)

Infrastructure Investment & Jobs Act (IIJA)

Energy Programs Estimated Funding

Fiscal Year	State Energy Program (SEP)	Energy Efficiency Revolving Loan Fund Grant Program	Weatherization Assistance Program (WAP)	Section 40101(d) Grid Resiliency
FY 2022	\$5 Million	\$1 Million	\$24 Million	\$5 Million
FY 2023				\$5 Million
FY 2024				\$5 Million
FY 2025				\$5 Million
FY 2026				\$5 Million

Water Infrastructure

- Bipartisan Infrastructure Law (BIL), Appropriations & State Match

Fiscal Year	Base Program— Annual Allotments	State Match— 20%	BIL General— Annual Allotments	State Match— 10% to 20%	Emerging Contaminants	CWSRF
FFY 2022	\$5,978,000	\$1,195,600	\$9,103,000	\$910,300	\$478,000	\$17,664,900
FFY 2023	\$7,600,000	\$1,520,000	\$10,531,000	\$1,053,100	\$1,075,500	\$21,779,600
FFY 2024	\$7,600,000	\$1,520,000	\$11,531,000	\$2,306,200	\$1,075,500	\$24,032,700
FFY 2025	\$7,600,000	\$1,520,000	\$13,531,000	\$2,706,200	\$1,075,500	\$26,432,700
FFY 2026	\$7,600,000	\$1,520,000	\$13,531,000	\$2,706,200	\$1,075,500	\$26,432,700

Fiscal Year	Base Program— Annual Allotments	State Match— 20%	BIL General— Annual Allotments	State Match— 10% to 20%	Emerging Contaminants	Lead Service Line Replacements	DWSRF
FFY 2022	\$7,008,000	\$1,401,600	\$17,992,000	\$1,799,200	\$7,555,000	\$28,350,000	\$64,105,800
FFY 2023	\$9,100,000	\$1,820,000	\$20,928,830	\$2,092,883	\$7,555,000	\$28,350,000	\$69,846,713
FFY 2024	\$9,100,000	\$1,820,000	\$22,886,717	\$4,457,343	\$7,555,000	\$28,350,000	\$74,169,060
FFY 2025	\$9,100,000	\$1,820,000	\$24,844,604	\$4,968,921	\$7,555,000	\$28,350,000	\$76,638,525
FFY 2026	\$9,100,000	\$1,820,000	\$24,844,604	\$4,968,921	\$7,555,000	\$28,350,000	\$76,638,525

American Recovery Plan Act (ARPA)

Legislative Bill 1014e – Nebraska State Allocation of ARPA

Section 51: Reverse Osmosis: Grants for reverse osmosis treatment to remove nitrates from drinking water

Total Funding: \$4,000,000

Section 52: State Fair Ground Project: funding for wastewater and drainage system updates at the state fair grounds.

Total Funding: \$20,000,000

Section 53: Rural Drinking Water Project: Grant assistance for Rural public water systems that supply drinking water to at least four communities that receives drinking water from a surface water source.

Total Funding: \$7,000,000

Enhancing Continuous Monitoring For Air Pollutants:

\$156,930 Direct Award via EPA for Enhancing Continuous Monitoring of PM2.5 and Other NAAQS Air Pollutants 2022-2023

Inflation Reduction Act (IRA)

Section 40101(d) Grid Resiliency

- The objective of this Program is to improve the resilience of the electric grid against disruptive events. Per IJA section 40101(a)(1), a disruptive event is “an event in which operations of the electric grid are disrupted, preventively shut off, or cannot operate safely due to extreme weather, wildfire, or a natural disaster.” To achieve this objective, funding provided by DOE under this Program may be used to implement a wide range of resilience measures intended to mitigate the impact of disruptive events, including:

Eligible Projects

- a) utility pole management
- b) hardening of power lines, facilities, substations, of other systems
- c) the undergrounding of electrical equipment
- d) the replacement of old overhead conductors and underground cables
- e) the relocation of power lines or the reconductoring of power lines with low-sag, advanced conductors
- f) vegetation and fuel-load management, g) weatherization technologies and equipment
- h) fire-resistant technologies and fire prevention systems
- i) monitoring and control technologies
- j) the use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including:
 - i. microgrids, and
 - ii. battery-storage subcomponents
- k) adaptive protection technologies, and
- l) advanced modeling technologies.

Not Eligible

Federal funds may not be used for:

- A. Construction of a
 - a. new electric generating facility or
 - b. large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events;
- B. Cybersecurity.

Eligible Entities

1. an electric grid operator
2. an electricity storage operator
3. an electricity generator
4. a transmission owner or operator
5. a distribution provider
6. a fuel supplier, and
7. any other relevant entity, as determined by the Secretary (i.e., by DOE)

Grid Resiliency Funding

States, Territories, and Tribes via annual formula grant

\$2.3 Billion (approximately \$459 million per year for FY 2022–2026)

Nebraska Allocation: **\$5,440,249 each year through 2026**

*Up to 5% can be used for Technical Assistance/Administrative expense associated with the program.

Required Match

State Match - 15% cost match

- First year based on draft allocation 15% match be **\$816,037**
- Estimating over five years we would have a required match of approximately **\$4,080,186**

Subgrantee Match:

100 percent or 1/3 for entities that sell \leq 4 million megawatt hours of electricity per year

NOTE: States can pass the 15% match onto the eligible entities, in addition to the 100% or 1/3 match required of eligible entities.

Section 40101(d) Next Steps

- NDEE designated as lead agency
- NDEE application to DOE due March 31st, 2023
- Stakeholder input and public hearing

NDEE Process Improvement

NRD/NDEE Kaizen

- Kaizen event Oct 18th & 19th
- Pre-Kaizen meeting w all NRDs Oct 3rd
- Goal: Identify issues and barriers and commit to solutions to protect and improve water quality and public health.



SRF Kaizen Project Background

- The NDEE receives approximately \$20 million per year in capitalization grants from EPA.
- Grant funds have five years to be utilized and there is a state cash fund balance of over \$300M which must be disbursed to meet all Federal conditions.
- The pace of loan development varies, slower at times than desired, and then faster, resulting in a backlog of loans being executed.
- Growth from 30 to 40 per year to 60 to 80 loans annually will occur in the program over the next 5 years due the recent passage of the infrastructure bill.

Team Photo



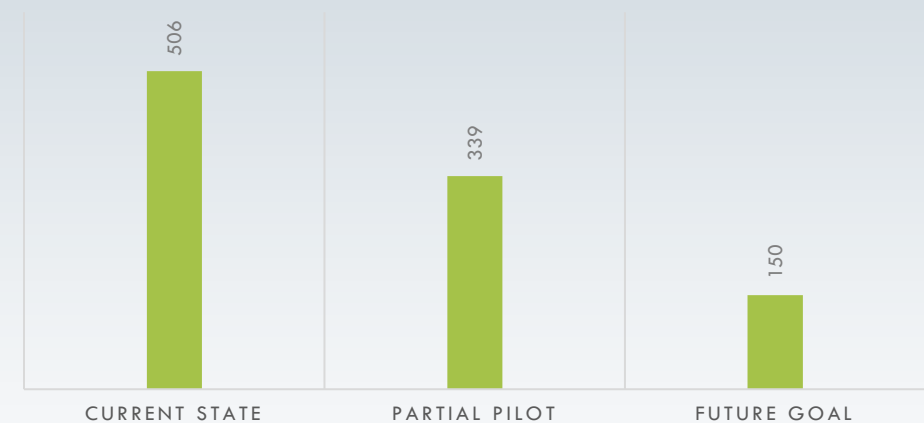
Results

- New financial detail sheet
- New orientation letter with checklist for borrowers (in draft phase)
- New loan survey document
- New Davis-Bacon SRF monthly report
- Central location for loan documents in the N:Drive
- KanBoard with recommended time allotment for each stage of the loan
- Re-ordering of loan steps and running some steps concurrently
- Number of process steps reduced from **63** to **51**

Metrics

- Partial project pilot (applications received prior to Kaizen): reduced average days from signed application to signed loan from **506 days** to **339 days**
- Goal timeframe: **150 days** from application received to signed loan

AVERAGE DAYS FROM SIGNED APPLICATION TO SIGNED LOAN

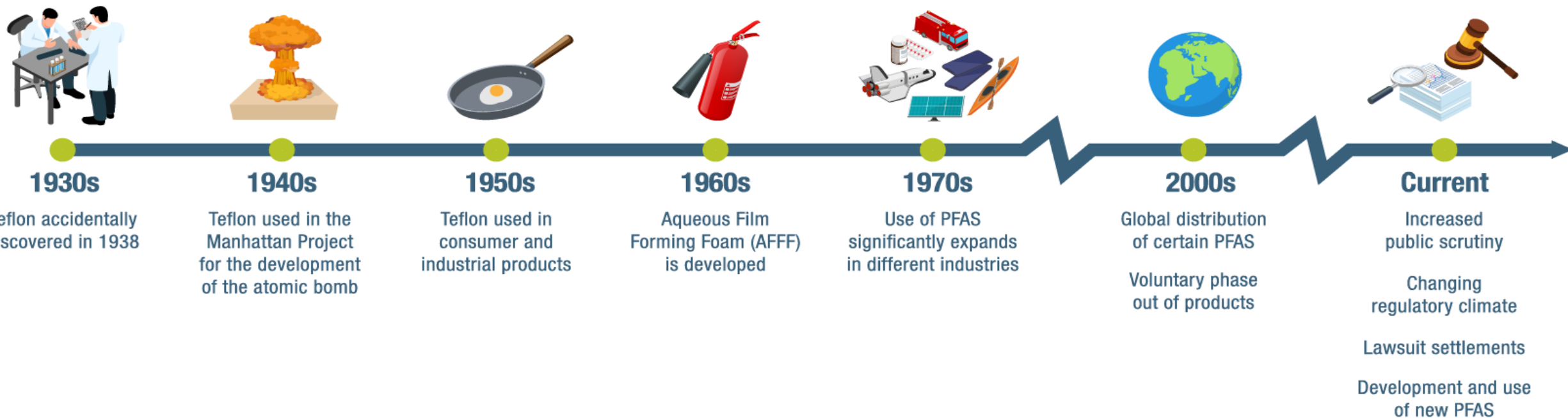


Opportunities, Challenges, Celebrations

- PFAS
- AltEn
- EtO
- Alvo Tire Site
- Emission Trends
- Energy Awareness Month

What are PFAS?

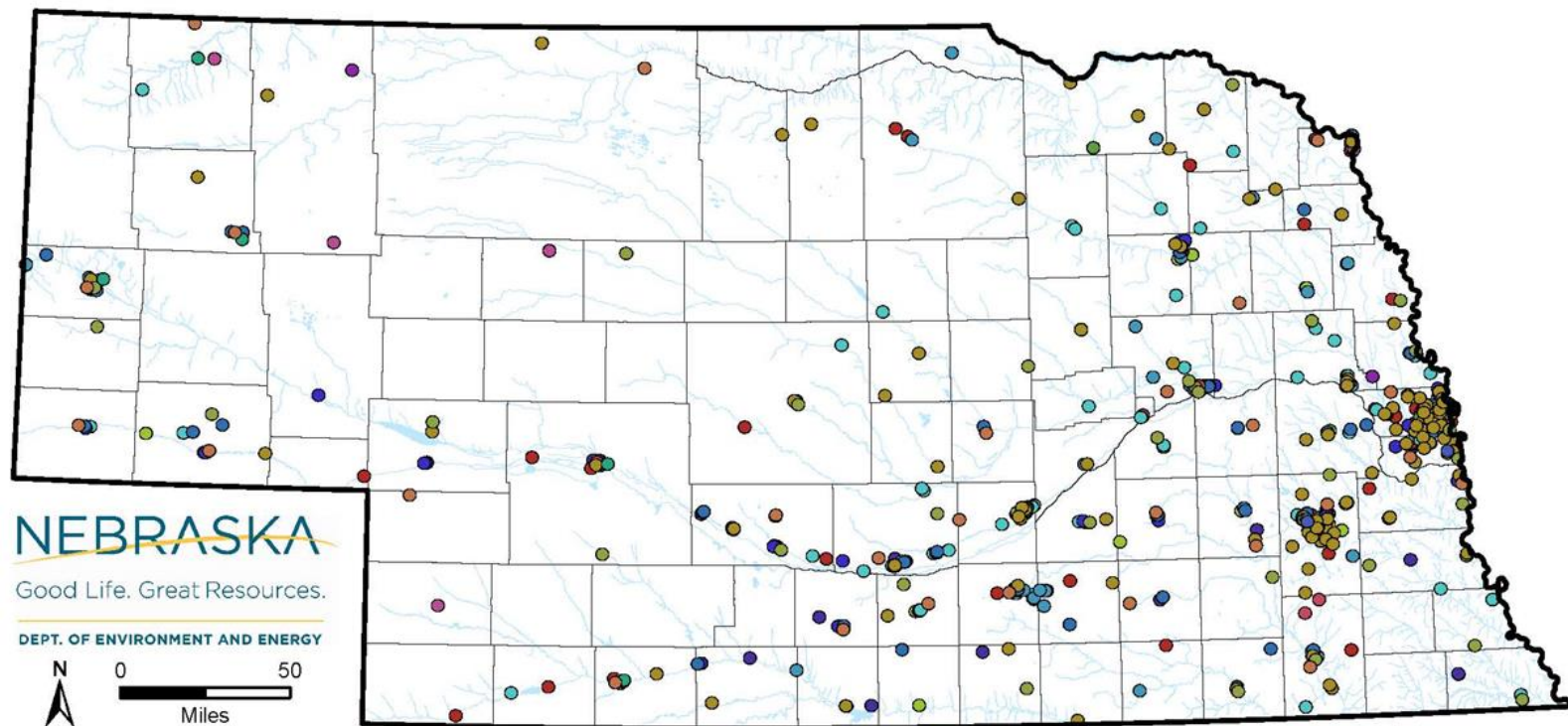
- Per- and poly-fluoroalkyl substances (PFAS) are a large group of man-made chemicals that are widely used in consumer products, industrial processes, and firefighting foams
- PFAS have seen increased regulatory scrutiny due to their persistence in the environment, toxicity at low concentrations, and widespread distribution.



PFAS Inventory

- Intended to identify sites where PFAS contamination is likely
- 990 facilities identified:
 - Standard Industrial Classification (SIC) codes
 - North American Industry Classification System (NAICS) codes
- Compilation of the inventory was not exhaustive

Nebraska Statewide Inventory Per- and Polyfluoroalkyl Substances



Industries:

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

Currently in Site Assessment Sampling

- Airport sampling has largely been completed
- Working with a contractor to process data, create easily shared map/report of findings
- Moving on to other industries identified in PFAS inventory (electroplating)



AltEn Update

AltEn LLC - Storm Water BMP Inspection Map



Monitoring Wells

Address: 11344 County Road 10, Mead NE
NDEQ ID: 84069
Program ID: NE0137634



NEBRASKA
DEPT. OF ENVIRONMENT AND ENERGY

JW - July 2022



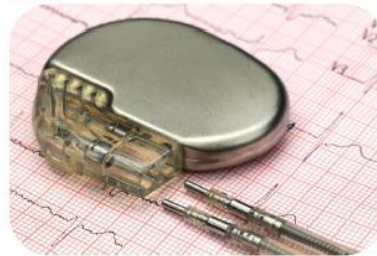
09.22.2022 10:59 AM
41.19777, -96.47674
1344 County Rd N, Mead, NE 68041, USA

Commercial Sterilizer Use of Ethylene Oxide in Columbus, NE

What is Ethylene Oxide?

- Gas
- Colorless
- Flammable
- Odorless

(in concentrations we see in communities)



4

Massive scrap tire pile in Alvo is no more

Village and new recycler look ahead



BEFORE: A pile of scrap tires, pictured here in July of 2021, once stretched over a large portion of a scrap yard in Alvo (Photos provided by Nebraska Department of Environment and Energy)



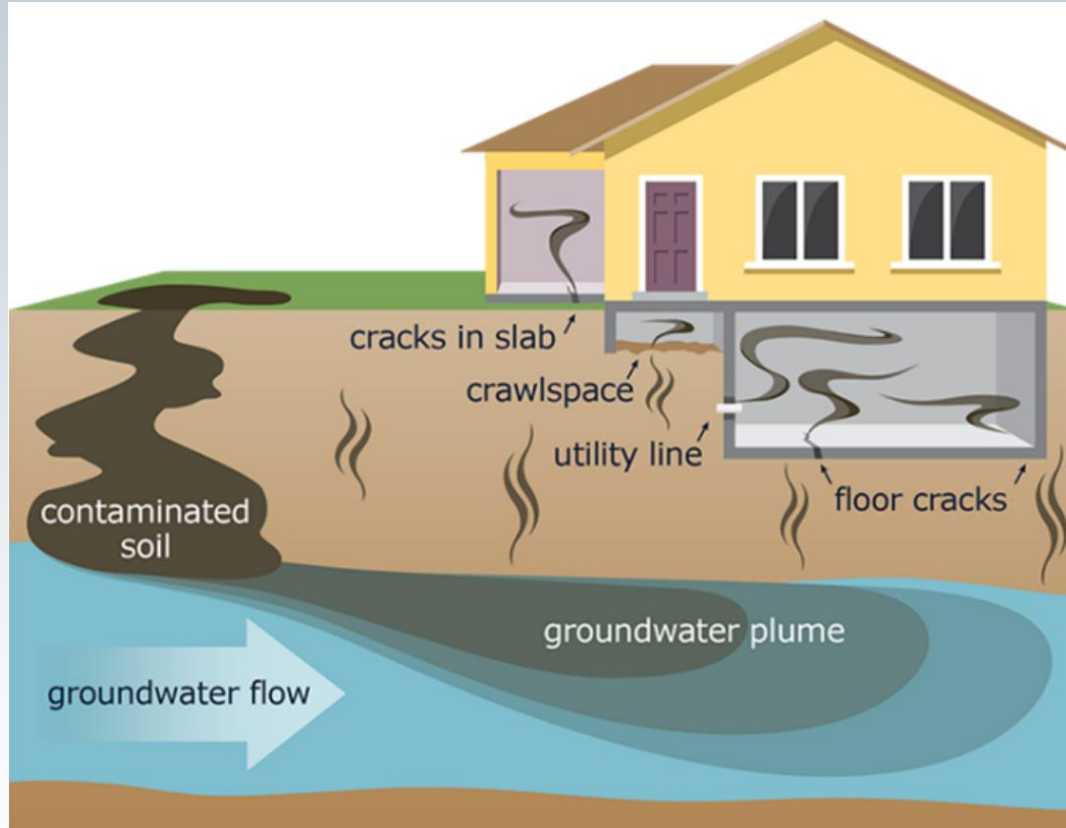
AFTER: By May of this year, most of the scrap tires had been shredded and hauled away.

Carriage Cleaners, Bellevue Superfund Site



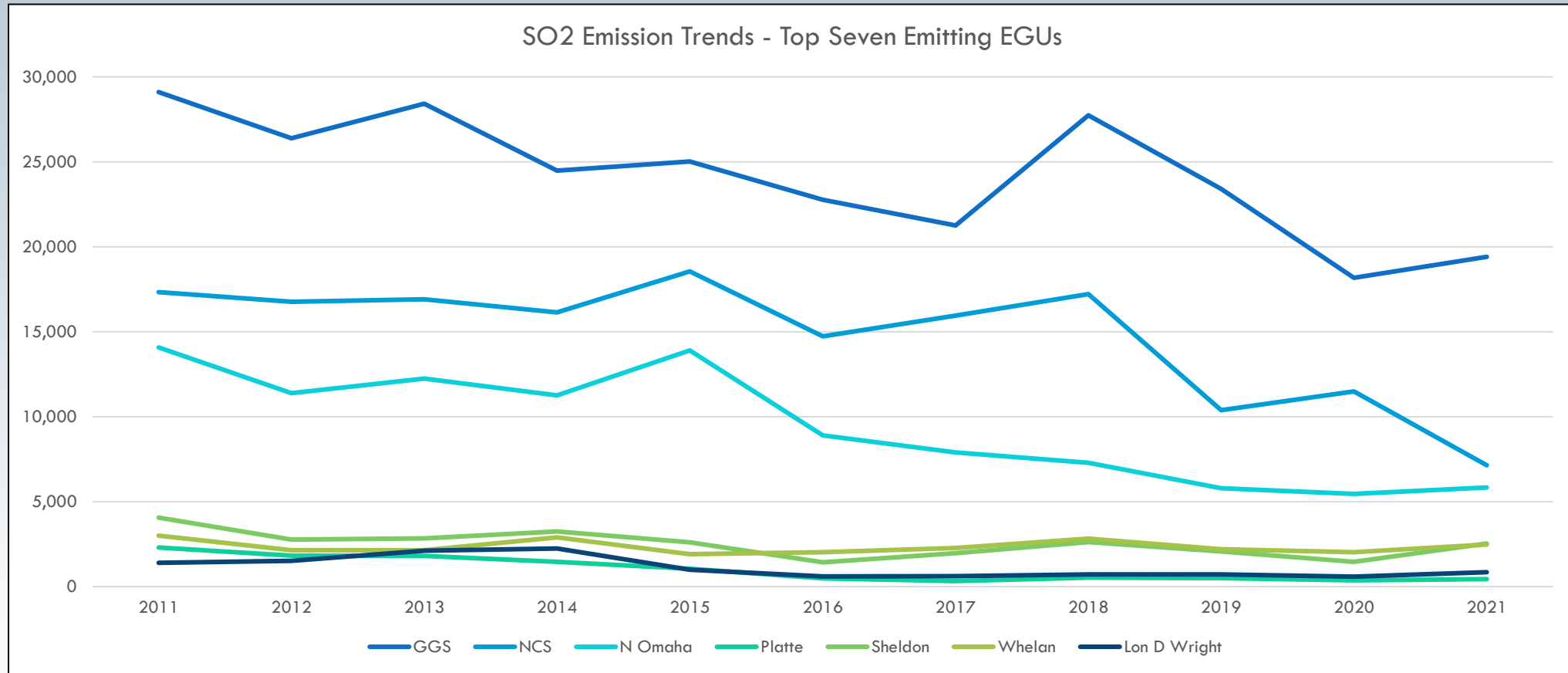
- Site is located at 2110 Franklin St
- Site area includes commercial and residential buildings

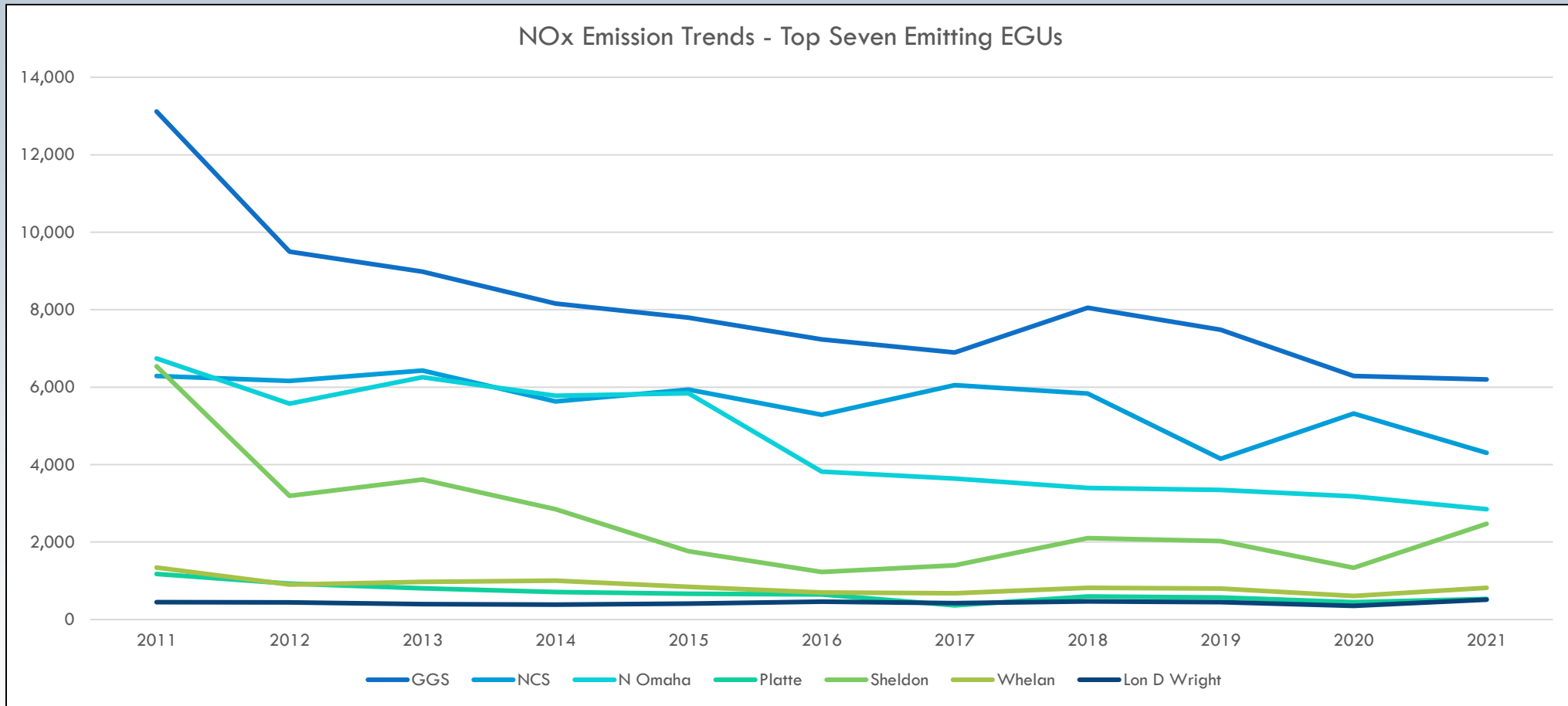
What Is Vapor Intrusion?



- Contamination of the soil or groundwater occurs
- Vapor-forming chemicals invade an overlying building
- A vapor mitigation system is installed to protect the building's occupants

Emission Trends





Energy Awareness Month

Gov. Pete Ricketts proclaimed October as Energy Awareness Month and recognized October 30th as Weatherization Day.