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- Establish ranges of costs for various cleanup phases and technologies used in LUST cleanups.
- Identify additional cost drivers by analyzing project durations, assessment versus total costs.

Methods

- Solicit and leverage project cleanup cost data from states.
- "Normalize" data to the extent possible between states to find ranges of comparable project phase and technology costs, and total durations.

Data Sources

STATE	NO. OF SITES PROVIDED	NO. OF SITES USED IN ANALYSIS	PROJECT START YEARS INCLUDED IN DATA
Kansas	53	53	2010-2021
South Carolina	357	217	1973-2021
Virginia	15,116	260	2011-2021

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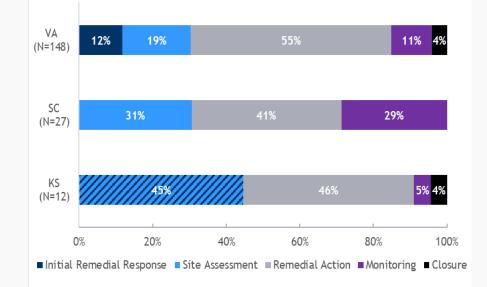




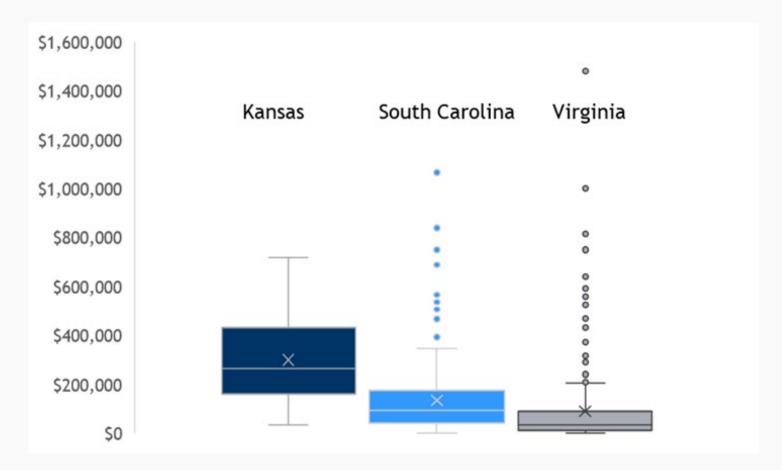
Data supported general conclusions on cost

ULTIMATE CORRECTIVE ACTION PHASE	AVERAGE COST	AVERAGE COST/DAY
Assessment Only (VA)	,	
Monitored Natural Attenuation Only (SC)	\$113,875	\$95
Active Remedial Action (KS, SC, VA)	\$255,491	\$165

Remedial action was a similar percentage of total costs for closed sites.

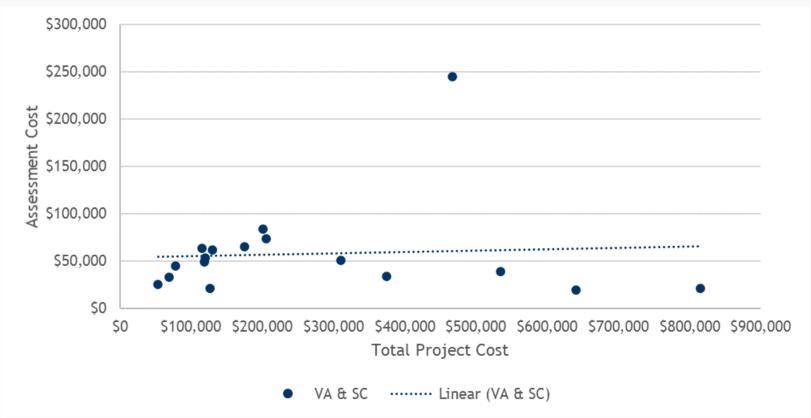


A relatively small number of high-cost sites are major drivers of costs in each state: **median < average**





Assessment costs tend to be similar across projects regardless of size. Regression analysis suggests that greater spending during the assessment phase may lower spending in other phases.





Controlling Costs

- 1. Look first at outliers.
- 2. Reduce the duration.
- 3. Conduct more site assessment?

Lessons Learned

- 1. Databases need to associate costs with phases and technologies.
- 2. Claims need to specify costs by phase and by technology.
- 3. Format data for easy analysis.

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More Information

- Come to the NTC Poster Session!
- Read the report: <u>Leaking Underground Storage Tank (LUST)</u> <u>Cleanup Costs Study</u>, Prepared for: U.S. EPA, OLEM by Industrial Economics, Incorporated (IEc)

https://www.epa.gov/system/files/documents/2022-08/Leaking%20Underground%20Storage%20Tank%20Cleanup%20Cost%20 Study.pdf

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