Department of N	latural Re	sources	•	HB Section(s): 6.225, 6.265

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

1a. What strategic priority does this program address?

The Environmental Remediation Program helps Missouri citizens by managing natural resources to promote a healthy environment and economy by:

- Promoting environmental responsibility and resource stewardship.
- Enhancing services, information, and communication to improve customer experience.
- Modernizing community infrastructure, strengthening workforce, and supporting economic development.
- Improving internal processes to better serve our customers.

1b. What does this program do?

The major functions of the Environmental Remediation Program are:

Pollution Prevention

- Prevents environmental damages and impacts to public health
- Promotes safe operation of approximately 3,276 underground storage tank sites by registering tanks, maintaining data, providing compliance assistance, conducting inspections, and taking appropriate enforcement actions
- Provides training and equipment to first responders along radioactive materials transportation routes

Remediation

- Addresses environmental contamination through investigation, remediation of contaminated sites, and restoration of land to productive use
- Implements laws that require responsible parties to be accountable for contamination
- Facilitates environmental remediation when parties seek to voluntarily clean up contaminated sites
- Provides oversight of parties conducting remediation

Long-Term Stewardship

- Implements long-term management to protect human health and the environment following risk-based cleanups
- Performs operation and maintenance activities
- Conducts inspections
- Maintains a registry and on-line mapper, providing information to the public on appropriate and productive reuse of properties

(continued on following page)

Department of Natural Resources

HB Section(s): 6.225, 6.265

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

1b. What does this program do (continued)?

Environmental Restoration

Assesses, restores, or rehabilitates damage to natural resources

The Environmental Remediation Program utilizes program-specific distribution appropriations in conjunction with operating appropriations to:

- Contract cleanup, monitoring, assessment work, manage data, perform relevant environmental studies, or related activities
- Meet state obligations at Superfund sites
- Investigate radiological contaminated sites

The following table shows financial data for the budget units included in this form.*						
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	
	Actual	Actual	Actual	Current	Gov Rec	
Environmental Remediation Operations (78870C)	5,043,775	3,633,198	3,373,472	5,092,475	5,087,475	
Hazardous Sites PSD (79445C) _	1,750,440	1,715,685	2,523,071	5,403,944	5,403,944	
Total	6,794,215	5,348,883	5,896,543	10,496,419	10,491,419	

* The FY 2021 Budget included core reallocations to the Waste Management Program. This reallocation was due to reorganization between the Environmental Remediation and Waste Management Programs.

2a. Provide an activity measure(s) for the program.

Clients served represents a known universe of persons and facilities regulated through licenses, registrations, and certifications plus sites either being assessed for contamination or sites in cleanup oversight.

Clients Served	FY 2020	FY 2021	FY 2022
Underground Storage Tanks (UST)/Leaking UST sites	3,291	3,274	3,276
Federal Facility sites	247	246	256
Brownfields/Voluntary Cleanup Program (BVCP) sites	677	674	776
Superfund Sites Evaluated Under CERCLA	255	253	251
Totals	4,470	4,447	4,559

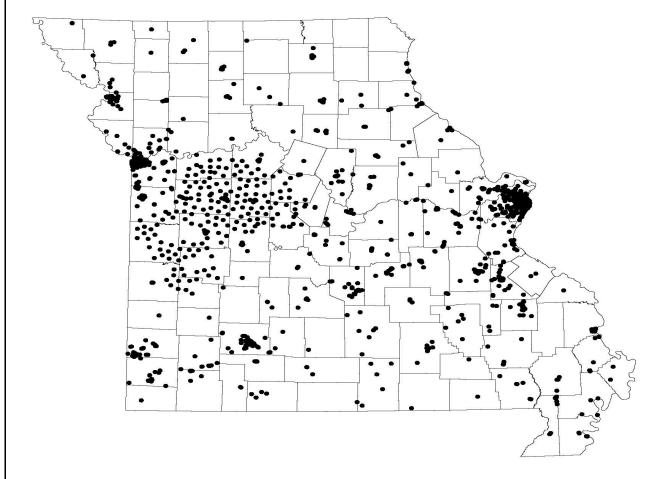
Department of Natural Resources

HB Section(s): <u>6.225, 6.265</u>

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

2a. Provide an activity measure(s) for the program (continued).



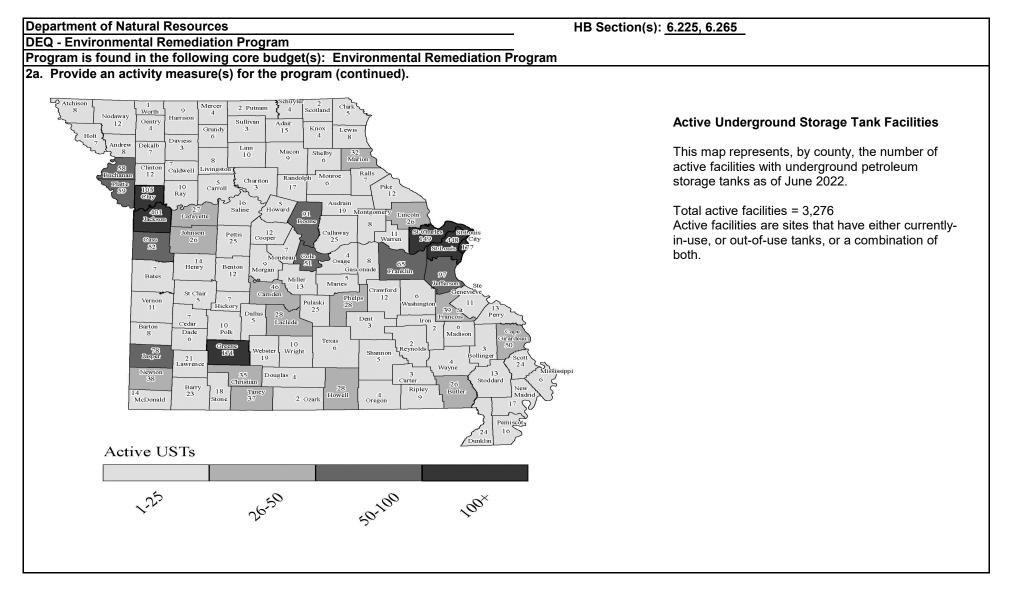
Ongoing Active Cleanup and Long-Term Stewardship Sites as of June 2022

Each dot represents one Superfund, BVCP, or Federal Facilities site where the Department provides cleanup oversight or long-term stewardship monitoring.

Brownfields/Voluntary Cleanup Program (BVCP) - The program provides funding and technical assistance to help assess the environmental condition of properties; addresses and oversees brownfield cleanups; and provides long-term stewardship of completed sites.

Superfund - EPA, the State, and responsible parties provide funding for assessment activities, oversight, and cleanup at Superfund sites. The state pays 10% of the total EPA cleanup costs and 100% of ongoing operation and maintenance at sites without responsible parties.

Federal Facilities - Federal agencies provide funding to oversee cleanup at U.S. Department of Defense and Department of Energy sites.

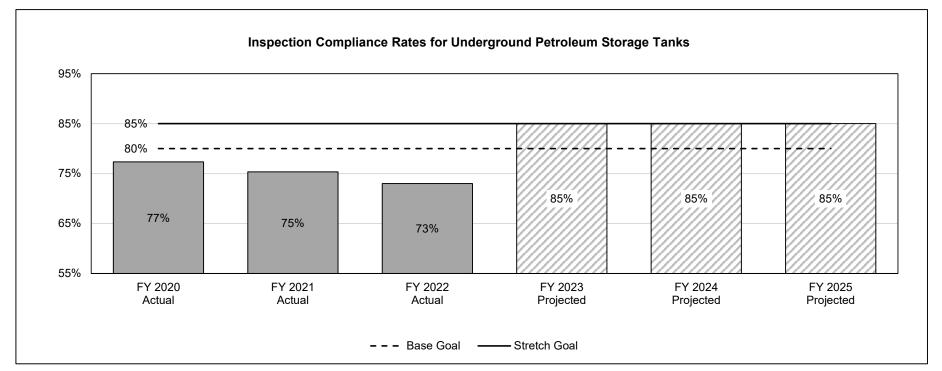


Department of Natural Resources HB Section(s): 6.225, 6.265

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

2b. Provide a measure(s) of the program's quality.



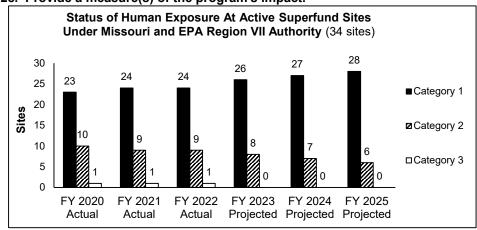
Compliant facilities have achieved operating compliance with spill, overfill, corrosion protection, and release detection. FY 2021 and FY 2022 numbers dipped slightly as some facilities were not immediately in compliance with federal regulations effective January 1, 2021 due to significant supply chain and logistic delays in acquiring parts for repair, along with labor shortages. In FY 2023, the Department will begin reporting the new Technical Compliance Rate, which replaces the Significant Operational Compliance Rate. The Environmental Protection Agency's current National Compliance Rate average is 55.8%. Missouri's compliance rate is expected to continue to surpass the national goal in future fiscal years.

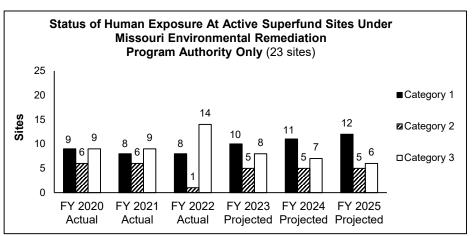
Department of Natural Resources

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

2c. Provide a measure(s) of the program's impact.





Category 1 - Sites where people are not exposed to unacceptable levels of contaminants.

Category 2 - Sites where people could be exposed to unacceptable levels of contaminants, but work is in progress to eliminate unacceptable exposure.

<u>Category 3</u> - Sites where there is uncertainty regarding human exposure; additional data collection and evaluation is needed.

Base Goal = 1 site moving from a Category 3 to a Category 2

Stretch Goal = 1 site moving from Category 3 to a Category 1

HB Section(s): 6.225, 6.265

Cleaning up Superfund sites is a complex, multi-phase process that can take decades. The amount of time it takes to cleanup a site depends upon the type, volume, extent, and location of contamination, risk to human health and the environment, and the cleanup technology used.

The 34 sites under both EPA and Missouri authority are National Priority Listed (NPL) sites. These sites are among the Nation's highest priority for cleanup of hazardous substances. The primary concern at thirteen NPL sites is volatile organic compound (VOC) groundwater contamination, which is typically treated by removing the source contamination then pumping groundwater to the surface and using technology to remove pollutants. An additional ten sites are from former lead mining activities, encompassing thousands of acres across whole counties that have contaminated soil, groundwater, and surface water with thousands of residential yards requiring cleanup.

Missouri Authority Site changes: Clayton Cleaners added in FY 2022, Former Farmland Industries North Kansas City deleted in FY 2022, and five sites moved from Category 2 (Not Under Control) to Category 3 (Insufficient Data) because additional sampling or delineation of contamination was deemed necessary.

*FY21 data was updated to include Former Farmland, which was inadvertently deleted from the data previously.

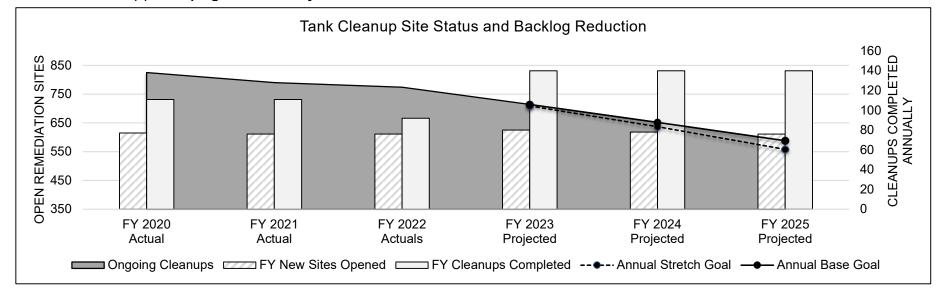
Department of Natural Resources

HB Section(s): <u>6.225, 6.265</u>

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

2d. Provide a measure(s) of the program's efficiency.



	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
	Actual	Actual	Actual	Projected	Projected	Projected
Active Cleanup Backlog	825	790	774	714	652	588
FY Cleanups Completed	111	111	92	140	140	140
FY Releases Added	77	76	76	80	78	76
FY Reduction of Sites	34	35	16	60	62	64

Base Goal: Backlog reduction with 140 cleanups completed each year.

Stretch Goal: Backlog reduction beginning with 155 cleanups completed in FY 2023 and increasing by 5 sites each year.

At full appropriation, 15.75 project-managers work on 774 tank remediation projects, approximately 49 sites per project-manager. Reporting of new petroleum releases are anticipated to decline in future years due to tank installation certification and operator self-inspection requirements. Receiving fewer new releases allows more time to work on existing petroleum cleanups. Impacts due to vacancies and training of new team members impact the timeliness of project completion.

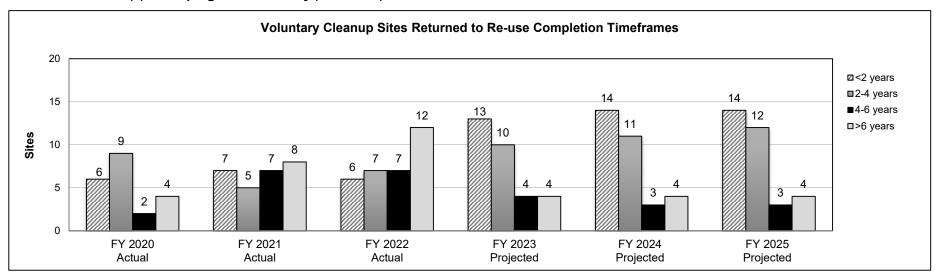
Department of Natural Resources

HB Section(s): 6.225, 6.265

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

2d. Provide a measure(s) of the program's efficiency (continued).



Properties in the Voluntary Cleanup Program range from residential to small businesses to multi-acre heavy industrial manufacturing facilities, with cleanups ranging from lead-based paint to extensive soil, groundwater, and indoor air contamination.

Since the beginning of the Voluntary Cleanup Program, approximately 43.0% of the properties complete the process within two years. The time to completion for a given site depends on the nature and extent of contamination and the effort with which the voluntary participant wishes to pursue site cleanup. Since inception of the program in 1995,1,009 sites have been cleaned up. FY 2020 and FY 2021 totals were lower due to a number of factors including participant financial issues, legal issues with adjacent landowners, complex sites requiring more time to cleanup, and participant delays in completing environmental covenant processes. In some cases, progress has slowed or stopped due to changes in work practice, consultant availability, and impacts on property transactions.

Goal: Complete 30-40 sites annually

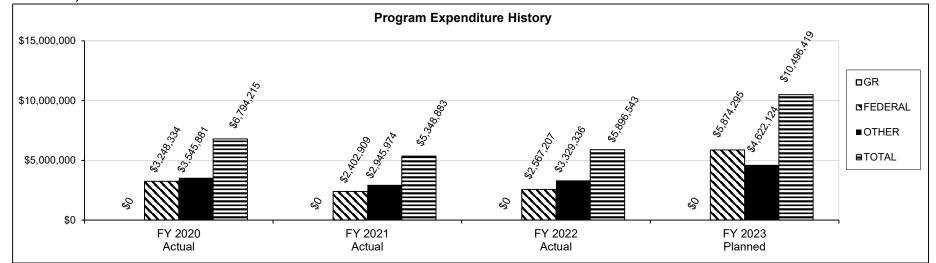
Department of Natural Resources

HB Section(s): 6.225, 6.265

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

3. Provide actual expenditures for the prior three fiscal years and planned expenditures for the current fiscal year. (Note: Amounts do not include fringe benefit costs.)



This budget does not contain General Revenue.

Financial data includes operating and pass-through appropriations. Beginning in FY 2013, core pass-through appropriations were set at a level to encumber and pay our commitments, which often span multiple fiscal years. FY 2023 Planned is shown at full appropriation.

4. What are the sources of the "Other" funds?

Natural Resources Protection Fund - Damages Subaccounts (0555); Solid Waste Management Fund (0570); Underground Storage Tank Regulation Program Fund (0586); Environmental Radiation Monitoring Fund (0656); Hazardous Waste Fund (0676)

Department of Natural Resources

DEQ - Environmental Remediation Program

Program is found in the following core budget(s): Environmental Remediation Program

5. What is the authorization for this program, i.e., federal or state statute, etc.? (Include the federal program number, if applicable.)

Pollution Prevention

Resource Conservation and Recovery Act of 1976 (RCRA), as amended

Solid Waste Disposal Act of 1976

Energy Policy Act of 2005

RSMo 319.100 through 319.139 Petroleum Storage Tanks

Title 42, USC part 9607(f) Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Oil Pollution Act of 1990

RSMo Chapters 640 and 644 Missouri Clean Water Law

RSMo Chapter 640 Missouri Safe Drinking Water Law

RSMo 643.010 through 643.192 Air Pollution Control RSMo 260.200 through 260.255 Solid Waste Management

Remediation, Restoration, and Long-Term Stewardship

Title 42, USC part 9607(f) Comprehensive Environmental Response, Compensation, and Liability Act of 1980

Superfund Amendments and Reauthorization Act of 1986

Atomic Energy Act of 1954, as amended, Section 21

Energy Reorganization Act of 1974

Department of Energy Organization Act of 1977, as amended

Energy Policy Act of 1992, Title X and XI

Small Business Liability Relief and Brownfields Revitalization Act 2002

RSMo 260.435 through 260.480

RSMo 260.565 through 260.609 and RSMo 447.700 through 447.708

RSMo 319.100 through 319.139

RSMo 260.750 RSMo 260.1039 RSMo 640.235 Abandoned or Uncontrolled Sites (Registry)

Voluntary Remediation including Brownfields

HB Section(s): 6.225, 6.265

Petroleum Storage Tanks

Environmental Radiation Monitoring Missouri Environmental Covenants Act Natural Resources Protection Fund Damages

Department of Natural Resources	HB Section(s): 6.225, 6.265			
DEQ - Environmental Remediation Program				
Program is found in the following core budget(s): Environmental Remediation Program	ogram			
6. Are there federal matching requirements? If yes, please explain.				
Performance Partnership Grant - RCRA	25% State (EPA)			
Brownfields 128 (a)	100% Federal (EPA)			
Brownfields 104 (k)	100% Federal (EPA)			
Defense/State Memorandum of Agreement (DSMOA)	100% Federal (DOD)			
Ellisville Superfund Cooperative Agreement	100% Federal (EPA)			
United States Department of Agriculture - Grain Bin Sites	100% Federal (USDA)			
Superfund Combined Cooperative Agreement - Core	10% State (EPA)			
Superfund Combined Cooperative Agreement - Pre-Remedial Response	100% Federal (EPA)			
Superfund Combined Cooperative Agreement - Support Agency	100% Federal (EPA)			
Weldon Spring Long-Term Surveillance and Maintenance Project	100% Federal (DOE)			
Leaking Underground Storage Tank-Preventative	25% State (EPA)			
Leaking Underground Storage Tank Trust Fund-Corrective Action	10% State (EPA)			
Minuteman II Longterm Stewardship	100% Federal (DOD)			
General Services Administration (GSA) - Environmental Project Assistance	100% Federal (GSA)			
Oronogo Duenweg OU1 Reverse Cooperative Agreement	100% State (EPA)			
Various State Superfund Contracts	10% State (this covers our 10% state Superfund obligation)			
Tri-State Mining District Restoration Compensatory Determination Plan	100% Federal (US Fish and Wildlife Service)			
Greenfields Multistate Agreement	100% Federal (Multistate Trust)			
MO Army National Guard - OTAG	100% Federal (MOARNG)			
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7. Is this a federally mandated program? If yes, please explain.

Through delegation from, and agreements with, the U.S. Environmental Protection Agency, the Environmental Remediation Program supports the federal Resource Conservation and Recovery Act (RCRA), Section 9004 of the Solid Waste Disposal Act as amended by RCRA, the Superfund Amendments and Reauthorization Act of 1986, and 40 CFR Part 281. In addition, work performed under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as well as cleanup oversight at Federal Facilities sites, is mandated by the federal government.