



**United States
Environmental Protection Agency**

FISCAL YEAR 2019

**Justification of Appropriation
Estimates for the Committee
on Appropriations**

Leaking Underground Storage Tanks

EPA-190-R-18-001

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**Environmental Protection Agency
2019 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency
FY 2019 Annual Performance Plan and Congressional Justification**

APPROPRIATION: Leaking Underground Storage Tanks

**Resource Summary Table
(Dollars in Thousands)**

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Leaking Underground Storage Tanks				
Budget Authority	\$92,143.4	\$91,317.0	\$47,532.0	-\$43,785.0
Total Workyears	48.5	54.1	40.7	-13.4

Bill Language: Leaking Underground Storage Tank Trust Fund Program

For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, \$47,532,000, to remain available until expended, of which \$47,532,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act: Provided, That the Administrator is authorized to use appropriations made available under this heading to implement section 9013 of the Solid Waste Disposal Act to provide financial assistance to federally recognized Indian tribes for the development and implementation of programs to manage underground storage tanks.

**Program Projects in LUST
(Dollars in Thousands)**

Program Project	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Enforcement				
Civil Enforcement	\$584.7	\$616.0	\$589.0	-\$27.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$373.2	\$404.0	\$420.0	\$16.0
Facilities Infrastructure and Operations	\$502.2	\$793.0	\$773.0	-\$20.0
Acquisition Management	\$144.7	\$146.0	\$138.0	-\$8.0
Subtotal, Operations and Administration	\$1,020.1	\$1,343.0	\$1,331.0	-\$12.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$9,554.5	\$9,177.0	\$6,452.0	-\$2,725.0
LUST Cooperative Agreements	\$55,320.2	\$54,666.0	\$38,840.0	-\$15,826.0
LUST Prevention	\$25,305.9	\$25,197.0	\$0.0	-\$25,197.0
Subtotal, Underground Storage Tanks (LUST / UST)	\$90,180.6	\$89,040.0	\$45,292.0	-\$43,748.0

Program Project	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$358.0	\$318.0	\$320.0	\$2.0
TOTAL LUST	\$92,143.4	\$91,317.0	\$47,532.0	-\$43,785.0

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Enforcement

Civil Enforcement

Program Area: Enforcement

Goal: Rule of Law and Process

Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Environmental Program & Management	\$172,309.6	\$170,849.0	\$140,677.0	-\$30,172.0
<i>Leaking Underground Storage Tanks</i>	<i>\$584.7</i>	<i>\$616.0</i>	<i>\$589.0</i>	<i>-\$27.0</i>
Inland Oil Spill Programs	\$2,342.8	\$2,397.0	\$2,219.0	-\$178.0
Total Budget Authority	\$175,237.1	\$173,862.0	\$143,485.0	-\$30,377.0
Total Workyears	1,061.0	1,080.4	857.1	-223.3

Program Project Description:

The Civil Enforcement program’s goal is to ensure compliance with the nation’s environmental laws to protect human health and the environment. The program collaborates with the United States Department of Justice, states, local agencies, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

To protect our nation’s groundwater and drinking water from petroleum releases from Underground Storage Tanks (UST), the Civil Enforcement program provides guidance, technical assistance, and training to promote and enforce cleanups at sites with UST systems.¹ The Enforcement and Compliance Assurance program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in EPA's FY 2018 - 2022 Strategic Plan. In FY 2019, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Agency will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

Performance Measure Targets:

Work under this program supports performance results in the Civil Enforcement program under the EPA appropriation.

¹ For more information, refer to: www.epa.gov/swerust1/cat/index.htm.

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$128.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.
- (-\$155.0/ -0.6 FTE) EPA will target funds to highest priority sites.

Statutory Authority:

Pollution Prevention Act; Community Environmental Response Facilitation Act; National Environmental Policy Act; Atomic Energy Act; Uranium Mill Tailings Radiation Control Act; Resource Conservation and Recovery Act.

Operations and Administration

Acquisition Management

Program Area: Operations and Administration

Goal: Rule of Law and Process

Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Environmental Program & Management	\$31,042.0	\$30,803.0	\$25,438.0	-\$5,365.0
<i>Leaking Underground Storage Tanks</i>	<i>\$144.7</i>	<i>\$146.0</i>	<i>\$138.0</i>	<i>-\$8.0</i>
Hazardous Substance Superfund	\$22,103.1	\$21,296.0	\$21,296.0	\$0.0
Total Budget Authority	\$53,289.8	\$52,245.0	\$46,872.0	-\$5,373.0
Total Workyears	277.0	304.5	259.5	-45.0

Program Project Description:

Leaking Underground Storage Tanks (LUST) resources in the Acquisition Management program support the Agency's contract activities.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/ Objective 3.5, Improve Efficiency and Effectiveness in EPA's FY 2018 – 2022 Strategic Plan. Acquisition Management resources in LUST support information technology needs and the training and development of EPA's acquisition workforce.

Performance Measure Targets:

Currently there are no performance measures specific to this program.

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1.0) This change to fixed and other costs is an increase due to an adjustment in essential workforce support.
- (-\$9.0) This program change reflect a minimal reduction in contractual resources from more effective business practices in the Acquisition Management program.

Statutory Authority:

Office of Federal Procurement Policy Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Central Planning, Budgeting, and Finance

Program Area: Operations and Administration

Goal: Rule of Law and Process

Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Environmental Program & Management	\$73,003.2	\$71,493.0	\$68,635.0	-\$2,858.0
<i>Leaking Underground Storage Tanks</i>	\$373.2	\$404.0	\$420.0	\$16.0
Hazardous Substance Superfund	\$22,511.4	\$21,345.0	\$21,152.0	-\$193.0
Total Budget Authority	\$95,887.8	\$93,242.0	\$90,207.0	-\$3,035.0
Total Workyears	450.5	493.4	430.6	-62.8

Program Project Description:

EPA’s financial management community maintains a strong partnership with the Leaking Underground Storage Tanks (LUST) program. Activities under the Central Planning, Budgeting and Finance program support the management of integrated planning, budgeting, financial management, performance and accountability processes, and systems to ensure effective stewardship of LUST resources. This includes developing, managing, and supporting a performance management system consistent with the Government Performance and Results Modernization Act for the Agency that involves: strategic planning and accountability for environmental, fiscal, and managerial results; providing policy, systems, training, reports, and oversight essential for the financial operations of EPA; managing the agencywide Working Capital Fund; providing financial payment and support services for EPA through three finance centers, specialized fiscal and accounting services for the LUST programs; and managing the Agency’s annual budget process.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA’s FY 2018 - 2022 Strategic Plan. EPA will continue to ensure sound financial and budgetary management of the LUST program through the use of routine and ad hoc analysis, statistical sampling, and other evaluation tools. Building on the work begun in previous years, EPA will continue to monitor and strengthen internal controls with a focus on sensitive payments and property. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance program under the EPM appropriation.

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$90.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support and benefit costs.
- (-\$74.0/ -0.7 FTE) This net program change reduces ad hoc analyses as part of the LUST financial management efforts.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute).

Facilities Infrastructure and Operations

Program Area: Operations and Administration

Goal: Rule of Law and Process

Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Environmental Program & Management	\$293,997.9	\$305,844.0	\$300,738.0	-\$5,106.0
Science & Technology	\$64,642.7	\$67,875.0	\$68,834.0	\$959.0
Building and Facilities	\$26,065.5	\$27,602.0	\$33,377.0	\$5,775.0
<i>Leaking Underground Storage Tanks</i>	<i>\$502.2</i>	<i>\$793.0</i>	<i>\$773.0</i>	<i>-\$20.0</i>
Inland Oil Spill Programs	\$376.2	\$580.0	\$665.0	\$85.0
Hazardous Substance Superfund	\$69,651.3	\$75,985.0	\$74,144.0	-\$1,841.0
Total Budget Authority	\$455,235.8	\$478,679.0	\$478,531.0	-\$148.0
Total Workyears	323.4	356.7	318.0	-38.7

Program Project Description:

EPA’s Facilities Infrastructure and Operations program in the Leaking Underground Storage Tank (LUST) appropriation supports the Agency’s rent, transit subsidy, and facilities management services. Funding is allocated for such services among the major appropriations for the Agency.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in EPA’s FY 2018 – 2022 Strategic Plan. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and other private landlords. For FY 2019, EPA is requesting a total of \$0.60 million for rent in the LUST appropriation.

Performance Measure Targets:

Currently there are no performance measures specific to this program.

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (-\$12.0) This change to fixed and other costs is a decrease due to the recalculation of rent and transit subsidy.
- (-\$8.0) This program change is a decrease to basic operations and maintenance costs.

Statutory Authority:

Federal Property and Administration Services Act; Public Building Act; Robert T. Stafford Disaster Relief and Emergency Assistance Act; Clean Water Act; Clean Air Act; Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Community Environmental Response Facilitation Act (CERFA); Energy Policy Act of 2005; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA’s organic statute).

Underground Storage Tanks (LUST/UST)

LUST / UST

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Core Mission

Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Environmental Program & Management	\$10,654.3	\$11,218.0	\$5,615.0	-\$5,603.0
<i>Leaking Underground Storage Tanks</i>	<i>\$9,554.5</i>	<i>\$9,177.0</i>	<i>\$6,452.0</i>	<i>-\$2,725.0</i>
Total Budget Authority	\$20,208.8	\$20,395.0	\$12,067.0	-\$8,328.0
Total Workyears	98.8	108.1	68.8	-39.3

Program Project Description:

The Leaking Underground Storage Tank (LUST) resources in the LUST/Underground Storage Tank (UST) program ensures that petroleum contamination is properly assessed and cleaned up. Under this program, EPA issues, monitors, and oversees LUST cleanup cooperative agreements to states.² EPA also provides technical assistance and training to states and tribes on how to conduct cleanups and improve the efficiency of state programs. At the end of FY 2017, approximately 68,000 LUST sites had not achieved cleanup completion.³

In addition, EPA has direct implementation authority and responsibilities in Indian country. In that role, EPA oversees cleanups by responsible parties, conducts site assessments, remediates contaminated water and soil, and provides alternative sources of drinking water when needed. EPA's funding for Indian country is the primary source of money for these activities. With few exceptions, tribes do not have independent program resources to pay for assessing and cleaning up UST releases, and in many cases, there are no responsible parties available to pay for the cleanups at sites in Indian country.

Cleaning up LUST sites protects people from exposure to contaminants such as benzene, a known carcinogen, and makes land available for reuse. In 2016, EPA released a study called "Property Value Study of High-Profile UST Release Sites." The purpose of the study was to determine the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 3 to 6 percent. Then, once a cleanup is completed, nearby property values rebound by a similar margin.⁴ In FY 2017, cleanups were completed at 8,775 LUST sites.

² States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

³ For more information, visit: <http://www.epa.gov/ust/ust-performance-measures>.

⁴ Guignet, D., R. Jenkins, M. Ranson, and P. Walsh. Do Housing Values Respond to Underground Storage Tank Releases? Evidence from High-Profile Cases across the United States. NCEE Working Paper No. 2016-01. March 2016. For more information, visit: <https://yosemite.epa.gov/EE/epa/eed.nsf/WPNumber/2016-01?opendocument>.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA’s FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will:

- Work with states and tribes within available resources to implement strategies to reduce the number of sites that have not reached cleanup completion, and to address new releases as they continue to be confirmed.
- Provide targeted training to states and tribes, such as remediation process optimization and rapid site assessment techniques.
- Monitor the soundness of financial mechanisms, in particular insurance and state cleanup funds that serve as financial assurance for LUST releases. EPA works with states to seek ways to cover and control remediation costs.
- Provide support in Indian country for site assessments, investigations, and remediation of high priority sites; enforcement against responsible parties; cleanup of soil and groundwater; alternate water supplies; cost recovery against UST owners and operators; oversight of responsible party lead cleanups; and technical expertise and assistance to Tribal governments.

Performance Measure Targets:

(113) Number of LUST cleanups completed in Indian country that meet risk-based standards for human exposure and groundwater migration.	FY 2018 Target	FY 2019 Target
	16	16

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$439.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to adjustments in salary, essential workforce support, and benefit costs.
- (-\$3,164.0/ -12.1 FTE) This program change reflects a focus on cleaning up the highest priority LUST sites in Indian country and a reduction in resources that provide subject matter and technical expertise to states and tribes.

Statutory Authority:

Resource Conservation and Recovery Act, § 8001, 9001-9014.

LUST Cooperative Agreements

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Core Mission

Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
<i>Leaking Underground Storage Tanks</i>	\$55,320.2	\$54,666.0	\$38,840.0	-\$15,826.0
Total Budget Authority	\$55,320.2	\$54,666.0	\$38,840.0	-\$15,826.0

Program Project Description:

This funding is used to award cooperative agreements to states⁵ to implement the Leaking Underground Storage Tank (LUST) program. The LUST program ensures that petroleum contamination is properly assessed and cleaned up by providing states with funding to address releases. LUST funding supports states in managing, overseeing, and enforcing cleanups at LUST sites. This is achieved by focusing on increasing the efficiency of LUST cleanups nationwide, leveraging private and state resources, and enabling community redevelopment. Cleaning up LUST sites protects people from exposure to contaminants, and makes land available for reuse.

EPA’s backlog study characterized the national inventory of sites that have not reached cleanup completion. The study found that almost half of the releases were 15 years old or older, and that groundwater was contaminated at 75 percent of these sites. Remediating groundwater contamination is often more technically complex, takes longer, and is more expensive than remediating soil contamination.⁶ Remediation costs average between \$100,000 and \$400,000 per underground storage tank (UST) release, the cost increasing with the presence of groundwater contamination. Potential adverse effects from chemicals such as benzene, methyl-tertiary-butyl-ether (MTBE), alcohols, or lead scavengers in gasoline contribute to the importance of cleaning up these contaminants and increase the cost of cleaning up these sites.⁷

In 2016, EPA released a study called “Property Value Study of High-Profile UST Release Sites.” The purpose of the study was to determine the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 3 to 6 percent. Once a cleanup is completed, nearby property values rebound by a similar margin.⁸

⁵ States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

⁶ See *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, <http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities>.

⁷ See *Technologies for Treating MtBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, <https://clu-in.org/download/remed/542r04009/542r04009.pdf>.

⁸ Guignet, D., R. Jenkins, M. Ranson, and P. Walsh. Do Housing Values Respond to Underground Storage Tank Releases? Evidence from High-Profile Cases across the United States. NCEE Working Paper No. 2016-01. March 2016. <https://yosemite.epa.gov/EE/epa/eed.nsf/WPNumber/2016-01?opendocument>.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in EPA’s FY 2018 – 2022 Strategic Plan. In FY 2019, EPA will:

- Work with states to implement strategies to reduce the backlog by targeting high priority sites, considering best practices, and increasing redevelopment efforts. Approximately, 68,000 releases remain that have not reached cleanup completion. In addition, thousands of new releases are discovered each year.⁹
- Provide resources to states to perform core cleanup work. Some states also may be able to pursue other means to maximize the effectiveness or efficiency in protectively completing cleanups and reducing their backlogs.
- Collaborate with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion, and leverage best practices and support management, guidance, and enforcement activities.

The Energy Policy Act (EPAct) of 2005 requires that states receiving LUST Cooperative Agreements funding meet certain release prevention requirements, such as inspecting every facility at least once every three years. In FY 2019, EPA will factor state compliance with EPAct requirements into LUST Cleanup Cooperative Agreement decisions.

Performance Measure Targets:

(112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.	FY 2018 Target	FY 2019 Target
	11,200	11,200

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (-\$15,826.0) This program change reflects a focus on cleaning up the highest priority sites.

Statutory Authority:

Energy Policy Act (EPAct) of 2005; Resource Conservation and Recovery Act, § 9003(h)(7).

⁹ For more information, visit: <http://www.epa.gov/ust/ust-performance-measures>.

LUST Prevention

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Core Mission

Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
<i>Leaking Underground Storage Tanks</i>	\$25,305.9	\$25,197.0	\$0.0	-\$25,197.0
Total Budget Authority	\$25,305.9	\$25,197.0	\$0.0	-\$25,197.0

Program Project Description:

The Leaking Underground Storage Tank (LUST) Prevention program works to ensure that groundwater is protected from petroleum and associated chemicals leaking from underground storage tanks (USTs), while the LUST Cooperative Agreement program provides funding to states to assess and clean up LUST sites. This program has provided funding to states,¹⁰ tribes, and/or intertribal consortia to inspect, prevent releases, ensure compliance with federal and state laws, and enforce these laws for the 555,079 federally regulated active USTs. The Energy Policy Act (EPA) of 2005 requires EPA or states to inspect every UST once every three years.

FY 2019 Activities and Performance Plan:

Resources have been proposed for elimination for this program in FY 2019. States could elect to maintain core program work with state resources rather than federal.

Performance Measure Targets:

Currently there are no performance measures specific to this program.

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (-\$25,197.0) This funding change proposes to eliminate the LUST Prevention grant program.

Statutory Authority:

Energy Policy Act (EPA) of 2005; Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.

¹⁰ States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

Research: Sustainable Communities

Research: Sustainable and Healthy Communities

Program Area: Research: Sustainable Communities

Goal: Rule of Law and Process

Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Science & Technology	\$142,429.1	\$133,415.0	\$52,549.0	-\$80,866.0
<i>Leaking Underground Storage Tanks</i>	<i>\$358.0</i>	<i>\$318.0</i>	<i>\$320.0</i>	<i>\$2.0</i>
Inland Oil Spill Programs	\$653.4	\$659.0	\$516.0	-\$143.0
Hazardous Substance Superfund	\$12,717.6	\$11,385.0	\$10,885.0	-\$500.0
Total Budget Authority	\$156,158.1	\$145,777.0	\$64,270.0	-\$81,507.0
Total Workyears	459.7	476.3	294.1	-182.2

Program Project Description:

EPA’s Sustainable and Healthy Communities (SHC) research program under the Leaking Underground Storage Tanks (LUST) appropriation provides federal, regional and community decision-makers with tools, methods, and information to prevent and control pollution at LUST sites. Specifically, this research enables decision-makers to better:

- Assess sites and evaluate the implications of alternative remediation techniques, policies, and management actions to assess and cleanup leaks at fueling stations;
- Identify the environmental impacts and unintended consequences of existing and new biofuels available in the marketplace; and
- Protect America’s land and groundwater resources and drinking water supplies that could be impacted by the nation’s approximately 600 thousand underground fuel storage tanks.¹¹

Recent accomplishments in this research area include:

- **Developing Field Screening Methodology to Assess Petroleum Vapor Intrusion:** SHC has developed field screening methods to assist in the implementation of EPA’s guide for petroleum vapor intrusion. The screening methodology and software tool provides site managers with an economical and practical approach for addressing petroleum vapor intrusion in their site cleanup plans.
- **Analyzing Three National Databases to Assess Variability in Fuel Composition.** In recent years, varying fuel composition has been associated with vapor and liquid releases from underground storage tanks and corrosion of tank components. SHC’s study increases EPA’s understanding on the fate and transport of contaminants from LUST sites and their potential impact on groundwater contamination and vapor intrusion.

¹¹ For more information, see: <https://www.epa.gov/ust>.

- **Estimating Site Densities of Private Domestic Wells (PDWs).** PDWs are not subject to the testing requirements of the Safe Drinking Water Act and are therefore more vulnerable to contamination (e.g., susceptible sub-populations). For public health and planning purposes, it is important to determine the locations of high density PDW use. The SHC program's research and information on PDWs assists states in triaging their inspections to address potential vulnerabilities to communities that are reliant on these drinking water supplies.

FY 2019 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in EPA's FY 2018 - 2022 Strategic Plan. Specifically, this work will aim to characterize sites and contaminants released from leaking underground storage tanks identified under the LUST trust fund with an emphasis on assisting the Agency and the states in addressing the backlog of sites for remediation. This research also will help communities remediate contaminated sites at an accelerated pace and lower costs while reducing human health and ecological impacts. Resulting methodologies and tools will help localities and states return properties to productive use, thus supporting the Agency mission of protecting human health and the environment in the context of communities. Such work is integral to achieving the Administrator's priority of revitalizing land and preventing contamination.

EPA's scientists also will continue to work with its Underground Storage Tanks program to deliver improved characterization and remediation methods for fuels released from leaking underground storage tanks. Research will address contaminant plume elongation and the associated risks to communities from the many underground storage tanks at fueling stations located near residences and residential water supplies. This research will inform tool development to assist communities, states, and tribes to determine what remediation is needed to protect local ground water resources and reduce the potential for vapor intrusion into buildings. These tools will ultimately reduce costs to communities while better protecting future drinking water resources and preventing vapor intrusion. In FY 2019, EPA scientists plan to produce software and user's guides for evaluating transport from released gasoline. These models will provide technical guidance for LUST remediation efforts.

Performance Measure Targets:

Work under this program supports performance results in the Sustainable and Healthy Communities Program under the S&T appropriation. EPA has a standing subcommittee under ORD's Board of Scientific Counselors (BOSC) for the SHC program to evaluate its performance and provide feedback to the Agency. The SHC program will meet regularly with both the BOSC and Science Advisory Board over the next several years to seek their input on topics related to research program design, science quality, innovation, relevance and impact. This includes advising EPA on its strategic research direction midway through the 4-year cycle of Strategic Research Action Plans (StRAPs).

EPA collaborates with the National Institutes of Health, National Science Foundation, Department of Energy, U.S. Department of Agriculture and the White House's Office of Science and Technology Policy to assess research performance. EPA's Office of Research and Development's

(ORD's) state engagement program is designed to inform states about ORD's research programs and role within EPA, and to enable ORD to better understand the science needs of state environmental agencies. Key partners at the state level include the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council, as well as state media associations such as the Association of State and Territorial Solid Waste Management Officials. EPA supports the interagency Science and Technology in America's Reinvestment, Measuring the Effect of Research on Innovation, Competitiveness and Science (STAR METRICS) efforts.¹²

FY 2019 Change from FY 2018 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$7.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to adjustments in salary, essential workforce support, and benefit costs.
- (-\$5.0) This program change decreases research to characterize and remediate contaminated leaking underground storage tank sites.

Statutory Authority:

Resource Conservation and Recovery Act, §§ 1002, 1006, 8001; Safe Drinking Water Act, § 1442.

¹² STAR METRICS: <https://www.starmetrics.nih.gov/>.

