

# Louisiana Department of Environmental Quality

Office of Environmental Assessment  
Underground Storage Tank Division

Overview of UST Remediation Process



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# What is an Underground Storage Tank?

An underground storage tank (UST) is a tank and connected underground piping having at least 10 percent of their combined volume underground.



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# Why a UST Program?

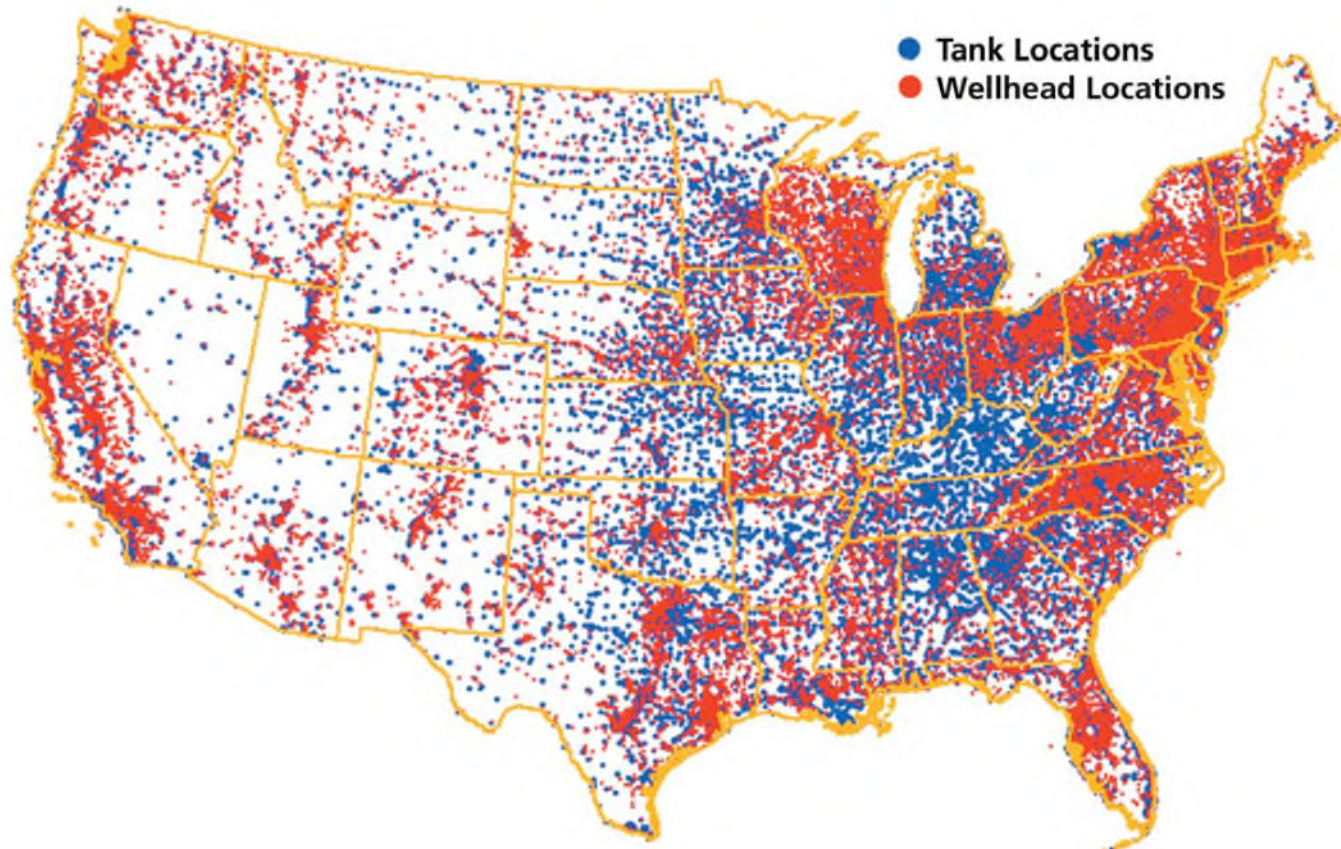


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# Protect Groundwater

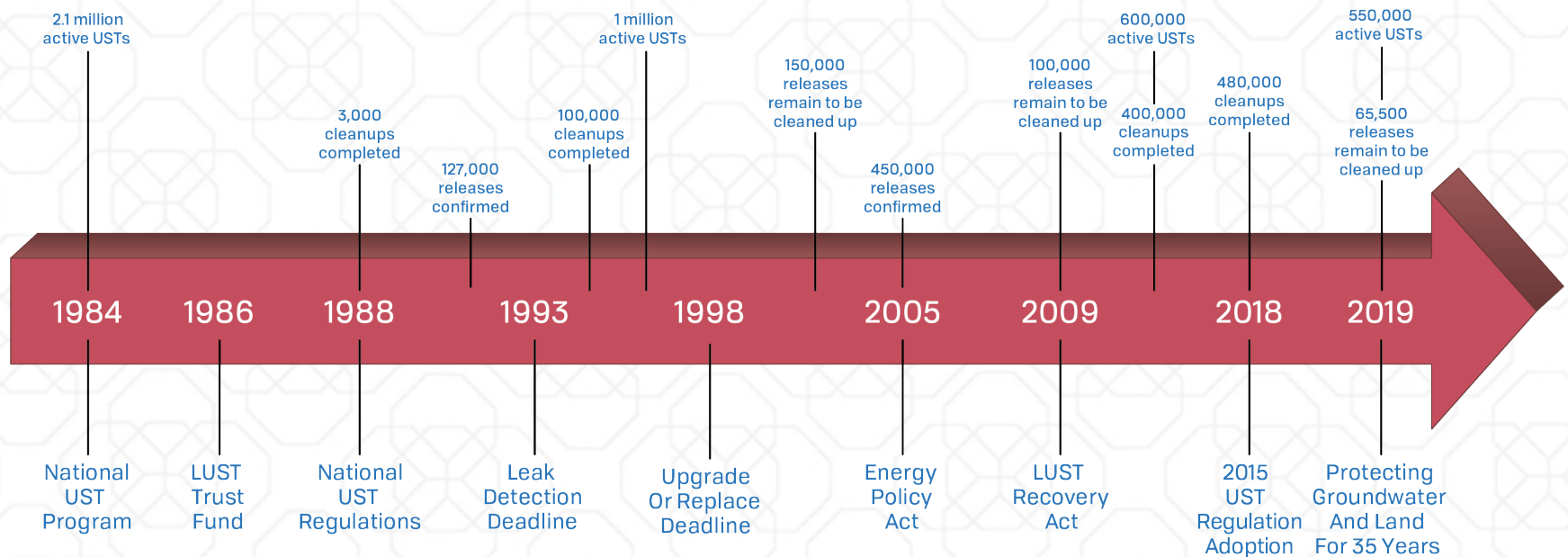




# Check the Water



# Regulatory Timeline

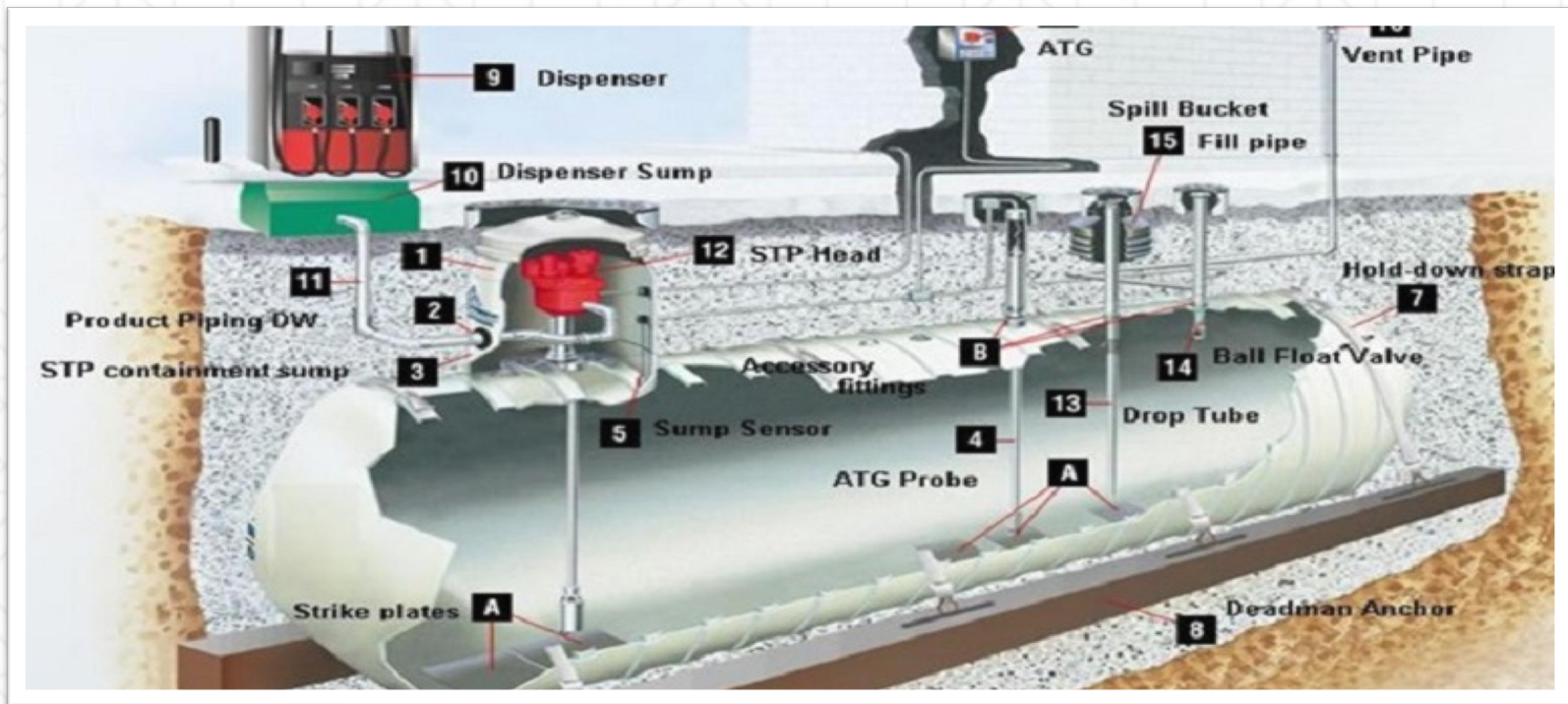


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# Modern UST System



# Louisiana UST Program

- Program Functions in three Offices
  - UST Division
    - Office of Environmental Assessment
  - UST Trust Fund
    - Office of Management and Finance
  - UST Enforcement
    - Office of Environmental Compliance



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# UST Division

- Underground Storage Tank Division (USTD)
  - Administrative
  - UST Prevention
  - UST Corrective Action
- Locations
  - Headquarters
  - 6 Main Regional offices
    - New Orleans, Monroe, and Shreveport
    - Lafayette, Lake Charles, Baton Rouge



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# UST Division

- Administrative
  - UST Reporting
  - UST Registration
  - UST CEI Processing
  - Energy Act of 2005 Compliance
  - UST Regulation Revisions
- Prevention
  - Compliance Evaluation Inspections (CEIs)
  - UST Certified Worker Program
  - Oversight and monitoring of UST installations, repairs, and testing of UST systems
  - Responding to UST-related incidents and complaints
  - Investigation, evaluation, and determination of causes of releases (confirmed release)
- Corrective Action
  - Corrective Action (Remediation) oversight
  - Review of work plans and reports for investigation, risk evaluation (RECAP), and corrective action
  - Direction and oversight of soil and groundwater assessment and remediation activities
  - Determinations of No Further Action



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# UST Corrective Action “Remediation”



# Release Confirmation

- LDEQ SPOC Incident (Release) notification is received.
- LDEQ UST “Confirms Release”
- Incident is assigned a Team Leader to oversee Corrective Action.



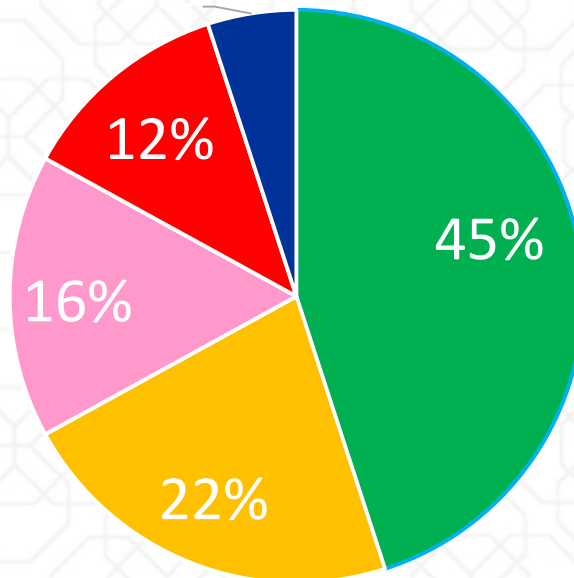


# What is a Confirmed Release?

Any contamination from a UST system to the environment that is evidenced by **free phase product** and/or concentrations above any **RECAP screening option standard**



# Confirmed Releases Causes



■ Piping ■ Spill/Overfill ■ Sumps ■ Unknown ■ UST

# UST Remediation Process

- **Site Investigation/RECAP Evaluation**
  - RECAP, Appendix B. Site Investigation Requirements
  - RECAP General Data and Format Requirements
  - Site Specific Standards
- **Corrective Action**
  - Presence of contamination at levels above the site-specific RECAP standards.
  - viable and cost effective corrective action technologies are implemented to reduce concentration levels
  - Remediation Oversight Group (ROG) approves most corrective action plans for sites that are eligible for the Motor Fuels Trust Fund.
- **Release Closure**
  - Contamination does not exceed or is reduced to the extent necessary to achieve the site-specific standards.



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# Technologies Used

## Investigation

- Direct push technology (DPT)
- **Laser-Induced Fluorescence (LIF)**
- Hollow stem augers well installation
- Peristaltic, bladder, and submersible pumps well purging and sampling
- Low-flow purging and sampling techniques

## Corrective Action

- Dual phase vapor extraction (DPVE)
- Ozone sparging
- Insitu Chemical Oxidation
- Groundwater Pump and Treat
- Excavation



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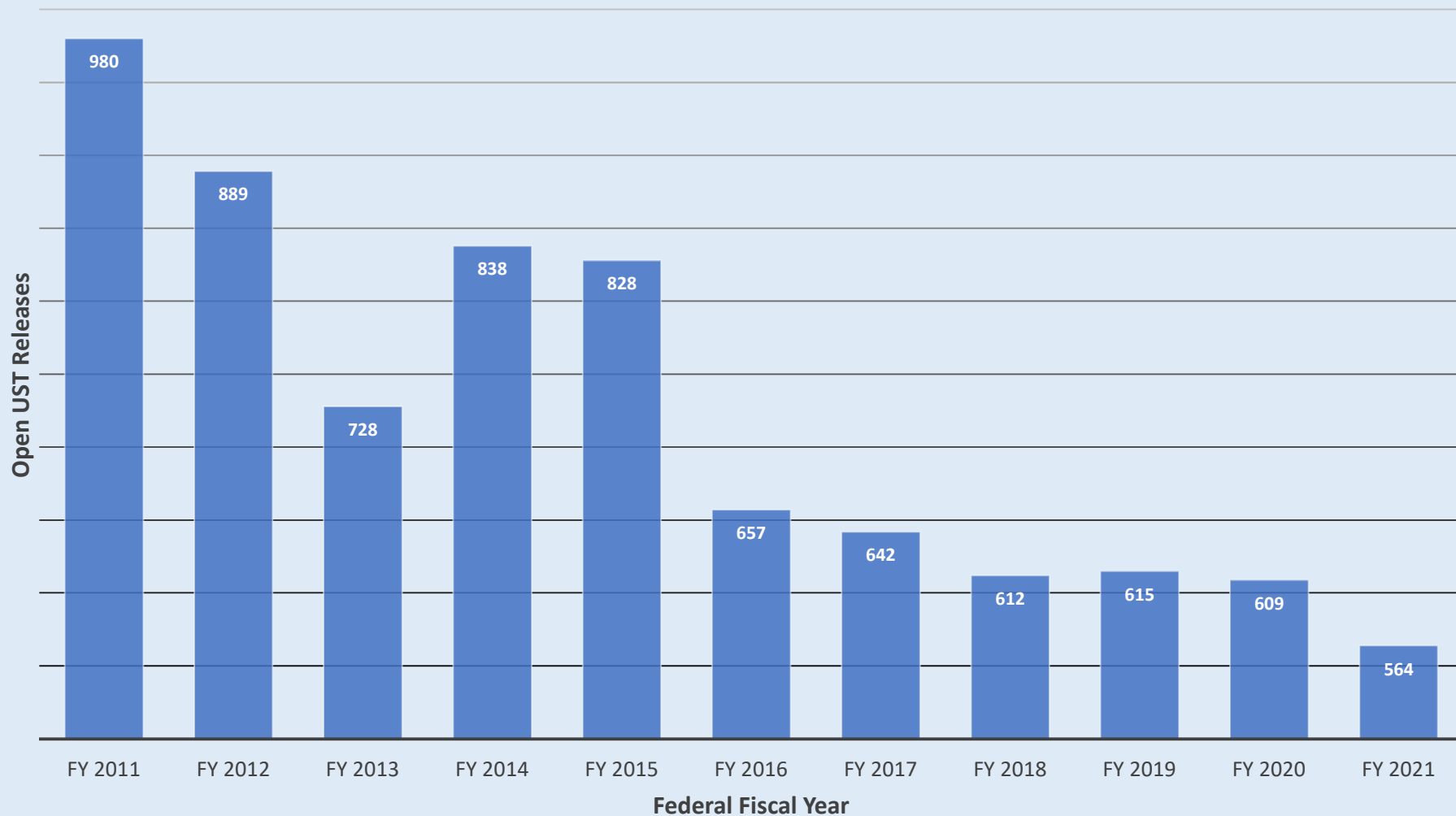


# UST Universe

- 10,117 Active USTs
- 37,261 Closed UST
- 3,824 Active Facilities
- 6,109 Confirmed releases
- 5,518 Cleanup completed
- 591 Active Confirmed releases
- 437 Facilities



## No. of Open Confirmed Releases in last 10 Federal Fiscal Years

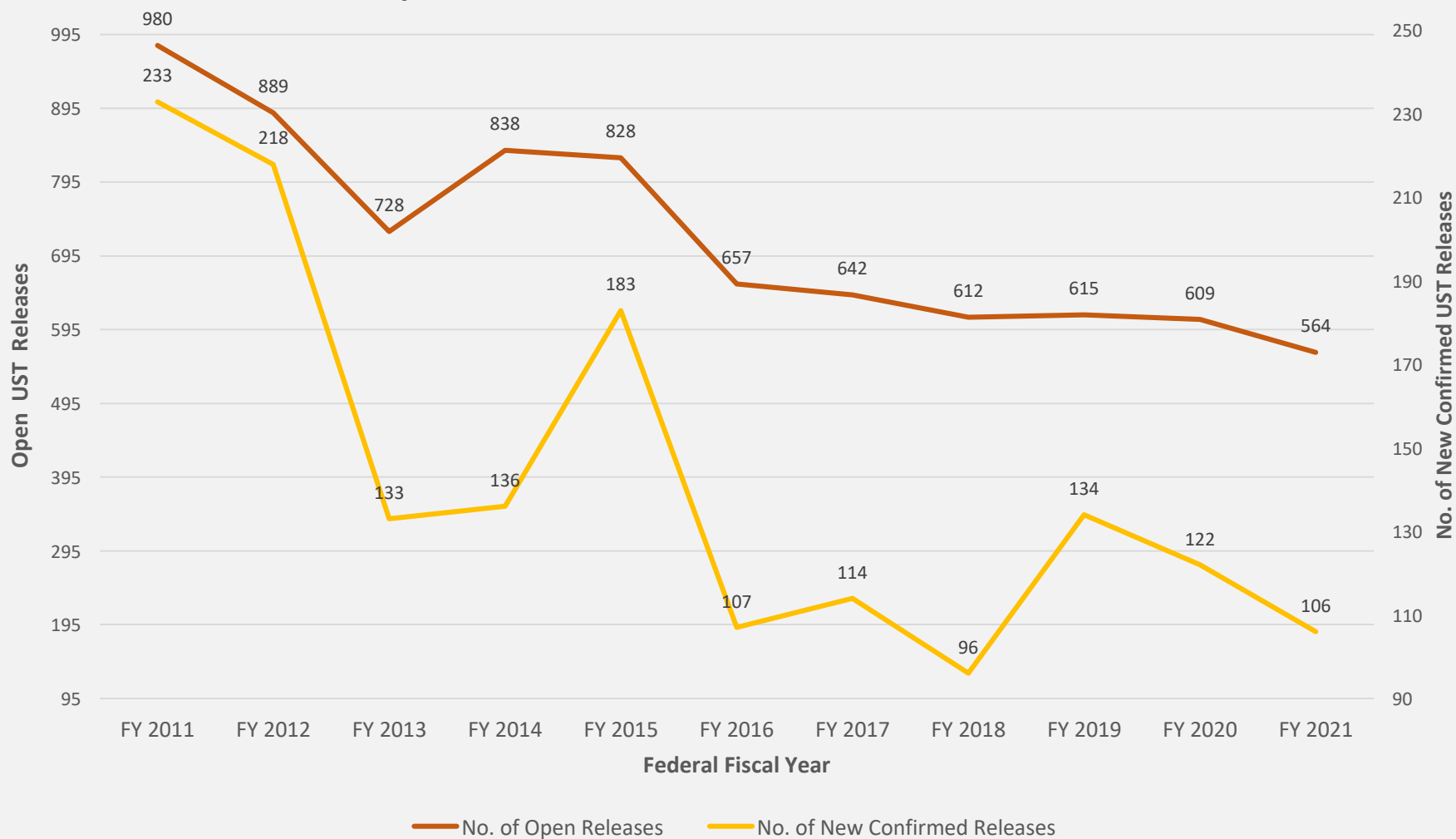


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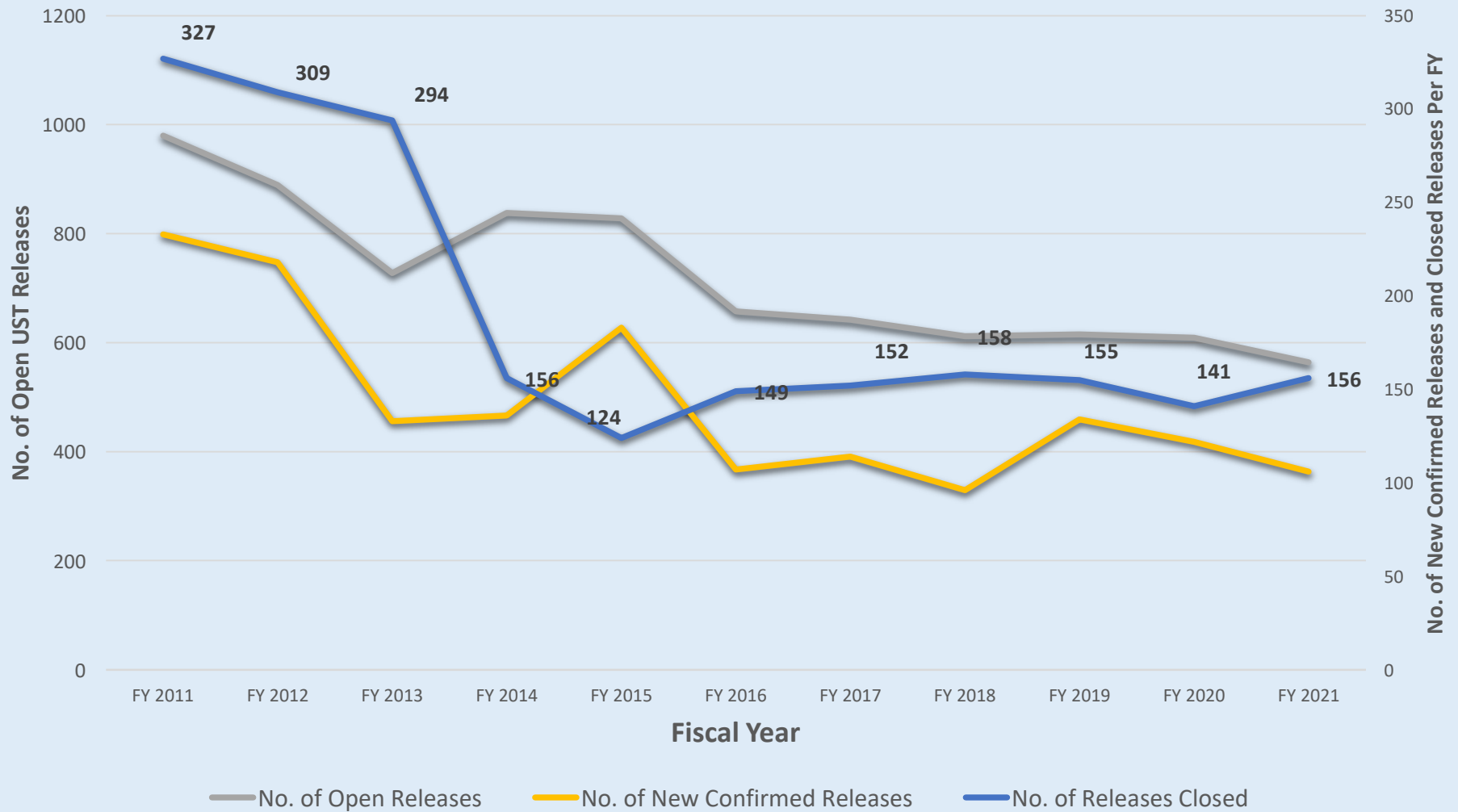
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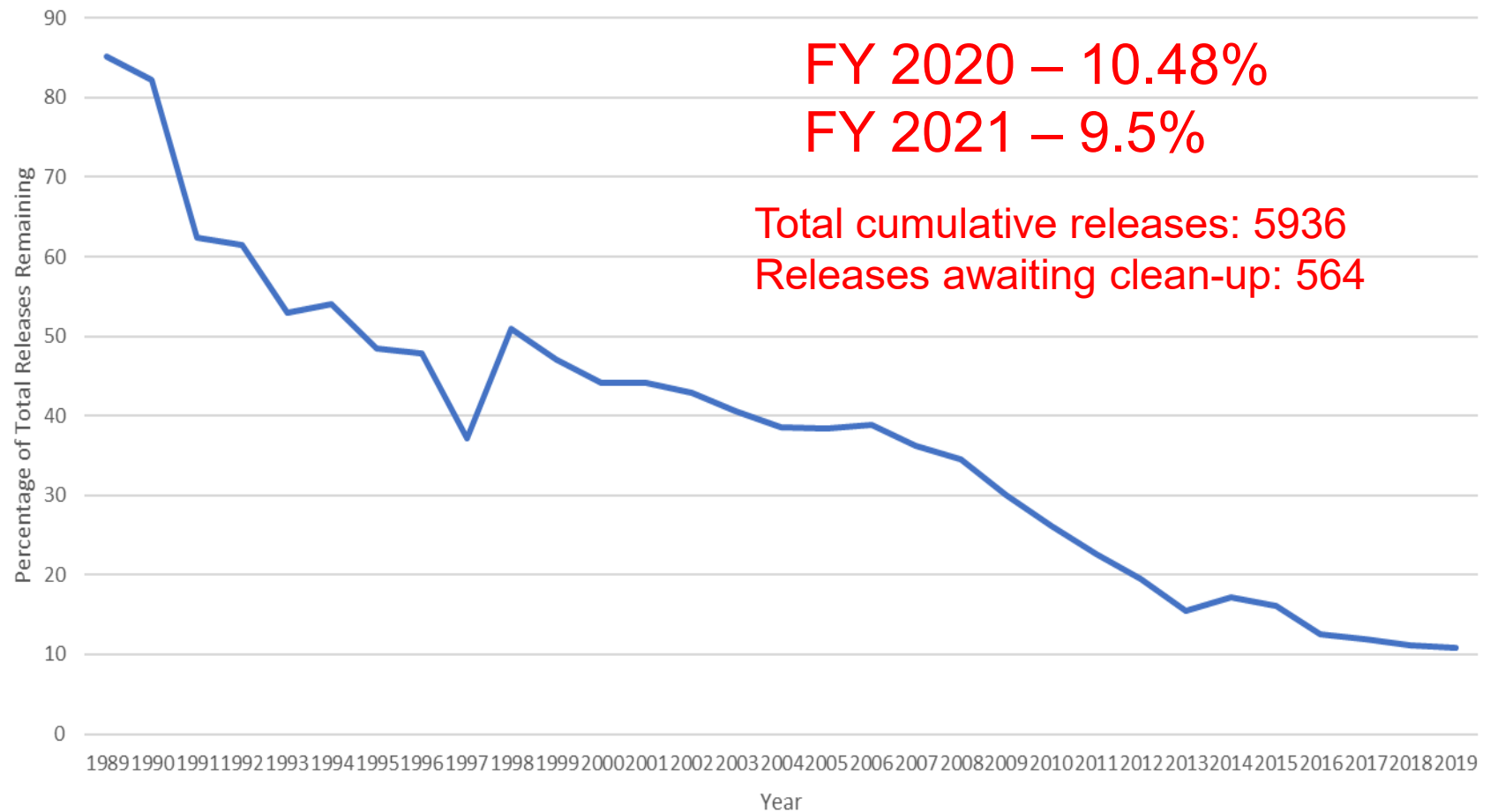
## No. of Open UST Releases, New Confirmed Releases, and Closed Releases per Fiscal Year



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## Percent of Total of Clean Ups Remaining Open in Louisiana



Graph by Jessica Holland, LDEQ



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# What are the costs?

- Average costs for site investigations - \$90,000
- Estimated costs for sites with investigation and corrective action - \$400,000 – \$900,000



# Who Pays?

- Financial Responsibility (FR) Mechanisms:
  - *Self-funded; Self-insured; Private Insurance*
  - *LA UST Motor Fuels Trust Fund (MFTF)*
- *EPA LUST Prevention Grant*
- *EPA LUST Corrective Action Grant*
- *Abandoned Tank Program (MFTF Ineligible)*
  - *Interest monies from MFTF*



# Louisiana Motor Fuels Trust Fund

- Established by RS 30:2195 (Act 767) on July 15, 1988.
- Reimburses appropriate costs incurred during Corrective Action.
- Trust Fund pays up to \$1,500,000 per confirmed release



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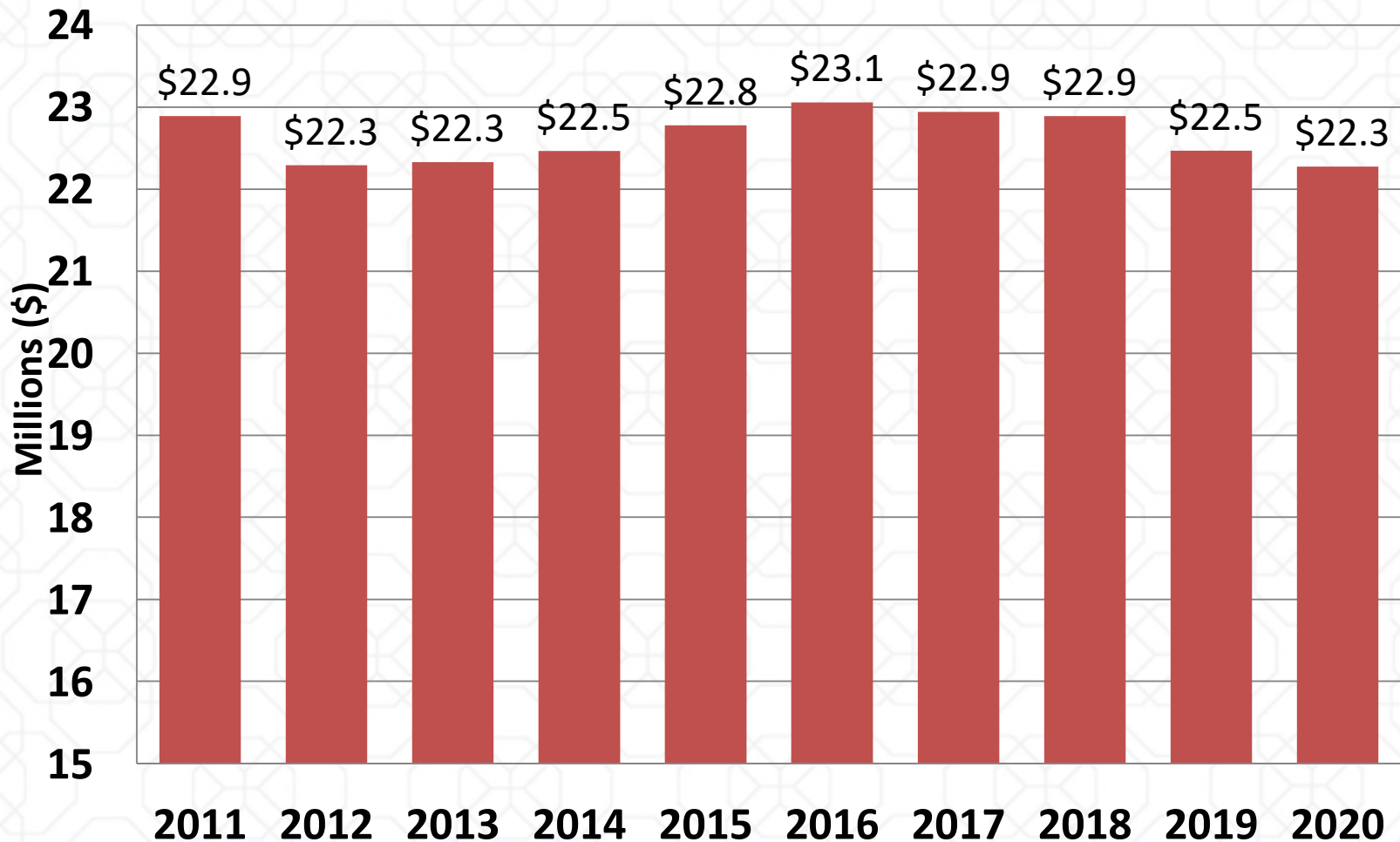




# Motor Fuels Trust Fund Funding Sources

- New and Used Oil Storage tank fee
  - Approximately \$ 27,000.00 per year – fee of \$275.00 per year per tank
- Fuel Distribution Fee
  - Fee of \$72.00 for each delivery of 9,000 gallons of fuel (8/10 of 1 cent per gal.)

## MFTF - Fee Collections



# Who is eligible for MFTF?

- **"Eligible Participant"** any owner/operator of an underground motor fuel storage tank who;
  - Has registered tanks prior to the date of a release,
  - Paid the annual tank registration fees,
  - Met the financial responsibility (deductible requirements).



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## **Eligibility Determination Process**

- Were the tanks registered at the time of the release?
- Have all annual UST registration fees been paid?
- Did the owner select Trust Fund as their Financial Responsibility Funding Mechanism on the UST Registration Form?
- Has DEQ confirmed that a release has occurred?
- Has DEQ requested Further Investigation for the release?



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# Compliant and Non-Compliant Financial Responsibility Deductible

- LDEQ Staff perform a compliance review
  - Compliant – Site was 100% compliant
    - **Compliant deductible-** \$0 per release.
  - Non-Compliant – Site was out of compliance (La. Revised Statute 30:2195.10.B)
    - **Non-Compliant deductible-** \$10,000 per release.

## Limitations to Trust Fund Reimbursements:

- Only reimburse to restore the site to the use and occupancy at the time of the release.
- Only reimburse Response Action Contractors (RACs).
- Cannot reimburse for activities older than two years.
- Only reimburse for USTs containing “Motor Fuels”.

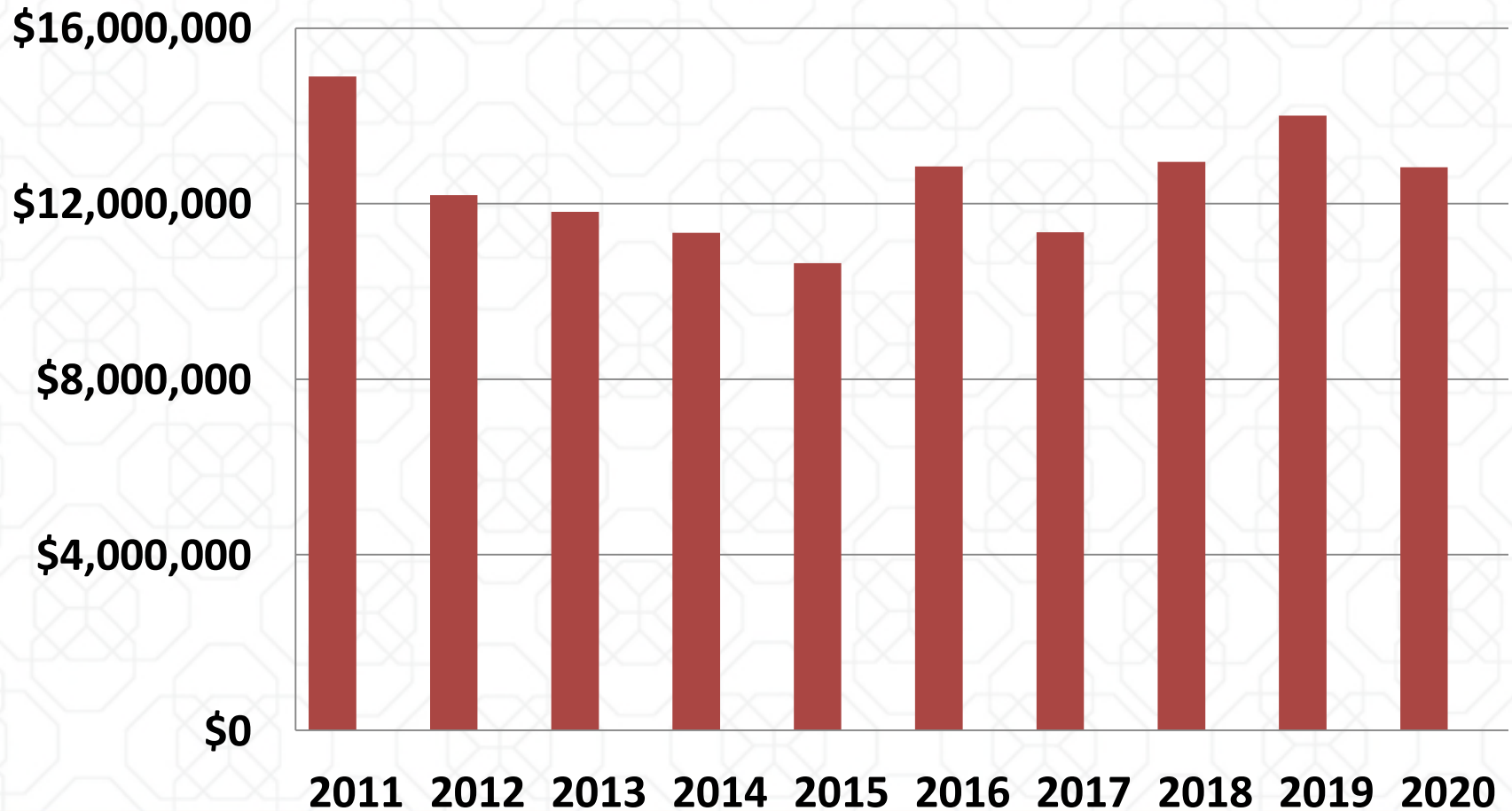


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## Motor Fuels TF – Reimbursed Amounts



# Abandoned Tank Program (ATP)

- The purpose of the program is to provide financial assistance to;
  - Conduct tank closures
  - Complete site investigation
  - Complete corrective action activities.

Requires that the state shall have a lien against immovable property for the costs incurred for the completed activities. (*La. R.S. 30:2195.F.2*)



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# ATP Eligibility

Under the provisions of La. R.S. 30:2195.F.3, a tank may be declared to be an abandoned UST by the secretary upon finding that all of the following apply to the site:

- Tank received motor fuels.
- Tank was not closed or the site was not assessed or remediated in accordance with regulatory requirements.
- Constitutes or may constitute a danger or potential danger to public health or the environment.
- No financially responsible owner who can be located or has failed or refused to undertake actions ordered by the secretary.  
(Unknown, Unwilling, or Unable owner)
- Release is not eligible for the Motor Fuels UST Trust Fund **OR the secretary has determined that action by the department is the most timely and efficient way to address the conditions at the site.**



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# Process for ATP

## Inspections

1. CEIs conducted every 3 years.
2. Document non-compliance.
3. \*Request further site investigation and/or corrective action.
4. Refer for further enforcement action.

## Enforcement

1. Receives referral with documented violations.
2. Issues Compliance Order(s).
3. Requests financial information.
4. Determines financial status.

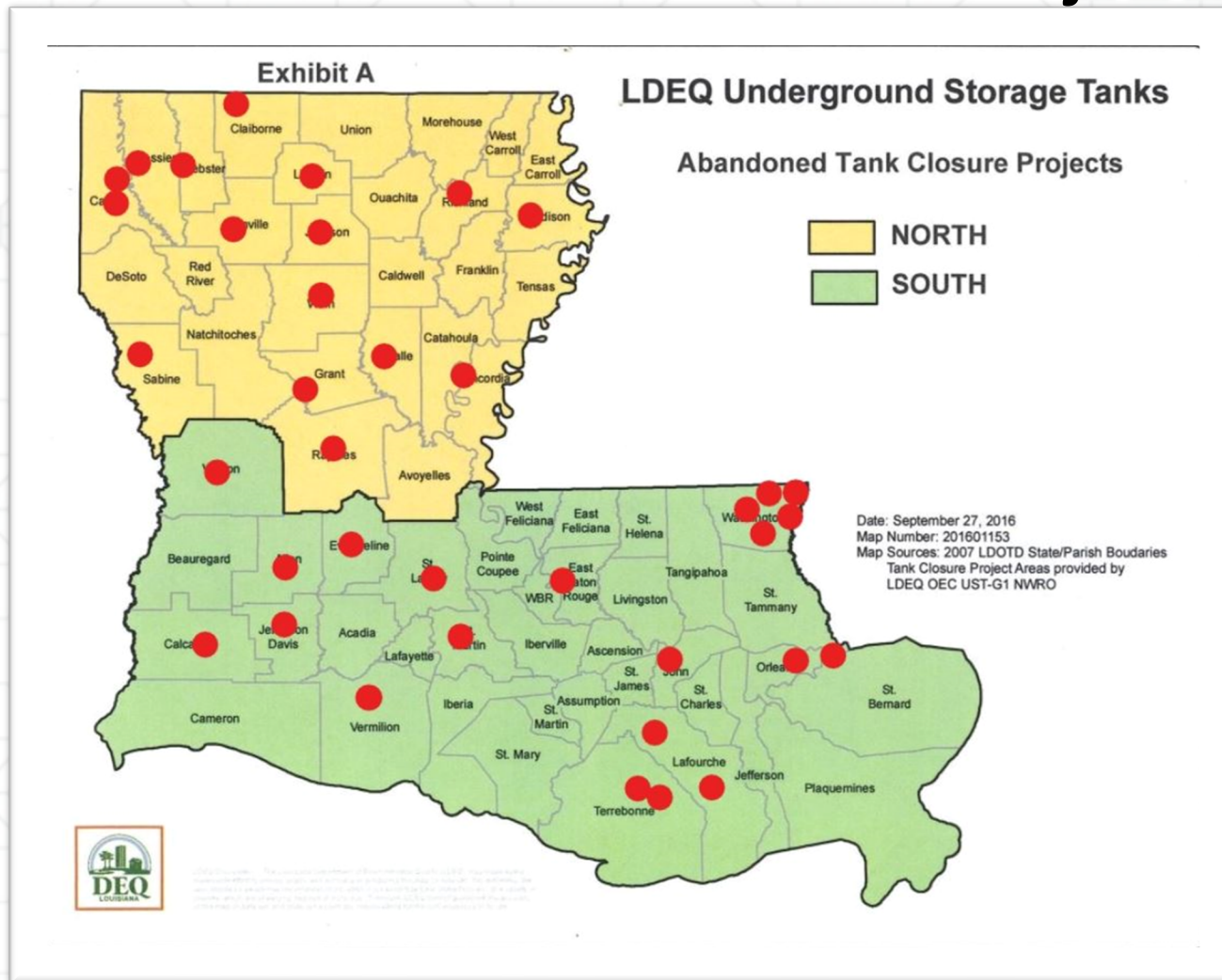
## Eligibility

1. Demonstrates inability to pay.
2. Refuses to comply or unable to locate.
3. Site meets all criteria of R.S. 30:2195.F.3.
4. Committee approves site for inclusion.

## Inclusion

1. Assign site to Team Leader.
2. Rank and prioritize site.
3. Issue Work Orders.
4. Complete closure or assessment.
5. File property lien.

# Abandoned Tank Closure Projects



# ATP Closures Summary

## Fiscal Years 2019-2021

- No. of UST Sites Closed: 37
- No. of USTs Removed: 105
- Total Tank Capacity: 363,600 gallons
- Total Fluids Removed: 127,079 gallons
- Total Cost: \$676,703.70
- Average Cost per Site: \$18,289.00
- Confirmed Releases: 21 (4 require further investigation)
- Sites remaining on list: 16

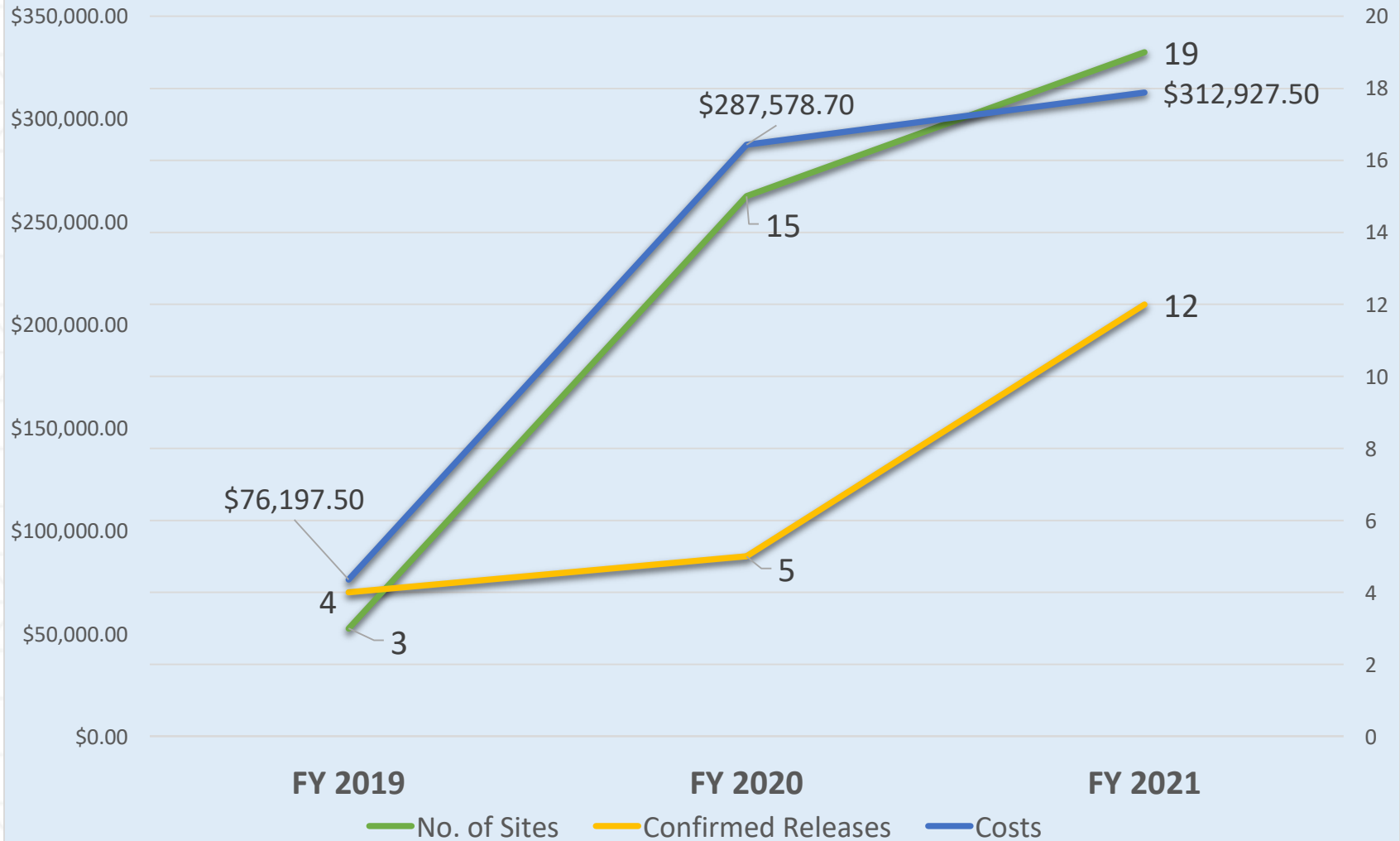


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## Abandoned Tank Closures



# ATP Remediation Projects

- 20 remediation sites on the current priority list.
- Active Work Orders for 8 priority remediation sites throughout the state.
  - *Free phase present; Groundwater 1/2 Classifications*
- Approved budgets of \$428,869.00.
- 2 sites are funded by a 2017 EPA Hurricane Relief Grant.
- All activities, investigation and corrective action, are in accordance with the UST Remediation Process and RECAP.

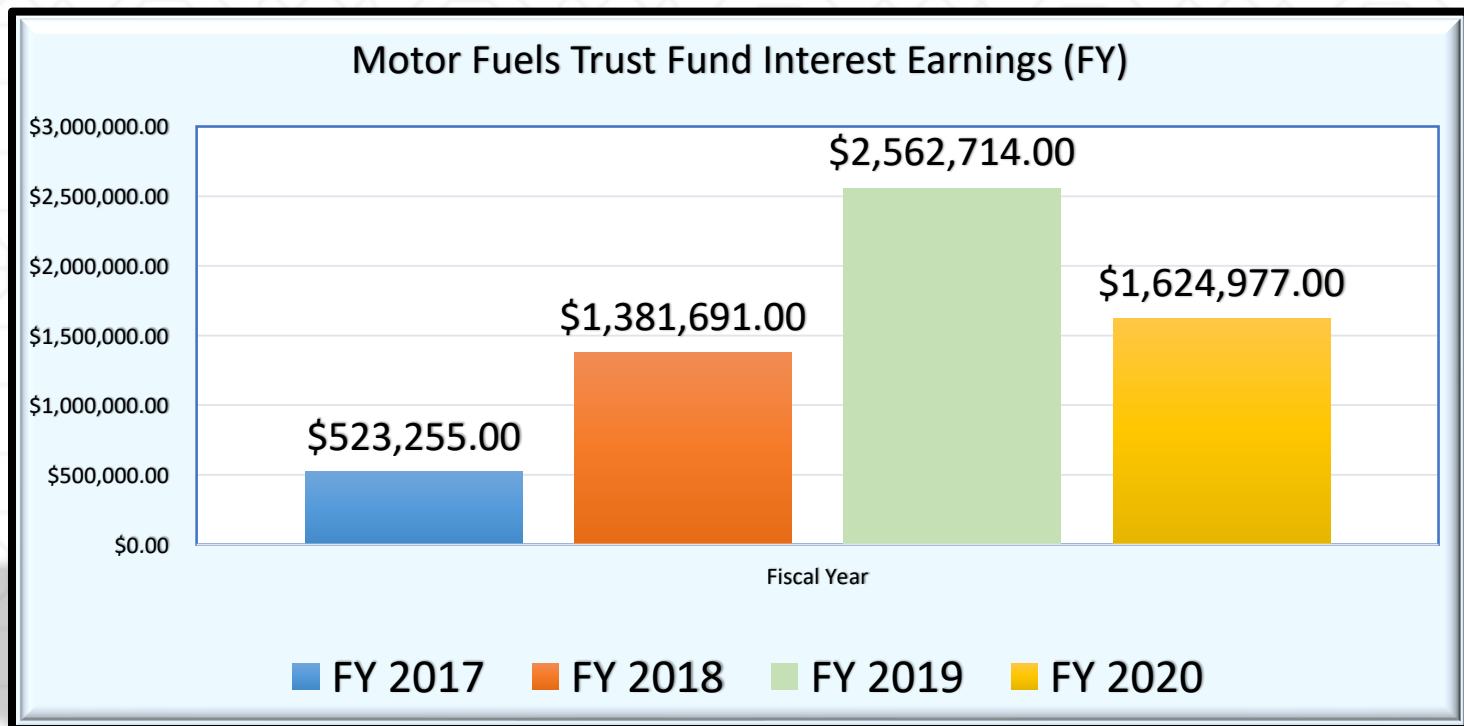


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# Financial Status of ATP Program

- FY 2020-2021 Budget: \$1,200,000



# Grading Performance

- Legislative Reporting Indicators
  - Number of sites evaluated and closed.
  - Percentage of registered underground storage tank sites inspected.
  - Percentage of soil and groundwater investigation work plans reviewed.
  - Percentage of soil and groundwater corrective action work plans reviewed.
- EPA Reporting Indicators
  - LUST Prevention Grant
    - Establish target compliance rates for all UST Facilities meeting the Technical Compliance Rate in compliance TCR categories; Spill, Overfill, Corrosion Protection, and Release Detection.
  - LUST Corrective Action Grant
    - Reduce the number of confirmed releases at UST facilities to five percent (5%) fewer than the prior year's target.
    - Number of confirmed releases awaiting cleanup at UST facilities.
    - Number of LUST Clean ups completed that meet risk-based standards for human exposure and groundwater migration.
    - Provide location information for cleanups completed during each semi-annual performance reporting period to meet the goals of the Environmental Justice 40 Initiative



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# UST Division

**Underground Storage Tank Division**

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# Questions?



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