

Annual Report to the North Carolina General Assembly

Status of Leaking Petroleum Underground Storage Tanks State Cleanup Fund

Fiscal Year 2018 (July 1, 2017 to June 30, 2018)

**N.C. Division of Waste Management
Underground Storage Tank Section**

November 1, 2018



**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY**

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Executive Summary

North Carolina Leaking Petroleum Underground Storage Tanks Cleanup Fund

Fiscal Year (FY) 2018

July 1, 2017 – June 30, 2018

North Carolina's underground storage tank program is administered by the Division of Waste Management's Underground Storage Tank (UST) Section in the North Carolina Department of Environmental Quality (DEQ). The section enforces UST regulations and manages funds used to perform cleanups of petroleum UST discharges or releases (UST incidents). The program was initiated in 1988 in response to growing reports of USTs leaking petroleum into soil and groundwater. Funding for the program is provided by the Commercial Leaking Petroleum Underground Storage Tanks Cleanup Fund (Commercial Fund), the federal Leaking Underground Storage Tank (LUST) Prevention Grant, and the federal LUST Cleanup Grant.

In FY 2017-18, the UST program achieved closure for 431 commercial UST release incidents. Reimbursements to responsible parties for FY 2017-18 totaled \$9,658,005. In addition, the state-lead program that assumes management of incidents for which no viable responsible party exists performed \$3,402,481 in assessment and cleanup through its state-lead contractors.

The Commercial Fund is used to provide safe alternatives to drinking water wells that have been contaminated by petroleum releases from USTs. In FY 2018, the UST program provided alternative water supplies, including bottled water, point-of-entry filtration systems and waterline extensions, to replace 74 contaminated water supply wells serving 279 citizens.

The North Carolina Division of Waste Management (DWM) maintains lists of all known discharges or releases from underground storage tanks, all responsible party (RP) cleanups, Noncommercial Fund cleanups requiring state funding and cleanup status updates. These are available at:

<https://deq.nc.gov/about/divisions/waste-management/ust/databases>.

The Department annually reports to the Environmental Review Commission, the Fiscal Research Division, the Senate Appropriations Subcommittee on Natural and Economic Resources, and the House Appropriations Subcommittee on Natural and Economic Resources per N.C. General Statute 143-215.94M.

Commercial Tank Cleanup Fund Management

In FY 2017-18, the Division of Waste Management's (DWM) Underground Storage Tank (UST) Section managed reimbursement funds for cleanup of environmental contamination from petroleum UST releases. The Commercial Cleanup Fund reimbursed the costs of cleanups of petroleum releases from commercial USTs, which are typically regulated gasoline station tanks or heating oil tanks greater than 1,100-gallons capacity. The owners of commercial USTs pay annual operating fees into the Commercial Cleanup Fund, and also pay deductible amounts toward the costs of assessments and cleanups of petroleum releases.

In FY 2017-18, the UST Section managed the cleanup funds in accordance with the requirements of N.C.G.S 143-215.94E, which directs the N.C. Department of Environmental Quality (DEQ) to give priority to cleanup of releases in emergency situations, and to those that pose the greatest risks to human health and the environment. The statute also directs the DWM to order non-emergency work only if the costs could be reimbursed by the appropriate cleanup fund within 90 days of claim approval. To meet these legislative requirements, the UST Section uses a risk, rank and abatement (RRA) scoring system that quantifies the relative risks of all releases, allowing the Section to direct work at the highest risk incidents and reimburse the costs of that work within 90 days. Each week, the UST Section staff reviews balances, expenditures and obligations of the Commercial Fund, and periodically adjusts the RRA score threshold to direct as much cleanup work as resources will allow. In FY 2015-16, as a result of implementing more intensive oversight and cost control measures, the UST Section was able to lower the RRA score threshold for the Commercial Fund for the first time since FY 2012-13. During FY 2017-18, the program could direct cleanup activities to all high-risk commercial UST releases and all but 190 intermediate-risk releases.

Unfunded Noncommercial Release Response

Session Law 2015-241 directed the phase-out of the Noncommercial UST reimbursement program to end on Dec. 31, 2016, and limited eligibility for the remaining funds to only those releases reported prior to Oct. 1, 2015. It furthered modified the necessary response to noncommercial UST releases based on DEQ risk determination. Initial Abatement Requirements were eliminated, and all actions at eligible sites were required to be re-authorized to ensure compliance with the new law. Session Law 2017-57 required the Environmental Management Commission (EMC) to adopt temporary rules to implement Section 14.16B of Session Law 2015-241 by Oct. 1, 2017. The necessary changes to 15A NCAC 02L Section .0400 were submitted by the DEQ and reviewed by the EMC for approval on Sept. 29, 2017. No further cleanup of noncommercial releases was required for low-risk sites or reimbursed for any sites. However, UST Section staff are still required, in the absence of funding, to oversee responsible party actions at all reported noncommercial incidents to ensure proper closure and documentation. A total of 381 noncommercial incidents were reported during FY 2017-18, which has resulted in significant unfunded use of personnel resources.

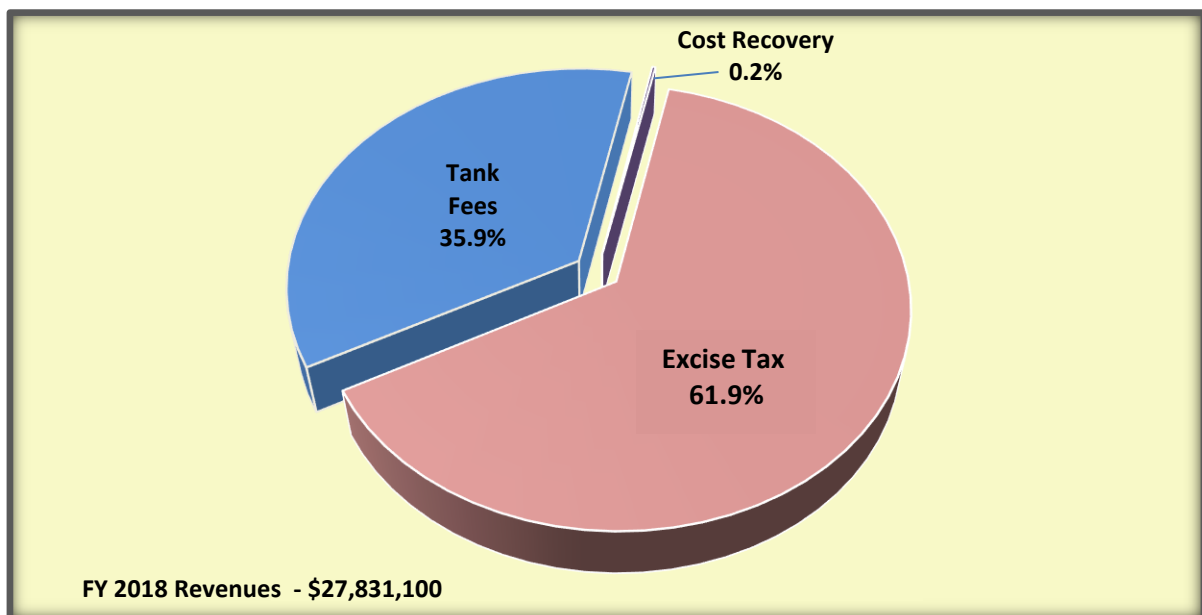
In addition, UST Section personnel are required to respond to releases from aboveground petroleum storage tanks (ASTs), roadside, and other spills greater than 25-gallons. These responses are also unfunded through current mechanisms and result in further diversion of personnel resources.

FY 2018 Commercial Fund Activity
(July 1, 2017 through June 30, 2018)

	Amount	Totals
Fund Balance on 7/1/2017	\$38,828,409	\$38,828,409
Revenues (7/1/17 – 6/30/18)		\$27,831,100
Motor Fuel & Gasoline Excise Tax	\$17,786,260	
UST Operating Fees	\$9,990,701	
State Lead Cost Recovery	\$ 54,139	
Interest	\$ 0	
Loan Fund Collection and Interest	\$ 0	
Transfer - Bernard Allen Trust Fund	\$ 0	
Expenditures		\$17,168,788
Reimbursements	\$9,658,005	
State-Lead Contracting and Laboratory	\$3,402,481	
Program Administration	\$4,018,302	
Transfers from Fund		
Transfer to Department of Agriculture	\$90,000	
Transfer to Federal LUST Program (cost recovery)	\$ 0	
Fund Cash Balance on 6/30/2018		\$49,490,721
Estimated Obligations¹		\$22,965,759
RP-lead cleanup	\$3,160,418	
State-lead cleanup	\$13,312,400	
Pre-approved non-directed actions	\$2,245,977	
Program Administration	\$4,246,964	
Estimated Unobligated Balance 06/30/2018		\$26,524,962

1. Estimated obligations include estimates of non-reimbursed costs for tasks not requiring pre-approval that were incurred prior to implementation of Session Law 2004-124; outstanding non-reimbursed costs for pre-approved directed tasks; requested reimbursement costs for claims under review; approved costs for claims awaiting reimbursement; non-reimbursed costs for approved non-directed tasks; and any remaining program expenses.

Commercial Fund Revenue Sources – FY 2018



**Summary of Key Statistics since UST Program Inception
(July 1, 1988 to June 30, 2018)**

Revenues and Expenditures		
Commercial Fund Revenues		\$ 783,018,019
Commercial Fund Expenditures		\$ 733,408,219
Releases		
Petroleum UST Releases – Reported		
Commercial	20,453	
Noncommercial	10,990	
Total		31,443
Petroleum UST Releases - Closed Out		
Commercial	15,247	
Noncommercial	8,804	
Total		24,051
<u>FY 2018 Activity</u>		
Petroleum UST Releases Reported		
Commercial	312	
Noncommercial	344	
Total		656
Petroleum UST Releases Closed Out		
Commercial	431	
Noncommercial	338	
Total		769

Commercial Fund Status

For the 12-month period from July 1, 2017 through June 30, 2018, the unobligated Commercial Fund balance increased for the second consecutive year. On June 30, 2018, the unobligated Commercial Fund balance was \$26,524,962 an increase of \$9,063,949 from the FY 2017 end-of-year balance. Beginning in late FY 2013-14 and continuing through FY 2017-18, the UST Section undertook an intensive re-evaluation of its risk-based closure process and instituted a more rigorous review of pre-approvals for site work. This resulted in cost savings that more nearly balanced revenues with expenditures during FY 2015 through FY 2018 than in the preceding six years when the cash balance decreased at an average rate of \$4.6M per year. Concurrently, the UST Section staff undertook an administrative review of all pending task authorizations with regard to statute of limitations requirements. Both of these cost-control measures remain ongoing, with the goal of the Commercial Fund eventually being able to direct work on all high- and intermediate-risk incidents. Pending estimated obligations as of June 30, 2018 were \$22,965,759, including \$13,312,400 allocated to State-led cleanups managed by the UST Section. However, funding is still subject to the RRA score, and the continuing inability to reimburse work on all releases, regardless of risk ranking, has both short-term and long-term impacts. In the near-term, the lack of funding means that owners of those properties may find it difficult to move forward with property transactions. In the long-term, conditions (i.e. residential/commercial development, new wells) around a lower-risk release may change with time and result in an increase in the threat to public health.

Estimated Costs of Clean Up

Despite implementation of the more rigorous oversight and cost control measures that have more nearly balanced revenues with expenditures, at current revenue levels (\$26.5 million per year on average), it will take the Fund approximately 19 years to generate the receipts necessary to pay existing projected obligations. Under new Environmental Protection Agency criteria, the DEQ can estimate the maximum potential liabilities for cleaning up all known commercial UST releases by multiplying the median cost to the Fund per release (\$104,769) for FY 2013 – FY 2018 by the number of known commercial releases needing cleanup (4,808). The result is a total estimated future

obligation of approximately \$503.7 million – an amount that includes about \$18.7 million obligated for cleanups already underway.

With a present balance of approximately \$49.9 million, the Fund will need an additional \$453.8 million to clean up all currently known commercial UST releases. This estimate does not account for the costs of cleaning up releases not yet reported (future releases). The number of reported new releases has decreased in recent years, due to increased inspection and prevention measures implemented in 2008. In FY 13 through FY 18, an average of 289 new, fund-eligible commercial UST releases per year were discovered and reported. This trend suggests an additional \$30.3 million per year will potentially be added to overall obligations. Given these projected obligations, in the absence of additional funding or changes in funding mechanisms, the long-term viability of the Commercial Fund as a primary financial responsibility mechanism, as currently structured, continues to be in question.

FY 2017-18
Petroleum Underground Storage Tank Cleanup Funds
Recommendations

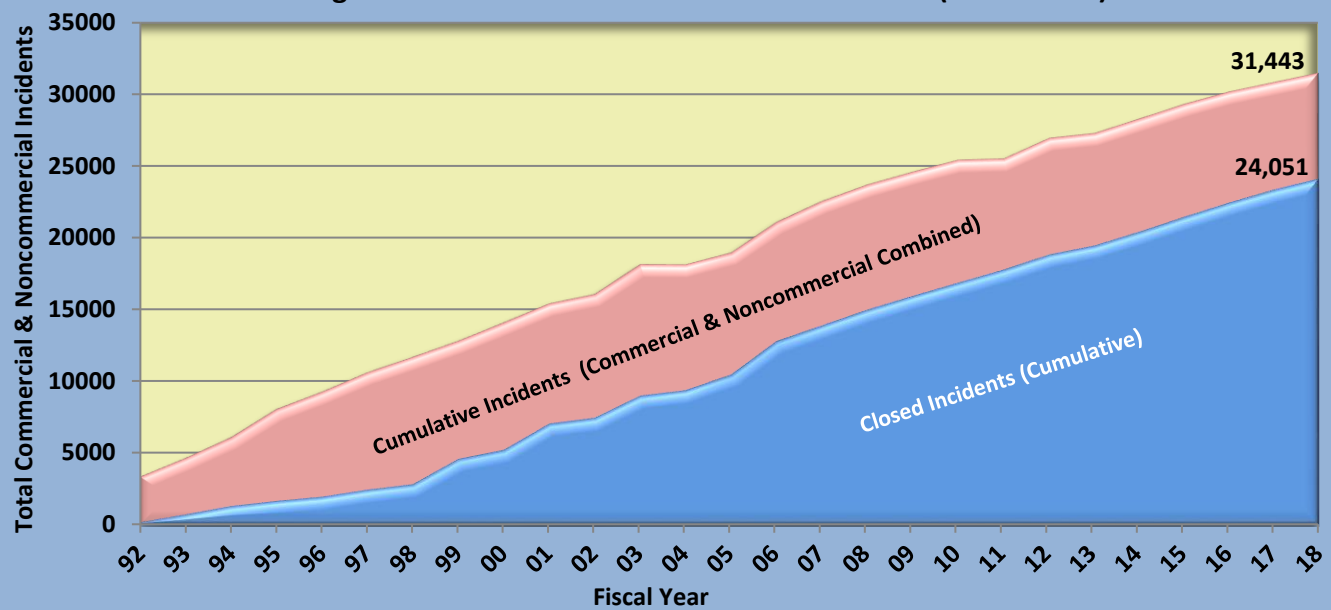
- 1) Provide additional funding and staff to address required oversight for releases from ASTs, noncommercial (home heating oil) USTs and roadside incidents.
- 2) Provide additional funding and equipment for emergency response actions (i.e. storms, floods or releases from unknown sources).
- 3) Continue ongoing cost control measures:
 - i) Evaluation and implementation of better, more systematic ways to apply risk-based closure criteria to incidents.
 - ii) Continuation of more intensive review of pre-approvals for requested site work.
 - iii) Continuation of more intensive corrective action plan review with consensus of the selected method and technology by all stakeholders prior to implementation.
- 4) Investigate possible revenue enhancement mechanisms to enable the Commercial Fund to better meet projected future obligations or consider long-term transition from the Commercial Fund as the primary mechanism for owners of regulated USTs to meet federal financial responsibility requirements. In place of, or in conjunction with, a state-subsidized fund, owners and operators of newly installed or replaced or upgraded, regulated commercial UST systems could be required to use other financial responsibility mechanisms, such as private insurance, bonding, letters of credit or self-insurance.
- 5) Continue the successful programs previously implemented to prevent releases by maintaining a compliance inspection frequency of at least once every three years for USTs in North Carolina.
- 6) Continue the successful programs previously implemented to prevent and minimize releases by providing release prevention and detection training to UST owners and operators.

Tables and Figures

Table 1 - UST Releases Since Program Inception (FY 1989 - FY 2018)

Commercial UST Releases		Noncommercial UST Releases	
Releases Reported	20,453	Releases Reported	10,990
RP-Lead	18,650	RP-Lead	10,723
State-Lead	1,803	State-Lead	267
Cleaned Up to No Further Action	15,247	Cleaned Up to No Further Action	8,804
RP-Lead	14,362	RP-Lead	8,651
State-Lead	885	State-Lead	153
Ongoing Cleanups	3,540	Ongoing Cleanups	2,078
RP-Lead	2,798	RP-Lead	2,078
State-Lead	742	State-Lead	0
No Action Currently Being Taken	1,666	No Action Currently Being Taken	108
RP-Lead	1,604	RP-Lead	0
State-Lead	62	State-Lead	108

Figure 1 - UST Incidents & UST Incidents Closed (Cumulative)



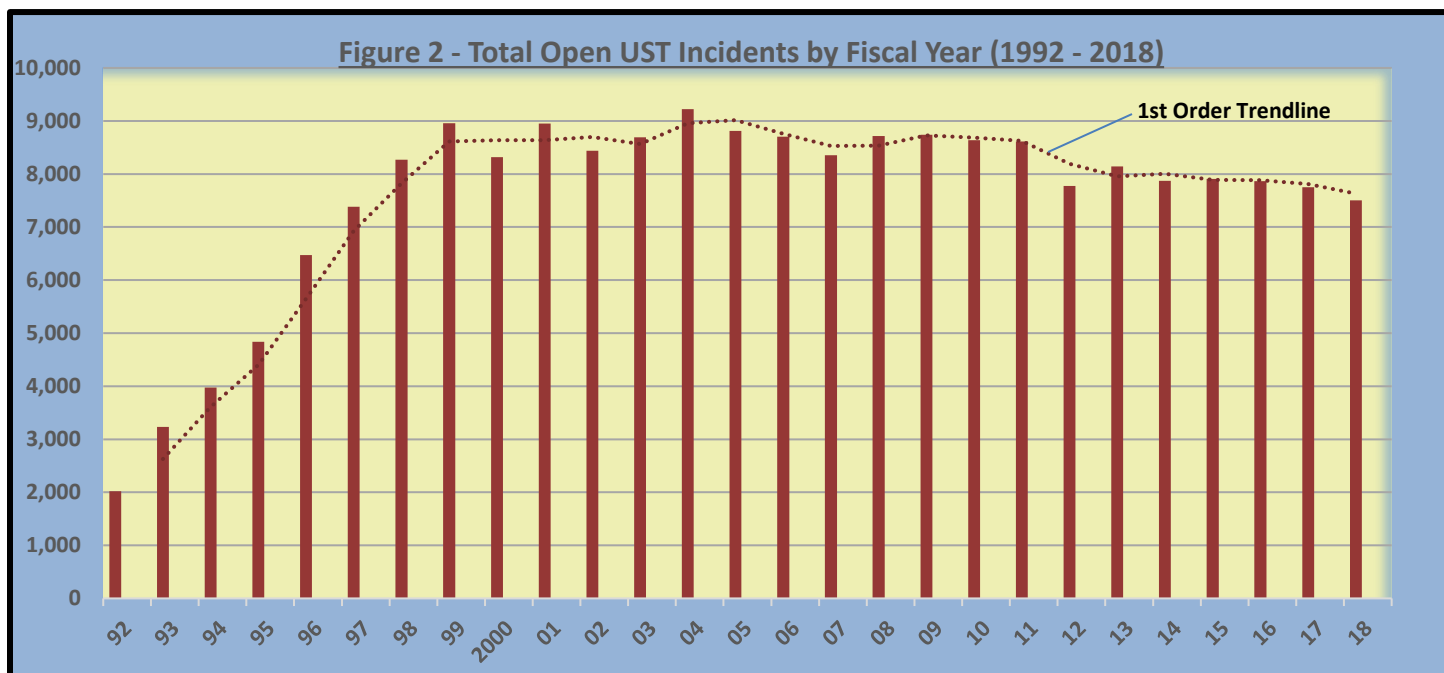


Table 2
Receipts, Disbursements and Program Expenses for the Commercial Fund
7/1/88 – 6/30/18

Fiscal Year	Receipts	Disbursements¹	Legislatively Allowed Program Expenses
FY 1989	\$ 2,337,685	\$ 14,768	
FY 1990	5,773,632	79,080	\$ 201,255
FY 1991	7,330,573	1,616,760	547,595
FY 1992	13,484,008	4,409,229	517,221
FY 1993	18,032,784	9,651,948	601,687
FY 1994	24,438,966	22,904,802	694,424
FY 1995	56,037,135 ²	37,405,510	666,270
FY 1996	28,178,768	44,060,639	2,322,632
FY 1997	28,564,034	44,163,273	2,623,339
FY 1998	27,291,220	30,267,392	2,530,036
FY 1999	26,783,344	16,104,152	2,567,668
FY 2000	27,178,623	22,820,069 ³	2,579,540
FY 2001	27,240,303	24,566,132 ⁴	2,730,236
FY 2002	27,124,210	36,872,426	2,397,264
FY 2003	27,055,759	26,498,565	2,221,851
FY 2004	26,934,685	23,514,179 ⁵	2,527,451
FY 2005	50,255,908 ⁷	46,966,083 ⁶	2,654,447
FY 2006	28,143,119	15,474,991 ⁸	2,636,228
FY 2007	27,564,837	7,372,403 ⁹	2,725,418
FY 2008	27,458,790	11,511,344 ¹⁰	2,859,460
FY 2009	31,026,131	15,007,590 ¹¹	3,380,143
FY 2010	27,969,400	17,760,225 ¹²	3,703,143
FY 2011	26,951,504	31,697,736 ¹³	3,859,161
FY 2012	26,311,956	29,132,749 ¹⁴	3,881,825
FY 2013	26,316,112	29,187,009 ¹⁴	3,960,943
FY 2014	28,222,762	27,091,769 ¹⁴	3,806,616
FY 2015	27,049,782	25,607,888 ¹⁴	3,890,089
FY 2016	26,496,737	23,616,208 ¹⁴	3,985,706
FY 2017	27,634,152	20,071,855 ^{14,15}	3,721,009
FY 2018	27,831,100	13,150,486 ¹⁴	4,018,302
TOTAL	\$ 783,018,019	\$ 658,597,260	\$ 74,810,959

1. Does not include program expenses.
2. Commercial receipts for FY 1994-1995 included \$31,288,889 that was transferred from the Groundwater Protection Loan Fund.
3. Adjustment due to a transfer from the Commercial Fund to the Federal Trust Fund of \$288,117 as a clean-up expenditure rather than as a program expense.
4. Includes \$33,866 transferred to the Federal Trust Fund for clean-up expenditure.
5. Includes transfer of \$2,036,932 from Commercial to Noncommercial Trust Funds per GS 119.18(b); transfer of \$90,000 to Department of Agriculture and Consumer Services; and transfer of \$452,722 to the Federal Trust Fund for clean-up expenditure.
6. Includes transfer of \$43,150,730 from Commercial to Noncommercial Trust Fund per GS 119.18(b). Transfer from Department of Agriculture and Consumer Services of \$38,702 to Federal Trust Fund.
7. Includes additional revenue from the 1-year 1.1 cent per gallon excise tax or \$19 million to the Trust Fund.
8. Includes \$1,922,601 transfer to Noncommercial Fund, \$90,000 transfer to Department of Agriculture and Consumer Services, and \$30,016 transfer to repay Federal Trust Fund for State Lead program expenses.
9. Includes transfer to Noncommercial Fund of \$598,935 and disbursement from the Commercial Fund to the Department of Agriculture and Consumer Services (\$90,000) and Federal LUST Grant (\$108,904).
10. Includes transfer to Noncommercial Fund of \$1,381,848, and disbursement from the Commercial Fund to the Department of Agriculture and Consumer Services (\$90,000), and Federal LUST Grant (\$53,752).
11. Includes transfer to Noncommercial Fund of \$1,004,895, and disbursement from the Commercial Fund to the Department of Agriculture and Consumer Services (\$90,000).
12. Includes disbursement to Department of Agriculture and Consumer Services of \$90,000.
13. Includes disbursements to Department of Agriculture and Consumer Services (\$90,000) and legislatively mandated transfer of interest (\$614,239.29).
14. Includes disbursements to Department of Agriculture and Consumer Services (\$90,000).
15. Includes transfer of \$1,153,783 to close out the Noncommercial Fund

Table 3 – Claims Processed for the Commercial Cleanup Fund
7/1/88 – 6/30/18

Claim Action	Number
Claims Paid	47,317
Incidents Denied Totally ¹	33
Claims Denied Partially ²	18,127
Claims Pending	47
Contracted Cleanups ³	1,805

1 Ineligible (operating fees not paid; release discovery pre-dates program)

2 Claims contain excessive or undocumented costs

3 State lead actions initiated

Figure 3 - Commercial Fund Balance and Claims Pending and Obligations

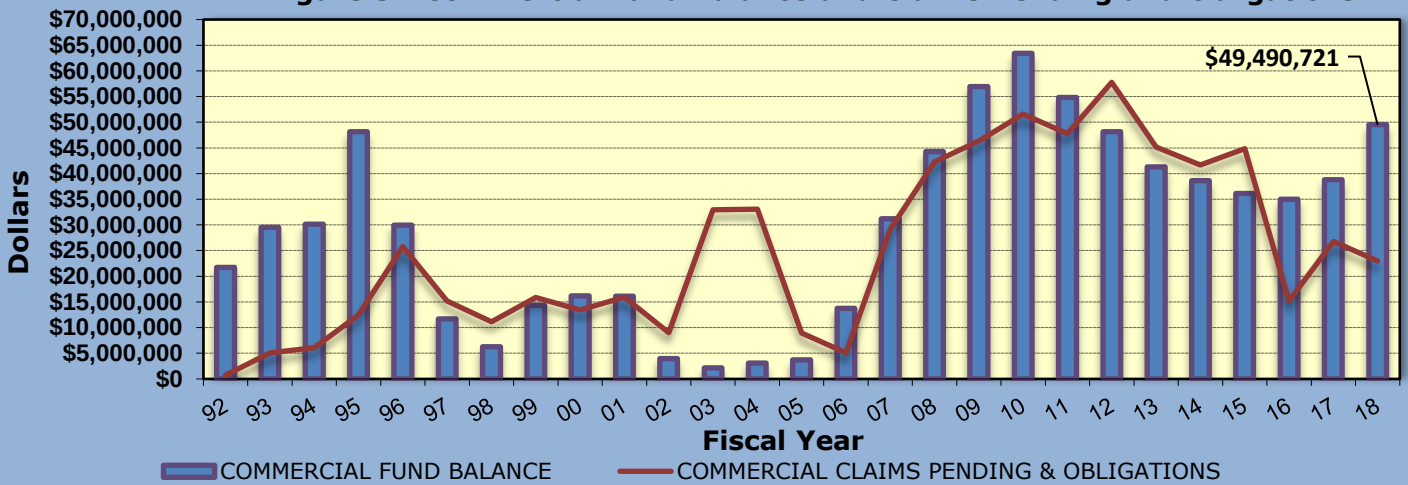


Figure 4 - Commercial Fund Balance Minus Claims Pending and Obligations

