

Annual Report to the Environmental Review Commission North Carolina General Assembly

**Status of Leaking Petroleum Underground Storage Tanks
The State Cleanup Funds**

Fiscal Year 2017 (July 1, 2016 to June 30, 2017)

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

November 1, 2017



**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY**

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EXECUTIVE SUMMARY – UNDERGROUND STORAGE TANK (UST) CLEANUP FUNDS FY 2017

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 and Noncommercial Cleanup Funds, the federal Leaking Underground Storage Tank (LUST) prevention grant, and the federal LUST cleanup grant. At FY 2017 year-end there are 5,325 known (open) releases from commercial UST systems in North Carolina. The number of open releases has been reduced from 6,875 at FY 2010 year-end. Based upon recent data, the average cost of cleanup from discovery to closure per incident is \$173,667.

The Commercial and Noncommercial Cleanup Funds are also used to provide safe alternatives to drinking water wells that have been contaminated by petroleum releases from USTs. In FY 2017, the UST program provided alternative water supplies, including bottled water, point-of-entry filtration systems, and waterline extensions, to replace 109 contaminated water supply wells serving 327 citizens.

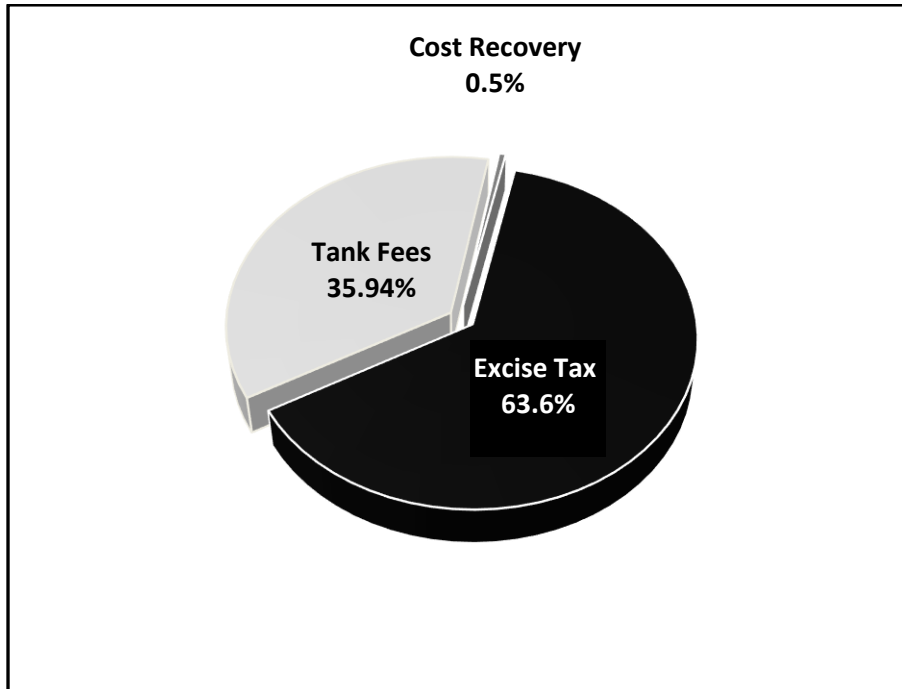
Lists of all known discharges or releases from underground storage tanks, all Responsible Party (RP) cleanups, Noncommercial Fund cleanups requiring state funding, and cleanup status updates are available from the Division of Waste Management.

**FY 2017 Commercial Fund Activity
(July 1, 2016 through June 30, 2017)**

	Amount	Totals
Fund Balance on 7/1/2015	\$34,987,121	\$34,987,121
Revenues (7/1/15 – 6/30/16)		\$27,634,152
Motor Fuel & Gasoline Excise Tax	\$17,564,893	
UST Operating Fees	\$9,931,107	
State Lead Cost Recovery	\$138,152	
Interest	\$ 0	
Loan Fund Collection and Interest	\$ 0	
Transfer - Bernard Allen Trust Fund	\$ 0	
Expenditures		\$23,792,864
Reimbursements	\$16,508,443	
State-Lead Contracting & Laboratory	\$2,319,629	
Program Administration	\$3,721,009	
Transfers from Fund		\$1,243,783
Transfer to Noncommercial Fund	\$ 1,153,783	
Transfer to Department of Agriculture	\$90,000	
Transfer to Federal LUST Program (cost recovery)	\$ 0	
Fund Balance on 6/30/2017		\$38,828,409
Estimated Obligations¹		\$21,367,397
RP-lead cleanup	\$8,718,497	
State-lead cleanup	\$10,941,601	
Pre-approved non-directed actions	\$1,707,299	
Estimated Unobligated Balance 06/30/2017		\$17,461,012

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

Commercial Fund Revenue Sources – FY 2017

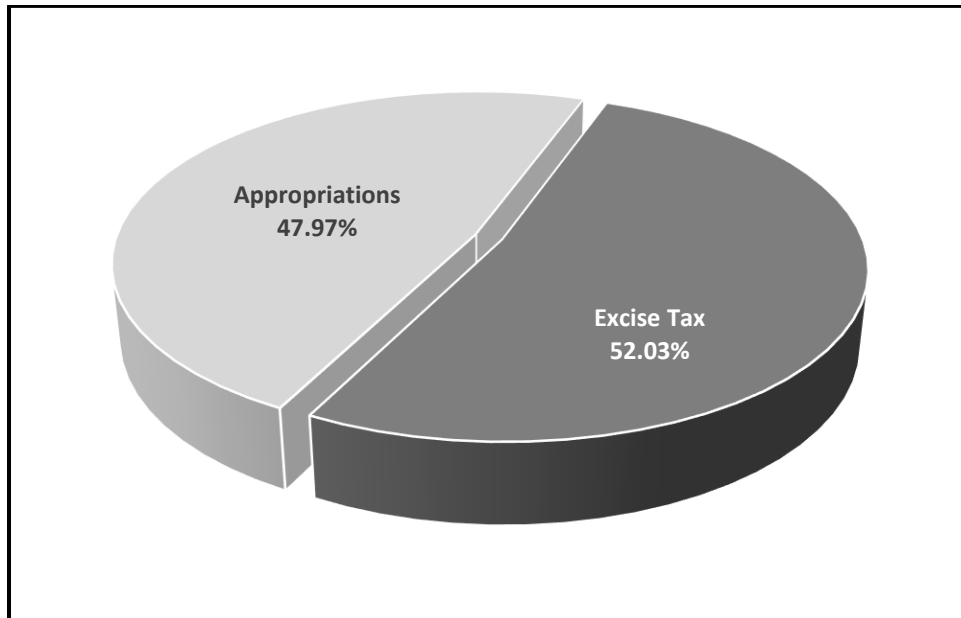


**FY 2017 Noncommercial Fund Activity
(July 1, 2016 through June 30, 2017)**

	Amount	Totals
Fund Balance on 7/1/2016		\$220,986
Revenues (7/1/16 – 6/30/17)		\$1,153,783
Motor Fuel & Gasoline Excise Tax	\$0	
Interest	\$ 0	
Transfer from Commercial Fund	\$1,153,770	
Cost Recovery	\$ 0	
Expenditures		\$1,374,769
Total Claims and Contracted Cleanups	\$1,374,769	
Administrative Costs	\$ 0	
Fund Balance on 6/30/2017		\$0
Obligations¹		\$0

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

Noncommercial Fund Revenue Sources – FY 2017



**Summary of Key Statistics since UST Program Inception
(July 1, 1988 to June 30, 2017)**

Commercial Fund Revenues		\$ 755,186,819
Commercial Fund Expenditures		\$ 716,239,521
Noncommercial Fund Revenues		\$ 162,805,815
Noncommercial Fund Expenditures		\$ 162,805,815
Petroleum UST Releases – Reported		
Commercial	20,141	
Noncommercial	10,646	
Total		30,787
Petroleum UST Releases - Closed Out		
Commercial	14,816	
Noncommercial	8,466	
Total		22,396
<u>FY 2017 Activity</u>		
Petroleum UST Releases - Reported		
Commercial		278
Noncommercial		322
Petroleum UST Releases – Closed Out		
Commercial		549
Noncommercial		313

Cleanup Fund Management

In FY 2017, the Division of Waste Management's UST Section managed two funds for cleanup of environmental contamination from petroleum underground storage tank (UST) releases. The Commercial Cleanup Fund reimbursed the costs of cleanups of releases of petroleum from commercial USTs, which are typically regulated gasoline station tanks or heating oil tanks of 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. The Noncommercial Cleanup Fund reimbursed the costs of cleanups of releases of petroleum from unregulated USTs such as home heating oil tanks and smaller farm tanks. The owners of noncommercial USTs did not pay annual fees, but were responsible for a \$1,000 deductible and 10 percent co-pay up to a combined maximum owner share of \$2,000 for cleanup expenses.

In FY 2017, the UST section managed the cleanup funds in accordance with the requirements of N.C.G.S 143-215.94E which directs the department 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 division 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 division uses a Risk, Rank and Abatement (RRA) scoring system that quantifies the relative risks of all releases, allowing the division to direct work at the highest risk incidents and reimburse the costs of that work within 90 days. Every week the division reviews balances, expenditures and obligations of both the Commercial and Noncommercial Funds, and periodically adjusts the RRA score threshold to direct as much cleanup work as resources will allow. In FY 2016, as a result of implementing more intensive oversight and cost control measures, the Section was able to lower the RRA score threshold for the Commercial Fund for the first time since FY 2013. During FY 2017, the program could direct cleanup activities at all high-risk commercial UST releases and all but 266 intermediate-risk releases. In FY 2017, the program was able to direct cleanup activities at only about two percent of all high-risk noncommercial UST releases.

Commercial Fund Status

For the 12-month period from July 1, 2016 through June 30, 2017, the Commercial Fund cash balance increased for the first time in seven years. On June 30, 2017, the Commercial Fund balance was \$38,828,408, a decline of \$3,841,287 from the FY 2016 end-of-year balance. Beginning in late FY 2014 and continuing through FY 2017 the Fund undertook an intensive re-evaluation of its risk-based closure process and instituted a more rigorous review of pre-approvals for site work. This has resulted in cost savings that more nearly balanced revenues with expenditures during FY 2016 and FY 2017 than in the preceding six years when the cash balance decreased at an average rate of \$3.5M per year. Concurrently, the Fund undertook an administrative review of all pending task authorizations with regard to statute of limitations requirements. Both of these cost-control measures remain on-going, with the goal of the Fund eventually being able to direct work on all high and intermediate risk incidents. Pending estimated obligations as of June 30, 2017, were \$21,367,397, including \$10,941,601 allocated to State-led cleanups managed by the Section. However, funding is still subject 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 the 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 million per year on average) it will take the Fund approximately 34 years to generate the receipts necessary to pay existing projected obligations. The Department can estimate the maximum potential costs of cleaning up all known commercial UST releases by multiplying the average cost to the Fund per release (\$173,667) for FY 2013 – FY 2017 by the number of known commercial releases needing cleanup (5,325). The result is a total future obligation of approximately \$924.8 million, an amount that includes about \$21.4 million obligated for cleanups already underway. With a present balance of approximately \$38.8 million, the Fund will need an additional \$903.4

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 FY2011 through FY 2017, an average of 260 new, fund-eligible commercial UST releases per year were discovered and reported. This trend suggests an additional \$45.1 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 financial responsibility mechanism, as currently structured, continues to be in question.

Noncommercial Fund Status

The Noncommercial Cleanup Fund showed a large, negative FY 2016 balance because claims greatly exceeded revenue. This is due to 2011 legislation that changed the funding mechanism. The Noncommercial Cleanup Fund had previously received a very small percentage of the motor fuels inspection tax. The 2011 budget re-directed the inspection tax to the Department of Transportation, thereby reducing the Fund income by more than 60 percent. The General Assembly made appropriations of \$4.88 million in FY 2013, \$3.5 million in FY 2014, \$3.42 million in FY 2015, and \$2.37 million in FY 2016 to the Noncommercial Cleanup Fund. In all four fiscal years these funds were quickly expended, primarily to reimburse approved pending claims. Claim reimbursements began to be backlogged again by the second quarter of each year.

Session Law 2015-241 directed the phase-out of the Noncommercial Underground Storage Tank reimbursement program to end on Dec. 31, 2016, and limited eligibility to the remaining funds to only those releases reported prior to Oct. 1, 2015.

Outstanding assets and liabilities of the Noncommercial Fund were transferred to the Commercial Fund for appropriate distribution after December 31, 2016.

On June 30, 2016, the Noncommercial Fund cash balance was \$220,986 with pending obligations of \$1,374,769. On January 1, 2017, \$1,153,770 was transferred from the Commercial Fund to reimburse all outstanding claims. All claims were reimbursed by February 15, 2017 and the Noncommercial Fund was closed with \$0 balance.

Session Law 2015-241 also modified the necessary response to Noncommercial UST releases based upon Department 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. No further cleanup of Noncommercial releases will be required or reimbursed for low-risk sites

Session Law 2017-57 required the EMC to adopt temporary rules to implement Section 14.16B of Session Law 2015-241 by October 1, 2017. The necessary changes to 15A NCAC 02L Section .0400 have been submitted by the Department and reviewed by the EMC for approval on September 29, 2017.

FY 2017
Petroleum Underground Storage Tank Cleanup Funds
Recommendations

- 1) Continue on-going cost control measures:
 - i) Evaluation and implementation of better, more systematic ways to apply risk-based closure criteria to incidents.
 - ii) Institution of more rigorous review of pre-approvals for requested site work.
- 2) Investigate possible revenue enhancement mechanisms to enable the Commercial Fund to better meet projected future obligations.
- 3) Consider long-term transition from the Commercial Cleanup 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 should be required to use other financial responsibility mechanisms, such as private insurance, bonding, letters of credit, or self-insurance.
- 4) Continue the successful programs previously implemented to prevent releases by maintaining a compliance inspection frequency of at least every three years for USTs in North Carolina.
- 5) 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 2017)

Commercial UST Releases		Noncommercial UST Releases	
Releases Reported	20,141	Releases Reported	10,646
RP-Lead	18,412	RP-Lead	10,385
State-Lead	1,729	State-Lead	261
Cleaned Up to No Further Action	14,816	Cleaned Up to No Further Action	8,466
RP-Lead	13,967	RP-Lead	8,321
State-Lead	849	State-Lead	145
Ongoing Cleanups	3,016	Ongoing Cleanups	0
RP-Lead	2,259	RP-Lead	0
State-Lead	742	State-Lead	0
No Action Currently Being Taken	2,309	No Action Currently Being Taken	2,180
RP-Lead	2,186	RP-Lead	2,180
State-Lead	123	State-Lead	0

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

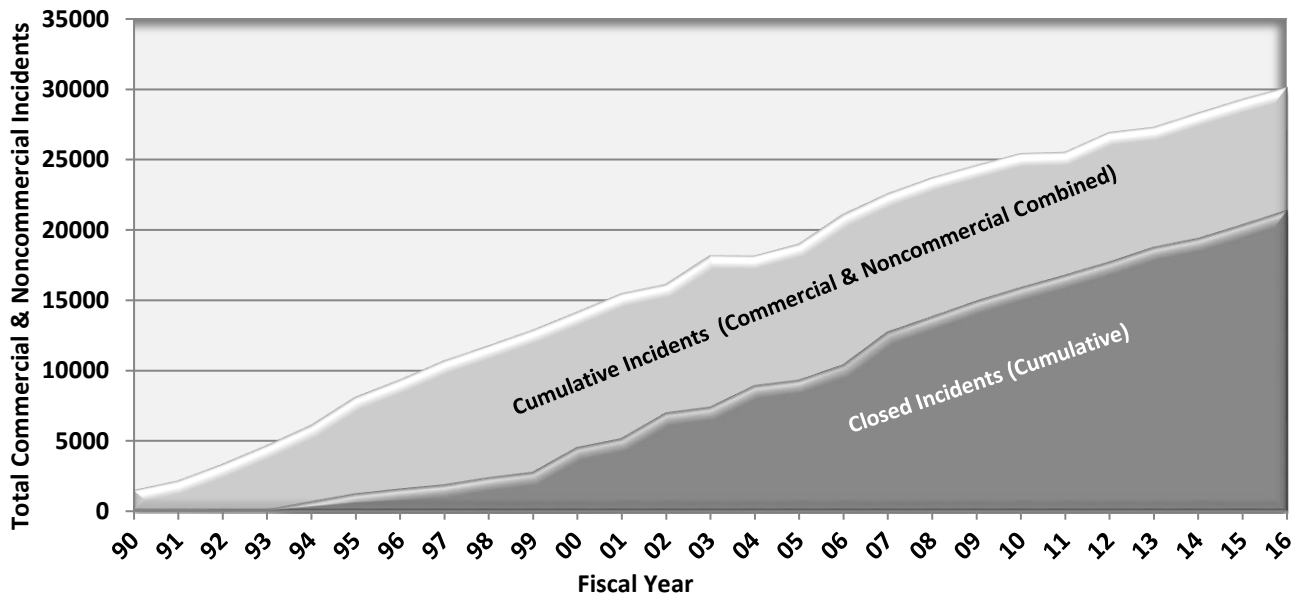


Figure 1A - Open UST Incidents

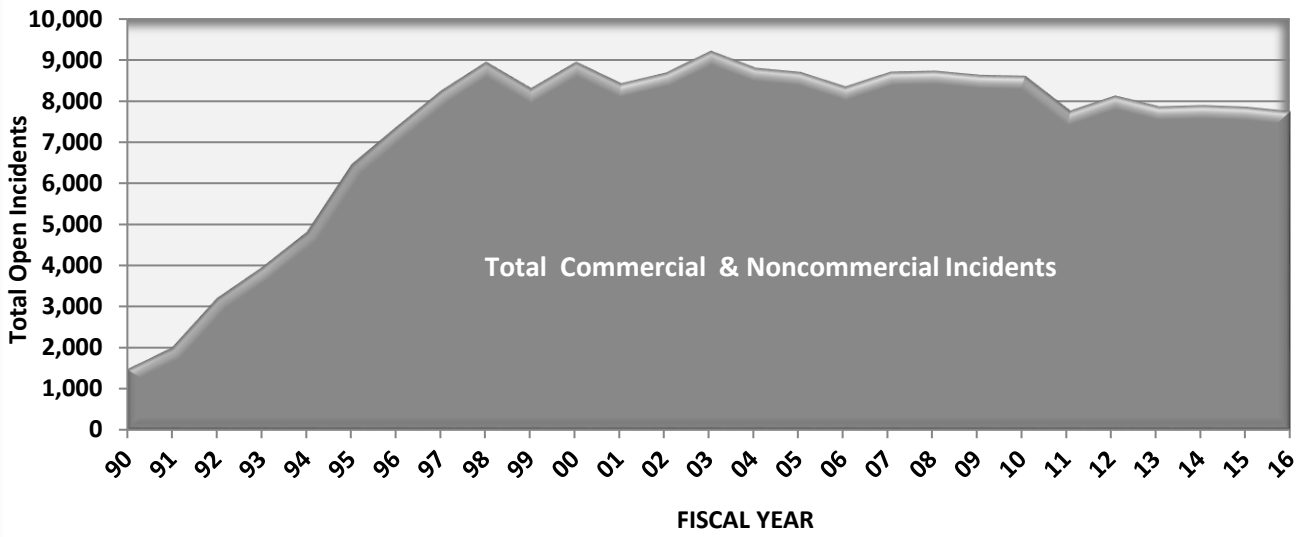


Table 2
Receipts, Disbursements and Program Expenses for the Commercial Fund
7/1/88 – 6/30/16

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
TOTAL	\$ 727,552,767	\$ 625,374,919	\$ 67,071,648

1. Does not include program expenses.
2. Commercial receipts for FY 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).

**Table 3 – Claims Processed for the Commercial Cleanup Fund
7/1/88 – 6/30/15**

Claim Action	Number
Claims Paid	44,245
Incidents Denied Totally ¹	33
Claims Denied Partially ²	17,656
Claims Pending	264
Contracted Cleanups ³	1,655

1 Ineligible (operating fees not paid; release discovery pre-dates program)
 2 Claims contain excessive or undocumented costs
 3 State lead actions undertaken/completed

Figure 3 - Commercial Fund Balance and Claims Pending & Obligations

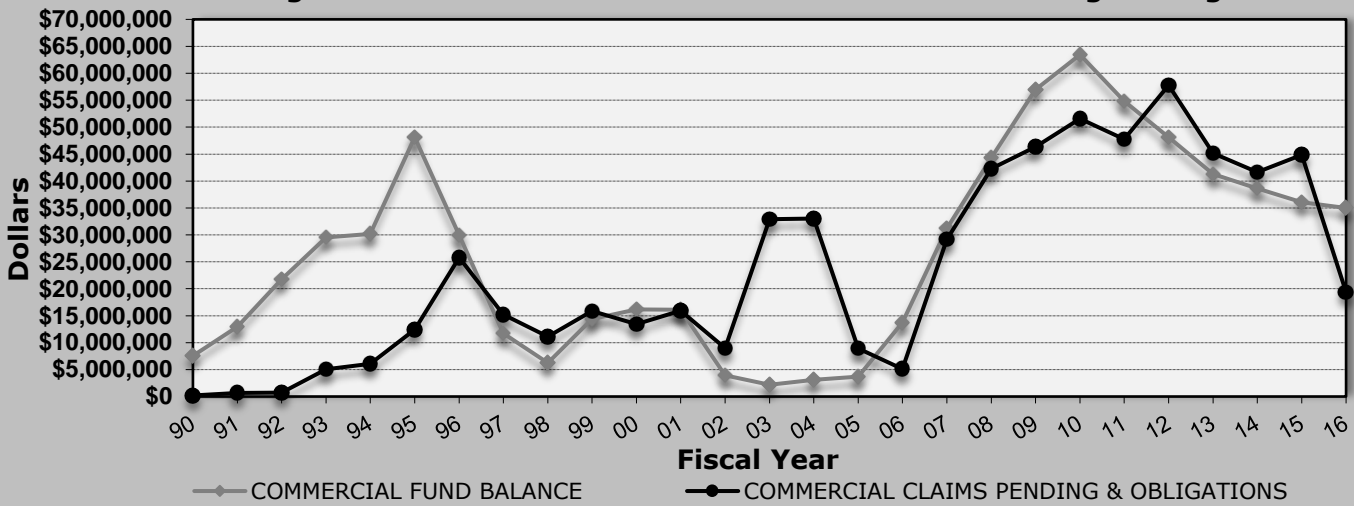
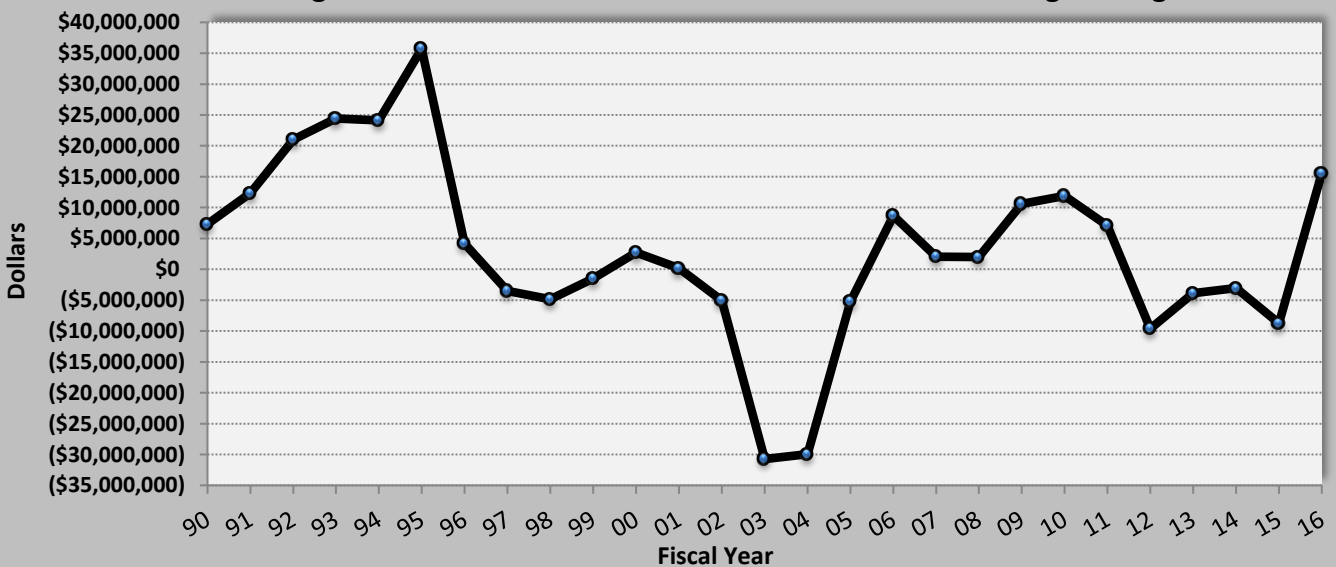


Figure 4 - Commercial Fund Balance Minus Claims Pending & Obligations



**Table 4 – Receipts & Disbursements for Noncommercial Cleanups
7/1/88 – 6/30/15**

Fiscal Year	Receipts	Disbursements¹	Program Expenses
FY 1989	\$ 0	\$ 0	\$ 0
FY 1990	2,905,035	0	201,254
FY 1991	2,934,347	564,206	547,595
FY 1992	3,018,344	2,143,155	517,221
FY 1993	7,693,288	4,069,497	601,686
FY 1994	3,404,086	2,012,312	694,423
FY 1995	5,194,725	2,900,368	666,270
FY 1996	5,215,550	5,029,109	783,684
FY 1997	5,587,781	5,924,799	801,143
FY 1998	5,717,592	3,869,091	667,724
FY 1999	5,945,461	2,776,105	620,574
FY 2000	5,636,563	5,028,505	570,738
FY 2001	5,811,666	7,890,618 ²	733,811
FY 2002	6,620,808 ³	9,182,320	913,755
FY 2003	7,664,329 ⁴	9,898,806	1,166,494
FY 2004	8,060,151	7,756,579	1,244,864
FY 2005	14,885,997 ⁵	11,326,318	1,265,079
FY 2006	7,615,613 ⁶	5,005,578	1,298,441
FY 2007	6,053,993 ⁷	5,099,349	1,349,006
FY 2008	6,030,546 ⁸	6,105,295	1,416,685
FY 2009	6,178,730 ⁹	5,878,808	1,324,956
FY 2010	6,726,977 ¹⁰	4,371,297	1,451,830
FY 2011	6,388,636	5,922,935	1,518,243 ¹¹
FY 2012	2,402,783	3,001,065	1,521,606
FY 2013	7,272,018 ¹²	5,494,840	1,552,619
FY 2014	5,895,127 ¹³	4,599,607	1,492,126
FY 2015	5,852,436 ¹⁴	4,068,263	1,524,845
FY 2016	4,939,450 ¹⁵	5,066,483	0
TOTAL	\$161,652,032	\$134,985,308	\$ 26,446,672

1. Does not include program expenses.
2. \$2 million was transferred from the Noncommercial Fund to the State's General Fund.
3. Includes transfer of \$784,382 from Circle K Settlement Fund.
4. Includes transfer of \$3,418,990 of motor fuel and kerosene tax from Commercial to Noncommercial trust funds due to balance below \$5 million – GS 119.18(b).
5. Includes additional revenue from the 1-year 1.1 cent per gallon excise tax or \$19 million to the Trust Fund.
6. Includes \$1,922,601 transfer to Noncommercial Fund, \$90,000 transfer to the Department of Agriculture and Consumer Services and \$30,016 transfer to repay Federal Trust Fund for State Lead program expenses.
7. Includes transfer to Noncommercial Fund of \$598,935 and disbursement from Commercial Fund to Department of Agriculture and Consumer Services (\$90,000) and Federal LUST Grant (\$108,904).
8. 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).
9. Includes transfer to Noncommercial Fund of \$1,004,895, and disbursement from the Comm. fund to Department of Agriculture and Consumer Services (\$90,000).
10. Includes transfer from NC DOT of \$4,283,393.
11. Includes legislatively mandated transfer of interest from the Fund - \$614,239.29.
12. Includes legislative appropriation of funds and interest transfer to the receipts for the Fund - \$4,880,000.
13. Includes legislative appropriation of funds and interest transfer to the receipts for the Fund - \$3,500,000.
14. Includes legislative appropriation of funds and interest transfer to the receipts for the Fund - \$3,417,105.
15. Includes legislative transfer of funds to the receipts for the Fund - \$2,369,428.

**Table 5 – Claims Processed for the Noncommercial Cleanup Fund
7/1/88– 6/30/15**

Claim Action	Number
Claims Paid	15,624
Incidents Denied Totally ¹	4
Claims Denied Partially ²	5,855
Claims Pending	188
Contracted Cleanups ³	254

1 Ineligible (operating fees not paid; release discovery pre-dates program)
 2 Claims contain excessive or undocumented costs
 3 State lead actions undertaken/completed

Figure 5 - Noncommercial Fund Balance and Claims Pending & Obligations

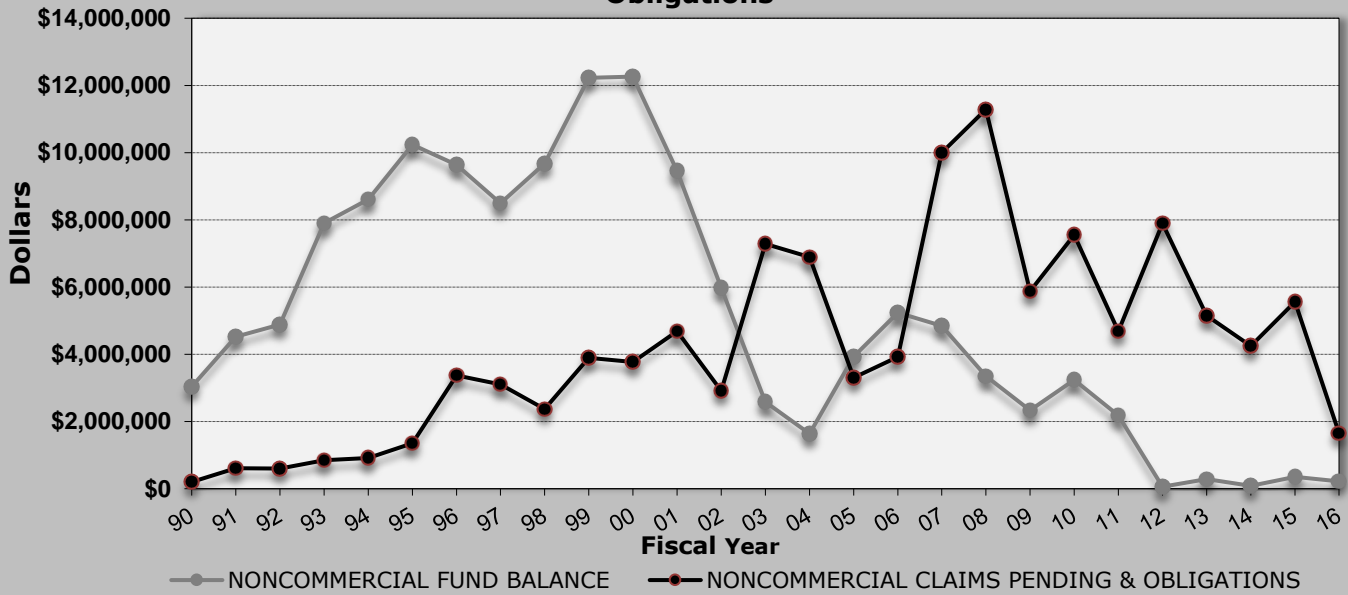


Figure 6 - Noncommercial Fund Balance Minus Claims Pending & Obligations

