



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

MEMORANDUM

TO: ENVIRONMENTAL REVIEW COMMISSION
The Honorable David Rouzer, Chair
The Honorable Mitch Gillespie, Co-Chair
The Honorable Ruth Samuelson, Co-Chair

FROM: Kari Barsness *KKB*
Director of Legislative and Intergovernmental Affairs

SUBJECT: Annual Report on the Status of Leaking Petroleum Underground Storage Tanks (USTs), the State Cleanup Funds, and the Groundwater Protection Loan Fund

DATE: November 29, 2012

Pursuant to General Statute 143-215.94M, the Division of Waste Management, UST Section shall submit to the Environmental Review Commission a report on the status of leaking petroleum underground storage tanks, the state cleanup funds and the groundwater protection loan fund each year. Please consider the attached annual status report as the formal submission of this reporting requirement.

If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at Kari.Barsness@ncdenr.gov.

cc: Assistant Secretary for Environment, Robin W. Smith
Dexter R. Matthews, Director, Division of Waste Management
Jennifer Hoffmann, Fiscal Research Division
Mariah Matheson, Research Division

**Annual Report to the
Environmental Review Commission
North Carolina General Assembly**

**The Status of Leaking Petroleum Underground Storage
Tanks, the State Cleanup Funds, For Fiscal Year 2012
(July 1, 2011 to June 30, 2012)**

November 1, 2012



**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES**

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

**North Carolina
Department of Environment
and
Natural Resources**

Beverly Eaves Perdue

Governor

Dee Freeman

Secretary

N.C. Department of Environment and Natural Resources

Dexter R. Matthews

Director

N.C. Division of Waste Management

NCDENR

N.C. Division of Waste Management

Underground Storage Tank (UST) Section

1637 Mail Service Center

Raleigh NC 27699-1637

(919) 707-8171

<http://portal.ncdenr.org>

Table of Contents

Summary Underground Storage Tank (UST) Cleanup Funds FY 2012	Page 4
Cleanup Fund Management	Page 6
Commercial Fund Status	Page 6
Noncommercial Fund Status	Page 6
Recommendations	Page 7

SUMMARY – UNDERGROUND STORAGE TANK (UST) CLEANUP FUNDS FY 2012

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 Environment and Natural Resources (DENR). 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 supplies. 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. Until 1998, some funding was provided by the Groundwater Protection Loan Fund.

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 2012, the UST program provided alternative water supplies to replace 121 contaminated water supply wells (some private wells and others serving public water systems).

Lists of all discharges or releases from underground storage tanks, cleanups requiring state funding through the Noncommercial Fund, and all Responsible Party (RP) cleanups and statuses are available from Bob Davies at 919-707-8298 or robert.davies@ncdenr.gov or Linda Smith at 919-707-8150 or linda.l.smith@ncdenr.gov

FY 2012 Commercial Fund Activity (July 1, 2011 through June 30, 2012)

	Amount	Totals
Fund Balance on 7/1/2011	\$ 54,840,574	\$ 54,840,574
Revenues		\$26,311,956
Motor Fuel & Gasoline Excise Tax	\$ 15,208,234	
Operating Fees	\$ 10,602,997	
State Lead Cost Recovery	\$109,717	
Interest	\$ 391,008	
Loan Fund Collection and Interest	\$ 0	
Transfer - Bernard Allen Trust Fund	\$ 0	
Expenditures		\$32,924,574
Reimbursements	\$ 29,042,749	
Program Administration	\$ 3,881,825	
Transfers from Fund		\$90,000
Transfer to Noncommercial Fund	\$ 0	
Transfer to Department of Agriculture	\$ 90,000	
Transfer to Federal LUST Program (cost recovery)	\$ 0	
Fund Balance on 6/30/2012		\$48,137,956
Estimated Obligations¹		\$57,773,366
RP-lead cleanup	(\$46,629,603)	
State-lead cleanup	(\$7,509,148)	
Pre-approved non-directed actions	(\$3,634,615)	
Estimated Unobligated Balance 06/30/2012		(\$ 9,635,410)

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 remaining program expenses.

**FY 2012 Noncommercial Fund Activity
(July 1, 2011 through June 30, 2012)**

	Amount	Totals
Fund Balance on 7/1/2011		\$2,180,688
Revenues		\$2,402,783
Motor Fuel & Gasoline Excise Tax	\$ 2,402,783	
Interest	\$ 0	
Cost Recovery	\$ 0	
Expenditures		\$4,522,671
Total Claims and Contracted Cleanups	\$3,001,065	
Administrative Costs	\$1,521,606	
Fund Balance on 6/30/2012		\$60,800
Estimated Obligations¹		\$7,893,077
Estimated Unobligated Balance 6/30/12		(\$7,832,277)

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 remaining program administration costs.

**Summary of Key Statistics for the Entire History of the UST
Program (July 1, 1988 to June 30, 2012)**

Commercial Fund Revenues	\$ 619,467,384
Commercial Fund Expenditures	\$ 574,808,838
Noncommercial Fund Revenues	\$ 137,694,001
Noncommercial Fund Expenditures	\$ 139,165,424
Petroleum UST Releases – Reported	
Commercial	17,816
Noncommercial	8,809
Total	26,625
Petroleum UST Releases - Closed Out	
Commercial	11,797
Noncommercial	6,681
Total	18,478
<u>FY 2012 Activity</u>	
Petroleum UST Releases - Reported	
Commercial	263
Noncommercial	421
Petroleum UST Releases – Closed Out	
Commercial	497
Noncommercial	490

Cleanup Fund Management

The UST Section manages two funds to cleanup environmental contamination from petroleum underground storage tank (UST) releases. The Commercial Cleanup Fund pays 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 1100 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 pays 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 do not pay fees or deductible amounts- they only pay the cost of removing the leaking tanks. The entire cost of assessment and cleanup is paid by the Noncommercial Cleanup Fund.

In FY 2012, the UST Section managed the cleanup funds in accordance with the requirements of Session Law 2004-124, which directed the department to give priority to cleanup of releases in emergency situations and those that pose the greatest risks to human health and the environment. The session law also directed the department 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 department uses a Risk, Rank and Abatement (RRA) scoring system that quantifies the relative risks of all releases, allowing the department to direct work at the highest risk incidents and reimburse the costs of that work within 90 days. Every week the department reviews balances, expenditures and obligations of both the Commercial and Noncommercial Funds, and periodically adjusts the RRA score threshold in order to direct as much cleanup work as resources will allow. By the end of FY 2011 and continuing through FY 2012, the program was able to direct cleanup activities at all high risk commercial UST releases and at many intermediate risk releases. The program did not have sufficient funds, however, to address all intermediate risk or low risk releases. The program could direct cleanup activities at only about three percent of all high risk noncommercial UST releases as a result of legislative changes in funding of the Noncommercial Cleanup Fund.

Commercial Fund Status

For the 12-month period from July 1, 2011 through June 30, 2012, in contrast to the previous six fiscal years, Commercial Fund obligations significantly exceeded the Fund balance. On June 30, 2012, the Commercial Fund balance was \$48,137,956 with pending estimated obligations of \$57,773,366. The estimated unobligated Commercial Fund balance at the end of FY 2012 is (- \$9,635,410). In the face of the large negative fund balance for FY 2012, it may become necessary to increase the risk threshold, which may restrict the program's ability to continue directing mandatory cleanups of some high risk and intermediate risk releases. The inability to reimburse work on lower risk releases, caused by insufficient funding, has both short-term and long-term impacts. In the near term, low risk releases may not pose a threat to public health and safety, but 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 around a low risk release may change and increase the threat to public health.

Estimated Costs of Cleanup

Although legislation enabled the department to maintain a positive cash balance in the Commercial Cleanup Fund for a number of years, the long-term fiscal condition of the Fund remains uncertain because of the backlog of known releases waiting to be cleaned up and the continuing influx of new releases that will need cleanup. The department can estimate the costs of cleaning up all known commercial UST releases by multiplying the average cost to the fund per release (\$142,377) by the number of known commercial releases needing cleanup (6,019). This results in a total future obligation of approximately \$857 million, an amount that includes about \$57 million obligated for cleanups already underway. With a present balance of about \$48 million, the fund will need an additional \$810 million to clean up all currently known commercial UST releases. At the rate revenue currently enters the fund (\$26 million per year on average), nearly 31 years will be necessary to generate the cash to pay for these obligations. This estimate does not account for the costs of cleaning up releases not yet reported (future releases). Since approximately 300 new commercial UST releases are discovered and reported each year, an additional \$43 million per year will potentially be added to the total obligation. 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 is problematic. In 2005, DENR prepared a white paper that evaluated the option of transitioning from reliance on the Commercial Cleanup Fund to reliance on private insurance as a means of financing the costs of cleaning up environmental contamination from petroleum releases. The report recognized that it would not be possible to shift financial responsibility for existing UST releases to private insurance, but recommended that the state consider phasing in an insurance requirement to pay the costs of cleaning up future petroleum releases. Without a change in the allocation of responsibility for future petroleum releases, the state's obligation under the Commercial Cleanup Fund will continue to grow.

Noncommercial Fund Status

The Noncommercial Cleanup Fund also shows a large negative FY 2012 balance because claims greatly exceeded revenue, due to 2011 legislation that changed the fund's funding mechanism. The Noncommercial Cleanup Fund had previously received a small percentage of the motor fuels inspection tax. The 2011 budget eliminated that earmark, reducing the income into the fund by 60 percent. In the 2012 budget bill, the General Assembly made a one-time appropriation of \$4.88 million to the Noncommercial Cleanup Fund, but these funds were not available until after the close of the fiscal year. On June 30, 2012, the Noncommercial Fund cash balance was \$60,800 with pending estimated obligations of \$7,893,077. The estimated unobligated Noncommercial Cleanup Fund balance at the end of FY 2012 is (- \$7,832,277).

Estimated Costs to Cleanup

The department can estimate the costs of cleaning up all known Noncommercial UST releases by multiplying the average cost to the fund per release (\$14,971) by the number of known commercial releases needing cleanup (2,128). This results in a total future obligation of approximately \$32 million, an amount that includes about \$8 million obligated for cleanups already underway. With a present balance of about -\$9.3 million, the Noncommercial Cleanup Fund will need an additional \$41 million to clean up all currently known noncommercial UST releases. Based on FY 2012 revenue into the Fund, about 17 years will be necessary to generate the cash to pay for these obligations. This estimate does not account for the costs of cleaning up existing releases that have not yet been reported to DENR or future releases.

Since approximately 425 new Noncommercial UST releases are discovered and reported each year, an additional \$6.75 million per year can be added to the total obligation. Given these projected obligations, the long-term viability of the Noncommercial Fund as a financial responsibility mechanism is highly questionable in the absence of additional funding or changes in funding mechanisms. Unlike the owners of commercial USTs, the owners of noncommercial USTs only pay the costs of removing tanks and do not pay any deductible amount toward the costs of cleanups.

Recommendations

- 1) Seek additional funding for the Commercial Fund to meet future obligations.
- 2) Seek additional funding for the Noncommercial Fund at a level at least equivalent to that provided prior to FY 2012 and improve the longterm health of the Fund by implementing owner deductible amounts.
- 3) Transition from the Commercial Cleanup Fund as the primary mechanism for owners of regulated USTs to meet federal financial responsibility requirements. In place of a state-subsidized fund, owners and operators of regulated commercial USTs should use other financial responsibility mechanisms, such as private insurance, bonding, letters of credit, and self-insurance.
- 4) Prevent releases by maintaining a compliance inspection frequency of at least every three years for USTs in North Carolina.
- 5) Prevent releases by continuing to provide release prevention and detection training to UST owners and operators.
- 6) Continue to find and implement better and more cost-effective methods for assessing and cleaning up petroleum releases.

Tables and Figures

Table 1 - UST Releases Since Program Inception (FY 1989 - FY 2012)

<u>Commercial UST Releases</u>		<u>Noncommercial UST Releases</u>	
Releases Reported	17,816	Releases Reported	8,809
RP-Lead	16,379	RP-Lead	8,565
State-Lead	1,437	State-Lead	244
Cleaned Up to No Further Action	11,797	Cleaned Up to No Further Action	6,681
RP-Lead	11,261	RP-Lead	6,550
State-Lead	536	State-Lead	131
Ongoing Cleanups	3,471	Ongoing Cleanups	1,035
RP-Lead	2,688	RP-Lead	955
State-Lead	783	State-Lead	80
No Action Currently Being Taken	2,548	No Action Currently Being Taken	1,093
RP-Lead	2,430	RP-Lead	1,060
State-Lead	118	State-Lead	33

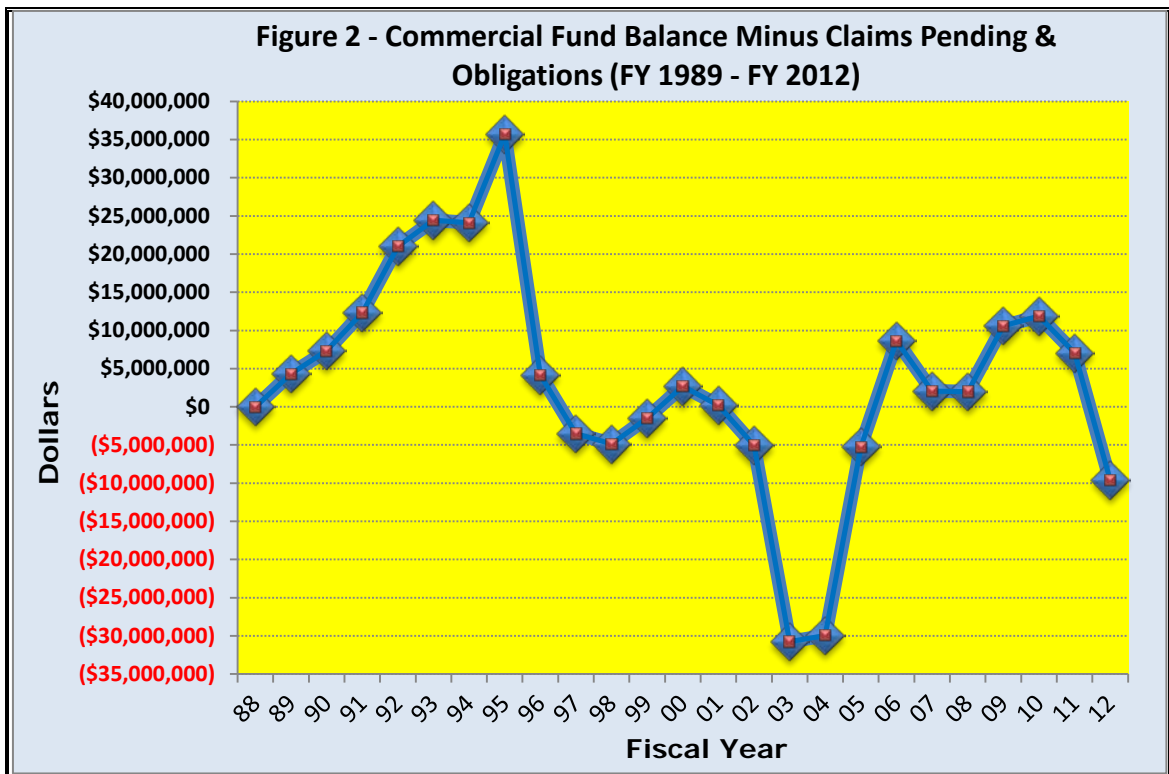
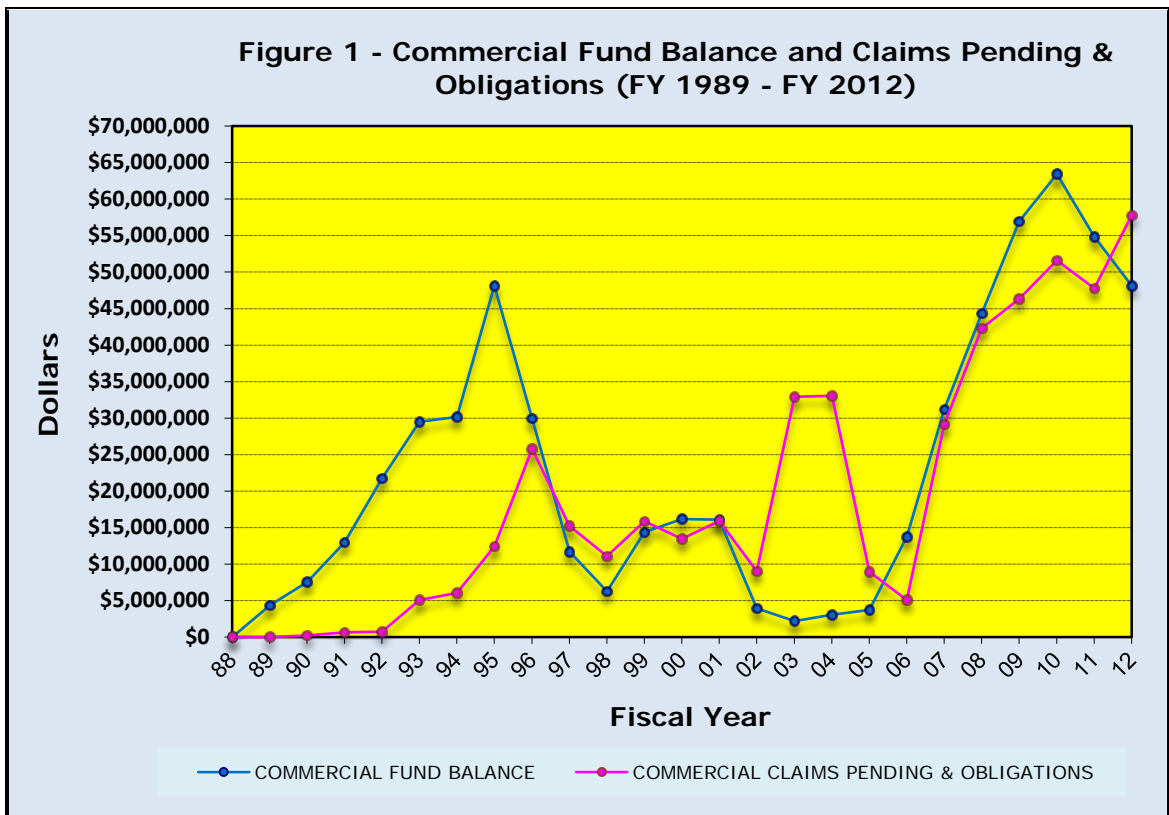


Table 2
Receipts, Disbursements and Program Expenses for the Commercial Fund
Since Program Inception

Fiscal Year	Receipts	Disbursements ¹	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	3,881,825
TOTAL	\$619,467,384	\$519,872,045	\$ 51,428,294

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. \$33,866 transferred to Federal Trust Fund as a 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 Federal Trust Fund as a 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).

**Table 3 – Claims Against the Commercial Cleanup Fund
July 1, 1988 – June 30, 2012**

Claim Action	Number	Cost
Claims Paid	34,883	\$ 512,234,766
Incidents Denied Totally ¹	33	\$ 4,573,040
Claims Denied Partially ²	16,136	\$ 90,973,089
Total Deductibles Paid	-----	\$ 84,153,854
Claims Pending	146	\$ 2,666,393
Contracted Cleanups ³	1170	\$ 25,047,023

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

² Excessive or undocumented costs

³ State Lead actions undertaken or completed

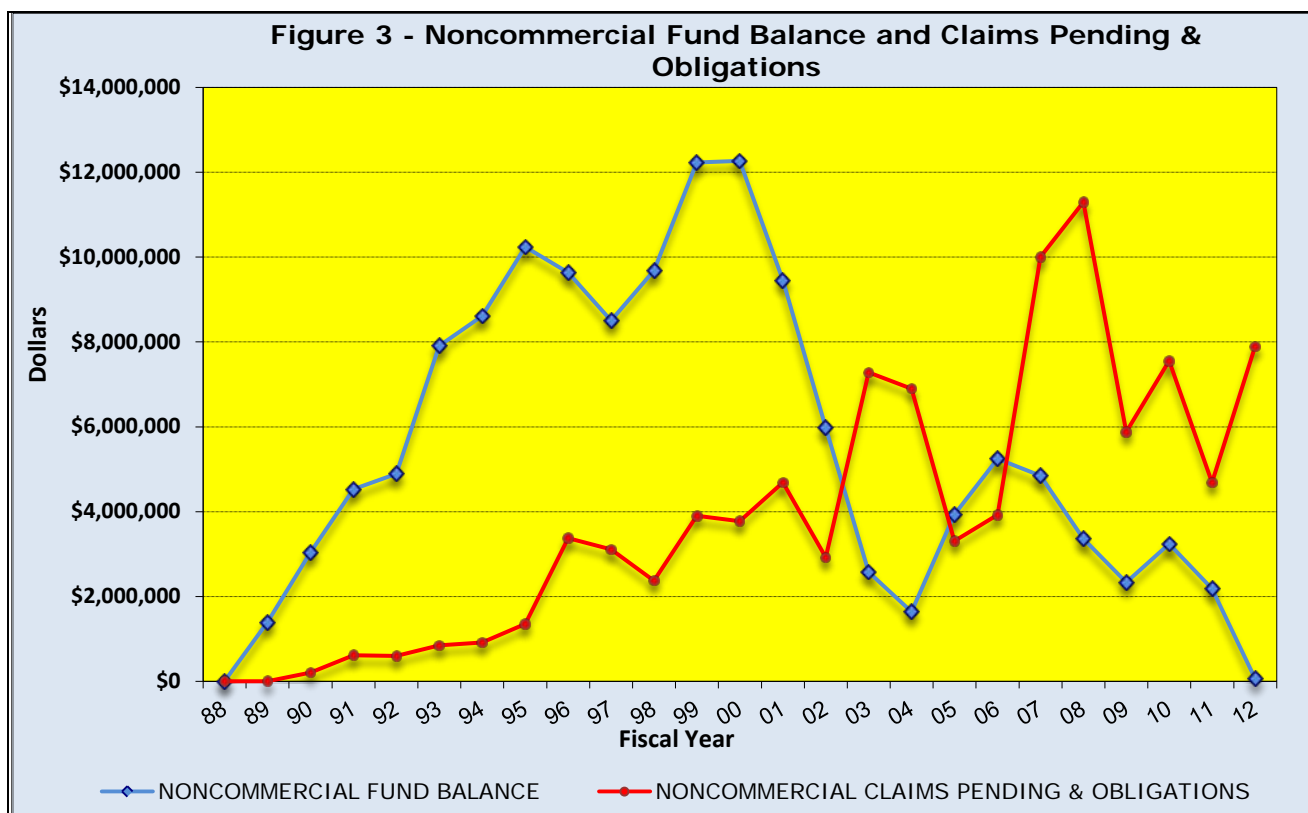


Figure 4 - Noncommercial Fund Balance Minus Claims Pending & Obligations

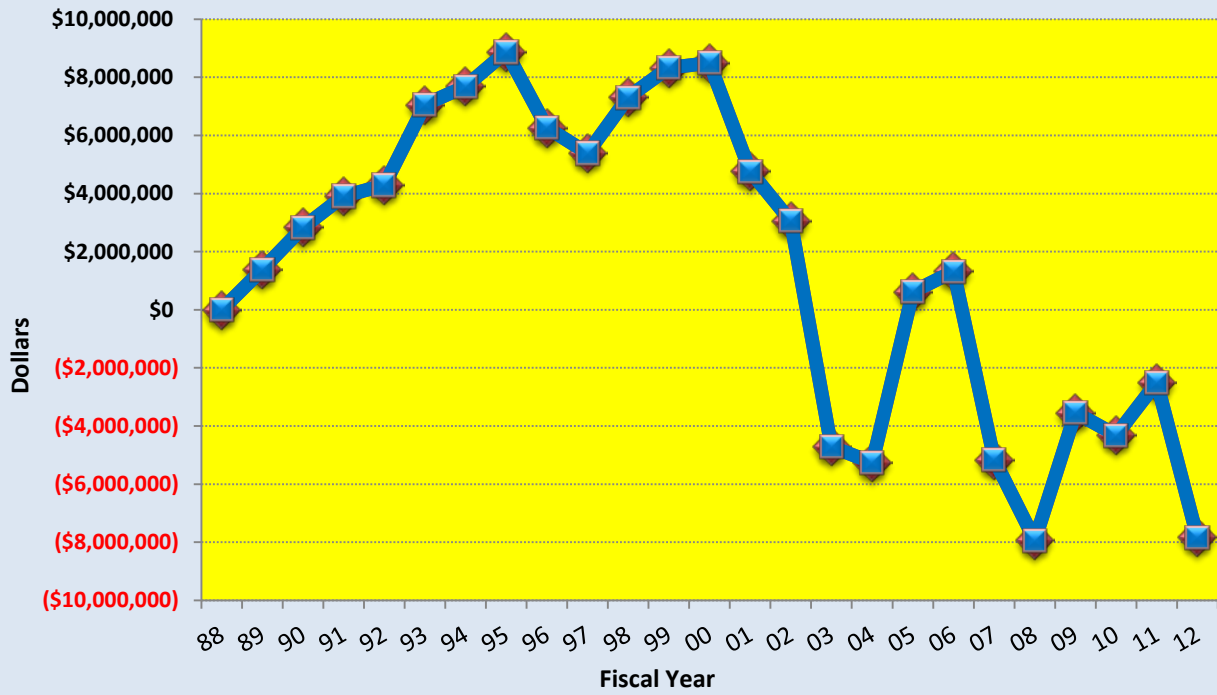


Table 4 – Receipts & Disbursements for Noncommercial Cleanups
7/1/88 – 6/30/12

Fiscal Year	Receipts	Disbursements ¹	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	4,522,671	1,521,606
TOTAL	\$137,693,001	\$117,277,721	\$ 21,877,082

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.

Table 5 – Claims Against the Noncommercial Cleanup Fund
7/1/88– 6/30/12

Claim Action	Number	Cost
Claims Paid	13,991	\$ 113,392,866
Incidents Denied Totally ¹	4	\$ 59,845
Claims Denied Partially ²	5,373	\$ 13,305,821
Total Deductibles Paid	-----	\$ 1,207,578
Claims Pending	301	\$ 3,193,428
Contracted Cleanups ³	236	\$ 2,376,139

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

² Excessive or undocumented costs

³ State Lead actions undertaken or completed