

Annual Report to the
Environmental Review Commission
North Carolina General Assembly

**The Status of Leaking Petroleum
Underground Storage Tanks,
the State Cleanup Funds, and
the Groundwater Protection Loan Fund**

SEPTEMBER 1, 2006



Underground Storage Tank Section
Division of Waste Management

Department of Environment and Natural Resources

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* Available upon request by contacting Ms. Jane Comer at 919.733.1438

EXECUTIVE SUMMARY

The Department of Environment and Natural Resources is required to prepare an annual report on the status of leaking petroleum underground storage tanks.

The Division of Waste Management's UST Section in DENR administers North Carolina's underground storage tank program. The section enforces UST regulations and manages funds used to perform cleanups of petroleum UST discharges or releases. The program was initiated in 1988 in response to growing reports of USTs leaking petroleum into soil and drinking water supplies. Funding for the program has been provided by the Commercial and Noncommercial UST Trust Funds, the Groundwater Protection Loan Fund, the Federal UST Regulatory Grant, and the Federal Leaking UST Grant.

Summary of Commercial UST Cleanup

Since 2004, the pace of cleanup at sites contaminated by a petroleum release from a commercial UST has been slowed as a result of legislation that limits the amount of cleanup activity based on the availability of funds for reimbursement of those activities. Of over 6,000 active commercial UST contaminated sites, cleanup activities are underway on 311. As directed by the legislation, the UST program orders cleanup activity based on the level of risk posed by the contamination. The need to immediately address sites that pose a risk to water supplies, combined with the prohibition against ordering cleanup activity that cannot be reimbursed within 90 days, means that a number of sites with free petroleum product (a lens of petroleum from several inches to several feet thick floating on the surface of the groundwater) are not currently being remediated. Federal rules require that free product be removed as soon as possible, so the delays in free product removal at a number of North Carolina UST sites has led the United States Environmental Protection Agency to send a letter expressing concern that North Carolina's Commercial UST Trust Fund may not provide adequate financial responsibility for UST owners and operators as required by federal law.

Summary for the period July 1, 2005 through June 30, 2006

Commercial Fund Revenues	\$28,143,119
Commercial Fund Total Expenditures	\$18,111,218
Noncommercial Fund Revenues *	\$ 7,615,613
Noncommercial Fund Total Expenditures	\$ 6,304,019
Petroleum UST Incidents – Reported	891
Petroleum UST Incidents – Closed Out	1051

Includes transfer of \$1,922,601 motor fuel and kerosene tax from commercial to non-commercial trust fund.

Summary for the entire history of the UST program (7/1/88 -6/30/06)

Commercial Fund Revenues	\$452,184,756
Commercial Fund Total Expenditures	\$438,407,229
Noncommercial Fund Revenues	\$103,911,336
Noncommercial Fund Total Expenditures	\$ 98,673,123
Petroleum UST Incidents – Reported	21,102
Petroleum UST Incidents – Closed Out	12,748

Status of the Trust Funds as of June 30, 2006

Commercial Fund Balance	\$ 13,747,190
Commercial Fund Claims Pending	\$ 2,459,046
Noncommercial Fund Balance	\$ 5,240,209
Noncommercial Fund Claims Pending	\$ 2,620,641

STATUS OF CLEANUPS UNDER THE COMMERCIAL UST TRUST FUND

Federal law requires that owners and operators of commercial USTs demonstrate financial responsibility for cleanup of any petroleum releases from the UST system. Since 1988, owners and operators of commercial USTs in North Carolina have been able to rely on the Commercial UST Trust Fund to meet the federal financial responsibility requirement (in lieu of an environmental insurance policy or other financial assurance mechanism). A percentage of Trust Fund revenues come from fees paid by commercial UST owners but most of the revenues come from the gasoline tax. Since 2002, claims for cleanup work have exceeded revenues in the Commercial Trust Fund, leading to delays in reimbursement of claims of up to 13 months. Session Law 2004-124, effective in October 2004, made several changes in the UST program designed to reduce the delay in reimbursement of claims. The session law directed the UST program to expend available resources on release incidents that pose the greatest risk. The law also changed the way the program responds to petroleum releases by only allowing the program to order the amount of cleanup work that can be reimbursed from the trust funds within 90 days (with an exception for emergency situations). In essence, Session Law 2004-124 slowed the response activities of the UST program to match the resources that are available to pay for those activities. However, nothing in this law relieves tank owners and operators from their responsibilities to conduct initial abatement activities, assessment activities, and risk determinations immediately upon discoveries of releases. Similarly, nothing in this law relieves tank owners and operators of their responsibilities to clean up releases as resources become available.

To implement Session Law 2004-124, the UST program first determined the relative risks of active release incidents using the criteria listed in 15A NCAC .02L .0400. Those criteria include emergency situations (fire, explosion, etc.); the proximity of a release to receptors (water supply wells, surface water sources, etc.); known, suspected, or potential contamination of receptors; the existence of free product; the number of wells and people potentially affected; and others. The UST program is ordering cleanup of petroleum contamination at the highest risk releases first and at a pace that allows the cost of the work to be reimbursed from the trust funds within 90 days.

The manner in which the UST program has implemented Session Law 2004-124 has ensured, so far, that public health is not at risk from UST releases. However, implementation does not allow the program to immediately remove free product at all incidents. Free product is petroleum that has leaked from a UST system and is floating on top of the ground water table. Sometimes free product is found in lenses more than 10 feet thick, although in about 40% of the incidents, the free product is less than one inch thick. These lenses of free product continue to spread laterally and to dissolve into the ground water, prolonging contamination of the ground water. Of the approximately 6000 active regulated UST incidents (commercial tanks), about 714 (12 %) include existing free product. Of the approximately 2100 unregulated UST incidents (home heating oil tanks), about 190 (9%) include existing free product. At present, the UST program is directing work at only about 35 of these incidents with free product (33 regulated USTs and 2 unregulated USTs). The slow pace of free product removal results from the demand for trust fund resources to clean up higher risk incidents that do not have existing free product, but are contaminating (or threatening to contaminate) water supplies.

Federal UST law requires the removal of free product at UST release incidents as soon as practicable and to the maximum extent practicable. Other cleanup criteria are generally left up to individual states. Since the UST program cannot presently direct free product removal at every incident, the US EPA is questioning whether North Carolina's Commercial Trust Fund is actually providing the financial responsibility required of UST owners and operators by federal law. In a 19 September 2006 letter to NC DENR Secretary William Ross, the US EPA Regional Administrator for Region 4, J. I. Palmer, expresses US EPA's concern that North Carolina's Commercial Trust Fund is not adequate to allow UST owners and operators to comply with federal law. The letter also notes that UST owners and operators would be required to find alternative mechanisms for financial responsibility if EPA withdraws approval of North Carolina's Commercial Trust Fund for that purpose. The letter is attached to this report in the appendices.

At the implementation of Session Law 2004-124 in October 2004, the Commercial Trust Fund was over \$18 million in deficit and the Noncommercial Trust Fund was about \$500,000 in deficit. At that time, the UST program determined that resources were available to direct work on 87 regulated incidents and 7 unregulated incidents. Every week, the UST program reviews the available fund resources, expenditures, and obligations. Since October 2004, we have adjusted the implementation six times and are now directing work at 311 regulated incidents and 20 unregulated incidents. Unobligated funds total almost \$3 million in the Commercial Trust Fund and almost \$1 million in the Noncommercial Trust Fund, which will allow us to continue to adjust the implementation and direct work at more and more incidents.

FUNDING FOR THE UNDERGROUND STORAGE TANK CLEANUP PROGRAM

Program funding is provided by revenues from the Commercial and Noncommercial Trust Funds and the Groundwater Protection Loan Fund. The Federal UST Regulatory Grant and the Federal Leaking UST Grant are provided by the Environmental Protection Agency. Of the 91.8 Full Time Equivalent (FTE) positions assigned to the UST program, state revenue funds 63.83 positions and 27.97 are supported by federal grants. In addition, the trust funds and federal grant pay for one laboratory position and four regional administrative positions, which support the program.

Commercial and Noncommercial Trust Funds

The Leaking Petroleum Underground Storage Tank Cleanup Act of 1988 (GS 143-215.94A et.seq) established two separate funds: the Commercial Trust Fund and the Noncommercial Trust Fund. Both may be used to reimburse eligible UST owners, operators and landowners for reasonable and necessary costs incurred as a result of environmental cleanup and third party liability claims. Additionally, both funds enable UST Section staff to:

- record and track UST release incidents;
- register and permit commercial USTs, manage the database and receive annual UST operating fee payments;
- identify responsible parties;
- provide technical assistance to tank owners and operators;
- inspect USTs to ensure compliance with UST regulations;
- monitor site cleanups;

- review site assessments and corrective action plans;
- evaluate innovative assessment and cleanup technologies;
- review reimbursement claim procedures;
- manage contracts for cleanups designated as “State Lead”;
- inspect and monitor land applications of contaminated soil; and
- identify and evaluate abandoned petroleum USTs.

The UST Section has the authority to contract for the cleanup of petroleum UST incidents if the owner or operator cannot be identified or located, if the owner or operator is financially unable to perform cleanup or if the owner or operator refuses to perform the required cleanup. In the latter case, the section is authorized by general statute to recover costs incurred during assessment and cleanup activities.

Sources of funding for the Commercial Trust Fund include:

- a motor fuel and kerosene inspection tax (1/4 of \$0.01/gallon);
- a re-occurring excise tax (19/32 of \$0.005/gallon) on motor fuel and kerosene sales;
- annual payment of UST operating fees;
- costs recovered from UST owners and operators for State Lead sites;
- loan collection and interest for the Groundwater Protection Loan Fund; and
- interest earned on the account.

Owners and operators are required to pay annual operating fees to receive operating permits and to be eligible for the Commercial Fund. Annual fees for commercial USTs began at a rate of \$30 for tanks with a capacity equal to or less than 3,500 gallons (small tanks) and \$60 for tanks with a capacity in excess of 3,500 gallons (large tanks). Tank fees increased annually from 1989 to 1993. From 1993 to 1997, fees were \$150 for small tanks and \$225 for large tanks. Beginning Jan. 1, 1997, annual fees were increased to \$200 for commercial USTs with a capacity equal to or less than 3,500 gallons and \$300 for commercial USTs with capacity in excess of 3,500 gallons.

Revenues received for the Commercial Fund for the twelve-month period from July 1, 2005 to June 30, 2006 were approximately \$28 million (Table 1). The relative contributions to the Commercial Fund from each of the funding sources are illustrated in Figure 1.

Table 1 – Commercial Trust Fund Revenues

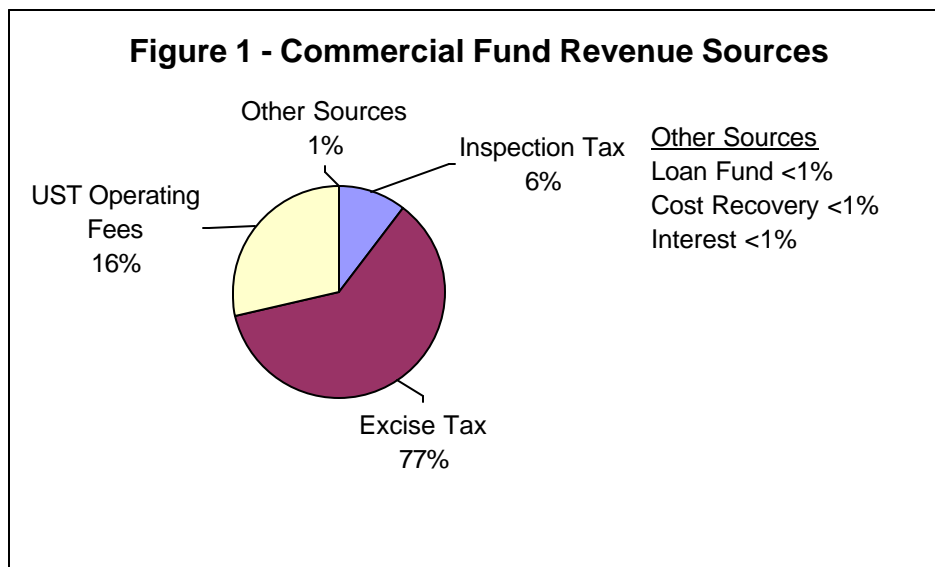
7/1/05- 6/30/06

Motor Fuel & Kerosene Inspection Tax	\$ 2,836,253
Motor Fuel & Gasoline Excise Tax	\$ 17,123,883
UST Operating Fees	\$ 7,951,508
State Lead Cost Recovery	\$ 24,562
Interest	\$ 198,909
Loan Fund Collection and Interest	\$ 8,004
Total Commercial Revenues	\$ 28,143,119
Transfers to Noncommercial	\$ (1,922,601)
Net Commercial Revenues	\$ 26,220,518

Groundwater Protection Loan Fund

The Groundwater Protection Loan Fund Program was created in 1991.* It provided financial assistance to owners of commercial USTs who replaced or upgraded their tanks to meet the performance standards required for all USTs by Dec. 22, 1998. Administrative rules implementing the program were adopted by DENR and became effective Dec. 1, 1992. Revenues for the fund were generated through a 0.0025 cent (one quarter of one cent) per gallon motor fuel excise tax received from Jan. 1, 1992 through Dec. 31, 1994.

*Session Laws 1991, c. 538, s. 25 - G.S. 143-215.94P



Funding for the Noncommercial Trust Fund is provided by a motor fuel and kerosene inspection tax and excise taxes (0.047 cents per gallon) on kerosene and motor fuel sales.¹ Owners and operators of noncommercial USTs are not required to pay annual operating fees. Revenues received for the Noncommercial Fund for the 12-month period from July 1, 2005 to June 30, 2006 were approximately \$15 million (Table 2).

¹ House Bill # 681 of 1993

Table 2 – Noncommercial Trust Fund Revenues

7/1/05 - 6/30/06

Motor Fuel & Kerosene Inspection Tax	\$ 2,836,253
Motor Fuel & Gasoline Excise Tax	\$ 2,705,441
Interest	\$ 150,714
Transfer from Commercial Fund	\$ 1,922,601
Cost Recovery	\$ 604
Total Noncommercial Revenues	\$ 7,615,613

Federal UST Regulatory Grant Program

This program promotes compliance with UST regulations. It provides the state's UST Section with \$186,675 per year to fund three positions in the DWM central office. The positions provide technical assistance to the owners and operators of USTs, develop materials, conduct educational activities, train regional staff and conduct UST inspections.

Federal Leaking UST Grant

The Federal Leaking UST Trust Grant is used to clean up petroleum contamination from leaking USTs, provide potable water to affected third-parties, perform emergency activities, relocate residents affected by leaking USTs and conduct enforcement activities. The use of this grant is limited to regulated USTs, primarily commercial tanks used for storing motor fuels. Tanks used for heating oil and those used for farm or residential uses (1,100 gallons capacity or less) are not covered by this fund.

Individuals (i.e., owners/operators) do not have access to the grant. Only the federal government and states with cooperative agreements with the EPA can draw on the grant. It may be used in situations when: (1) the responsible party cannot be identified; (2) the responsible party is financially unable to pay for the cleanup; or (3) the responsible party is unwilling and refuses to undertake assessment and/or cleanup actions.

Since the state's UST program began in 1988, the Federal Leaking UST Grant has made 23 awards totaling \$43,873,118 to the state's UST Section. As of June 30, 2006, the state spent \$43,464,600 from these awards. Of this amount, \$19,979,810 was spent for cleanup-related activities and \$3,925,890 for enforcement actions. Administrative, operating, travel and equipment costs totaled \$19,558,900.

The program is obligated to seek recovery of all costs incurred during state lead cleanups. As of June 30, 2006, the UST Section had recovered \$ 1,727,144 in federal cleanup money through cost recovery actions. Of this amount, \$ 912,411 came from the North Carolina Commercial Fund for sites determined eligible for Commercial Fund coverage after cleanup activities had begun.

The EPA approved \$1,994,660 for North Carolina from the Leaking UST Fund for FY 2005-2006.

PETROLEUM UST INCIDENTS

Discharges or releases from petroleum USTs are reported to DENR regional offices where they are added to an incident management database. Table 3 lists the number of incidents reported and closed out in each region during the twelve-month period from July 1, 2005 through June 30, 2006. It also shows the number of incidents reported and closed out since the UST program began in 1988.

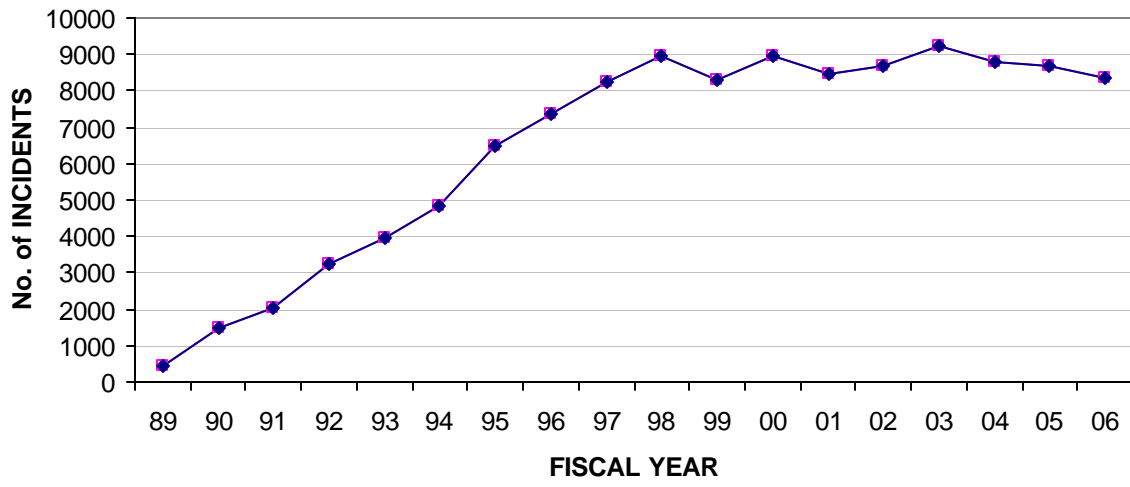
Beginning January 2, 1998, the UST Section implemented risk-based corrective action rules for petroleum UST incidents. Discharges or releases under these rules receive a risk classification of “high,” “intermediate,” or “low” based on the potential threat to human health and the environment. Of the total number of UST incidents closed since 1988, 67 percent were closed following implementation of Risk-Based Corrective Action. The total number of open incidents has generally increased since 1988; however, recent data indicates the trend may be leveling off (see Figure 2).

Table 3 – Petroleum UST Incidents by Region¹

REGION	7/1/05 - 6/30/06		7/1/88 - 6/30/06	
	Reported	Closed	Reported	Closed
Asheville	94	61	2,151	1343
Fayetteville	57	57	1,598	818
Mooreville	151	202	4,194	2,713
Raleigh	202	253	4,287	2,572
Washington	128	114	2,763	1,606
Wilmington	81	97	1,599	878
Winston-Salem	178	267	4,510	2,818
TOTAL	891	1051	21,102	12,748
Total reported releases affecting groundwater that have been closed out:				4,293
Total reported releases closed out since implementation of RBCA ¹ :				8,536
Total remaining open sites:				8,354
Open commercial sites:				6,565
Open noncommercial sites:				1,789

1. Risk-based corrective action implemented 1/2/98.

Figure 2 - Open UST Incidents



**RECEIPTS AND DISBURSEMENTS: COMMERCIAL AND NONCOMMERCIAL TRUST FUNDS AND
GROUNDWATER PROTECTION LOAN FUND**

Commercial and Noncommercial Funds

UST owners, operators and landowners may submit reimbursement claims for reasonable and necessary costs incurred during environmental assessment and cleanup activities. Claims may be submitted if the eligibility requirements for the trust funds are met. Deductibles that must be met before receiving reimbursement from the Commercial Fund range from \$20,000 to \$75,000. Noncommercial Fund deductibles are \$0 for UST owners and operators, and \$5,000 for landowners. Table 4 lists the receipts and disbursements by fiscal year for both funds for the period July 1, 1988 to June 30, 2005.

Table 4 – Receipts & Disbursements for Cleanups
7/1/88 - 6/30/05

FISCAL YEAR	RECEIPTS		DISBURSEMENTS ¹	
	Commercial	Noncommercial	Commercial	Noncommercial
FY 88-89	\$ 2,337,685	\$ 0	\$ 14,768	\$ 0
FY 89-90	5,773,632	2,905,035	79,080	0
FY 90-91	7,330,573	2,934,347	1,616,760	564,206
FY 91-92	13,484,008	3,018,344	4,409,229	2,143,155
FY 92-93	18,032,784	7,693,288	9,651,948	4,069,497
FY 93-94	24,438,966	3,404,086	22,904,802	2,012,312
FY 94-95	56,037,135 ²	5,194,725	37,405,510	2,900,368
FY 95-96	28,178,768	5,215,550	44,060,639	5,029,109
FY 96-97	28,564,034	5,587,781	44,163,273	5,924,799
FY 97-98	27,291,220	5,717,592	30,267,392	3,869,091
FY 98-99	26,783,344	5,945,461	16,104,152	2,776,105
FY 99-00	27,178,623	5,636,563	22,820,069 ³	5,028,505
FY 00-01	27,240,303	5,811,666	24,566,132 ⁴	7,890,618 ⁵
FY 01-02	27,124,210	6,620,808 ⁶	36,872,426	9,182,320
FY 02-03	27,055,759	7,664,329 ⁷	26,498,565	9,898,806
FY 03-04	26,934,685	8,060,151	23,514,179 ⁸	7,756,579
FY 04-05	50,255,908 ¹⁰	14,885,997 ¹⁰	46,966,083 ⁹	11,326,318
FY 05-06	28,143,119	7,615,613 ¹¹	15,474,991 ¹¹	5,005,578
TOTAL	\$452,184,756	\$103,911,336	\$407,389,998	\$85,377,366

¹ Does not include administrative costs.

² Commercial receipts for FY 94-95 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 cleanup expenditure rather than as an administrative cost.

⁴ \$33,866 transferred to Federal Trust Fund as a cleanup expenditure.

⁵ \$2 million transferred out of Noncommercial Fund to the state's General Fund.

⁶ Includes transfer of \$784,382 from Circle K Settlement Fund

⁷ Includes transfer of \$3,418,990 of motor fuel and kerosene tax from Commercial to

Noncommercial trust fund due to balance below \$5 million - General Statute 119-18(b).

⁸ Includes transfer of \$2,036,932 from Commercial to Noncommercial trust funds per GS 119.18(b); transfer of \$90,000 to Dept. of Agriculture; and transfer of \$52,722 to Federal trust fund as a cleanup expenditure.

⁹ Includes transfer of \$3,150,730 from Commercial to Noncommercial trust fund per GS119:18(b). Transfer from Agriculture Department; transfer of \$38,702 to Federal trust fund.

¹⁰ Includes additional revenue from the 1-year 1.1 cent per gallon excise tax or \$19,000,000 to the Trust Fund.

¹¹ Includes \$1,922,601 transfer to Noncommercial Fund, \$90,000 transfer to Dept. of Agriculture, and \$30,016 transfer to repay Federal Trust Fund for State Lead program expenses.

The administrative budget for the state-funded portion of the UST program is derived from the Commercial and Noncommercial Funds. Table 5 lists past administrative expenditures since the beginning of the UST program.

Table 5 – Administrative Expenditures

FISCAL YEAR	COMMERCIAL	NONCOMMERCIAL
FY 89-90	\$ 201,255	\$ 201,254
FY 90-91	547,595	547,595
FY 91-92	517,221	517,221
FY 92-93	601,687	601,686
FY 93-94	694,424	694,423
FY 94-95	666,270	666,270
FY 95-96	2,322,632	783,684
FY 96-97	2,623,339	801,143
FY 97-98	2,530,036	667,724
FY 98-99	2,567,668	620,574
FY 99-00	2,579,540*	570,738
FY 00-01	2,730,236	733,811
FY 01-02	2,397,264	913,755
FY 02-03	2,221,851	1,166,494
FY 03-04	2,527,451	1,244,864
FY 04-05	2,654,447	1,265,079
FY 05-06	2,636,228	1,298,441
TOTAL	\$ 28,382,916	\$11,996,315

Incorporating the administrative costs into receipts and cleanup disbursements yields these Commercial and Noncommercial Fund balances:

Commercial Fund Balance (as of June 30, 2006)	\$13,747,190
Noncommercial Fund Balance (as of June 30, 2006)	\$ 5,240,209

*Adjustment due to a transfer of \$288,117 from the Commercial Fund to the Federal Trust Fund as a cleanup expenditure rather than an administrative cost.

Groundwater Protection Loan Fund

After the Groundwater Protection Loan Fund was created, 11 North Carolina banks agreed to administer the loan program. As of June 30, 1995, four loans totaling \$1,228,350 had been closed. After this date, remaining funds of \$31,288,889 were deposited into the Commercial Trust Fund. Loan repayments are also deposited into the Commercial Fund. During the twelve-month period ending June 30, 2006, \$ 24,562 was repaid. Total receipts for the Loan Fund since its inception in January 1992 are \$33,168,709. The program is no longer active, but loan payments continue to be received.

CLAIMS AGAINST THE CLEANUP FUNDS

Claims against both the Commercial and Noncommercial Funds are processed on a “first-come, first-served” basis. The status of all claims requesting reimbursement from both funds that were received as of June 30, 2006 is presented in Table 6. These claims only include costs claimed to date, and do not represent the total costs for cleanups.

UST Section staff have supervised contract cleanups at 558 commercial and noncommercial sites (Table 6, 443 commercial and 115 noncommercial). In FY 2005-2006, DENR went through a new contract selection process. Twenty-six firms submitted proposals for DENR consideration. Based on the firms’ technical expertise, project qualifications and cost proposals, DENR selected six environmental engineering/geology firms to work in the Trust Funds State Lead program. The firms perform a range of assessment and cleanup actions. The new contract period started with FY 2005-2006.

Table 6 – Claims Against the Cleanup Funds
7/1/88 - 6/30/06

	Commercial Fund		Noncommercial Fund	
	<u>Number</u>	<u>Cost</u>	<u>Number</u>	<u>Cost</u>
Claims Paid	25,741	\$387,581,510	9,909	\$ 80,252,212
Incidents Denied Totally ¹	33	\$ 4,573,040	4	\$ 59,845
Claims Denied Partially ²	14,798	\$ 79,218,134	4,456	\$ 10,909,354
Total Deductibles Paid	-----	\$ 72,212,204	-----	\$ 661,007
Claims Pending	263	\$ 2,420,870	274	\$ 2,532,273
Contracted Cleanups ³	443	\$ 10,611,297	115	\$ 2,906,797

¹ Ineligible

² Excessive or undocumented costs

³ State Lead actions undertaken or completed

**COMMERCIAL AND NONCOMMERCIAL FUNDS BALANCES
AND PROJECTED NEEDS**

Commercial Fund

As of June 30, 2006, the Commercial Fund balance was \$13,747,190 with pending claims of \$2,459,046 (see Figure 3, Page 9). From fiscal year 2000 through 2004, the difference between the fund balance and the pending claim amounts steadily increased (see Figure 4, Page 9). This was largely due to the fact that the UST Section implemented an expedited review process during fiscal year 2001-2002 in an effort to reduce the time for claim review. While claim review time was reduced, the result was a delay in the reimbursement payment, since the Commercial Fund could only pay out what had been received for the month. This trend continued up to fiscal year 2004-2005. With the passage of Session Law 2004-124, the difference decreased markedly. The present situation represents a significant change in the commercial fund program over previous years because the UST Section now directs most of the work that can be accomplished, and only those commercial and noncommercial sites with a threshold level risk will be directed to continue on with assessment and remediation. This results in greater fiscal control over the program, while focusing on those sites exhibiting the greatest risk to human health and the environment.

Figure 3 - Commercial Fund Balance and Claims Pending Amount

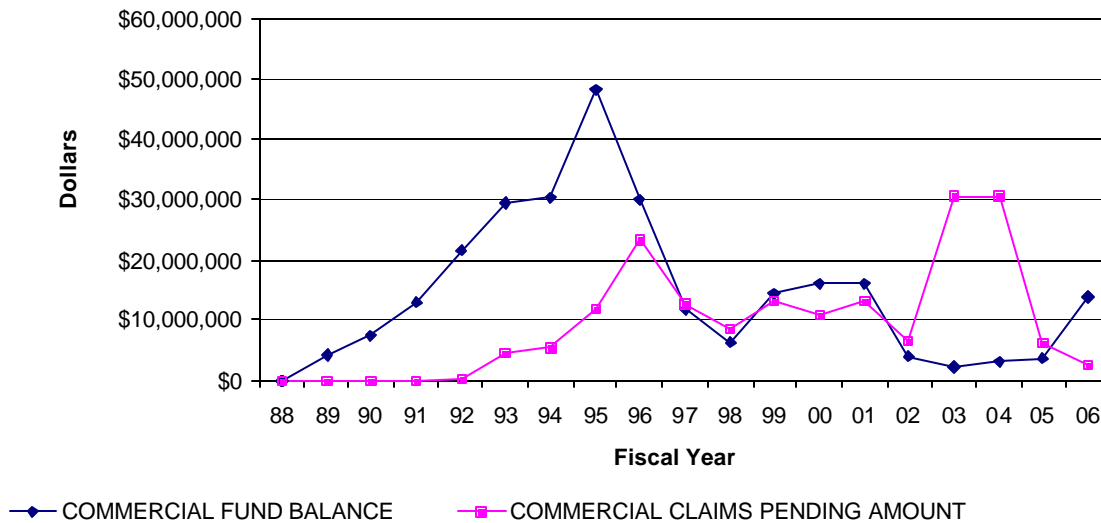


Figure 4 - Commercial Fund Balance Minus Claims Pending Amount

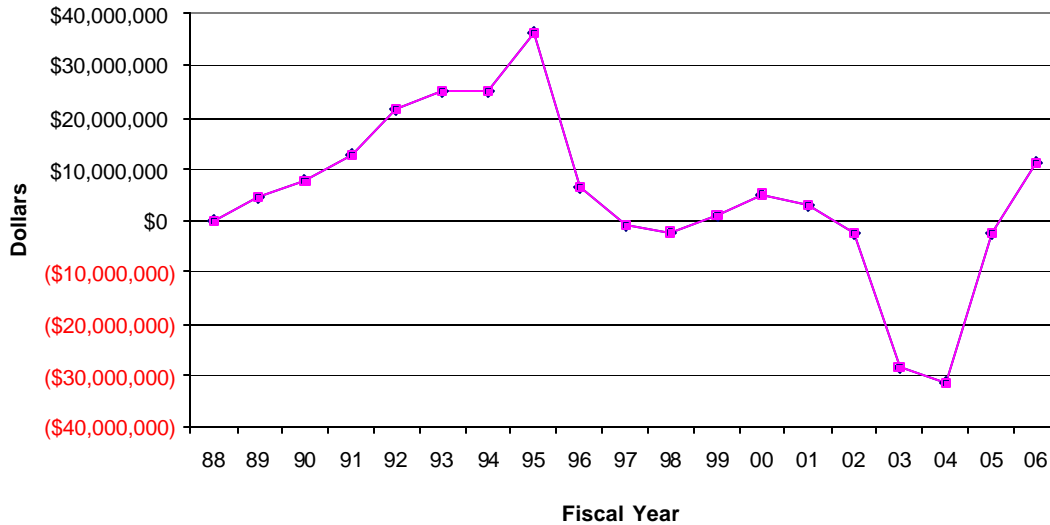


Table 7 - Total Commercial Fund Revenues and Expenditures
7/1/05 – 6/30/06

Total Commercial Revenues (see Table 1)	\$28,143,119
Total Claims and Contracted Cleanups	\$13,432,373
Transfers ¹	2,042,617
Administrative Costs	<u>\$ 2,636,228</u>
Total Commercial Expenditures	\$18,111,218

1-From Table 4, footnote 11 monies transferred to the Noncommercial Fund, Dept. of Agriculture, and Federal Trust Fund for State Lead expenses.

One initiative which may affect a future demand on the Commercial Fund is pay-for-performance based cleanups. On Oct. 1, 2001, the General Assembly ratified House Bill 1063, which allows responsible parties to participate in the pay-for-performance program on a voluntary basis. Pay-for-performance is a reimbursement method that requires cleanup goals to be met before payments can be made to environmental consultants. This reimbursement method requires the Trust Fund to obligate the contracted cleanup costs. Pay-for-performance obligations may initially place a higher demand on the Trust Fund, but should greatly decrease the costs of cleanups and thus result in a lesser burden to the Trust Fund.

Other factors that may affect future demands on the Commercial Fund are claims for bodily injuries and property damages brought by third parties. There are currently several pending third-party claims totaling approximately \$1.7 million (less the \$100,000 deductible per incident amount) that will place an additional burden on the Commercial Fund. Other third party claims may be planned that have not yet been submitted for review.

After UST operating fees were raised on Jan. 1, 1997, revenue from this funding source declined through the end of FY 1998-99 (see Table 8). This decrease was likely due to the reduction in the number of registered USTs that occurred as a result of the federal 1998 upgrade regulations. Overall, since 1998, the number of registered USTs has generally decreased. As in FY 2004-05, the number of registered USTs has decreased during the period from July 1, 2005 to June 30, 2006. UST operating fees have remained essentially stable.

Table 8 - Commercial UST Population and Operating Fee Revenue

<u>Fiscal Year</u>	<u>No. of Commercial USTs Billed</u>	<u>Operating Fee Revenue</u>
FY 1988-89	-	\$ 4,322,917
FY 1989-90	-	\$ 8,086,895
FY 1990-91	57,385	\$ 6,889,969
FY 1991-92	52,529	\$ 9,910,737
FY 1992-93	48,812	\$18,032,784
FY 1993-94	43,314	\$ 23,661,875
FY 1994-95	39,289	\$ 8,500,000
FY 1995-96	37,529	\$ 11,050,000
FY 1996-97	37,776	\$ 10,839,975
FY 1997-98	36,563	\$ 10,008,917
FY 1998-99	34,428	\$ 8,697,468
FY 1999-00	33,558	\$ 8,844,093
FY 2000-01	33,776	\$ 8,464,019
FY 2001-02	32,839	\$ 8,553,715
FY 2002-03	31,155	\$ 8,087,033
FY 2003-04	32,005	\$ 8,309,807
FY 2004-05	31,518	\$ 7,987,101
FY 2005-06	30,638	\$ 7,951,508

At present, there are approximately 6,991 commercial incidents that have yet to be closed out. Risk levels at these sites rank from low to high. With implementation of Session Law 2004-124, the Department now directs most work done at both Commercial and Noncommercial incidents. In addition, all high risk incidents have been assigned a relative risk, and further assessment and remediation is being directed on only those incidents with a high enough relative risk. While the statutory responsibility of the responsible party to address their incident remains, the Session Law limits the number of incidents that can be addressed and the cost of work reimbursed. This improves fiscal control and management, but it will result in a longer time necessary to address all petroleum releases.

Data tracking improvements are continuously made to the UST incident management database. These changes will enable the UST Section to better predict the number of incident closures and project Commercial Fund expenditures.

UST systems pose a substantial threat to human health and the environment. On average, over 1,200 leaks are reported each year. Maintaining the quality of North Carolina's drinking water and groundwater depends on preventing releases to the environment. Direct education and technical assistance for tank owners and operators is critical. Only education and assistance

ensure responsible handling of petroleum products (including methyl tertiary-butyl ether) and early detection in the event of a leak.

North Carolina currently has about 30,638 active regulated USTs at 11,003 facilities. We estimate that 40 to 50 percent of the facilities are located within 500 feet of both domestic and public drinking water supplies. Our inspection data show that over 30 percent of tank owners and operators do not comply with UST regulations. These regulations cover proper operation and maintenance, with an emphasis on leak detection. If we are to preserve the quality of North Carolina’s drinking water, improving compliance must be given increased priority.

To ensure that all UST facilities are in compliance with the rules and regulations necessary to prevent releases, the UST program presently has 11 inspectors, one support staff, and one attorney. These inspectors are responsible for all phases of facility compliance, including inspection preparation, on-site inspecting, inspection data entry, follow-up inspections, owner and operator training, and enforcement activities. Each inspector can complete approximately 250 inspections per year. This inspection rate only allows the program to inspect each facility once every 4 to 5 years. Experience has shown that more frequent inspections lead to improved compliance and fewer releases, particularly since many facilities change ownership each year and many new owners are unfamiliar with UST regulations. The preferred inspection frequency is once every two years and, in fact, the federal Energy Act mandates a three-year inspection frequency by 2010. This year, the UST program focused more resources on compliance by creating two inspector positions from two incident management positions, and by negotiating 2.5 time-limited inspector positions under a federal grant from US EPA. Although these actions will help, more are needed to meet inspection and compliance goals. An additional nine full-time inspectors, one support staff, and one attorney are needed to get the inspection rate to the desired two-year cycle

Noncommercial Fund

As of June 30, 2006, the Noncommercial Fund balance was \$5,240,209. The total for pending claims stood at \$2,620,641. Based on the past 12 month period, the demands on the Fund have decreased. We anticipate that this will improve the timeliness of payments, just as in the Commercial Fund (see Figure 5).

Figure 5 - Noncommercial Fund Balance and Claims Pending Amount

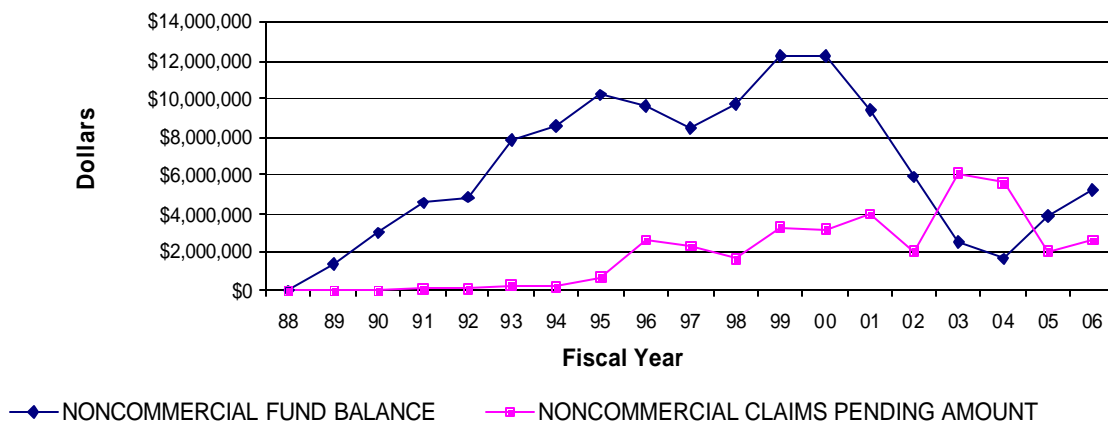


Figure 6 - Noncommercial Fund Balance Minus Claims Pending Amount

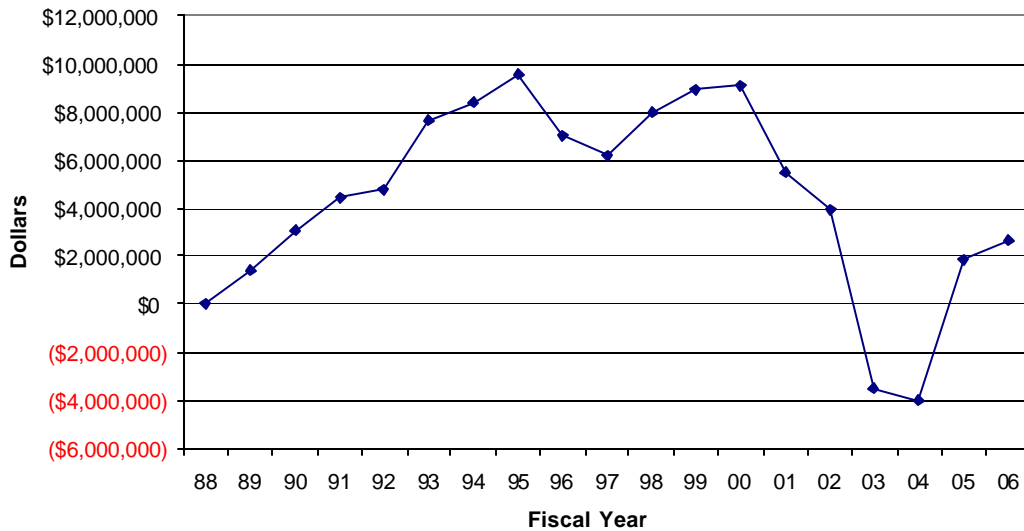


Table 9 – Total Noncommercial Fund Revenues and Expenditures

7/1/05-6/30/06

Total Noncommercial Revenues (see Table 2, page 3) **\$ 7,615,613**

Total Claims and Contracted Cleanups \$ 5,005,578

Administrative Costs \$ 1,298,441

Total Noncommercial Expenditures **\$ 6,304,019**

Table 10 shows the estimated cost to complete cleanups for noncommercial incidents reported from July 1, 2005 to June 30, 2006. It should be noted, however, that cleanups can easily extend over several years and costs may vary greatly. In addition, these figures do not include remedial costs for reported releases from past fiscal years.

Table 10 - Estimate of Cleanup Costs for Noncommercial Incidents

7/1/05-6/30/06

<u>Region</u>	<u>Incidents*</u>	<u>Total Estimated Cleanup Cost**</u>
Asheville	94	\$ 2,321,800
Fayetteville	57	\$ 1,407,900
Mooreville	151	\$ 3,729,700
Raleigh	202	\$ 4,989,400
Washington	128	\$ 3,161,600
Wilmington	81	\$ 2,000,700
Winston-Salem	178	\$ 4,396,600
Total	891	\$22,007,700

* Calculations of the last twelve-month period indicate that approximately 22 percent of reported new releases are from noncommercial sites.

** An average cost of \$24,700 is used as an estimate of total cleanup costs for noncommercial sites.

PAY FOR PERFORMANCE

On October 15, 2001, House Bill 1063 was enacted by the North Carolina General Assembly. This bill gives the Division of Waste Management's Underground Storage Tank program the authority to allow performance-based cleanups of sites where petroleum has been discharged or released from underground storage tanks. Sites selected for the pilot program were posted for competitive bidding in the North Carolina Interactive Purchasing System. A performance-based contract was awarded to the qualified environmental services firm that submitted the lowest, technically qualified bid for an acceptable remedial proposal for the advertised site. A series of milestones (generally percentage reductions in contaminate levels in the soil and groundwater) must be achieved before payments are made to the cleanup firm from the Commercial or Non-Commercial Fund.

On November 2, 2001, the Division of Waste Management convened a stakeholders workgroup consisting of representatives of the Professional Engineers of North Carolina, the Consulting Engineers Council of North Carolina, the North Carolina Board for the Licensing of Geologists and the North Carolina Petroleum Marketer's Association to develop a temporary rule. A follow-up meeting on November 9, 2001 resulted in the further refinement of the rule and the discussions of the contract and bidding procedures proposed for use with the rule.

The proposed temporary rule was presented to the Groundwater Committee of the Environmental Management Commission on December 12, 2001 and received a favorable vote to proceed to full commission review in February 2002. On February 14, 2002, the EMC voted to approve the publication of the temporary rule in the North Carolina Register. The temporary rule was published for public comment between March 15 and April 15, 2002 in Volume 16, Issue 18, p. 2019 of the NC Register. No comments were received. The Commission adopted the temporary rule on May 14, 2002. On July 11, 2002 the Commission voted to allow the Division of Waste Management to proceed with permanent rule making. The permanent rule was published in the September 2004 issue of the NC Register.

In July of 2003, House Bill 897 was passed, allowing \$2.5 million from the Commercial Fund and \$250,000 from the Non-Commercial Fund to be allocated for the Pay-for-Performance Program in each fiscal year. At present, there have been four commercial sites accepted into the pilot program. Of the four sites, one has naturally attenuated to the point that a Notice of No Further Action has been issued with the filing of a Notice of Residual Petroleum. A contract has been awarded for the second site and installation of the remediation system has begun. Bid specification packages for the last two sites are being prepared.

In June of 2005, the UST Section opened and reviewed six offers for the first Pay for Performance contract to be placed out to bid for cleanup. Unfortunately, the six offers were not detailed enough in the technical proposal to justify the cost proposals submitted. The performance contract was placed back out to bid, with an updated technical proposal description, on July 21, 2005 with a closing date of August 31, 2005.

In order to be considered for the Pay for Performance Program, an incident must have a completed comprehensive site assessment and not be considered an emergency cleanup. Any responsible party who would like their incident considered for the program, and who can meet the requirements, may contact the UST Trust Fund Section.

On January 4, 2006, the first voluntary Pay for Performance contract, #N06004, was awarded to Pyramid Environmental & Engineering, P.C. and then amended on May 12, 2006 to finalize the contract terms and conditions. In June and July of 2006, the first milestone was met: installation and startup of the remediation system. Monitored attenuation of the plume will be conducted under the terms of the contract until the site has met the cleanup levels stipulated in the contract.

In 2001, the UST Section entered into a Pay for Performance based cleanup contract as part of a third party lawsuit settlement agreement. This contract, while not allowing for flexible cleanup goals due to the settlement agreement between the responsible party and the affected party, did set the cleanup timetable and fix the cleanup costs. Over the past five years, this site has met all contractual milestones up to and including the 99% contaminant reduction goal. At present, the consultant of record is trying to meet the final cleanup goals and begin the one year of monitoring following system shut down to ensure that the cleanup milestone has been met and that contamination levels do not rebound.

RECOMMENDATIONS

Based on the results of this report, the UST Section makes the following recommendations for the Commercial and Noncommercial Trust Funds:

- 1) Continuing as the primary recommendation, transition (and ultimately terminate) the providing of required financial responsibility (FR) for owners and operators of regulated, commercial USTs by the trust fund to other mechanisms, such as private insurance and self-insurance. Ending the use of the trust fund as a provider of FR will eventually greatly reduce the need to use trust fund resources to clean up new releases. Transitioning to private insurance, self-insurance, or other non-trust fund mechanisms of FR will also tend to reduce the number and severity of releases by making tank owners and operators more fiscally involved and more vigilant in preventing releases early, before the contamination of significant areas of soil and ground water.
- 2) Continue to increase the inspection frequency for USTs in North Carolina. More frequent inspections will have the following positive effects: detect and correct more out-of-compliance equipment and operating procedures that could allow a release, detect some undiscovered releases, and provide more frequent release prevention and detection training to UST owners and operators. This last benefit is particularly important due to the large number of UST facilities being bought and operated by new and inexperienced owner/operators each year.
- 3) Incrementally increase the annual operating fees for USTs in order to increase the amount of money available in the trust fund for cleaning up existing releases and to provide an incentive for tank owners and operators to transition from the trust fund to other FR mechanisms.
- 4) Implement a phase-in of secondary containment requirements for existing UST systems. Implement a phased approach by requiring secondary containment of the oldest and most failure-prone UST systems first.
- 5) Increase the amount of money coming into the trust funds in order to clean up the existing UST releases.
- 6) Continue to find and implement better and more cost-effective methods for assessing and cleaning up petroleum releases, including reviewing existing rules and regulations and reducing or eliminating requirements whenever practical, while maintaining a sufficient level of protection for public health and the environment.
- 7) Implement technical changes to existing law, such as setting time limits on filing claims and seeking eligibility determination, in order to lessen the logistics of the process and to determine the trust fund's total liability for cleaning up releases.
- 8) Continue to encourage responsible parties of UST releases to consider pay-for-performance cleanups of their incidents. Pay-for-performance (PFP) is a reimbursement method that requires cleanup goals to be met before payments can be made to environmental consultants. States which incorporate the use of PFP programs for corrective actions have realized a reduction in their costs for cleanups over non-PFP based cleanups. Two states, Florida and

South Carolina, have used PFP programs for several years. In evaluating their effectiveness, these states have experienced overall reductions in cleanup costs, primarily through a decrease in the length of time required to achieve remediation. South Carolina's program continues to realize an average cost reduction of 40 percent. The Department of Environment and Natural Resources will monitor the obligated costs for pay-for-performance contracts and the potential cleanup cost savings of the PFP program.

- 9) Renew and expand the PFP effort based on the initial pilot PFP program results.

APPENDICES

Appendix A – Letter from J. I. Palmer, Jr., Regional Administrator, US EPA Region 4,
to William G. Ross, Jr., Secretary, NC DENR, dated 19 September 2006

Appendix B - LUSTs reported 7/1/88-6/30/06 *

Appendix C - LUSTs reported 7/1/05-6/30/06 *

Appendix D - LUSTs closed out 7/1/88-6/30/06 *

* Available upon request by contacting Ms. Jane Comer at 919.733.1438)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 19 2006



William G. Ross, Jr., Secretary
North Carolina Department of Environment
and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

Dear Secretary Ross:

The U. S. Environmental Protection Agency (EPA) has monitored the status of North Carolina's Commercial Leaking Petroleum Underground Storage Tanks Cleanup Fund (State Fund) over the past several years as the State has worked to clean up leaking underground storage tank (UST) sites. Because it serves as a financial responsibility mechanism for tank owners and operators to ensure the availability of funds to clean up new releases from regulated tanks and provides funds to clean up many sites contaminated before the establishment of financial responsibility requirements, the State Fund is a vital component of the State UST Program. I am concerned that the State Fund is not adequately capitalized to meet its current and future liabilities.

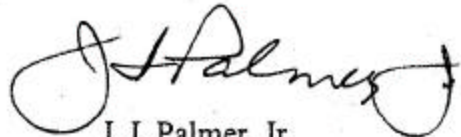
As part of annual reviews of the State's UST Program undertaken during fiscal years 2002 through 2005, our staff expressed growing concern about the solvency of the State Fund. From 2002 to 2004, the Fund's unpaid claims liability ballooned to more than \$31,000,000. In 2004, the North Carolina General Assembly responded to our concerns by providing money from the Highway Trust Fund to pay backlogged claims and placing controls on future State Fund obligations to prevent unchecked increases in claims. Those controls limited the number of sites subject to remediation based on the State Fund's financial ability to reimburse for claims. As a result, the number of contaminated sites undergoing assessment and remediation immediately decreased. I understand that state policymakers expected a steady increase in the number of sites that could be funded under the new controls as the Department of Environment and Natural Resources (DENR) modified its reimbursement procedures. During the past two years, DENR has worked hard to implement the provisions of 2004 N.C. Sess. Laws 124 by prioritizing sites and has periodically increased the number of sites that could be addressed based on the availability of funds; however, it appears to us that many sites required to be addressed under federal and state UST rules remain unattended as a result of inadequacies in the State Fund.

I recently requested and received information from your staff showing that only 33 of the 714 contaminated sites, with a measurable level of free petroleum in the ground water, are being addressed because of the State Fund's financial status. While it is understandable that the priority scheme implemented by DENR focuses on sites posing the greatest risks to public health and the environment, we are concerned about the deficient response at the other 681 sites with free product. Under federal rules, many aspects of leaking underground storage tank site remediation are left to the discretion of the state; however, removal of free product is a federal requirement that exists to ensure protection of ground water as a vital natural resource.

As you are aware, the Underground Storage Tank Compliance Act of 2005 (Title XV, Subtitle B of the Energy Policy Act of 2005) authorizes the EPA Administrator to withdraw approval of state assurance funds as a financial responsibility mechanism without withdrawing approval of an entire state UST program. If approval is withdrawn, UST owners and operators would be required to arrange an alternative means to comply with state and federal financial responsibility rules. These rules require that tank owners and operators maintain a minimum of \$1,000,000 liability coverage to pay for corrective action and third party damage claims. Within the next few months, EPA anticipates issuing guidelines for implementing these provisions of the 2005 Act.

In conclusion, we are concerned that the State Fund is not adequately funded at this time to allow DENR to address all sites requiring clean up. Given our concerns that the State Fund may be deemed inadequate under the draft guidance, I strongly encourage North Carolina to have a strategy in place for addressing its fund solvency issues before implementation occurs. Our staff stands ready to work with you in addressing issues and concerns. If you would like to discuss this matter further or need additional information, please feel free to contact me or have a member of your staff contact John Mason of our UST Section at (404) 562-9441.

Sincerely,



J. I. Palmer, Jr.
Regional Administrator

cc: Dexter Matthews, Director
Division of Waste Management Division, DENR