



NC UST Program

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State of the UST Section?

- **Non-Commercial Trust Fund**

- Dissolved in Session Law 2015-241 on September 18, 2015
- Releases Prior to October 1, 2015
- Releases Subsequent to October 1, 20105

- **Commercial Trust Fund**

- Current Balances and Obligations
- New Cleanup Strategies



Non-Commercial Trust Fund

- NC Session Law 2015-241- September 18, 2015
 - Section 14.16B.(b)“*A Responsible Party is not required to take immediate action or initial abatement actions at a non-commercial site, with the exception of emergency responses until such time as the Department has classified the risk posed by the release*”-SL 2015-241.
- Prior to October 1, 2015
 - All work requires pre-approval
 - Minimal work with lower TF reasonable rates
 - Claims must be submitted prior to July 1, 2016
- Subsequent to October 1, 2015
 - Release reporting is required within 24 hours (UST-61 Form)
 - No change to the closure requirements (or lack thereof) for unregulated USTs
 - Release is made by visual, olfactory, or semi-quantitative or quantitative methods (voluntary)



Non-Commercial Trust Fund (continued)

- SL 2015-241 Section 14.16B.(c) requires that NCDEQ amend the following rules:
 - 15A NCAC 02L .0403-Rule Application
 - 15A NCAC 02L .0407(d)-Risk-Based Assessment and Corrective Action
 - Rules must be substantively identical to the provisions of Section 14.16B.(b)
- SL 2015-241 Section 14.19 requires that NCDEQ review and revise its procedures and rate tables for reimbursement of soil assessment activities:
 - Permit the use of Ultra Violet Florescence (UVF) and other appropriate test methods as alternatives for USEPA Method 8015.



Exceptions (Emergency Situations)

Non-Commercial UST Incidents

- Vapor/Fire/Explosion Hazard
 - Identified by the Fire Department, EMS or Health Department
- Surface Exposure of Free Product
- Free Product on the Groundwater (1/8 inch) and less than 30 feet from a property boundary, as long as the adjacent property owner is Not the RP.
- Impacted Water Supply Well



High Risk Classification at Non-Commercial UST Incidents

- **Receptor Survey (voluntary)**
 - Water Supply Well within 150 feet from a heating oil UST or 1,000-feet from a gasoline/diesel UST
 - Water Supply Well-Used for drinking, gardening, livestock watering, food/fish preparation, swimming pool, or other potable use.
- **Mitigate Receptor for Closure**
 - Move water supply well to a distance greater than 150 feet for home heating oil
 - Connect to Municipal Water (if available)
 - Cleanup soil and groundwater to “unrestricted use standards”
 - Below Soil-to-Groundwater and 2L Standards



Low Risk Classification at Non-Commercial UST Incidents

- **No Further Action with Notice of Residual Petroleum**
 - Restricting the use of soil in the vicinity of the UST/contaminated soil and groundwater to be the most protective
 - No Quantitative Data is necessary
 - 95% of home heating oil USTs should be low risk under the newly established criteria.



Trust Fund Balances and Obligations as of 03-11-2016

Obligations	Commercial	Noncommercial	Total
RP-Lead Cleanups	\$21,034,473.47	\$2,269,567.57	\$23,304,041.04
State-Lead Cleanups	\$4,820,780.07	\$0.00	\$4,820,780.07
Program Administration	\$1,122,383.44	\$1,000,000.00	\$2,122,383.44
Fund Balance	\$36,638,260.88	\$274,147.19	\$36,912,408.07
Fund Balance Less Obligations	\$9,660,623.90	(\$2,995,420.38)	\$6,665,203.52

**Commercial Trust Fund is
Sustainable!**

(Three months operating expenses plus \$8,000,000)



Commercial Trust Fund

Funding Level- Intermediate 110

- Funding Level lowered from Intermediate 125 to Intermediate 110 on February 1, 2016
 - Funding level last lowered in 2012
- EPA requests reduction of backlog
 - Approximately 2,500 low risk sites across the state
 - Currently researching avenues to work on low risk sites without violating NCGS 143-215.94V(a).
 - Greater than 2,000 sites are between 20 and 25 years old



Random Fun Facts

Commercial USTs and Trust Fund

- Fourth largest number of active regulated USTs in the US (25,368)

1) Texas (50,633), 2) California (36,844), 3) Georgia (29,302)

- Fifth largest number of closed regulated USTs in the US (70,127)

1) California (131,733), 2) Texas (121,225), 3) Florida (111,826) 4) New York (104,045)

Source: EPA Semiannual Report of UST Performance measures through September 30, 2015

- Facility Ownership
 - 197 owners with greater than 5 facilities
 - 4,000 owners with less than 5 facilities
 - 3,000 owners with 1 facility
- 26% of all the TF has been spent on 208 sites
- 50% of the annual funding is spent on System Operation and Maintenance



New Risk Ranking Strategies

Commercial UST Incidents

- Risk classification is Dynamic (15A 02L .0407)
 - Reevaluate the risk to receptors periodically
 - Water Supply wells:
 - NCGS 143-215.94V states that when using the distance between the source area and a water supply well as a risk factor, the likelihood of the water supply well to be affected must be determined.
 - Elimination of water supply wells as receptors when years of data show that the well has not become contaminated
 - Plume stage:
 - Expanding, contracting and stable
 - Elimination of water supply wells, surface waters, utilities, and structures that were at first deemed “at risk”.



New Cleanup Strategies

Commercial UST Incidents

- Base Design and Phased Cleanup Approach
 - 0-2 years-Active remediation with results of 90% of contaminant mass removal at the end of 2 years.
 - 3-12 years-Monitored natural attenuation
- Eliminate Receptors and Reduce Risk Classification from High, Intermediate, Low over time:
 - Groundwater Cleanup to GCLs
 - Soil Cleanup to Residential MSCCs (??).



Consensus of Reasonable and Necessary costs for Cleanup

Commercial UST Incidents

- The Stakeholders Meetings
 - Scoping meetings with all stakeholders (RP/Consultant, CAB Incident Manager and TFB Auditor) to evaluate the cost effectiveness and the reasonable and necessary characteristics of expenditures prior to CAP development.
 - Differences of Opinion will be brought to the attention of the CAB Branch Head, the TF Branch Head, and the Section Chief and a meeting/conference call scheduled.
 - Decisions provided in writing



Examples of Cost Effective Strategies

Commercial UST Incidents

- Remove grossly contaminated soil (over Residential MSCCs) and use natural attenuation to remediate groundwater to below GCLs
 - Use UVF to define extent of contamination during CSA in order to accurately determine how much soil requires excavating.
 - Use UVF to limit the amount of soil to excavate during CAP Implementation
- Do not over design remediation systems
 - Blowers, compressors, number of points, control panels
- Use an *in-situ* oxygen delivery system
 - Seems to work well in the Piedmont
- Consider unusual solutions
 - Excavate a pit, fill with porous material, install a large diameter recovery well to remove free product in source area.



QUESTIONS?

