



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue, Governor

Division of Waste Management  
UST Section

Dee Freeman, Secretary  
Dexter R. Matthews, Director

July 1, 2012

**MEMORANDUM**

**TO:** Responsible Parties, Environmental Service Companies, Consultants, and Other Interested Parties

**CC:** UST Section Regional Supervisors  
Vance Jackson, Ruth Strauss, and Robert Davies, Branch Heads

**FROM:** Grover Nicholson, Chief, UST Section

**SUBJECT:** *Guidelines for Initial Response and Abatement, Assessment, and Corrective Action for Non-UST Releases of Petroleum*

The UST Section has developed a guidance document, *Guidelines for Initial Response and Abatement, Assessment, and Corrective Action for Non-UST Petroleum Releases (Guidelines)*, which describes initial response and abatement, assessment, and corrective action policy and procedures for non-UST petroleum releases (e.g., surface spills and releases from aboveground storage tanks). This document replaces the existing guidance document, *UST Section Guidelines for the Investigation and Remediation of Contamination from Non-UST Petroleum Releases*.

The draft *Guidelines* were available for public review for a 30-day period which ended June 25, 2012; the UST Section received no comments during the public review period. The new *Guidelines* are effective from July 1, 2012 and are available on the UST Section website at <http://portal.ncdenr.org/web/wm/ust/nustmain>.

The DENR responds to non-UST petroleum releases in accordance with North Carolina General Statute (NCGS)143-215.75 *et seq.*, the Oil Pollution and Hazardous Substances Control Act of 1978 (OPHSCA), and Title 15A NCAC Subchapter 2L, Groundwater Classifications and Standards. The OPHSCA and Subchapter 2L establish the requirements for investigating non-UST petroleum releases and for performing initial response and abatement, assessment, and corrective actions and set the criteria and standards for cleanup.

The guidance for assessment, remediation, and reporting of non-UST releases presented by these *Guidelines* follows that established for UST releases to the maximum extent practicable within the framework of the regulations. To optimize consistency with petroleum UST release guidance, this document incorporates similar organization, progressing from initial response through assessment and correction action to site closure and concluding with notification, sampling, and soil and groundwater disposal guidance. Tables with approved analytical methods and soil and groundwater concentration limits and appendices with report formats, reporting tables, required permits, etc., support the main document (from separate files); these tables and appendices are almost identical in non-UST and UST guidance documents, i.e., the sampling methods and reporting requirements are now similar for both non- UST and UST releases.

The DENR requires for non-UST (and UST) petroleum releases that, immediately upon determining that contamination in soil samples exceeds a specified action level, the responsible party excavate all contaminated soil. In these *Guidelines*, the initial action level for contamination in soil for all classifications of non-UST (and UST) petroleum releases is 10 ppm TPH, the maximum level which is scientifically defensible as a detection limit. However, for specific release sites, if the DENR determines that the

contaminated soil poses a threat to groundwater or that semi-quantitative data provided by TPH analysis are not adequately protective, the soil-to-groundwater MSCCs (for individual constituents) must serve as action levels.

If soil contamination remains at a release site after the excavation pits from the initial investigation are filled, the cleanup goals are the soil-to-groundwater MSCCs. The groundwater quality standards in 2L .0202 are the cleanup goals for groundwater.

In these *Guidelines* (and in proposed revisions of the UST guidance documents), field-based methods for TPH analysis such as Ultraviolet Fluorescence Technology (UVF) are allowed as a alternative to EPA Method 8015C for TPH analysis if all requirements, including product (fuel) identification and calibration approved by DWM, are met.

***In these Guidelines, the responsible party is strongly advised to avoid the rigorous criteria requirements and the inflexibility of the alternative CAPs and to propose a CAP under NCAC 2L .0106(j).*** The requirements for the alternative CAPs are presented in detail in these *Guidelines* to facilitate full understanding of the difficulties involved in meeting the stringent requirements for approval and *in continuing to meet them throughout implementation* (e.g., if a CAP under .0106(k) or (l) is approved but later, during implementation, contaminated soil or FP is discovered or the plume migration model is found to be faulty and a receptor to be at risk, then another CAP, under 2L.0106(j), using active technology to address the soil or FP, will be required.) The formula for a CAP under 2L .0106(j), although strictly described as a plan for implementing active technology from start to finish (with no further action), is interpreted to allow implementation of several different technologies (including excavation) simultaneously or sequentially to the point where each no longer functions to provide further cost-effective or technically-efficient cleanup and also to allow necessary periods of system shutdown to monitor for rebound or attenuation of contaminants. The environmental consultant is urged to discuss proposed CAPs, especially alternative CAPs, with the UST Section prior to preparation.

If you have questions, please contact Karen Harmon by mail at Green Square Complex, DENR Office Building, 1646 MSC, Raleigh, NC 27699 or by email at karen.harmon@ncdenr.gov.