UST SECTION
June 1, 2004

MEMORANDUM

TO: **Underground Storage Tank Owners and Operators**

FROM: **Ruth Strauss, Permits and Inspection Branch Head**

SUBJECT: **Guidelines for Operating and Maintaining Corrosion Protection for Regulated Underground Storage Tank Systems**

This memorandum transmits new cathodic protection system evaluation forms; provides procedures for handling situations where a corrosion protection system is inoperative or has failed; and furnishes guidelines for placing USTs in temporary closure and for bringing them back into service following temporary closure. Guidance for adding corrosion protection to previously lined USTs will be mailed to you shortly.

(1) New Cathodic Protection System Evaluation Forms
Attached (Attachment A) are new cathodic protection system evaluation forms (UST-7A and UST-7B) that must be used after August 1, 2004 for reporting the results of corrosion protection tests. These forms take the place of the UST-7 form. Corrosion protection tests of a corrosion protection system must be performed within six months of installation, at least once every three years thereafter and within six months of any repairs to the UST or corrosion protection system. Tank owners and operators are responsible for submitting the results of these tests to the Division of Waste Management (DWM)/UST Section within 30 days after performance of a test. The UST-7A form is to be used for reporting results for tests of galvanic corrosion protection systems (systems protected by sacrificial anodes) and the UST-7B form is to be used for reporting results for tests of impressed current corrosion protection systems. The forms are available on the UST Section's web site at http://www.enr.wastenot.state.nc.us.

(2) Procedures for Inoperative or Failed Corrosion Protection Systems
Pursuant to federal and state regulations and rules, corrosion protection must be operated and maintained to continuously provide corrosion protection to the metal components of a UST system that routinely contain regulated substances and are in contact with the ground. This means that corrosion protection must be maintained even if the UST system is temporarily closed. However, circumstances of bankruptcy, fire, ownership changes, store closings or remodeling have resulted in UST systems that have inoperative or failed corrosion protection systems. The lack of corrosion protection can result in degradation of the metal components of the UST system and possible leaks from the system may occur.

Attachment B contains procedures for restoring inoperative or failed UST systems. The procedures take into consideration the type of corrosion protection system installed, the length of time a corrosion protection system has been inactive and the length of time a UST system has been out-of-service. Various levels of corrosion expertise and testing are used to assure performance of the restored system. In most cases it is possible to restore or replace a corrosion protection system. However, if a UST system has been out-of-service for more than 365 days and corrosion protection has not been operated and maintained over that period of time, then the UST system is not in compliance with the temporary closure requirements in CFR 280.70 as incorporated by 15A NCAC 2N .0801, and must be permanently closed. An extension may be requested only after a site assessment has been completed and the results submitted to DWM along with the extension request.

(3) Procedures for Temporary Closure of UST Systems
Attachment C provides steps for placing UST systems in temporary closure and for bringing them back into service following a period of temporary closure. UST systems may remain in temporary closure indefinitely as long as corrosion protection and leak detection (in some cases) are continuously maintained. The same testing schedules and record keeping requirements must be maintained as when the UST systems were in service. In addition, owners and operators of temporarily closed tanks must continue to pay annual tank fees and to maintain financial responsibility. Annual tank fees must be paid until a UST system is permanently closed. Financial responsibility requirements do not cease until a UST system is permanently closed and any corrective action is completed.

Please note that the UST Section has withdrawn its approval of the alternative integrity assessment methods that it approved between 1992 and 1997 pursuant to 40 CFR 280.21(b)(2)(iv) as incorporated by 15A NCAC 2N .0302. The methods include Tank Environmental Profile (TEP), Mean Time to Corrosion Failure (MTCF), Tanknology 3-Phase Assessment, Mean Age to Corrosion Failure (MACF), Statistical Corrosion Probability Analysis (SCP) and Cathodic Protection Suitability Study (CPSS). These procedures were approved by the State for the purpose of determining that steel USTs were suitable for upgrading with corrosion protection prior to the December 22, 1998 deadline. Since the upgrade deadline has long since passed and because the integrity assessments were often not performed in accordance with the state's conditions for approval, the methods are no longer valid for determining the integrity of a tank.

Should you have any questions, please visit our website at http://www.enr.wastenot.state.nc.us or call the Raleigh Central Office at (919) 733-8486 and ask for compliance assistance.

cc: Grover Nicholson, Chief, UST Section

Attachment A – UST-7A and UST-7B Forms
Attachment B – Procedures for Failed or Inoperative Corrosion Protection Systems
Attachment C – Procedures for Temporary Closure of UST Systems