

NEW RISK-BASED ASSESSMENT AND CORRECTIVE ACTION RULES
FOR PETROLEUM UNDERGROUND STORAGE TANKS

Temporary Amendment - Effective January 2, 1998

New Classifications For Leaking UST Sites

The State of North Carolina Department of Environment and Natural Resources (NCDENR) has recently implemented new rules affecting Underground Storage Tanks (USTs). These rules, which became effective **January 2, 1998**, will require owners/operators to use Risk-Based Corrective Action (RBCA) standards to remediate and close UST sites. The rules also create three new categories for leaking UST sites (high, intermediate, and low risk), which will effectively eliminate the old classifications of "A" through "E".

The NCDENR will designate each site with a documented discharge or release as high, intermediate or low risk. According to Ruth Strauss of the UST Compliance Group, sites previously classified as A and B priority will initially be placed in the "high risk" category, and the C, D and E sites will be listed as "low risk" sites. Sites will be upgraded or downgraded to the "intermediate risk" status based on site specific determinations provided to the DWQ.

Those sites which remain "high risk" will be subject to previous closure regulations, if the Comprehensive Site Assessment (CSA) was submitted prior to January 2, 1998. Remedial actions required at those sites categorized as "intermediate risk" may not be as rigorous, since groundwater clean-up goals for these sites may be less stringent. Owners/operators of "intermediate risk" sites will be required to document that adequate soil remediation has occurred to facilitate reclassification as a low risk site.

Finally, owners/operators of "low risk" sites will be required to submit a Soil Assessment Report (SAR) and/or a Limited Site Assessment (LSA) and conduct appropriate soil remediation (if necessary) prior to petitioning for site

closure. However, the reclassification from "intermediate risk" to "low risk" will require specific activity by owners/operators, even if the State previously indicated that "no further action" was required at those low priority sites.

Who is Affected by the New Rule?

- Owners/operators of USTs.
- Landowners obtaining reimbursement from the State Trust Fund for leaking USTs.
- Any person responsible for the assessment or cleanup of a petroleum UST release.

Sites Affected by the New Rule

- Commercial and noncommercial petroleum USTs reporting a release on or after January 2, 1998.
- Existing UST discharges if the CSA has not been completed and submitted to the DENR by January 2, 1998.
- Sites where the new rule will be more cost-effective or provide greater protection to human health and the environment.

Also in this Issue of the *EI Alert*:

**Highlights of NCDENR's RBCA Owner/
Operator Training Session**

New Remediation and Report Requirements for Newly Classified Leaking UST Sites

Specific requirements have been developed for each of the three new categories. Those sites with the potential to be most impacted are those that were previously ranked as low priority (“C”, “D”, and “E”). The new remediation and report requirements are as follows.

High Risk Sites:

- Conduct an extensive Comprehensive Site Assessment (CSA).
- Submit a Corrective Action Plan (CAP) to restore groundwater quality to state guidelines listed in 15A NCAC.
- Remediate contaminated soils by removal, in-situ remediation, Soil Vapor Extraction (SVE) or other methods approved by North Carolina.
- Use natural attenuation wherever applicable.

Intermediate Risk Sites:

- Conduct a Comprehensive Site Assessment (CSA).
- If DENR cannot reclassify the site as “low risk” based on the results of the CSA, a Corrective Action Plan (CAP) must be submitted.
- Remediate contaminated groundwater to a level sufficient to protect surface waters and deeper Coastal Plain aquifers that are or potentially could be used for drinking water. Minimum cleanup requirements for groundwater are the Gross Contaminant Levels (GCLs) established in 15A NCAC 2L .0115 (d)(2)(D).

Low Risk Sites:

- Soil remediation must be completed according to 15A NCAC 2L .0115 (i). Minimum requirements for “low risk” sites are as follows:

DENR initially determines whether a site is classified as residential or industrial/commercial based on site-specific data.

Responsible party must submit a Soil Contamination Report assessing the vertical and horizontal extent of soil contamination.

Responsible party shall submit a report demonstrating that soil contamination has been remediated to the residential or industrial/commercial maximum soil concentration limits pursuant to 15A NCAC 2L .0115 (l).

Even owners/operators of sites that remain classified as low priority may be required to complete some specific actions. Owners/operators should review the details associated with their sites to ensure compliance.

C, D, and E-Ranked Sites May Require Additional Soil and/or Groundwater Evaluation

On July 21, 1996, all work required for “low risk” Leaking UST sites (classified as C, D and E designations) was *temporarily* suspended. However, under the new RBCA rules, low priority sites will be reclassified as “*intermediate risk*” if:

- Surface waters are located within 500 feet of the source area of a confirmed discharge; or
- The site is in the Coastal Plain physiographic region where there is recharge to an unconfined or semi-confined aquifer which is or has the potential to be used as a source of drinking water; or
- The levels of groundwater contamination for any contaminant (excluding ethylene dibromide, benzene and alkane/aromatic carbon fractions) exceed 1,000 times the groundwater standard under 15A NCAC 2L .0202; or
- Groundwater contamination levels for ethylene dibromide and benzene exceed 1,000 times federal drinking water standards stated in 40 CFR 141.

Such a reclassification of a formerly “low priority” site will require remediation and reporting activity as described in the previous section. Again, owners/operators should review their site conditions.

The new RBCA rules, by definition, place a high degree of importance on the protection of public health and the ground/surface waters of the state for future use. These rules will create the need for additional remedial action on the part of owners/operators at a time when the Commercial UST Trust Fund is limited, resulting in increasingly longer delays in claim reimbursements. It is,

therefore, in the best interest of owners/operators to proceed with necessary remediation activities as quickly as possible to bring their sites to closure and file for reimbursement.

Other Activities Affecting Low Risk Sites

In addition to the regulatory changes in North Carolina, new research will lower acceptable contaminant concentrations of some compounds. Methyl tertiary butyl ether (MTBE), a gasoline additive, currently has a groundwater cleanup level of 200 parts per billion (ppb). The EPA is considering decreasing that level to 40 ppb very soon due to new evidence from the Division of Epidemiology indicating cancer risk at lower concentration levels. **This reduction in the MTBE level will reopen many low risk sites to a further action required status.**

HIGHLIGHTS OF DENR'S RBCA OWNER/OPERATOR TRAINING SESSION HELD IN RALEIGH

The North Carolina Department of Environment and Natural Resources (DENR), Division of Water Quality (DWQ) and the North Carolina Petroleum Marketers Association sponsored a one-day training session at the Brownstone Hotel in Raleigh, North Carolina, on January 12, 1998. Approximately three hundred environmental professionals, owners and operators of underground storage tanks (USTs), and business representatives attended the seminar to learn about the new Risk-Based Corrective Action (RBCA) rules for USTs.

The new "Temporary Rules", Risk-Based Corrective Action for Petroleum Underground Storage Tanks, officially went into effect on January 2, 1998, and are expected to be permanently adopted in August 1998.

UST Trust Fund Facing Expenditure Restrictions

Arthur Mouberry, Chief of the Groundwater Section, Division of Water Quality, opened the meeting by detailing the financial status of the Leaking Petroleum Underground Storage Tank Cleanup Fund ("UST Trust Fund"). The UST Trust Fund status, as of December 31, 1997, is as follows:

Non-Commercial Fund

Funds Available	\$8,392,512
Claims Pending	\$2,225,295

Commercial Fund

Funds Available	\$6,746,383
Claims Pending	\$10,355,842

It is obvious that the Commercial Fund's claims pending well exceed the amount of funds currently available for reimbursement. Mr. Mouberry, responding to a pointed question from the audience, indicated that

if the UST Trust Fund drops to \$5,000,000 or below, the Division will restrict expenditures on the fund and only pay out money received as receipts that month.

For example, if 1.2 million dollars is collected for the fund in a given month and the reimbursements are 4.5 million dollars, the Division will only pay out 1.2 million dollars in reimbursements. This situation would cause a dramatic increase in the amounts contained in the Claims Pending accounts and lengthen reimbursement intervals. The General Statutes are enforced by the UST Funds Council, an eleven-member advisory committee appointed by the Senate and Legislature to overview the solvency of the UST Trust Fund. Unless new legislation is passed to increase the solvency of the fund, claims for payment made against the fund will be increasingly delayed each month.

Spill, Overfill & Corrosion Protection For Underground Storage Tanks

December 22, 1998 - Final Deadline!!!!

Arthur Mouberry stated that the DENR and the USEPA have no intentions of delaying enforcement of the federal regulations (40 CFR Part 280) for upgrading, closing or replacing UST systems by the current deadline of December 22, 1998. **Mr. Mouberry announced that UST owners/operators who are not in compliance will be fined. The NCDENR will enforce the 1998 deadline** (the increased fines will help replenish UST Trust Fund revenues).

In addition to fines for owners and/or operators of UST systems who fail to meet compliance standards, insurance companies may reduce or eliminate coverage (an action also likely by the State regarding reimbursement funds). On the positive side, some insurance firms may offer incentives, such as lower deductibles or premiums, for earlier upgrading or replacement.

Under the new federal regulations, if your UST system was installed before December 22, 1988, then you are required to perform one of the following actions:

- Install spill, overflow and corrosion protection by December 22, 1998.
- Close your existing UST(s) by December 22, 1998.
- Replace the closed UST(s) with a new UST system.

As the deadline approaches for upgrade requirements, contractors will face schedule difficulties. Increased demand will drive prices up, create a strain on experienced skilled labor, and may cause lengthy project delays.

RBCA Rules For Petroleum USTs

New Risk-Based Corrective Action rule changes were discussed during the remainder of the session. Each speaker offered answers to questions raised by audience members in an attempt to clarify the new RBCA rules, which went into effect January 2, 1998.

In summary, sites currently classified as A and B will automatically be designated as “high risk” sites, and those listed as C, D and E will be ranked as “low risk.” Owners/operators or their environmental consultants must offer acceptable proof to lower a site’s status.

Cleanup and reimbursement was suspended on C, D and E priority sites on July 21, 1996, to help continue the solvency of the Leaking Petroleum Underground Storage Tank Cleanup Funds. However, new groundwater and soil cleanup guidelines for leaking petroleum UST sites will cause some of the sites to be reclassified as

“intermediate risk,” thus requiring further remedial action at these sites.

“It can take months to line up a qualified contractor and complete the work, so tank owners should start planning now to meet the Dec. 22, 1998, deadline. These upgrades are crucial to preventing groundwater and soil contamination caused by leaking [USTs].”

--Julie Anderson, Waste Management Director
for EPA’s western regional office

Source: *Pollution Engineering*, Vol. 30, No. 2

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