Agriculture and Natural Resources WATER QUALITY: Controlling Nonpoint Source (NPS) Pollution



ALABAMA A&M AND AUBURN UNIVERSITIES

Underground Storage Tanks (USTs) And NPS Pollution Regulating USTs

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fforts at the federal, state, and local levels are underway to protect the quality of groundwater from leaking underground storage tanks (USTs). This article summarizes applicable laws and regulations. Recent amendments to the Alabama Underground Storage Tank Trust Fund Act (effective June 1, 1994) also address aboveground storage tanks (ASTs).

Federal Laws

Two federal laws deal with underground storage tanks: the Resource Conservation and Recovery Act (RCRA) of 1976 with 1986 reauthorization amendments and the Comprehensive Environmental Response, Compensation, and Liability Act passed by Congress in 1980 (CERCLA or Superfund). Subtitle I of RCRA amendments contains all the UST technical standards and corrective action requirements, which are the bulk of the federal legislation. Subtitle C of RCRA deals with hazardous waste regulations as they apply to USTs, and CERCLA deals with owner or operator liabilities, release reporting requirements, and cleanup requirements for USTs containing a hazardous substance.

The Resource Conservation And Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 is the major vehicle for hazardous waste and underground storage tank regulation. After a number of states passed their own underground storage tank regulatory programs, Congress required EPA to develop national standards for USTs. These were included in the 1986 reauthorization amendments to RCRA and published under Subtitle I in September of 1988.

The federal regulations on USTs are divided into two broad categories: technical standards and financial responsibility requirements.

Technical Standards. The USTs of greatest concern are those used for storing and dispensing of petroleum products. The EPA has summarized the technical standards for petroleum products as follows:

- All new UST systems must be protected from corrosion, equipped with spill and overfill prevention devices, and provided with leak detection.
- Existing UST systems must be provided with leak detection that is phased in over a 5-year period, with the oldest tanks due in the first year (December 1989) and the youngest in the fifth year (December 1993).
- Existing UST systems must be upgraded (essentially to the new tank standards) by 1998.
- All suspected releases must be investigated, and confirmed releases must satisfy corrective action requirements established on a site-by-site basis by the state.
- Requirements for reporting, record-keeping, operating, maintaining, and closure must assure that the UST system does not leak or spill throughout its operating life.

Financial Responsibility Requirements. The federal regulations call for UST owners and operators to demonstrate their financial capability to take prompt corrective action and to compensate third parties for injuries or damage because of leaks or spills from USTs.

Compliance requirements vary for different sizes and classifications of owners and operators. The net worth of larger municipalities can serve as a financial indicator of their ability to pay for cleanup costs and liability claims. However, most motor fuel industries, local governments, and many small businesses with vehicle fleets fall into the category of owners or operators which must demonstrate the ability to provide all of the following:

- A minimum of \$500,000 to cover costs for individual releases.
- A minimum of \$1,000,000 to cover costs of annual aggregate releases (should more than one leak occur).

Small rural governments and many smaller businesses which cannot qualify for the self-insurance op-

tions must use one of the other mechanisms on EPA's list of allowable methods to demonstrate financial capability. Local governments must meet the applicable financial responsibility by no later than one year after the financial requirements become final (October 1993) or within 30 days of putting a new or upgraded tank into service after that date.

EPA has encouraged states to develop and promote state-sponsored assurance mechanisms for local governments. At least 43 states, including Alabama, currently operate or have passed enabling legislation to establish a state assurance fund. These funds are different from state to state. Some do not cover the full \$1,000,000 required for aggregate annual coverage, and the deductible which local governments must pay runs as high as \$100,000.

Subtitle C of RCRA indirectly applies to USTs because it governs the generating, transporting, storing, treating, and disposing of hazardous waste. A "hazardous waste" is defined as any waste material that (1) exhibits specified characteristics of ignitability, reactivity, toxicity, or corrosivity, or (2) is explicitly identified and numbered by EPA on a series of lists based on industrial source or specific chemical type. Subtitle C of RCRA or appropriate state and local regulations apply when more than 220 pounds or 26 gallons (about half of a 55-gallon drum) of hazardous waste is produced at a site or remains in an underground storage tank to be closed.

State Laws

In most states two sets of legislation address USTs. Most states have now enacted their own UST regulations, some more stringent than the federal regulations under RCRA. Most states also have statewide construction or building codes, which may contain UST removal or abandonment criteria and notification or inspection requirements.

Two state laws were enacted in Alabama in 1988 in response to the federal legislation dealing with underground storage tanks:

- Alabama Underground Storage Tank (AUST) Trust Fund Act.
- Alabama Underground Storage Tank And Wellhead Protection Act.

The Alabama Storage Tank Trust Fund Act of 1988 was amended in 1993 by Act No. 93-628 and Act No. 93-891, effectively changing its title to Alabama Underground and Aboveground Storage Tank Trust Fund. The primary purpose of these amendments was to provide additional revenue to the former Alabama Underground Storage Tank Trust Fund, now simply called "Tank" Trust Fund. The 1993 amendments went into effect June 1, 1994.

Alabama Underground And Aboveground Storage Tank Trust Fund. This act establishes financial responsibility in Alabama for owners and operators of underground storage tanks (USTs) as required by federal law, and also for owners of aboveground storage tanks (ASTs) as well. Administered by the Alabama Department of Environmental Management (ADEM), this law establishes all the rules, regulations, procedures, exemptions, etc., for owners and operators of USTs and ASTs to follow in maintaining Tank Trust Fund eligibility requirements.

The act deals specifically with regulated tank systems used for storage, use, or dispensing of "motor fuels." Any applicable UST system in use on November 8, 1984, or brought into use after that date must comply with the provisions of this act. Any applicable AST in use on August 1, 1993 or brought into use after that date must comply with the provisions of this act.

The Tank Trust Fund is maintained by tank owners, who pay annual fees set by ADEM. Costs for investigation, site assessment, certain types of interim and permanent restoration and rehabilitation, and some liability costs after the first \$5,000 (\$10,000 for ASTs) can be charged against the fund. Costs of replacement, installation, closure, and/or retrofitting, or testing of affected tanks and associated piping is not eligible for payment or re-imbursement by the Tank Trust Fund. Costs for environmental audits, property transfer audits, and purchase of equipment for testing and rehabilitation are not eligible. Hourly rates for use of such equipment however, is eligible for those who have response action clearance from ADEM.

The Tank Trust Fund is strictly for the use of owners who comply with all applicable requirements of the state and federal law. The federal Leaking Underground Storage Tank (LUST) Trust Fund may be available for abandoned sites, which pose emergency risks to health or the environment or where the expected cleanup is beyond the financial capability of the responsible party.

Alabama Underground Storage Tank And Wellhead Protection Act Of 1988. This act established essentially the same rules and regulations contained in federal legislation (RCRA Subtitle I and CERCLA) to protect wellhead areas from underground storage tanks.

Alabama's UST program requires more than the minimum installation requirements for USTs located within 300 feet of a private well, within 1,000 feet of a public water supply well, and in any area designated as being highly vulnerable to groundwater contamination. These installation requirements are currently being implemented in delineated wellhead protection areas in Alabama.

Underground And Aboveground Tank Exemptions.

Underground tank exemptions in Alabama are essentially identical to those adopted by the EPA. Aboveground tanks in Alabama carry the same exemptions. The types of tanks for belowground or aboveground storage that are not covered by state and federal standards in Alabama include the following:

- Farm and residential tanks holding 1,100 gallons or less of motor fuel used for noncommercial purposes.
- Tanks storing heating oil used on the premises where they are stored.
- Tanks situated on or above the floor of underground areas, such as basements, cellars, or mineworking, drift, shaft, or tunnel areas.
- Septic tanks and systems for collecting stormwater and wastewater.
- Pipeline facilities regulated under the Natural Gas Pipeline Safety Act of 1968, the Hazardous Liquid Pipeline Safety Act of 1979, or state laws comparable to these Acts.
 - Surface impoundments, pits, ponds, and lagoons.
 - Flow-through process tanks.
- Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations.
- Other underground storage tanks exempted by the administrator of EPA.
- Piping connected to any of the above exemptions.
- Pipeline terminals, refinery terminals, rail and barge terminals, and tanks associated with each.

Other UST and AST systems excluded from the requirements of this Act include:

- Tanks of state and federal government entities which have debts and liabilities to the state or United States.
- Any UST or AST system holding hazardous waste listed or identified under Div. 14 of the ADEM Administrative Code on hazardous waste management.
- Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Chapter 335-6-5 or 335-6-6 of the ADEM Administrative Code.
- Equipment or machinery operation tanks that contain motor fuels or hydraulic fluids.
- Any UST system whose capacity is 110 gallons or less.
- Any emergency spill or overflow containment UST or AST system that is expeditiously emptied after use.

Statutory Authority And Financial Responsibility In Alabama. In order to participate in the liability limitations and reimbursement benefits of the Alabama Tank Trust Fund, each owner or operator of USTs or ASTs must comply with ADEM Administrative Code or the applicable Code of Federal Regulations. Applicable tanks must be registered by ADEM, and the owner or operator must remain in compliance with the regulations. Each year the owners or operators of applicable tanks will pay an annual fee or special assessment fees after 30 days notice (not to exceed \$150 per regulated tank per year) to keep the fund solvent.

Every owner or operator of a UST is required to maintain financial responsibility in the amount of \$5000 (\$10,000 for ASTs) per occurrence (\$25,000 aggregate) or another amount if required by the ADEM Commission. Any one or combination of the following may be used to meet this financial obligation: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer by demonstration of a tangible net worth in the amount of \$25,000.

Penalties. Tank owners or operators delinquent in payment of Tank Trust Fund Fees may be charged a late fee not to exceed \$100 per tank each day such payment is delinquent.

Any person in Alabama who negligently or will-fully violates the regulations or standards adopted under the provisions of the state laws dealing with USTs or ASTs is subject to stiff fines, imprisonment, or both. Fines may be up to \$25,000 per day for the first violation and not more than \$50,000 per day for subsequent violations.

Any person who knowingly makes any false statement in reference to certification, records, reports, or other documents filed in reference to state regulations or tampers with any monitoring device or method required to be maintained under these laws may be fined not more than \$10,000 per day, imprisoned for not more than 6 months, or both.

State Common Law. Although many underground storage tanks are now extensively regulated under federal and state law, state common law rules still apply to many individual situations. The owner, operator, or lease-holder of a UST or AST that has caused environmental damage may be held accountable for those damages under the common law theories of nuisance, trespass, negligence, or strict liability. Common law applies both to tanks regulated by RCRA and tanks exempt from regulation. Thus, compliance or attempted compliance with federal and state rules does not necessarily shield a tank owner or operator from common law actions by neighbors.

Local Laws

Some of the tanks that are exempt from federal and state regulations may not be exempt from certain local regulations.

Most local requirements dealing with USTs and ASTs are found in ordinances dealing with fire codes, building codes, or zoning restrictions. In some states, the fire department is the implementing agency for the federal regulations. The fire department may be responsible for all notices and local inspections.

Criteria for removal and abandonment of USTs are often included in local fire codes. The Building Officials And Code Administration (BOCA) periodically issues National Fire Prevention Codes, which are adopted by numerous states and localities. The 1990 version of these codes includes guidelines for UST closure.

Local building codes may also have criteria for UST removal or abandonment and may include criteria for notification and inspection. These may be different from state codes.

Zoning laws typically have tank location restrictions, but may also contain criteria on removal and abandonment.

For More Information

Detailed information on the UST technical standards and corrective action requirements under RCRA Subtitle I and the hazardous waste regulations under RCRA Subtitle C may be obtained from either the regional EPA office or state UST regulatory agency.

The primary contact in Alabama is

Chief, UST and AST Compliance or Corrective Action Units

Groundwater Branch/Water Division

Alabama Department of Environmental Management

1751 Congressman W. L. Dickinson Drive P.O. Box 301463

Montgomery, Alabama 36130-1463 334-271-7986 or 270-5613

For more information on county or municipal regulations or local fire codes, you may contact the fire department, local building inspector, zoning board, or town planner.

Conclusion

Many UST owners or operators who have not been involved in environmental protection programs must now comply with sweeping federal regulations on USTs that went into effect in the late 1980s. They are finding themselves in the situation of either consulting with engineers to remove their tanks or obtaining adequate financial assurance to pay for a potential cleanup. Similar criteria may apply to aboveground tanks.

Some communities, businesses, industries, and individuals have no choice but to own and operate USTs. For them, UST regulations impose new costs to meet the technical and financial responsibility requirements as long as their tanks are in service.

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