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A Summary of Underground Storage Tank (UST) Closure Requirements & Procedures

Introduction

Leaking Underground Storage Tanks (UST) can contaminate drinking water, instigate explosions and fires, and kill plants and wildlife. Considering that more than 50 percent of the nation's drinking water and more than 90 percent of Florida's drinking water comes from groundwater, underground storage tank monitoring and clean up is under great public and governmental scrutiny. There are very stringent State and Federal regulations concerning the clean up and remediation of contaminated underground storage tank sites aimed at ensuring that groundwater resources are adequately restored and protected, and that there is a safe environment for those who live or work around these sites.

Do you need to be concerned about USTs? The unexpected discovery of underground storage tanks during site preparation or construction is a common problem, especially during the renewal of urban properties. In some cases, the tanks can simply be removed and properly disposed. However, if the tank is regulated or if contamination is discovered during the removal process, then you are required to strictly adhere to Florida Department of Environmental Protection's (FDEP) closure assessment rules.

Chapter 62-761 of the Florida Administrative Code (FAC) requires that an owner or operator of a regulated substance storage tank system perform a closure assessment at the time of permanent closure or replacement, prior to installing secondary containment and during the change in service from a regulated substance to a non-regulated substance. The purpose of the closure assessment is to determine if any release resulted from the operation of the storage tank system and if contamination is present of sufficient quantity to warrant further assessment in accordance with Chapter 62-777 FAC. The purpose of this paper is to provide information about What is Regulated, Notification and Reporting Requirements,

Assessment Requirements and what level of effort is required to achieve a No Further Action (NFA) order as specified in Chapter 62-777 FAC. For brevity, this paper will focus on storage tank systems that contain petroleum related compounds. However, it should be noted that Chapter 62-761 also covers the storage of mineral acids and hazardous wastes.

What Tanks are Regulated?

The intent of Chapter 62-761 FAC is to provide standards for the registration, construction, installation, operation and maintenance, repair, and closure of storage tank systems that store regulated substances and to minimize the occurrence and environmental risks of discharges. The Chapter regulates underground storage tanks having individual storage tank capacities greater than 110 gallons and above ground storage tanks having storage capacities greater than 550 gallons. While this rule is generally applicable to non-residential facilities, it should be pointed out that under 40 C.F.R. 280, residential tanks greater than 1,100 gallons containing motor fuels are subject to Federal regulations. Several types of above and underground systems are exempt from this rule due to their regulation under Federal rules. Additionally, there are exemptions for underground storage tank systems with storage capacities of less than 30,000-gallons used for storing heating oil for consumptive use on the property, tanks that contain asphalt or asphalt products, agricultural storage tank systems of 550-gallons or less (such as remote pump stations), residential storage tanks, mobile tanks and tanks that are located entirely within an enclosed building or vault with adequate roof and walls to protect it from rainwater.

Notification and Reporting Requirements

The notification and reporting requirements for USTs and ASTs vary based on whether the notification is for an upgrade or repair or for an incident or discharge. In general, if an installation or upgrade is taking place at the facility Rule 62-761.500 FAC requires the owner to notify the County at least 30 days prior to the start of a planned installation or upgrade. At least 10 days prior to the start of an internal inspection, a change in service status, a closure or a closure inspection and then 48 hours before

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conducting any of the above listed activities or the performance of a tightness test on the system. If any one of the above activities is performed as the result of an emergency, then the owner has until the close of the County's next business day. In addition to these prenotification requirements, within 30 days after the completion of the activities, the owner or operator must notify the Department of Environmental Protection using Storage Tank Registration Form 620761.900(2) of any change of ownership of the facility or system, any closure or upgrade of the system, any change or correction in the information contained on the reporting form and of any change to the method of demonstrating financial responsibility. Along with this post notification, the Certified Contractor needs to submit a completed Underground Storage Tank System Installation and Removal Form within 30 days of any installation, replacement or removal of the UST system.

If an incident has occurred at the facility, such as a failed SIR (Statistical Inventory Reconciliation) evaluation, a failure of the results of an internal inspection, unusual operating conditions (sudden loss of product or the presence of water in the tank) or the presence of an odor of a regulated substance in surface or ground water, soils, basements, sewers or utility lines at the facility the County must be notified using Form 62-761.900(6) within 24 hours or the close of the next business day.

Assessment Requirements

So when is a closure assessment required? As stated earlier, Chapter 62-761 FAC requires that an owner or operator of a regulated substance storage tank system perform a closure assessment at the time of permanent closure or replacement, prior to installing secondary containment and during the change in service from a regulated substance to a non-regulated substance. The purpose of the closure assessment is to determine if any release resulted from the operation of the storage tank system and if contamination is present of sufficient quantity to warrant further assessment in accordance with Chapter 62-777 FAC. However, some sites are not required to perform an assessment. In the following instances, all that is required is a limited summary report describing the work that was performed and summarizing any data collected:

- Sites with storage systems with documented contamination requiring a site assessment in accordance with Chapter 62-770 FAC;

- Sites where the storage system was initially installed with secondary containment that have no evidence of a release;

- Sites with storage systems that were upgraded with secondary containment where a closure assessment was performed prior to the upgrade and where the secondary containment passed an interstitial breach of integrity test;

- Double walled shop fabricated aboveground tanks (Convault style or similar);

- Aboveground systems with capacities of 1,100-gallons or less that are elevated and not in contact with soil (visual inspection for contamination required).

If your site requires a closure assessment, what is required to be performed? According to the regulations, you must have a professional engineer or professional geologist prepare a closure assessment report that must be submitted to the governing regulatory agency within 60 days of the completion of the field activities. The requirements of the report include: a scaled site map; soil and groundwater sampling records, a table summarizing all field and analytical results; copies of the laboratory reports; the dimensions of the excavation, depth to groundwater, volume of soil removed and disposal method of the soil; and information on the procedures used during the closure activity. Additionally, if a No Further Action (NFA) status is requested for the site then the report must be sealed by either a Professional Geologist (PG) or Professional Engineer (PE) licensed in the State of Florida.

According to the EPA, the average cleanup cost for a contaminated UST site is about \$125,000. But some leaking USTs are extremely contaminated sites that have severely impacted groundwater resources and may require years of cleanup activities that can cost over \$1 million. Other sites may involve relatively minor or no groundwater contamination that may allow cleanup contractors to restore the site more quickly and at a lower cost. If your project has a contaminated UST site it is in your best interest to contract with an experienced, knowledgeable environmental engineering firm that will be able to remediate the site and navigate the governmental regulations on your behalf in the most time and cost efficient manner as possible. Ellis & Associates has conducted hundreds of tank closures, site assessments, remedial designs, and turnkey cleanups of contaminated sites. Please contact us at 904-880-0960 to learn more about how we can assist you with environmental services.

Referenced regulation current as of 9/20/04.