
**Application to Inland Wetlands and Watercourses Agency
Narrative of Proposed Underground Storage Tank (UST) Closure/Installation**

BACKGROUND

Coneco Engineers & Scientists (CONECO), an Environmental Engineering Consulting firm located in Glastonbury, CT proposes to conduct an underground storage tank (UST) Closure and UST Installation at the American Distilling, Inc., facility located at 31 East High Street in East Hampton, Connecticut (hereinafter, the “Site”).

The proposed Site Project will be conducted in two phases including the closure of three (3) existing out of service USTs and the installation of one (1) new UST. The three USTs will be closed by excavation, removal and disposed or reclaimed off-Site at a licensed facility.

The USTs to be closed include two (2) former 10,000-gallon steel fuel oil tanks and one (1) former 3,000-gallon gasoline also all manufactured by Buffalo Company. The three USTs are contained in concrete vaults above grade. In April 2019, American Distilling, Inc., had the contents of the three UST removed.

Following the removal of the USTs concrete vault tops to assess the three USTs, a determination will be made as to whether any product remains within the tanks. Should product be present, the USTs will be pumped of their remaining contents by a licensed hazardous-materials contractor using a vacuum truck, for disposal off-Site at a licensed facility.

The UST to be installed includes one (1) 1,500-gallon steel, double wall, Sti-P₃ tank, manufactured by Highland Tank Company. This UST will replace the afore mentioned 3,000-gallon gasoline UST to be removed. The new 1,500-gallon UST will be used to store gasoline and be connected to the existing dispenser and existing Veeder Root monitoring system.

A Site Locus Plan, Site Plan, and Areal Plan of the Site in attached as Figures 1, 2, and 3 respectively.

Photographs of the present-day location of the three (3) USTs and historical construction of the concrete UST vaults and UST installations is attached.

UST CLOSURE

The purpose of the UST Closure is to properly close three (3) inactive USTs in compliance with applicable state and local environmental regulations. The tanks to be closed by excavation removal and disposal off-Site at a licensed facility include two (2) out of service 10,000-gallon steel gasoline tanks and one (1) out of service 3,000-gallon gasoline tank.

CONECO has submitted the Notification of Scheduled Permanent Closure of Underground Storage Tanks (Form DEEP-UST-NOT-002) to the Connecticut Department of Energy and Environmental Protection (CT DEEP). Form DEEP-UST-NOT-002 is attached.

The UST Closure Scope of Work is as follows:

Task 1.0: Permitting / Site Preparation

Prior to commencing excavation activities, the areas of the USTs will be properly marked-out and Call-Before-You-Dig will be contacted to ensure that any utilities present within the area of the work are identified.

The Connecticut Department of Energy and Environmental Protection (CT DEEP) will be informed of the planned UST closures 30-days in advance of commencement of field activities. In addition, the East Hampton Fire Marshal will be notified of the tank removals if his office wishes to perform an inspection prior to backfilling the excavation.

Task 2.0: UST Closure

CONECO proposes to complete the UST closures over a five-day period. The three out of service USTs are located end to end inside an above ground concrete vault located behind, north of, the Site building, see Figure 2 attached.

Prior to any UST Closure/Installation activities straw bale and silt fence will be installed off the asphalt paved parking area located to the north of the UST Closure/Installation area for erosion control. The erosion control measures will extend beyond the entire Closure/Installation activities area. Figure 2 attached illustrates the proposed straw bale and silt fence barrier location. In addition, a detail sheet of the straw bale and silt fence barrier is attached.

The Temporary fencing will be placed around the entire work area on the concrete surface. Closure activities will initially be conducted to remove the concrete pad over the three USTs vaults. Figure 2, attached, illustrates the approximate location of the three tanks beneath the top of the concrete vaults.

The top of the concrete vaults containing the three USTs, will be saw cut and disposed of at a licensed facility. In April 2019, American Distilling, Inc., had the contents of the three UST removed. Following the removal of the concrete over the three tanks, a determination will be made as to whether any product remains within the tanks. Should product be present, the USTs will be pumped of their remaining contents for disposal off-Site at a licensed facility. The tanks will be closed by excavation, removal and disposed or reclaimed off-Site at a licensed facility.

It is expected that the East Hampton Fire Marshal or a designated representative of the Fire Department will be present during the UST removals and inspect the USTs and excavations for evidence of a release.

At the time of the installation in approximately late 1999, the three USTs, were placed in the concrete vaults and backfilled with pea stone. No soil was excavated and/or used as backfill. Therefore, CONECO does not anticipate any excavation of soil at the Site, during the USTs closure or the installation of the new UST. Pea stone within the concrete vaults will remain and be used as backfill material. Additional pea stone will be brought to the Site and used as backfill for the void left by the removed USTs. CONECO estimates that approximately 120 cubic yards of pea stone will be required.

During the excavation activities, CONECO will screen soils within the excavations with a portable photoionization detector (PID) to determine whether petroleum impacted soils are present. Subsequent to the removal of the USTs, CONECO will perform a UST Closure Investigation which will include the collection of confirmatory soil samples from the excavation side walls and bottom to verify that the soils meet the CT DEEP Remediation Standard Regulation (RSR) criteria. The UST Closure Investigation, to be performed by CONECO is described below.

UST CLOSURE INVESTIGATION

The purpose of the Closure Investigation is to gather information regarding the closure of three (3) USTs by excavation, removal and disposal at a licensed facility. The Closure will be performed in accordance with Sections 22a-449(d) -1 and 22a-449(d)-101 through 113 of the Connecticut General Statutes (CGS), Connecticut Department of Energy and Environmental Protection (CT DEEP) and local regulations.

CONECO's role in the closure project will be to provide professional oversight of the excavation activities, including the collection and submittal of confirmatory soil samples from the perimeter of the three (3) UST excavations and associated pipeline into the boiler room to document that those soils are in compliance with the CT DEEP Remediation Standard Regulations (RSRs). All confirmatory soil samples will be collected and analyzed to satisfy the sampling and analytical methods required of 22a-449(d)-107 of the Connecticut General Statutes. It is anticipated that the three (3) USTs can be removed in five (5) days by Rand Construction Company located in East Hampton, Connecticut.

Task 1.0: Confirmatory Soil Sample Collection & Analysis

The two (2) 10,000-gallon USTs are 8-feet in diameter and approximately 28-feet in length, located in a concrete vault with an earthen bottom. The 3,000-gallon UST is 8-feet in length and 8-feet in diameter and located in a concrete vault with an earthen bottom. During the installation of the three USTs pea stone was poured and compacted around and above the tanks. Prior to pouring the top of the concrete vaults. Therefore, confirmatory soil samples will be collected from beneath the pea stone along the centerline of the three tanks into virgin soil.

Four (4) confirmatory soil samples will be collected from beneath each 10,000-gallon tank, and three (3) confirmatory soil samples will be collected from beneath the 3,000-gallon tank. In addition, one (1) soil sample will be collected beneath the buried feed and return pipelines leading from the USTs in a common trench to the building.

Upon retrieval, all soil samples will be visually inspected, classified, logged, and screened for volatile organic compounds (VOCs) with a photoionization detector (PID). Specifically, visual, textural, olfactory observations, and PID screening results will be indicated for each soil sample collected. All confirmatory soil samples collected from beneath the three (3) USTs and pipeline will be submitted to Complete Environmental Testing, Inc., (CET) located in Stratford, CT. CET is an independent Connecticut certified analytical laboratory.

Soil samples collected from beneath the two 10,000-gallon heating oil USTs, (eight (8) total), will be analyzed for total petroleum hydrocarbons (TPH) by the CT DEEP extractable TPH (ETPH) Method. In addition, four (4) of these soil samples will be further analyzed for volatile organic compounds (VOCs) by USEPA Method 8260b 5035 and semi-VOCs PNAs (SVOC PNAs) by USEPA Method 8270b.

Soil samples collected from beneath the 3,000-gallon gasoline UST, (three (3) total) will be analyzed for VOCs and synthetic precipitation leaching procedure (SPLP) lead.

One (1) confirmatory soil sample will be collected from beneath the feed and return lines and analyzed for ETPH, VOCs, SVOC PNAs, and SPLP lead.

Task 2.0: Report of Findings

Following completion of the tasks described above and receipt of laboratory analytical data, CONECO will complete its evaluation of the soil investigation and prepare and submit a Closure Report. In general, the report will describe the activities completed and, present the findings and conclusions of the investigation.

The Closure Report will include the following:

- Description of UST removal activities;
- Photographs;
- Site Plan with Tank locations;
- Analytical results of the confirmatory soil samples;
- Evaluation of Site conditions & comparison to applicable CT DEEP Remediation Standard Regulations (RSRs) criteria;
- Findings and Conclusions; and
- Recommendations for additional work if necessary.

UST INSTALLATION

CONECO will provide field oversight for the replacement of the 3,000-gallon gasoline UST with a new 1,500-gallon Highland Tank Manufacturing Company, double wall Sti-P₃ UST with secondary containment piping. The Sti-P₃ tank protection system consists of three basic parts, a coating with high dielectrical qualities, combined with electrically isolated fittings and sacrificial anodes. This UST carries a 30-year limited warranty against failure and exterior corrosion.

A UST diagram and Highland Tank Company Buoyancy Calculations sheet for the proposed 1,500-gallon sti-P₃, steel double wall tank is attached. Based on the buoyancy calculation have determined that tank anchoring is not required. The total tank buoyancy force equals 12,429 pounds and the overburden weight including overburden backfill and the concrete pad over the tank is 12,949 pounds. The overburden weight exceeds the tank buoyancy by 520 pounds.

CONECO and their selected contractor, Absolute Tank Removal, LLC (Absolute) located in Milford, Connecticut, will be responsible for the installation of the new tank system including accessories in strict accordance with the manufacture's recommendations, National Fire Codes Chapter 23.5 "Installation of Underground Storage Tanks" Section 23.5 through 23.17.1, and applicable environmental codes.

Installation of a new 1,500-gallon double wall sti-P₃ UST system will include the following items:

- Set a 1,500-gallon double wall Stip-P₃ in a previously excavated tank grave, (excavation of the former 3,000-gallon gasoline UST to be completed by Rand Construction under the supervision of CONECO);
- The new 1,500-gallon UST **will not** require anchoring using prefabricated concrete "deadman". CONECO provided Fire Marshal Richard Klotzbier with Buoyancy calculations which demonstrated that the total tank buoyancy force is equal to 12,429 pounds of force. Based on the buoyancy calculation have determined that anchoring is

not required. The total tank buoyancy force equals 12,429 pounds and the overburden weight, of the empty tank, including overburden backfill and the concrete pad over the tank is 12,949 pounds. The overburden weight exceeds the tank buoyancy by 520 pounds.

- Place pea-stone bedding beneath and around the perimeter of the new UST, to approximately 18-inches from the top of the UST;
- Install a 4-inch fill pipe with a 5-gallon spill bucket with 95% positive shut-off tube;
- Plumb a 2-inch fiberglass reinforced plastic (FRP) vent pipe with extractor valve and pressure vacuum vent cap;
- Attach water-tight mini-piping sump to the UST with 1½-inch water-tight sump entry boots;
- Plumb 1½-inch double wall non-metallic suction pipe from piping sump to the existing Gasboy dispenser sump. The suction pipe will be equipped with product line isolation valve, shut-off valve and steel drop tube, plumbed 3-inches off the UST bottom;
- Set dispenser sump in same location as the existing sump and install water-tight sump entry boot;
- Install island form above dispenser sump with stabilizer bars and secure existing Gasboy dispenser to the stabilizer bars;
- Run 1½-inch double wall non-metallic product piping into Gasboy dispenser sump through water-tight entry boot and tie into 1½ -inch vertical check shear valve;
- Install 5-foot 4-inch Veeder Root probe with water detection and gas floats;
- Secure sensors in piping sump and interstitial space;
- Bring piping sump, Veeder Root probe, interstitial space and vent tubing to grade via steel riser piping, for future testing;
- Cover area with backfill sand and compact prepare area for process concrete pour by others; and
- Set manholes at grade to access riser piping. Final grading and manhole setting will be performed by concrete contractor.
- All work will be performed to the requirements of federal, state and local government regulations including EPA, OSAHA, NFPA and Sate of CT Regulations.
- CONECO and Absolute will furnish all materials, signs and protective equipment for the safe execution of the new UST installation. Labor provided will be performed by Code of Federal Regulations Section 29 1910.120 40-hour trained technicians. CONECO will coordinate with the proper local representatives for oversight of UST installation. It is anticipated that the new UST can be installed and operational in 3-days of on-Site presence.

American Distilling Scope of Services:

American Distilling will, provide the following services regarding the installation of the new 1,500-gallon UST.

Provide an inhouse licensed electrician to disconnect the existing Gasboy dispenser from the existing 3,000-gallon UST, rewire the Gasboy dispenser and connect all Veeder Root monitoring wiring and conduit to code; and

Employ a Veeder Root company technician to perform complete startup upon completion of the CONECO and Absolute Scope of Services.

Once the new 1,500-gallon tank has been installed, Rand Construction Company will pour the new concrete pad over the former location of the two 10,000-gallon USTs and the new 1,500-gallon UST.

PROJECT SCHEDULE

The proposed Scope of Services for the USTs Closure and installation will be managed and conducted by CONECO's Glastonbury, Connecticut office. Mr. Michael Feldman will serve as the Project Manager for the proposed Scope of Services of work. Mr. Thomas F. McMorrow, P.E., L.E.P, Senior Engineer will oversee the Project.

The schedule for the installation of the new 1,500-gallon Sti-P₃ is dependent on the removal and closure of the three (3) existing USTs including two (2) 10,000-gallon heating oil USTs and the existing 3,000-gallon gasoline UST.

The existing USTs are scheduled to be removed by Rand Construction Company, with environmental engineering oversight by CONECO in late August July 2019.

ATTACHMENTS:

FIGURES

- Figure 1: Site Locus Plan**
- Figure 2: Site Plan**
- Figure 3: Areal Plan of the Site**

SITE PHOTOGRAPHS

HIGHLAND TANK COMPANY 1,500-GALLON UST DIAGRAM

HIGHLAND TANK COMPANY 1,500-GALLON UST BUOYANCY CALCULATIONS

CT DEEP NOTIFICATION PERMANENT STORAGE TANK FORM (DEEP-UST-NOT-002)