Special Specification 5059

Waste Management and Stormwater Pollution Prevention

1. DESCRIPTION

This Special Specification defines the Area of Concern (AOC) and establishes procedures for waste management and stormwater pollution prevention. Construction of the planned roadway improvements and roadway utility improvements for this project will require monitoring and management of potentially impacted soils and groundwater. Impacted soils encountered in the project limits may be categorized as leaking petroleum storage tank (LPST) type soils and groundwater.

2. AREA OF CONCERN

2.1. **Description of Area**. In May 2016, assessment activities were conducted in the right of way along FM 1516 (S. Seguin Road) from FM 78 and FM 1976. Soils and groundwater were analyzed for the presence of hydrocarbons associated with the former petroleum storage tank (PST) sites. Analyses of soil and groundwater samples indicate a former release of hydrocarbons near the following locations: 101 S. Seguin Road (Sta. 533+00 to Sta. 534+00 left of the Centerline), 202 S. Seguin Road (Sta. 531+00 to Sta. 531+50 Right of the Centerline), and 305 S. Seguin Road (Sta. 526+50 to Sta. 527+00 Left of the Centerline). Groundwater was encountered at a depth of 5 feet below ground surface at the 101 S. Seguin Site. Table 1, below, summarizes the findings of the assessment activities.

2.2. **Contamination Levels.** Table 2, below, summarizes the analytical information for the AOC.

3. WASTE MANAGEMENT

3.1. **Soil Management Procedures within AOC.**

These procedures are applicable to the locations identified in Table 1. The best available engineering controls shall be utilized to minimize potential on-site and off-site impacts to human health and the environment from construction in locations with known or suspected impact.

None of the soils, sediments, or surface intrusion water located or found within the AOC will become the property of the Contractor.

Daily schedules for the hauling of dirt from the AOC will be coordinated in a preconstruction conference prior to excavation in this location and as construction progresses.

Contractor will be required to provide the TxDOT at least 48 hours' notice before beginning work in the AOC and shall not undertake any work in within the AOC unless a designated TxDOT Representative is present at the AOC.

Roll-off dumpsters will be provided by TxDOT for the contractor to load the impacted soil.

Contractor shall grant the designated TxDOT Representative access to the AOC. Contractor shall not interfere with the TxDOT Representative's on-site monitoring and testing activities. Contractor shall accept the TxDOT Representative's determination as to whether any part of the soil is impacted.

3.2. **Groundwater and surface water management within AOC.**

Contractor shall remove all groundwater, surface water and leachate (together "Groundwater") located within the AOC. Contractor shall remove all Groundwater in accordance with Special Specification Portable Storage Tank and Pump, and Special Specification Mobile Water Storage Tank. If the volume of water generated in the excavation is minimal and the proposed worked can be accomplished without the removal of the groundwater, then the groundwater will not be removed from the excavation. If rain is anticipated at the time the excavation will be open, sand bags must be placed up gradient and around the excavation to prevent storm water from entering the excavation. If stormwater enters the excavation, the water in the excavation will be considered impacted with hydrocarbons and must be pumped and transported to the tank located in the staging area.

3.3. **Stormwater Pollution Prevention (SW3P) Requirements.**

Decontamination procedures shall be selected and implemented by the Contractor for work conducted within the AOC. Decontamination of equipment must be conducted prior to moving from the AOC to a non-impacted area.

Contractor shall limit the tracking of soil from the AOC into non-impacted areas by minimizing wet soil removal operations. Contractor shall construct a decontamination pad or a method of decontamination that will be used to prevent tracking of contaminants during construction activities. Contractor shall remove excess soil from equipment and trucks prior to exiting the AOC locations either by dry decontamination or by cleaning at a decontamination pad with a pressure washer. Dry decontamination methods, i.e., using a broom to remove visible soil, are preferred. Contractor shall select the wet decontamination method that best minimizes waste generation and that best prevents fluids from running off the AOC.

The Contractor is required to document decontamination of heavy equipment when moving from the AOC to a non-impacted area. Soils from the AOC shall not be tracked onto roadways. Any soils tracked onto roadways shall be immediately removed. The Contractor will place the decontamination waste with the impacted soil originating from the AOC.

3.4. **Soil and Groundwater Staging Area.**

A Temporary Soil and Groundwater Staging area will be established by the contractor in TxDOT ROW on the north end of the project next to the railroad right-of-way at Station 536+00 (former location known as 100 North Seguin Road). A temporary 8 foot tall fencing will be erected by the contractor at this location. The roll-off dumpsters provided by TxDOT and the mobile water storage tank (as described in Special Specification "Mobile Water Storage Tank") will be secured at this location. This temporary fenced enclosure will measure 50 feet long and 20 feet wide. No trespassing signs will be placed on all four sides of the enclosure. The contractor will provide a chain and a lock to secure the gate entrance. Once utility work has been completed in all of the AOCs, TxDOT will direct the contractor to dismantle the temporary staging area.

4. MEASUREMENT AND PAYMENT

4.1. The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly, but is subsidiary or is included in payment for other bid Items.

5. TABLES

Table1
PROJECT DATA SUMMARY
Environmental Data
FM 1516 (S. Seguin Road), Converse, Texas

AOC	Media/Depth	From Station No.	To Station No.	Location	Contaminant Type On-Site Monitoring Required
AOC #1 101 S. Seguin Road	Soil 5 to 8 feet below ground surface.	533+00	534+00 Left of Centerline	Between the ROW line and the edge of Pavement.	Hydrocarbons (LPST Waste) /Yes
	Groundwater Beginning at 5 feet below ground surface	533+00	534+00 Left of Centerline	Between the ROW line and the edge of Pavement.	Hydrocarbons (LPST Waste) /Yes
AOC #2 202 S. Seguin Road	Soil 0 to 10 feet below ground surface.	531+00	531+50 Right of Centerline	Between the ROW line and the edge of Pavement.	Hydrocarbons (LPST Waste) /Yes
AOC #3 305 S. Seguin Road	Soil 5 to 8 feet below ground surface.	526+50	527+00 Left of Centerline	Between the ROW line and the edge of Pavement.	Hydrocarbons (LPST Waste) /Yes

Table2
PROJECT IMPACT RESULTS
(Maximum Concentrations)
FM 1516 (S. Seguin Road), Converse, Texas

	AOC#1 Soil (mg/kg)	AOC#1 Groundwater (mg/L)	AOC#2 Soil (mg/kg)	AOC#3 Soil (mg/kg)
TPH	602	4.0	976	607
Benzene	0.0939	Below reporting Limits	Below reporting Limits	Below reporting Limits
Toluene	0.695	Below reporting Limits	0.457	0.365
Ethyl Benzene	2.02	Below reporting Limits	1.17	0.721
Total Xylenes	3.65	Below reporting Limits	2.44	1.54
MTBE	Below reporting Limits	Below reporting Limits	Below reporting Limits	Below reporting Limits
Naphthalene	1.14	0.0009	11.5	0.167