

## 1 EXECUTIVE SUMMARY

One Fifty Three Hamlet Avenue Realty Trust, LLC retained Theodore F Low & Associates, inc (TFL&A) to conduct a Site Investigation Report (SIR) at 153 Hamlet Avenue in the City of Woonsocket, Rhode Island (the subject site). The objective of the site investigation documented herein was to assess the presence, concentration and distribution of contaminants in environmental media at the subject site, and to prepare a SIR to fulfill requirements set forth in Section 7.0 of the Remediation Regulations. TFL&A's Limitations of Work Product are included as *Appendix A*.

TFL&A conducted a soil sampling program at the subject site on March 29, 2013. Fourteen (14) soil borings were advanced at select pre-approved locations utilizing direct push drilling methods. The soil borings were advanced around the perimeter of the entire site. Refer to *Figure 3* for a site plan of the soil boring locations. Soil borings were generally advanced approximately twenty (20) to twenty-five (25) feet below grade, the water table was encountered at approximately fifteen (15) to twenty (20) feet below grade. During soil boring operations, soil samples collected throughout the soil column at each boring location were field screened for total volatile organic compounds with a photoionization detector (PID). Results of those PID readings can be viewed in the Soil Boring Logs in *Appendix B*.

Soil samples were collected from each boring and selected samples were submitted for laboratory analysis. Soil samples were generally collected from surficial soil, from vadose zone soil directly above the water table and/or from soil exhibiting elevated PID readings. Thirteen (13) soil samples were submitted to ESS Laboratory (ESS) of Cranston, Rhode Island for analysis of VOCs by USEPA Method 8260B, TPH by USEPA Method 8100M, PP13 Metals by USEPA Method 6010B and/or polynuclear aromatic hydrocarbons (PAHs) by USEPA Method 8270C.

On April 16, 2013, TFL&A collected one groundwater sample from each of the eight (8) newly installed monitoring wells. Field parameters, including pH, temperature, specific conductance, dissolved oxygen and oxidation reduction potential (ORP) were recorded at each sampling location. The groundwater quality measurements forms that were utilized to record the above data are attached in *Appendix D*. Groundwater samples were collected utilizing low flow sampling techniques.

Prior to the collection of the groundwater samples, each well was bailed once for all on site groundwater monitoring wells in an attempt to detect a floating sheen on groundwater. None of the groundwater bailed at each well identified a sheen or floater contamination present on the groundwater table. Groundwater samples were submitted to ESS for analysis for VOCs by USEPA Method 8260B. Dedicated sampling equipment was utilized, therefore equipment blanks were not collected.

The objective of the site investigation activities described herein was to complete the SIR in accordance with the RIDEM regulations and to determine if the recognized environmental conditions identified in the December 1012 Phase I ESA had impacted the subject site.

These investigations consisted of the collection and laboratory analysis of soil and groundwater samples to address the potential impact of a release on environmental media at the subject site. Results of the site investigation activities indicated that soil and groundwater quality at the subject site was sufficiently characterized in accordance with the RIDEM Regulations.

Analytical results of soil samples collected from soil borings advanced across the subject site identified PAHs above the applicable regulatory criteria.

Analytical results of groundwater samples collected from the installed monitoring wells across the subject site did not exceed the applicable regulatory criteria. It does not appear the soil release has the potential to become in contact with the groundwater table for the following reason:

- Depth of groundwater (soil contaminants would have to migrate approximately ten (10) to fifteen (15) further below grade).
- The slight soil exceedance and it limited locations (the impacted soils do not appear to be widespread, only locally).
- The placement of an Environmental Land Use Restriction (ELUR) with an associated Soil Management Plan (SMP), this will help restrict the stormwater runoff to infiltrate into the subsurface and potentially migrate the contaminants into groundwater.

Based on the conclusions of this Site Investigation, it appears the preferred remedial alternative is an engineered control. Based on the impacted direct exposure soils, it appears this is the most efficient and cost effective approach. These direct exposure soils will be addressed by engineered controls through the recording of an institutional control in the form of a Department approved ELUR and SMP, followed by an annual compliance certification of the ELUR. The details of the engineered control are below:

- In area that are to have asphalt:
  - Six (6) inches of clean soil cap with a minimum four (4) inch layer of asphalt with an ELUR
- In green space areas:
  - Two (2) feet of a clean soil cap with an ELUR, or
  - One (1) foot of clean soil over Geofabric material with a minimum puncture strength of 120 pounds, and burst strength of 400 psi with an ELUR

## **2 NOTIFICATION OF RELEASE**

Section 2 of the EXPRESS Policy is not applicable to the subject site. The notification of release will be reported along with all of the required documents associated with the EXPRESS Policy. The subject site is within an Environmental Justice Area (EJ) and attached in Appendix B are the associated EJ documents and a list of the recipients.

## **3 PAST INCIDENTS OR RELEASES**

### **3.10 STATE HAZARDOUS WASTE MANAGEMENT FILE – HAMLET AVENUE REALTY TRUST (HAML-HWM/I)**