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April 1, 2016

City of Redmond
15670 NE 85th Street
P.O. Box 97010
Redmond, Washington

Attention: Joe O'Leary

Subject: Perrigo Park Phase 2A
Addendum to the November 11, 2015 Cleanup Action Report
9011 196th Avenue NE
Redmond, Washington
File No. 0500-208-00

INTRODUCTION

The purpose of this addendum letter is to provide information regarding the remedial excavation completed at the Perrigo Park Phase 2A project site to the Washington State Department of Ecology (Ecology) in addition to GeoEngineers' Cleanup Action Report, Perrigo Park Phase 2A Remedial Excavation, dated November 11, 2015. GeoEngineers submitted the Cleanup Action Report to Donna Musa at Ecology on November 11, 2015 and received an email on February 9, 2016 containing questions about the removal of contaminated soil and confirmation soil sampling.

PROJECT DESCRIPTION AND CURRENT SITE CONDITIONS

In August 2015 the City of Redmond (City) began construction to expand the parking lot and install a subsurface stormwater detention tank at Perrigo Park. The extent of the excavation for construction purposes is shown on the attached figure in dark blue. Construction began at the south corner of the excavation and moved toward the north. The excavation was approximately 11 feet deep. During construction, soil with field screening indications of contamination was encountered at the northern extent of the planned area of construction.

Upon discovery, a remedial excavation was immediately conducted to remove soil with contaminants present at concentrations greater than the Model Toxics Control Act (MTCA) Method A cleanup level. Additionally, in an effort to be conservative, the City elected to continue the remedial excavation laterally where logistically feasible to remove soil with contaminants present at concentrations less than the MTCA Method A cleanup level. Following the removal of soil with detectable levels of contamination, the stormwater detention tank and concrete vault was installed, the construction excavation and remedial excavation areas were backfilled and a parking lot was constructed over the entire area.



REMEDIAL EXCAVATION AND CONFIRMATION SOIL SAMPLING

When petroleum contaminated soil was encountered at the northern extent of the stormwater detention tank excavation, soil samples were obtained to characterize the nature and extent of the contaminated soil and to identify the limits of the contamination. One soil sample, EX-4-8.5 (shown on Figure 3 in the November 11, 2015 report), obtained at a depth of approximately 8.5 feet below the ground surface, contained diesel-range hydrocarbons (specifically heating oil) at a concentration greater than the MTCA Method A cleanup level (8,700 milligrams per kilogram [mg/kg]). Soil sample EX-1-11, obtained below (within 4 feet) of EX-4-8.5 at a depth of approximately 11 feet below the ground surface, contained diesel-range hydrocarbons at a concentration less than the MTCA Method A cleanup level (640 mg/kg). Both of these samples were obtained on August 19, 2015 and after analytical results were received, soil represented by EX-4-8.5 was excavated to the depth of 11 feet (represented by sample EX-1-11) and transported off site for permitted disposal.

Because heating oil was detected at concentrations between 1,000 and 1,500 mg/kg in EX-2-8.5 and EX-3-8.5 and Perrigo Park is located within the Wellhead Protection Program Zone 2, the City elected to remove soil represented by those samples to the north of the stormwater detention tank excavation (shown by a dashed yellow line on the attached figure) even though the detected concentrations were less than the MTCA Method A cleanup levels. Soil characterized by samples EX-2-8.5 and EX-3-8.5, was excavated and transported off site for permitted disposal. Confirmation soil samples were obtained at the limits of the excavation and diesel-range hydrocarbons either were not detected or were detected at concentrations less than the MTCA Method A cleanup level in each. Additionally two groundwater samples were obtained down-gradient of the remedial excavation and diesel-range hydrocarbons were not detected in the groundwater, showing that the cleanup action was protective of groundwater.

Due to the presence of the concrete vault housing the stormwater detention tank, it is not possible to obtain additional soil samples in the dark blue construction excavation area shown on the attached site plan, which includes the area directly below the contaminated soil sample EX-4-8.5. However, all the contaminated soil represented by EX-4-8.5 was excavated and removed from the site for permitted disposal, as demonstrated by field screening (described in Appendix A and Table 1 of the November 11, 2015 Cleanup Action Report) and the laboratory chemical analytical results of the confirmation soil samples. The approximate locations of confirmation soil samples are shown on the attached Figure.

Sincerely,
GeoEngineers, Inc.



Jessica A. Smith, LG
Environmental Geologist

JAS:TNO:nld

Attachments:

Figure 1. Remedial Excavation and Confirmation Soil Chemical Analysis Results

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

4/1/16
Tony N. Orme, PE
Associate



