

September 5, 2019

Hasan Ahmed
Environmental Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
47-40 21st Street
Long Island City, New York 11101-5407

Re: Letter Notification and Scope of Work for the Delineation of Petroleum Contamination Near MW-35 in Operable Unit 3 Sunnyside Yard, Queens, New York OOC Index #W2-0081-08-10

Dear Mr. Ahmed:

On behalf of National Railroad Passenger Corporation (Amtrak), Roux Environmental Engineering and Geology, D.P.C. (Roux) has prepared this letter to notify the New York State Department of Environmental Conservation (NYSDEC) of the proposed investigation/ delineation activities in Operable Unit 3 (OU-3) at Sunnyside Yard, Queens, New York (Yard). OU-3 encompasses approximately eight acres in the north central portion of the Yard. The majority of OU-3 is owned by Amtrak. A portion of OU-3 (approximately 2 acres) includes property owned by the Metropolitan Transportation Authority (MTA) and Long Island Rail Road (LIRR). OU-3 consists of unsaturated and saturated soil, and separate phase hydrocarbon (SPH).

The investigation activities outlined in this Scope of Work (SOW) are intended to delineate SPH impacts encountered by MTA East Side Access (ESA) in the portion of OU-3 owned by MTA/ LIRR. According to MTA-ESA, during utility excavation activities conducted on August 23, 2019, stained soil was encountered at approximately 3-3.5 feet below land surface (ft bls) in two areas south of groundwater monitoring well, MW-35. MW-35, which was previously monitored for over two decades and has since been abandoned by MTA-ESA to facilitate utility excavations, did not have prior detections of SPH. According to MTA-ESA, during utility excavations groundwater was initially encountered at approximately 4.5 ft bls and no SPH was observed on the groundwater. Following identification of stained soil, MTA-ESA notified the NYSDEC. At that time, it was not known that the excavation was being conducted within OU-3 and the NYSDEC instructed MTA-ESA to call in a spill. MTA-ESA called in a spill and cautioned off the area around the excavation, which remained opened overnight. The following morning (8/24/19), MTA-ESA noticed the groundwater elevation rose, and was now above the stained soil, and a dark-colored sheen was observed on the groundwater. MTA-ESA did not measure the SPH sheen thickness. Years of previous SPH monitoring in this area has confirmed this residual SPH is not mobile and is not migrating.

After reviewing Yard documents and discussions between MTA-ESA and Roux, it was determined the petroleum impacts were within OU-3. In accordance with the NYSDEC email dated August 28, 2019, the NYSDEC instructed MTA-ESA to backfill the excavation, which was completed on August 28, 2019 using the excavated material.

Delineation of SPH impacts within OU-3 will be completed in general accordance with the NYSDEC-approved OU-3 Remedial Action Work Plan (RAWP), prepared by Roux dated October 2007, subsequent NYSDEC-approved addendums to the RAWP, and the NYSDEC-approved July 26, 2011 Revised Remedial Design/ RAWP (and subsequent amendment). A discussion of the proposed investigation SOW is provided below.

## Scope of Work

Based on the information provided by MTA-ESA and a site walk conducted August 30, 2019 by Roux and MTA-ESA, the OU-3 investigation activities will include the completion of up to 12 seven-feet-long by three-feet-wide test pits to approximately five ft bls and installation of three groundwater monitoring wells (monitoring wells). The proposed test pit and monitoring well locations are shown on Figure 1. As shown, the monitoring wells will be installed immediately adjacent to the utility excavation to prevent the monitoring wells from being destroyed during the MTA-ESA work and not to impede MTA-ESA work in the area.

During OU-3 investigation activities, soil from each of the test pits will be visually inspected for evidence of impacts and screened for organic vapors in the field using a photoionization detector (PID). Soil lithology will be recorded according to the Unified Soils Classification System (USCS). If SPH impacts are encountered at a test pit location, the excavator will step out approximately 15 feet, based on field conditions, and conduct another test pit to delineate the horizontal extent of the SPH impacts. Additionally, all test pits will be excavated to groundwater (assume to be approximately 4.5 ft bls). Once groundwater is encountered, each test pit with SPH impacts will remain opened until groundwater fills in the bottom of the test pit. The groundwater will be inspected for SPH accumulations. If SPH is not observed, the test pit will be backfilled. If SPH is observed, the test pit will be left open overnight and SPH thickness will be measured the following morning with an oil/water interface probe. All test pits left open overnight will be surrounded with safety cones/barrels and caution tape and covered with plywood. Once SPH thickness data is recorded, the test will be backfilled.

Additionally, three monitoring wells will be installed with a Geoprobe at the locations shown on Figure 1, locations are subject to change based on test pit results. Each monitoring well will be constructed of approximately 10 feet of 2-inch diameter Schedule 40 polyvinyl chloride (PVC) with a 10-slot screen installed to span the water table. A gravel pack consisting of #2 Morie Sand or equivalent will be placed around the screen and up to two-feet above the top of the screened interval followed by a one to two-foot layer of bentonite pellets. The bentonite pellets will be given time to hydrate before filling the remainder of the well annulus with bentonite grout. All monitoring wells will be completed with a flush-mounted manhole protective curb box installed at grade. The proposed monitoring well locations are shown on Figure 1.

Following installation, each well will be developed to ensure proper hydraulic connection with the aquifer and to reduce/ eliminate turbidity. The newly installed wells will be monitored daily over a two-week period. During monitoring activities, fluid levels will be gauged in each well to monitor SPH accumulations, if any.

All excavation and drilling equipment will be decontaminated between each sample location using a detergent solution. The rinsate generated during the cleaning and purge water generated from well developments will be containerized in 55-gallon drums and characterized for proper disposal.

All investigation activities will be performed in OU-3 in general accordance with this NYSDEC-approved OU-3 RAWP. All on-Site personnel conducting the SOW described herein will be 40-hour HAZWOPER trained. All soil generated during excavation activities will be contained and properly disposed off-site, in accordance with the Soil/ Materials Management Plan provided in the OU-3 RAWP. Additionally, all excavation and well installation activities will be completed under the oversight of Roux. Roux will implement community air monitoring during all intrusive activities, in accordance with the Community Air

Mr. Hasan Ahmed September 5, 2019 Page 3

Monitoring Plan (CAMP) provided in the OU-3 RAWP. All deviations from the OU-3 RAWP and this letter will be promptly reported to NYSDEC.

## **Schedule**

MTA-ESA, under Roux oversight, plans to complete the above-mentioned activities immediately following approval of this SOW. This letter serves as notification for the start of this work.

If you have any questions regarding this scope of work, please do not hesitate to contact the undersigned.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Jeff Wills, P.G.

Senior Hydrogeologist

Robert Kovacs, P.G. Principal Scientist

Charles McGuckin, P.E. Principal Engineer

Attachments

cc: Rich Mohlenhoff, P.E., Amtrak Craig Caldwell, Amtrak Tenzin Lhundup, MTA-ESA

