

January 31, 2019

2018-3756

Mr. Ragesh R. Patel
Regional Manager
Environmental Cleanup and Brownfields
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, Pennsylvania

RE: Response to PADEP Request for Characterization and Demonstration of Attainment of a Cleanup Standard for Groundwater
Former Marcus Hook Pump Station
1111 West Ridge Road
Lower Chichester Township
Delaware County

Dear Mr. Patel;

Advanced GeoServices Corp., a Montrose Environmental Group company (AGC/Montrose), on behalf of the Interstate Energy Company, LLC (IEC) is submitting this letter in response to the Pennsylvania Department of Environmental Protection's (PADEP) letter dated December 21, 2018 (PADEP letter) to Mr. Curtis Rounds, approving the Act 2 Final Report dated October 10, 2018 (Final Report) for the Former Marcus Hook Pump Station (MHPS). In that letter, the PADEP granted IEC an Act 2 release of liability for No. 2 and No. 6 fuel oils in soils at the Former MHPS, as set forth under Act 2.

However, the PADEP letter also stated *"Information provided in the Final Report indicates groundwater was encountered in multiple excavations where contaminated soil was removed. The potential for groundwater contamination may violate environmental laws that DEP administers, including, but not limited to, the Clean Streams Law, and may constitute a public nuisance. DEP requests that you [IEC] enter Act 2, characterize, and demonstrate attainment of a cleanup standard for groundwater."*

We have carefully considered the Department's request in light of the data collected during the soil remediation and provided in the Final Report and AGC/Montrose's extensive knowledge of the site from its 25-year history of providing environmental consulting services for IEC's MHPS. As outlined below, there is no indication that groundwater is impacted above the PADEP groundwater Statewide Health Standards (SHSs) at the MHPS. As such, we do not believe that further groundwater investigation is warranted.

Final Report: Groundwater Information

The underground piping and foundation demolition project along with the associated soil excavation occurred from July to September 2018, a period in which there was extensive rainfall at the site. As a result, stormwater had to be pumped from all excavations with soil impacts into frac tanks for off-site treatment/disposal. After completing the removal of impacted soils and

stormwater in each area, only Sites 2 and 5 still had water in the excavations. This was assumed to be groundwater infiltrating into the excavations; therefore, samples of the groundwater were collected from these sites. Specifically, four groundwater samples were collected: three from Site 2 (subareas 2A, 2B and 2C) and one from Site 5. As shown in Table 1, all the groundwater results were below the Act 2 SHSs for No. 2 and No. 6 fuel oil criteria pursuant to the PA Act 2 Short List of Petroleum Products for groundwater in a non-residential, used-aquifer setting. This groundwater analytical data from Sites 2 and 5 indicates that the groundwater within the area of the excavations was not impacted.

Final Report: Temporary Piezometers

To further support that the groundwater beneath the excavation areas was not impacted, temporary piezometers were installed within 25 feet of the edges of the excavation at Site 2. On July 24, 2018, AGC/Montrose installed five temporary piezometers (TW-1 through TW-5) around Site 2, subarea 2A to determine impact to groundwater in the excavation area. Five soil samples were collected from the boring at a depth just above the water level for each piezometer, as summarized below.

MHPS Temporary Piezometers, Date: 7/24/18				
Name	Total Depth (ft. bgs)	GW Depth (ft. bgs)	Soil Sample Collected	Sample Depth (ft. bgs)
TW-1	8 (5.5)	4	TW-1	3.5
TW-2	10.5	8	TW-2	7.5
TW-3	11	7	TW-3	6.5
TW-4	12	7	TW-4	6.5
TW-5	10.5	6	TW-5	5.5
Note: TW-1 originally 8 ft. Boring collapsed to 5.5 ft.				

The soil samples were analyzed for No. 2 and No. 6 fuel oil constituents, pursuant to the PA Act 2 Short List of Petroleum Products (PADEP Table IV-9). These soil sample results were all below the Act 2 SHSs for No. 2 and No. 6 fuel oil criteria pursuant to the PA Act 2 Short List of Petroleum Products for soil in a non-residential, used-aquifer setting (See Table 2). These results indicate that oil would not be expected on the groundwater table.

On July 25, 2018, one day after the piezometers were installed, AGC/Montrose utilized a dual-phase water oil interface probe to evaluate the presence of potential product (oil) levels and thickness in the five piezometers. Product was not identified in any of the five piezometers. The piezometer soil analytical data and the absence of product in the five piezometers indicates that there were no oil releases impacting groundwater near Area 2. This evaluation supports the lack of evidence that the limited soil impacts in these excavations had impacted groundwater.

Historical Property Information Not Presented in the Final Report

As previously discussed, AGC/Montrose has been providing environmental consulting services to IEC at the Property for over 25 years. AGC/Montrose is providing the following historical

information that supports AGC/Montrose's and IEC's position that there is not sufficient evidence of groundwater contamination to warrant an additional groundwater investigation at the Property.

In response to a release of oil at the property, Gulf Interstate Pipeline, the previous owner of the Property, conducted a Limited Environmental Assessment at the Property in 1989 that included the installation of five groundwater monitoring wells. The Limited Environmental Assessment Report concluded the following:

- the water table on the property is very shallow,
- groundwater flows in a southwesterly direction,
- the soil has low permeability (clay-like) based on a low water yield on the monitoring wells, and
- there was no detectable groundwater contamination present on the property based on the groundwater sample analyses.

The Limited Environmental Assessment Report dated June 1989 is presented as Attachment A. Groundwater surface elevations developed from the five wells on May 19, 2000 is presented as Attachment B.

Shortly after IEC began operating the Property, IEC voluntarily sampled the five on-site monitoring wells, and a total of 14 groundwater sampling events were conducted from March 1992 through July 2003. The groundwater analyses included benzene, toluene, ethylbenzene, xylene (BTEX), and total petroleum hydrocarbons. Select groundwater sampling events included analyses of semi-volatile organic compounds and MTBE. All results from the sampling performed throughout this period were below laboratory detection limits. Groundwater sampling results are tabulated and summarized in Attachment C.

Because oil was stored and transferred at MHPS, IEC had maintained and followed a Spill Prevention and Response Plan. A copy of the plan, dated April 13, 1993, Revised October 2014, and certified by a Pennsylvania Professional Engineer, Tom Legel of AGC/Montrose is provided as Attachment D. The Plan required that IEC conduct observations and monitoring activities that included:

- an inspection of the T-1 above ground storage tank at least every 72 hours when the tank was in service,
- weekly facility inspections to identify signs of leaks from terminal components,
- annual storm water discharge inspections, and
- monthly maintenance operations inspections for above ground storage tanks.

Section 2.4 of the plan states "*There have been no releases to land or water of SARA Title III Section 313 water priority chemicals by this facility at any time during the past ten years [2004 through 2014].*" Based on a review of other historical information the last documented oil release was in 1993.

TABLES

ATTACHMENT A

ATTACHMENT B

ATTACHMENT C

ATTACHMENT D

ATTACHMENT E