Advanced Environmental Concepts, Inc.

1751-1Pulaski Highway Havre de Grace, MD 21078 (410) 939-5550

Groundwater Sampling Report Q4 2023

Site Location:

Pantry One Food Mart
1897 Conowingo Road
Rising Sun, MD

MDE Case # 2019-0724-CE
Facility ID: 11347

Prepared For:

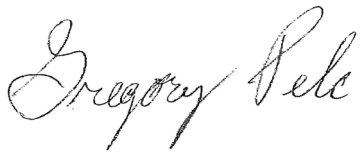
Mr. Aijaz Shaikh

December , 2023

SIGNATURE SHEET

Report Prepared by:

Name: Gregory Pelc



Title: Sr. Project Manager

Company: Advanced Environmental Concepts, Inc.

Address: 1751 Pulaski Hwy

City/State/Zip: Havre de Grace, Maryland 21078

Telephone: (410) 939-5550

Table of Contents

1.0 Introduction

This monitoring well (MW) sampling report has been prepared to satisfy the requirements set forth by the Maryland Department of the Environment (MDE) for the Pantry One Food Mart located at 1897 Conowingo Road, Rising Sun, MD; referred to herein as the “site”.

2.0 Groundwater Monitoring

2.1 Monitoring Well Sampling & Gauging

On 12/11/2023 AEC personnel arrived on site to gauge and sample all site monitoring wells. Prior to sampling each well was gauged for presence/absence of LPH as well as depth to groundwater with an electronic oil/water interface meter. LPH was not detected in any of the site wells. After gauging, each well was purged a total of three well volumes of water. Purged groundwater was treated with activated carbon prior to being discharged to the ground. After purging, groundwater was allowed to recover to a minimum of 90% pre purge levels prior to sample collection. Groundwater samples were collected using pre-packaged, single use, disposable bailers and placed in laboratory supplied VOAs and then placed in a cooler with ice and chain of custody record for delivery to the laboratory. Groundwater samples collected were delivered to AEC’s laboratory to be analyzed by EPA Method 8260 for volatile organic compounds (VOCs) and by EPA Method 8015 for total petroleum hydrocarbons - diesel and gasoline range organics (TPH-DRO/GRO).

2.2 Domestic Supply Well Sampling

On 12/11/2023 a sample was collected from the site’s domestic supply well (DSW). The sample was collected using standard sampling procedure by an MDE certified drinking water sampler. Domestic supply wells samples collected were delivered to AEC's laboratory to be analyzed for VOCs by EPA Method 524.2.

2.3 Off Site Domestic Supply Well Sampling

On 12/11/2023 samples were collected from the POET system located at 1894 Conowingo Road.

Samples were collected using standard sampling procedure by an MDE certified drinking water sampler. Domestic supply wells samples collected were delivered to AEC's laboratory to be analyzed for VOCs by EPA Method 524.2.

3.0 Results of Groundwater Sampling

3.1 Groundwater Elevation

AEC constructed a groundwater elevation contour map based upon depth to groundwater measurements collected on 12/11/2023 which depicts groundwater flow to be to the north-northeast. Relative groundwater elevation observed during the sampling event ranged from 257.75 feet in MW-3 (highest) to 250.23 feet in MW-2 (lowest). The groundwater elevation contour map can be found in Appendix A.

3.2 Monitoring Well Sampling Results

Method detectable concentrations of VOCs were observed in the groundwater samples collected from MW-2 and MW-3. Method detectable concentrations were not observed in the sample collected at location MW-1.

Samples collected from MW-2 contained concentrations which exceed the MDE GNCS to include:

- TPH-GRO - 463 ug/L

Laboratory method detectable concentrations at location MW-3 were below the MDE GNCS during the 12/11/2023 sampling event.

A Quick Reference Groundwater Sampling Summary Table which summarizes groundwater sampling analytical results can be found in Appendix B. A full Report of Analysis and Chain of Custody Record can be found in Appendix C.

3.3 Domestic Supply Well Sampling Results
Method detectable concentrations were not observed in the drinking water sample collected from the onsite supply well. A Quick Reference Groundwater Sampling Summary Table which summarizes groundwater sampling analytical results can be found in Appendix B. A full Report of Analysis and Chain of Custody Record can be found in Appendix C.

3.4 Off Site Domestic Supply Well Sampling Results
Method detectable concentrations of VOCs were observed in the samples collected pre, intermediate 1, and intermediate 2 treatment in the drinking water from the POET system located at 1894 Conowingo Road. Method detectable concentrations were not observed in the effluent (post) treatment samples.

A Quick Reference Groundwater Sampling Summary Table which summarizes off site DSW sampling analytical results can be found in Appendix B. A full Report of Analysis and Chain of Custody Record can be found in Appendix C.

4.0 Future Activities
The next quarterly sampling event is scheduled for March of 2024 to include the sampling of the DSW POET system located at 1894 Conowingo Road.

5.0 Appendices

Appendix A
Site Maps

Appendix B
Groundwater Gauging & Analytical Tables

Appendix C
Report of Analysis & Chain of Custody Record