Information Request – Land Use Controls

Former Alcoa Eastalco Works Property Frederick, Maryland June 21, 2023

Geo-Technology Associates, Inc. ("GTA") has prepared this response for additional information requested by the Maryland Department of the Environment ("MDE") Land Restoration Program ("LRP") for the Former Alcoa Eastalco Works Property located at 5601 Manor Woods Road, in the Frederick area of Frederick County, Maryland ("Site"). GTA understands that the requested information will be utilized by the MDE LRP to determine compliance with the Land Use Controls ("LUCs") that have been established for the Site. Supporting documentation for the following responses has been included on an enclosed CD. Paper copies of this information can be provided upon request.

Additional Information Requested

Page 3, Bullet Number 1

• Excavation activities in the southern utility installations have resulted in significant groundwater generation. This water was discharged to nearby surface water body, including Tuscarora Creek, without notification or approval. Provide documentation regarding start date of dewatering, length of time, daily flow rate and total daily volume discharged, and source areas of discharge along with sampling data and other relevant documentation including photographs, figures with discharge locations, pumping locations, reports etc. Provide a copy of the general permit application and final permit issued for the site work.

Response: No water was discharged directly into Tuscarora Creek during excavation activities. Dewatering associated with the construction of sewer line 1A and 1B occurred on various dates between April 12, 2023 and May 19, 2023, at locations along the sewer alignment between Manhole 3 and Manhole 18. A Sewer Line Dewatering Map, Sewer Line Work Tracker, and Weekly Reports detailing the start date of dewatering and each date when dewatering occurred are included on the provided CD under the folder *Utility Excavation Information*. The Sewer Line Dewatering Map, located within the *Sewer Line 1A and 1B Dewatering Information* subfolder, identifies yellow highlighted areas as the water extraction points, and blue boxed areas as the dewatering discharge points. Additional documentation regarding dewatering activities is provided in the *Reports* subfolder located within the *Utility Excavation Information* folder.

Site activities generally were associated with excavation, installation of sewer lines, and backfill daily. Due to site geotechnical parameters, excavations opened each day required backfill prior to the end of the day.

Dewatering associated with the construction of the sewage pump station occurred between May 5, 2023 and May 22, 2023. The proposed sewage pump station is located outside of the Environmental Covenant area. Water vacated from the pump station excavation was pumped into a water infiltration system located directly south of the excavation. Documentation regarding sewage pump station dewatering is included on the provided CD under the folder

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Utility Excavation Information and in subfolders labeled Pump Station Dewatering Information and Reports.

Per information provided by the general contractor Structure Tone, documentation of daily flow rate and total daily volume discharged is not available. Although sampling data was not obtained at the time of dewatering activities, analytical results within the surface water and sediments of Tuscarora Creek were obtained in June 2023. Adverse impacts to public health and the environment were not identified, and creek water and sediments did not demonstrate adverse impacts. The sampling results from the source area did not identify contaminants of concern that would be anticipated to impact surface water quality. Sampling location plans and tabulated analytical sampling data are included on the provided CD under the folder *Surface Water and Sediment Sampling*. These documents have previously been provided to MDE.

The general permit applications for the utility installations were submitted through MDE's e-Permits web interface. Documentation from the e-Permits web interface and the MDE-issued permits are included on the provided CD under the subfolder *Utility Excavation Information*, *General Permits*.

Page 3, Bullet Number 2

Excavations and soil and sediment movement activities have occurred in the DA 11 basin, a
former rainwater pond immediately adjacent to the northern landfill and within the EC
boundary, without submission or approval of requisite workplan for stormwater,
groundwater, soil, and sediment management as required in the approved Environmental
Management Plan (EMP); Unauthorized dewatering and exposure to construction worker
from the impacted water from the basin may have taken place.

Response: No dewatering was performed at the DA-11 basin. Per information provided by utility subcontractor Petillo, Inc., ("Petillo") excavation activities that were performed at the DA-11 basin occurred on May 3, 2023, May 4, 2023, and May 9, 2023. Prior to the advancement of work, water depth in the former rainwater pond was generally low and isolated to the western portion of the former pond. As such, no pumping of water was necessary.

Equipment that was used included an excavator and four off road dump trucks. The excavated material was placed in a stockpile adjacently east of DA-11, and sediment erosion controls were established south (downgradient) of the stockpile. Petillo had a site-specific Health and Safety Plan ("HASP") in place prior to the start of construction and, per information provided by Petillo, all work was performed in accordance with the HASP. Construction activities were conducted by personnel in construction equipment, and none of the activities discussed above involved laborers or "on the ground" personnel.

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Page 3, Bullet Number 3

• Documentation that a Health and Safety Plan was developed and implemented during soil disturbance and groundwater management activities.

Response: HASPs were developed and implemented during soil disturbance and groundwater management activities. GTA previously prepared a HASP, dated December 10, 2020 for the Site during the due diligence process, and prior to Quantum Maryland LLC's acquisition of the Site. At the request of the MDE LRP, the HASP was revised on October 13, 2022 to identify arsenic and pesticides as contaminants of potential concern (COPCs) in surface and subsurface soil and total cyanide as a COPC in surface water, and to expand the air monitoring section. The modifications were made in conjunction with a Phase II Environmental Site Assessment and development of an Environmental Management Plan for the Site.

GTA's HASP was provided to Structure Tone and the associated utility subcontractors, Petillo and Clark Water ("Clark"). Structure Tone, Petillo, and Clark generated the following site-specific safety documents:

<u>Structure Tone</u> Site Specific Safety Plan, dated November 9, 2022;

Petillo Site Specific Health and Safety Plan, dated November 9, 2022; and

<u>Clark</u> Emergency Action Plan, dated January 9, 2023.

Petillo also provided a *Safety Manual*, dated April 17, 2017 from Douglas Explosives, Inc., for proposed rock blasting activities on-site, and Clark also provided an undated *Accident Prevention Plan*.

These HASPs and other safety documents were implemented during construction, and on-site safety inspections were conducted by a third-party health and safety professional and documented in weekly Compliance Inspection Reports.

Copies of the HASPs, other safety documents, and the weekly site safety compliance inspection reports are included on the provided CD under the folder *Health and Safety Plans*.

Page 3, Bullet Number 4

Provide updated status of all groundwater monitoring wells on the Property to confirm none
of the wells were damaged or destroyed during the site activity.

Response: All groundwater monitoring wells on the Site are intact and in good condition. None of the monitoring wells were damaged or destroyed during the site activity. A total of 25 groundwater monitoring wells are currently located on and are in use at the Site. These groundwater monitoring wells are associated with three distinct areas: (1) the overall Site, (2) the north landfill area, and (3) the south landfill area. The groundwater monitoring wells

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associated with these areas are summarized below, and photographs of the wells and figures depicting the well locations are included on the provided CD under the folder *Groundwater Monitoring Wells*.

1.	Overall Site V	Wells (12 wells):				
	MW-29	MW-45	MW-51	MW-52	MW-56	MW-60
	MW-62	MW-72	MW-73	MW-103	MW-107	MW-108
2.	North Landfill Area (6 wells):					
	MW-64	MW-74	MW-75	MW-76	MW-77	MW-111
3.	South Landfill Area (7 wells):					
	MW-4	MW-6	MW-25	MW-26	MW-66	MW-67
	MW-68					

Based on a site visit and as shown in the enclosed photographs, the above-referenced wells are in good condition. The protective casing for MW-66 was leaning slightly; however, the groundwater monitoring well within the casing appeared to be vertical and upright, with no indications of damage. No indications of construction traffic or construction activity were observed in the vicinity of MW-66. MW-76 had a casing cap with the notation "63," indicating this groundwater monitoring well was either mismarked in the field or utilized the MW-63 casing cap once that well was abandoned (see below). The photographed MW-76 location is correct based on historical documentation.

Two additional wells are associated with the Site groundwater monitoring network, but the condition of these wells was not documented since one is an off-site well (MW-13) and another was previously abandoned (MW-63).

Page 3, Bullet Number 5

• Provide all previous annual On-Site Cap Inspection Forms documenting the conditions of the existing asphalt and RCRA cap during the inspection. If damaged, please provide documentation that the cap was adequately repaired following the intrusive activities.

Response: All Annual On-Site Cap Inspection Forms from 2018 through 2023 are included on the provided CD under the folder *Annual On-Site Cap Inspection Forms*. These forms indicate that the observed caps were in generally good condition during each inspection, except for noted erosion along the western slope of WDS-8 in 2019 that required corrective action. Erosion repairs were performed in 2019 and photo documented (see *Annual On-Site Cap Inspection Forms*). The 2020 inspection of the repaired area indicated that the "WDS 8 area that was repaired late 2019 is in good condition, grass is growing and there are no erosion pathways in the repaired area."

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The most recent cap inspection was performed on March 30, 2023, and no response actions were noted.

Page 3, Bullet Number 6

 A file review conducted on May 24, 2023, has identified that the required Annual Summary Reports/Inspection Reports have not been submitted to MDE since 2017 as described in 1.d.4 above. Please provide copies of all summary/inspection/monitoring reports for the period from 2018 to 2023.

Response: In addition to the above-referenced Annual On-Site Cap Inspection Forms, Semi-Annual Water Quality Reports for the North and South Landfills and Annual Groundwater and Surface Water Monitoring Reports were prepared and submitted for the Site between 2017 and 2022. These reports and associated transmittal documentation are included on the provided CD under the folders *Semi-Annual Landfill Summary Reports* (Semi-Annual Water Quality Reports for the North and South Landfills) and *Annual GW and SW Summary Reports* (Annual Groundwater and Surface Water Monitoring Reports). The next Semi-Annual Water Quality Reports for the North and South Landfills are due to the MDE by June 30, 2023.

Page 3, Bullet Number 7

• Please schedule a time for a site inspection with MDE.

Response: MDE inspected the Site on June 1, 2023. MDE personnel in attendance were:

- Anu Mohanty MDE LRP
- Barbara Brown MDE LRP
- Kate Ansalvish MDE Water & Science Administration (WSA)
- Gregory Hazzard MDE WSA
- Jacob Haglund MDE
- Sarah Megee MDE

Site representatives in attendance were:

- Scott Noteboom Quantum Maryland LLC
- AD Robison Quantum Maryland LLC
- Peter McCabe Structure Tone
- John Gervais Structure Tone
- Johnny Castillo Petillo
- Paul Hayden GTA
- Kevin Plocek GTA
- Kraig Walsleben Rodgers



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The meeting convened at Structure Tone's construction trailer and included a review of the following site locations:

- DA-2
- DA-11
- Northern Borrow Location
- Pump Station
- Sewer Line 1A Manhole 3 to Manhole 8

Should you need follow-up from the June 1st site visit, the site representatives are available at your convenience for an additional site inspection. Please contact Kevin Plocek to schedule via email at kplocek@gtaeng.com.