GTA

Soil Disposition Memorandum -

Former East Alcoa Property June 30, 2023

Geo-Technology Associates, Inc. (GTA), on behalf of Quantum Maryland LLC, has prepared the following memorandum to document the current disposition and sources of soils stockpiled or utilized as fill at the Former East Alcoa Property ("Site") in advance of a July 6, 2023 site meeting.

The following soil stockpiles are currently located at the Site:

Stockpile	Approximate	Current Location			Soil Origins			
Designation	Size (cubic yards)	Location	In EC?	In SMA?	Location	In EC?	In SMA?	
1	3,500	Lot 111 Outside Floodplain	Yes	No	Lot 110 North Borrow Area	No	No	
2	16,000	Lot 112D Outside Floodplain	Yes	Yes	Rainwater Pond 102 and areas adjacently east	Yes	Yes	
3	30,000	Lot 105 Outside Floodplain	Yes	Yes	Unknown	Yes	Yes	
4	325	Between MH-18 and MH-19 Inside Floodplain	No	No	Sewer Line 1B	No	No	
5	125	Near MH-18 Inside Floodplain	No	No	Sewer Line 1B	No	No	
6	175	Between MH-17 and MH-18 Inside Floodplain	No	No	Sewer Line 1B	No	No	



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Stockpile	Approximate	Current Location			Soil Origins			
Designation	Size (cubic yards)	Location	In EC?	In SMA?	Location	In EC?	In SMA?	
7	300	Between MH-12 and MH-13 Inside Floodplain	Yes	No	Sewer Line 1B	Yes	No	
8	800	Near MH-10 Inside Floodplain	Yes	No	Sewer Line 1B	Yes	No	
9	200	Near MH-10 Inside Floodplain	Yes	No	Sewer Line 1A	Yes	No	
10	275	Between MH-8 and MH-9 Inside Floodplain	Yes	No	Sewer Line 1A	Yes	No	
11	175	Near MH-8 Inside Floodplain	Yes	No	Sewer Line 1A	Yes	No	
12	375	Between MH-7 and MH-8 Inside Floodplain	Yes	No	Sewer Line 1A	Yes	No	
13	4,000	Lot 304 Inside Floodplain	No	No	Pump Station	Yes	No	
14	1,000	Lot 304 Outside Floodplain	No	No	Pump Station	No	No	



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Stockpile Designation	Approximate Size (cubic yards)	Current Location			Soil Origins		
		Location	In EC?	In SMA?	Location	In EC?	In SMA?
15	7,250	Lot 304 Outside Floodplain	No	No	Pump Station	No	No
16	1,200	Lot 303 SP-3, Stockpile / Staging Area 2 Outside Floodplain	No	No	Happy Landing Road	No	No

Note – approximate cubic yardage was determined by field observations and measurements, actual stockpile cubic yardage may be lesser or greater than estimated.

Source material for Stockpile 1 originated from a borrow area that is in an area on the northern portion of the Site that was historically utilized for agricultural purposes. The borrow area is located outside of the Environmental Covenant (EC) and the Soil Management Area (SMA); however, the current stockpile is in the bounds of the EC, within a designated soil stockpile area. Sediment erosion control fencing is currently present.

Source material for Stockpile 2 originated from a former rainwater pond 102 and areas immediate adjacent east of the pond, both of which are in the EC. While the former rainwater pond 102 is not located in the SMA, excavation activities that were conducted adjacently east of former rainwater pond 102 during the expansion of the pond to the DA-11 pond configuration are located within the SMA. The current stockpile is in the bounds of the EC and the SMA, within a designated soil stockpile area. Sediment erosion control fencing is currently present.

The source material for Stockpile 3 is currently unknown, the stockpile is currently vegetated and stabilized, and the stockpile is currently located in the EC. Based on the unknown origin of the materials located in Stockpile 3, GTA previously prepared a clean fill sampling work plan that was approved by the MDE LRP. Sampling was conducted as summarized in GTA's April 25, 2023 *Clean Fill Sampling Report*. This report indicated that the soils within the stockpile qualify as Category 1 material. However, the MDE LRP has not yet concurred with these findings.

Stockpiles 4 through 12 originated from the installation activities associated with sewer line 1A (Stockpiles 4 through 8) and 1B (Stockpiles 4 through 8). Stockpiles 4, 5, and 6 are located outside of the EC and SMA, but within a floodplain. Stockpiles 7 through 12 are located within the EC

^{*=}Existing Clean Fill Stockpile previously sampled by GTA

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and the floodplain. Materials in these stockpiles consist of soil and rock that was displaced from the sewer installation activities. Soils located along the sewer line 1A and 1B alignments were previously characterized as part of a Phase II ESA, dated November 16, 2022. Soils sampled along sewer line 1A and 1B did not contain contaminants above the applicable regulatory limits. These stockpiles are proposed to be relocated into two new stockpiles that are located outside of the EC and floodplain, pending MDE LRP's review and approval of a *Site Stabilization Work Plan*.

Source material for Stockpile 13 originated from pre-excavation activities associated with future installation of MH-1 and MH-2 and associated sewer line. The stockpile is currently located outside of the SMA and EC but is located within the floodplain. This stockpile is proposed to be relocated to a new area located outside of the floodplain, pending MDE LRP's review and approval of a *Site Stabilization Work Plan*.

Source material for Stockpile 14 and 15 originated from excavation activities associated with the pump station. The stockpile is currently located outside of the SMA, EC, and floodplain. Two soil samples were previously collected at the pump station as part of a Phase II ESA, dated November 16, 2022. These soil samples did not contain contaminants above the applicable regulatory limits.

Source material for Stockpile 16 originated from excavation activities associated with Basin 3. The stockpile is currently located outside of the SMA and EC, within a designated stockpile area. Two soil samples were previously collected at Basin 3 as part of a Phase II ESA, dated November 16, 2022. These soil samples did not contain contaminants above the applicable regulatory limits. Sediment erosion control fencing is currently present.

The following areas have received fill soils at the Site:

Approximate Dimensions	Cu	urrent Location			Soil Origins		
(Feet)	Location	In EC?	In SMA?	Location	In EC?	In SMA?	
Approximately 1,750 feet long, up to 84 feet wide, up to 7 feet of fill	Quantum Place South – East of Existing Access Road	Yes	No	Basin DA- 2	Yes	No	
Approximately 1,050 feet long, up to 84 feet wide, and up to 7 feet of fill	Quantum Place South – West of Existing Access Road	Yes	No	Lot 110 North Borrow Area	No	No	
800 feet long, 1,100 feet	Lot 112A	Yes	No	Lot 110 North	No	No	



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Approximate Dimensions	Cı	Current Location			Soil Origins		
(Feet)	Location	In EC?	In SMA?	Location	In EC?	In SMA?	
wide, up to 2 feet of fill	Substation Pad			Borrow Area			
Approximately 6,550 long, up to 70 feet wide, and up to 7 feet deep	Happy Landing Road	No	No	Lots 303 & 304 Basin 3	No	No	

Note – Approximate dimensions were determined through review of available site plans and information provided by the site contractor, actual dimensions will need to be field verified. Width and depth dimensions vary dependent on ground elevations prior to the placement of fill, actual fill widths and depths may be less than maximum width/depth measurements provided above.

The eastern portion of Quantum Place South received fill material that originated from the excavation of DA-2, which is located within the EC but not in the SMA. Additional fills consisted of cuts from other portions of Quantum Place South. Two soil samples were previously collected at DA-2 as part of a Phase II ESA, dated November 16, 2022. These soil samples did not contain contaminants above the applicable regulatory limits. In addition, soils located along Quantum Place South were previously characterized as part of the same Phase II ESA. Soils sampled along Quantum Place South also did not contain contaminants above the applicable regulatory limits.

The western portion of Quantum Place South received fill material that originated from the excavation of borrow area on the northern portion of the Site that was historically utilized for agricultural purposes. The borrow area is located outside of the EC and the SMA. Additional fills consisted of cuts from other portions of Quantum Place South. Soils located along Quantum Place South were previously characterized as part of a Phase II ESA, dated November 16, 2022. Soils sampled along Quantum Place South did not contain contaminants above the applicable regulatory limits.

The substation received fill from the same borrow area the soils from the western portion of Quantum Place South. The borrow area is located outside of the EC and the SMA. Additional fills consisted of cuts from other portions of the substation. Soils located along at the substation were previously characterized as part of a Phase II ESA, dated November 16, 2022. Soils sampled at the substation did not contain contaminants above the applicable regulatory limits.

Happy Landing Road received fill materials from the excavation of Basin 3, which is located outside of the EC and the SMA. Additional fills consisted of cuts from other portions of the Happy Landing Road. Soils located along Happy Landing Road were previously characterized as part of a Phase II ESA, dated November 16, 2022. Soils sampled along Happy Landing Road



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did not contain contaminants above the applicable regulatory limits. A rail line was formerly on a portion of Happy Landing Road. A portion of this rail line was utilized as grading material at and proximate to the former rail line location.





