



Maryland

Department of the Environment

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Sent Via Electronic and Certified Mail

October 27, 2023

Mr. Scott Noteboom, Chief Technology Officer
Quantum Maryland, LLC
500 4th E Street, Suite 333
Austin, Texas 78701

Re: CHS Withdrawal Letter dated September 26, 2023
Former Alcoa Eastalco Property
5601 Manor Woods Road
Frederick, Maryland 21703

Dear Mr. Noteboom:

The Maryland Department of the Environment's (MDE) Land Restoration Program (LRP) is responding to your subject letter withdrawing parcels outside of the area controlled by an Environmental Covenant of the Quantum Maryland, LLC (QL) property at 5601 Manor Woods Road, Frederick, Frederick County, Maryland from oversight by the Controlled Hazardous Substance (CHS) Enforcement Program. While it is QL's right to withdraw these parcels (Withdrawn Property) from this voluntary program, we are making you aware of circumstances that may impact this decision.

You are correct that the parcel governed by the existing Environmental Covenant (EC Area) on the larger 2122.92-acre Former Alcoa Eastalco Property (Subject Property) requires LRP's oversight for existing environmental contamination. However, the approximately 1,665-acre Withdrawn Property was also owned and controlled by Eastalco Aluminum Company from 1968 until 2021, as part of the Eastalco Facility, and was never sufficiently characterized to determine the presence or absence of soil, groundwater, or soil gas impacts. A Phase I Environmental Site Assessment (Phase I) submitted by QL with the VCP application was not adequate, as discussed in detail in this letter. In addition, multiple prior Phase I reports submitted to LRP for the Withdrawn Property have also identified multiple potential recognized environmental concerns in the Withdrawn Property parcels.

Subject Property and Withdrawn Property

The Alcoa Eastalco Plant (Eastalco Plant) started operation in 1969 and occupies approximately 460 acres of the ~2200-acre parcel. This is the Subject Property. The 460 acres of land where the Eastalco Plant operated subsequently became the EC Area. In 1968, Alcoa Eastalco (Eastalco) purchased all of the property surrounding the former aluminum production facility to provide a containment of Eastalco Plant contaminants from impacting the nearby residential and agricultural properties. These lands outside of the Eastalco Plant facility comprised farmland, wooded land, grassland, and approximately

83 acres of stream, wetland, and waterways which were known as the “buffer zone properties.” Eight (8) farms along with 20 farm support structures existed on the buffer zone property, including barns, equipment, supply storage, vehicle maintenance areas, as well as underground and above ground storage tanks (USTs and ASTs). Most of the farms and support structures were demolished subsequently over a period of time after acquisition by Eastalco. This buffer zone area primarily forms the Withdrawn Property.

Phase I Report Concerns

The following is a parcel summary of the available information from the previous Phase I reports submitted by QL, regarding environmental concerns on the Subject Property and Withdrawn Property:

1. In 2002, MFG Inc. conducted a Phase I and II Environmental Site Assessment for Alcoa Eastalco in the buffer zone property to:
 - a. evaluate existing environmental concerns in the buffer zones from Eastalco Plant operation, and
 - b. provide Alcoa with an onsite environmental setting that will help with the future divestiture and development of the buffer zone property.

The majority of the buffer zone property (except the far southeastern and southwestern edges) were defined as areas with the greatest potential to be impacted by the Eastalco Plant. The 2002 report recommended more focused evaluation in a significant portion of the buffer zone property, prior to divestiture, to address moderate to high impacts from the Eastalco Plant operation as well as the presence of known environmental issues including USTs at several of the farms. The report concluded that the greatest amount of uncertainty in the buffer zone property evaluation is with the deep groundwater flow in the vicinity of the Eastalco Plant. Due to lack of information on groundwater flow direction outside of the Eastalco Plant area, migration of future hypothetical contamination cannot be accurately determined. The report recommended retaining areas located down- and cross-gradient to the Eastalco Plant to manage existing groundwater issues. This buffer zone property evaluation excluded air emission issues. Therefore, a limited surface soil sampling investigation was conducted in 2006 to assess impacts from air emissions of only fluoride and poly aromatic hydrocarbons (PAHs) within the buffer zone property.

2. In 2006, an updated Phase I ESA by Anchor Environmental was performed within the buffer zone to identify any issues that may potentially impact Eastalco’s future land management strategies. This report included concerns from leaking USTs, soil and surface water runoff from herbicide/pesticide application to crops, airborne deposition of fluoride and PAHs and down gradient groundwater impacts as potential environmental impacts. But no additional characterization was recommended or conducted.
3. In 2016, Environmental Consultants and Contractors Inc. (ECC) conducted a series of Phase I ESAs for several parcels that constitute the buffer zone property and identified several additional environmental issues. They are as follows:

a. Phase I ESA, Eastalco Property- Part 3A prepared by ECC dated June 2016: (Area 1 and 2 per GTA Phase I ESA)

This report identifies the following recognized environmental conditions (RECs) associated with the Subject Property along with fluoride contamination in the soil in the Subject Property. They are:

- i. Railroad spurs on the eastern part of the property
- ii. Buried waste material including steel pipe, metal scrap, and crushed concrete on the hillside adjacent to the grain pit.

Limited sampling data collected during a Phase II Investigation by ECC indicates the presence of arsenic and chromium, with the arsenic at levels of 57 ppm along the railroad tracks.

b. Phase I ESA, Eastalco Property- Part 3B prepared by ECC dated June 2016: (Area 3 per GTA Phase I ESA)

One gasoline UST and 2 potable wells were reported in this area. Additionally, approximately 40 feet of bare soil was also observed. The ECC Phase I ESA implied that the barren patch could indicate the soil in this area is contaminated by chemicals, petroleum, herbicide/pesticide, etc. This was identified as a REC and a sample collected from this location in 2016 indicates the presence of arsenic and chromium above MDE's non-residential cleanup standards (NRCS). The characterization was not sufficient and other chemicals including cyanide and total petroleum hydrocarbon (TPH) were not analyzed in this sample. Additionally, MFG 2005 ESA indicates that one of the buildings in the complex was used as a garage and equipment shed with potential for hydrocarbon and volatile organic compound (VOC) contamination.

c. Phase I ESA, Eastalco Property- Map 94, Parcel 3 prepared by ECC dated June 2016: (Area 4 per GTA Phase I ESA):

A gasoline UST was reported on the north side of the southern barn. Also, per the MFG 2005 ESA, empty 55-gallon drums were observed in one of the buildings which was possibly the old garage. There is potential for TPH and VOC contamination, which needs to be addressed prior to future development.

d. Phase I ESA, Eastalco Property- Map 94, Parcel 76 prepared by ECC dated June 2016 (Area 5 per GTA Phase I ESA):

The ESA refers to an orchard in the eastern portion of the property based on the review of topographic maps. Orchards typically are heavily sprayed with pesticides and consequently considered an area of concern until it can be cleared through sampling. Additionally, it is reported that the original farm was burned in 2001. This is a concern due to the potential for PAH contamination.

e. Phase I ESA, Eastalco Property- Map 94, Parcel 67, Tax Map 103, Parcel 28 prepared by ECC dated June 2016 (Area 6 and 7 per Phase I ESA):

The report refers to scattered debris, stained soil, and distressed vegetation near railroad easement areas. In addition, a berm was observed connecting the new design road to a small clearing in the central portion of the property. The report also confirms the presence of a temporary shooting range along with a figure showing a tentative location. Shooting ranges are associated with environmental issues including contamination of soil and groundwater from contaminants, including lead and mercury.

f. Phase I ESA Eastalco Property Parcel 9 prepared by ECC dated June 2016 (Area 7 per Phase I ESA):

This report refers to the presence of an orchard in the central-western portion of the parcel identified from the topographic map but not in available aerial imageries. Evidence of illegal dumping was observed in the wooded area with empty 5-gallon buckets, 55-gallon drums, scrap metal, and various unlabeled plastic containers. Three pole-mounted transformers were also reported near or within the property boundary.

During prior MDE oversight, the former manufacturing Eastalco Plant and immediate areas surrounding the Eastalco Plant were characterized and are currently subject to the EC. However, MDE has not been involved in site characterization of the buffer zone areas and the limited sampling data available to date is incomplete and does not provide adequate characterization of the buffer zone properties.

CHS Oversight Deficiencies

LRP's CHS Enforcement Program oversaw the development and implementation of a conditionally approved Environmental Management Plan (EMP) for the initial utility and roadway installation Phase 1 (EMP Area). The EMP Area consisted of Sewer lines (Phase 1A, 1B and B), potable cooling water lines (Eastern and Western), Happy Landing Road, Quantum Place South, Sediment basins (1,2,3, DA2 and DA11), Pump Station, and Electrical Substation. However, during implementation of the EMP, QL and their contractors initiated site work that involved large scale mass grading involving soil movement across the Subject Property. Soil movement and soil disturbance (mass grading) outside the EMP area was conducted without proper characterization through an approved plan and/or notification to MDE. MDE's understanding of the soil movement activities from the Subject Property EMP areas is incomplete and consequently we are currently trying to determine whether soil movement was in accordance with soil management protocol, as outlined in the EMP as well as in compliance with all local, State, and federal regulations. MDE required QL to provide a report detailing soil movement that occurred on the Subject Property with details on the source and volume of the displaced soil. QL submitted the Quantum Frederick – Phase 1A Soil Movement Construction Summary Report for the period from November 03, 2022 through and May 25, 2023 on August 18, 2023. However, this Report was incomplete and MDE had further questions and comments, which were sent to QL on August 28, 2023. Since then, MDE has received QL's response to comments dated October 10, 2023. However, this document also contains many statements with which MDE disagrees, and the document does not adequately address MDE's prior comments. Therefore, LRP has not approved the Quantum Frederick – Phase 1A Soil Movement Construction Summary Report outlining the soil movement activities at the Subject Property. Any soil piles that are currently present on the

Withdrawn Property have not been sampled via an approved LRP work plan nor approved by LRP for reuse as clean fill either on-site or off-site. QL must still address LRP concerns regarding unauthorized soil movement from the rail area, use of unapproved fill from a borrow area, and soil stockpile sampling and reuse to document that contamination has not been exacerbated on the Withdrawn Property.

Inculpable Person (IP) status understanding

QL was granted expedited IP status on June 22, 2021, and subsequently submitted a VCP application dated September 18, 2021, for the 2122.92-acre Subject Property. The Subject Property is comprised of the following tax parcel numbers: 01-005413; 01-005391; 23-437457; 01-000152; 01-005111; 01-005138; 01-005383; 01-005405; 01-005979; and 01-602350.

On May 4, 2022, QL submitted a letter to the MDE requesting CHS oversight for the Subject Property prior to acceptance into the VCP. A second QL letter dated June 8, 2022, clarified the CHS oversight was for the Subject Property as originally included in the VCP application.

Inculpable Person (IP) status is defined by Section 7-505 of the Environment Article, Annotated Code of Maryland and *only* exists through an applicant's participation in the VCP. An IP that withdraws from the VCP prior to acceptance in the VCP by MDE and prior to receiving and recording in the local land records a No Further Requirements Determination or Certificate of Completion from the Department may maintain IP status if they: 1) reapply to the VCP, 2) demonstrate compliance with the requirement to stabilize and secure the eligible property to ensure protection of the public health and the environment to the satisfaction of the MDE, and 3) confirm that there was no new contamination or the exacerbation of existing contamination at the eligible property. Successful completion of CHS oversight is accepted as demonstrating compliance with these requirements. Your letter states that "MDE confirmed that withdrawal from the VCP does not affect QL's Inculpable Person status and that QL may reapply to the VCP at a later date as an Inculpable Person." However, actions by the applicant after withdrawal will affect whether they maintain IP status if they reapply to the VCP. At this time, due to the ongoing investigation of violations of various MDE statutes and regulations and non-compliance with the CHS Environmental Management Plan (EMP) which resulted in LRP rescinding conditional approval of the EMP on May 25, 2023, the LRP cannot make a determination as to whether QL will qualify for IP status if they reapply to the VCP for all or portions of the property at a later date.

In summary, the 1,665-acres, located outside the boundaries of the Environmental Covenant and Soil Management Area, that have been withdrawn from CHS oversight have not been properly or fully characterized. LRP has not made any determination that the Withdrawn Property, which was owned and included as part of the whole Eastalco facility, meets any land use standard and has not been characterized to allow for unrestricted soil movement and groundwater discharge.

MDE suggests that QL may find it valuable to have the Withdrawn Property participate in either the VCP or CHS for oversight in order to be confident that the Withdrawn Property is suitable for reuse.

Sincerely,



Barbara Krupiarz
Land Restoration Program Manager

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