



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

JUNE 6, 2017

David Pytak
Aluminum Smelting & Refining Co.
250 Delaware Avenue
Buffalo, NY 14202

RE: Aluminum Smelting & Refining Landfill
Director's Authorization
Non-Approval
Industrial Solid Waste Landfills
Ashtabula County
ISWL018817

Ohio EPA JUN 6 '17
Entered Directors Journal

**Subject: Aluminum Smelting & Refining Landfill, Ashtabula County
Ohio Administrative Code (OAC) Rule 3745-30-08(E)(5) Non-Approval**

Dear Mr. Pytak:

On December 7, 2016, the Ohio Environmental Protection Agency (Ohio EPA), Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO) received a document titled "2016 Second Semi-Annual Assessment Report for Aluminum Smelting & Refining Landfill" dated December 6, 2016, for Aluminum Smelting & Refining Landfill (Facility) located in Ashtabula County. This document was submitted by Bowser-Morner, Inc., on behalf of Aluminum Smelting & Refining Company (ASR) pursuant to OAC Rule 3745-30-08(E)(5), and requested reinstatement of the ground water detection monitoring program for specific monitoring wells at the Facility and to release the owner or operator from the obligation to comply with the ground water quality assessment monitoring program. The assessment monitoring program was initially implemented due to the detection of statistically significant changes of specific conductance, calcium, chloride, barium, and magnesium in monitoring well AW-4. Following replacement of monitoring well MW-4 with MW-4R and installation of assessment monitoring wells AW-1 and AW-2, subsequent statistically significant increases (SSIs) have been detected. Specifically, arsenic in monitoring well AW-1; arsenic, calcium, and manganese in monitoring well AW-2; and arsenic, magnesium, and manganese in monitoring well MW-4R were detected during the October 25-26, 2016 ground water sampling event at the Facility.

Pursuant to OAC Rule 3745-30-08(E)(5), if the owner or operator determines, based on the results of the determination made according to OAC Rule 3745-30-08(E)(2), that no waste-derived constituents from the facility have entered the ground water, then the owner or operator shall request that the director approve reinstatement of the detection monitoring program described in OAC Rules 3745-30-08(C) and (D). Until the director approves reinstatement of the detection monitoring program, the owner or operator shall comply with OAC Rules 3745-30-08(E)(6) and (F).

The December 6, 2016 document concluded that the SSIs in arsenic in monitoring well AW-1; arsenic, calcium, and manganese in monitoring well AW-2; and arsenic, magnesium, and manganese in monitoring well MW-4R are not waste-derived constituents from the Facility that have entered the ground water because higher concentrations of arsenic, calcium, and manganese are found in the ground water at monitoring well AW-2 than at monitoring well MW-4R; and the alternate source of constituents in the ground water at monitoring well MW-4 is the result of dissolution as water passed through shallow soils and the grout seal.

Ohio EPA has reviewed the December 6, 2016 document and has determined that ASR has not provided sufficient evidence to demonstrate that the SSIs in arsenic in monitoring well AW-1; arsenic, calcium, and manganese in monitoring well AW-2; and arsenic, magnesium, and manganese in monitoring well MW-4R are not waste-derived constituents from the Facility that entered the ground water. Ohio EPA's conclusion is based upon the following information, which can be interpreted as defining a plume originating near the former location of monitoring well MW-4:

- The replacement of the damaged monitoring well MW-4 with monitoring well MW-4R, located further down gradient from the waste placement area due to surface conditions, did not change the conditions of the ground water at the former location of MW-4. ASR has not presented evidence that the contaminants detected in former monitoring well MW-4 are not still present at similar concentrations.
- Higher concentrations of chloride, iron, sodium, barium, magnesium, and total dissolved solids have been reported at monitoring well MW-4, adjacent to the landfill, rather than at MW-4R. ASR's interpretation of the contaminant plume dismisses the historical data from monitoring well MW-4.
- Concentrations of ammonia, sodium, and magnesium are higher at monitoring well MW-4R than at monitoring well AW-2. MW-4R is closer to, and more downgradient of, the disposed waste material than AW-2.
- Monitoring well MW-4R is not directly upgradient of monitoring well AW-2. Monitoring well AW-2 is farther from the landfill than MW-4R. The potentiometric surface map indicates that monitoring well AW-2 is directly downgradient of the northeast corner of the landfill.

For the noted reasons, Ohio EPA cannot determine that the SSIs at monitoring wells MW-4R, AW-1, and AW-2 are not a result of impact from the Facility. Therefore, I cannot approve reinstatement of the ground water detection monitoring program at monitoring well(s) AW-1, AW-2, and MW-4R. ASR shall comply with the ground water quality assessment program pursuant to OAC Rule 3745-30-08(E).

You are hereby notified that this action of the Director of Ohio EPA (Director) is final and may be appealed to the Environmental Review Appeals Commission pursuant to Ohio

Revised Code Section 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High St., 17th Floor
Columbus, Ohio 43215

If you have any questions concerning this letter, please contact Katharina Snyder, DMWM, NEDO at (330) 963-1257.

Sincerely,



Craig W. Butler
Director

CWB:KS:cla

ec: Lynn Sowers, Ohio EPA, NEDO, DMWM
Eric Adams, Ohio EPA, NEDO, DDAGW
Ray Saporito, Ashtabula County Health Department
Dawn Coleman, Bowser-Morner, Inc.
Dave Pytak, Aluminum Smelting & Refining Co.