

CHIO E.P.A.

FEB-9 2015

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

SALLAED UNECTOR'S JOURNAL

FEB 0 9 2015

Evan Jahn Facility Manager USA Waste Geneva Landfill, Inc. 4339 Tuttle Road Geneva, Ohio 44041

Re: Geneva Landfill Director's Action Non-Approval Municipal Solid Waste Landfill Ashtabula County MSWL018758

## Subject: Geneva Landfill, Ashtabula County Ohio Administrative Code (OAC) Rule 3745-27-10(D)(7)(c) Non-Approval

Dear Mr. Jahn:

On August 13, 2014, and October 17, 2014, the Ohio Environmental Protection Agency (Ohio EPA), Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO), received respectively, the documents titled *"2014 First Semiannual Ground Water OAC 3745-27-10(D)(7)(c)(ii) Demonstration"* dated August 11, 2014, and *"2014 First Semiannual Ground Water OAC 3745-27-10(D)(7)(c)(ii) Request – Supplemental Information"* dated October 16, 2014, for Geneva Landfill (Facility) located in Ashtabula County. The documents were submitted by Eagon & Associates, Inc., on behalf of USA Waste Geneva Landfill, Inc. pursuant to OAC Rule 3745-27-10(D)(7)(c), and requested continuation of the ground water detection monitoring program for monitoring well SW-5 at the Facility and to release the owner or operator from the obligation to comply with the ground water quality assessment monitoring program. The statistically significant change(s) detected in monitoring well SW-5 were ammonia (1.65 mg/L), chloride (827 mg/L), sodium (218 mg/L) and potassium (4.5 mg/L).

Pursuant to OAC Rule 3745-27-10(D)(7)(c), the owner or operator may demonstrate that a source other than the sanitary landfill facility caused the contamination, or that the statistically significant change(s) resulted from error in sampling, analysis, or statistical evaluation, or from natural variation in ground water quality, and request that the director approve continuation of the detection monitoring program.

The August 11, 2014, and October 16, 2014, documents concluded that the statistically significant change(s) in ammonia (1.65 mg/L), chloride (827 mg/L), sodium (218 mg/L) and potassium (4.5 mg/L) at monitoring well SW-5 were due to a source other than the landfill. Ohio EPA has reviewed the August 11, 2014, and October 16, 2014, documents and has determined that the owner or operator has not provided sufficient

Evan Jahn Geneva Landfill Page 2 of 3

evidence to demonstrate that the statistically significant change(s) in ammonia (1.65 mg/L), chloride (827 mg/L), sodium (218 mg/L) and potassium (4.5 mg/L) at monitoring well SW-5 were from a source other than the sanitary landfill facility, due to an error in sampling, analysis, or statistical evaluation, or from natural variation in ground water quality. Ohio EPA concluded the following:

- A recent sharp, upward trend with data exceeding the statistical limits is observed since 2013. Patterns are more defined than they were during past semiannual reporting and the patterns are typical of release detection.
- The ground water concentrations are 8.8 (sodium) to 89.9 (chloride) times higher in SW-5 than in upgradient monitoring well SW-1. The most plausible source of the additional sodium, ammonia, chloride, and potassium between SW-1 and SW-5 is the landfill.
- The maps of the shallow groundwater concentration patterns for ammonia, chloride, sodium, and potassium show concentration patterns that are perpendicular to the prevailing ground water flow. When a landfill becomes hydraulically connected to the shallow ground water, there is typically a radial flow pattern leading away from the landfill. The effect of such a connection, made in the vicinity of SW-5, would be an introduced ground water flow direction. The ground water concentration patterns, therefore, support the conclusion of a release from the landfill.
- It was noted that the leachate samples are collected from the lined eastern and northern portions of the landfill. Monitoring Well SW-5 is located immediately downgradient of the older, unlined southwest portion of the landfill. The leachate from the unlined portion may have different characteristics due to age and fill content. Because there is no simple way to collect a representative sample of leachate from an unlined landfill, precise comparisons between the leachate sample and the ground water quality at SW-5 cannot be made at this time.

Therefore, I cannot approve continuation of ground water detection monitoring at monitoring well SW-5. The owner or operator shall comply with the ground water quality assessment program pursuant to OAC Rule 3745-27-10(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 Section 3745.04 of the Ohio Revised Code. 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 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. Evan Jahn Geneva Landfill Page 3 of 3

Notice of the filing of the appeal shall be filed with the Director within three 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., 17<sup>th</sup> Floor Columbus, Ohio 43215

A detailed account of Ohio EPA's review of the ground water demonstration will be sent in a separate correspondence. If you have any questions concerning this letter, please contact Colum McKenna, NEDO, DMWM at (330) 963-1268.

Sincerely,

Craig W. Butler Director

CWB:CM:cla

cc: Jarnal Singh, Ohio EPA, NEDO, DMWM Raymond Saporito, Ashtabula County Health Department