



Mike DeWine, Governor  
Jon Husted, Lt. Governor  
Laurie A. Stevenson, Director

SEPTEMBER 30, 2019

Mr. John Verba  
Director of Public Services  
City of Brooklyn  
9400 Memphis Avenue  
Brooklyn, Ohio 44144

**Re: City of Brooklyn Landfill  
Director's Authorization  
Approval  
Municipal Solid Waste Landfills  
Cuyahoga County  
MSWL018802**

**Subject: City of Brooklyn Landfill, Cuyahoga County  
OAC Rule 3745-27-10(F)(8) Determination and Exemption from the  
Requirements of OAC Rule 3745-27-10(F)(2)(e)(ii)**

Dear Mr. Verba:

Ohio EPA SEP 30 '19  
Entered Directors Journal

On June 12, 2019, the Ohio Environmental Protection Agency (Ohio EPA), Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO) received the Corrective Measures Monitoring Plan (CMMP) documents for the closed City of Brooklyn Landfill (Facility). The CMMP was submitted by Civil & Environmental Consultants on behalf of the City of Brooklyn (Owner). Ohio EPA also received a request to delete 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) from the Corrective Measures Monitoring Program, which would be an exemption from the requirements of Ohio Administrative Code (OAC) Rule 3745-27-10(F)(2)(e)(ii).

The Facility was granted a variance from OAC Rule 3745-27-10(E) requiring ground water quality assessment monitoring with the condition that the Facility shall comply with OAC 3745-27-10(F)(8): *Determination that remediation is not necessary. The director may determine that remediation of a release of waste-derived constituents from the sanitary landfill is not necessary if the owner or operator demonstrates one of the following: (b) The constituents present in ground water that: (i) Is not currently or reasonably expected to be a source of drinking water. (ii) Is not hydraulically connected with waters to which the waste-derived constituents are migrating or are likely to migrate in concentrations that would exceed the ground water remediation standards established under paragraph (F)(7) of this rule.* The Owner included a demonstration pursuant to OAC Rule 3745-27-10(F)(8)(b), which shows that remediation is not necessary because ground water is not currently a source of drinking water and nor is it expected to become a drinking water source, and the ground water is not hydraulically connected to waters that waste-derived constituents can migrate to in concentrations that exceed the established ground water remediation standards (GWRS).

OAC Rule 3745-27-10(F)(2) requires the Corrective Measures Plan (CMP) contain a ground water CMMP and OAC Rule 3745-27-10(F)(7) requires that the CMP propose a

concentration level (GWRS) for each waste derived constituent detected in the ground water. OAC Rule 3745-27-10(F)(2)(e)(ii) requires sampling for parameters 1-66 of Appendix I of this rule that were determined not to have been released to ground water. The Owner requested to delete DCBP and EDB from the corrective measures monitoring list for the Facility. Sampling results for DCBP and EDB included in the exemption request support the removal of DCBP and EDB from the corrective measures monitoring parameter list. Based on the submitted data, the Facility has never had a verified detection of DCBP or EDB, and the parameters are not reasonably expected to be in or derived from the waste contained or deposited in the landfill.

The CMMP submitted on June 12, 2019 complies with the requirements contained in paragraphs (F)(2), (F)(7), and (F)(8) of OAC Rule 3745-27-10, including the requirement to be protective of human health and safety and the environment. Specifically, the CMMP includes provisions for semiannual sampling and analysis of ground water, a GWRS for each waste derived constituent detected in the ground water, and a demonstration which shows that remediation is not necessary.

According to the CMMP, the Owner will sample and analyze ground water and surface water at the Facility semiannually and evaluate the resulting data after each sampling event to determine if the results trigger an evaluation of the Facility's source controls.

The CMMP identifies 10 waste-derived constituents determined to be above background in the Upper Aquifer System. The Owner established GWRS for all 10 waste derived constituents at the Facility based upon established Maximum Contaminant Levels (MCLs), Secondary Maximum Contaminant Levels (SMCLs), U.S. EPA Regional Screening Level, USDA Nutrient Data Study, or Health Advisory Level.

The table below presents the 10 waste-derived constituents and their corresponding GWRS and the source for each standard in accordance with OAC Rule 3745-27-10(F)(7).

Waste Derived Constituent	GWRS	Basis for GWRS
Ammonia	30.0 mg/L	HAL
Antimony	0.006 mg/L	MCL
Arsenic	0.01 mg/L	MCL
Barium	2.0 mg/L	MCL
Chloride	250 mg/L	SMCL
Cobalt	0.006 mg/L	U.S. EPA RSL
Potassium	204 mg/L	USDA
Selenium	0.05 mg/L	MCL
Sodium	391 mg/L	USDA
Thallium	0.002 mg/L	MCL

Note: HAL = Health Advisory Level  
MCL = Maximum Contaminant Level  
SMCL = Secondary Maximum Contaminant Level  
U.S. EPA RSL = U.S. EPA Regional Screening Level for Tapwater (May 2018)  
USDA = United States Department of Agriculture, 2003 Nutrient Data Laboratory Study

Ohio EPA has reviewed the submitted information and concurs that the demonstration submitted in the CMMP satisfies the requirements of OAC Rule 3745-27-10(F)(8)(b)(i)

because the upper aquifer system underlying the Facility is not currently a source of drinking water and is not expected to be used as a source of drinking water in the future. Ohio EPA concurs also that the demonstration satisfies the requirements of OAC Rule 3745-27-10(F)(8)(b)(ii) that ground water is not hydraulically connected to waters where waste-derived constituents can migrate based on the geology of the site; also, previous surface water sampling results have not shown a connection. Therefore, further measures beyond the past removal of waste found outside the limits of waste placement and placement within the landfill during closure activities are not needed, and remediation is not necessary at the Facility.

Based on the information contained in the CMMP and the demonstration submitted pursuant to OAC Rule 3745-27-10(F)(8)(b), I have determined that remediation of the above-described release of waste derived constituents from the Facility is not necessary. As proposed in the CMMP, the Owner shall use the existing site controls and ground water monitoring to sample and analyze ground water semiannually at the Facility. After each sampling event, the Owner shall evaluate the resulting data to determine if the results trigger an evaluation of the Facility's source controls in accordance with the standards established in the CMMP.

Ohio EPA has also reviewed the exemption request for removing DBCP and EDB from the monitored parameter list and has determined that granting an exemption from the requirements of OAC Rule 3745-27-10(F)(2)(e)(ii) for the Facility is unlikely to adversely affect public health or safety or the environment. Therefore, pursuant to Ohio Revised Code (ORC) Section 3734.02(G) and OAC Rule 3745-27-03(B), the Owner is hereby granted an exemption from requirements in OAC 3745-27-10(F)(2)(e)(ii) only as it relates to determining the presence of DBCP and EDB in ground water above background levels at the Facility. The Owner shall continue monitoring all the wells at the Facility in corrective measures monitoring for parameters 1-27 and parameters 30-66 listed in Appendix I in accordance with OAC Rule 3745-27-10, unless otherwise authorized by Ohio EPA. This exemption shall remain in effect throughout the effective period of this authorization unless otherwise revoked.

This letter shall not be construed to release the Owner from the obligation to comply with the requirements of any other ground water quality assessment monitoring program being conducted at the Facility.

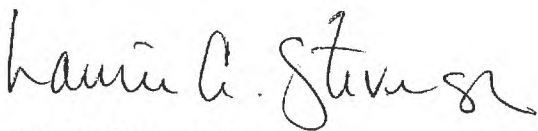
You are hereby notified that this action of the Director or Environmental Protection (Director) is final and may be appealed to the Environmental Review Appeals Commission pursuant to ORC Section 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which 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  
30 East Broad Street, 4<sup>th</sup> Floor  
Columbus, Ohio 43215

If you have any questions concerning this letter, please contact Paul Parrish, Ohio EPA, NEDO at (330) 963-1125.

Sincerely,

A handwritten signature in cursive script, reading "Laurie A. Stevenson".

Laurie A. Stevenson  
Director

LAS:PMP

ec: Lynn Sowers, Ohio EPA, DMWM, NEDO  
Eric Adams, Ohio EPA, DMWM, NEDO  
Bill Lutz, Ohio EPA, DMWM, NEDO  
Paul Parrish, Ohio EPA, DMWM, NEDO  
Jeremy Carroll, Ohio EPA, DMWM, CO  
Dane Tussel, Cuyahoga County Board of Health