



OHIO E.P.A.

JAN 20 2015

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

ENTERED DIRECTOR'S JOURNAL

JAN 20 2015

Tremont Landfill Company  
c/o Mr. Tom Danis  
The Greene  
70 Birch Alley, Suite 246  
Beavercreek, Ohio 45440

RE: Tremont Landfill  
Director's Authorization  
Approval  
Municipal Solid Waste Landfill  
Clark County  
MSWL019365

**Subject:** Selection of Corrective Measure for Monitoring Well MW-2

Dear Mr. Danis:

On May 5, 2014, the Ohio Environmental Protection Agency (Ohio EPA), Division of Materials and Waste Management (DMWM), Southwest District Office (SWDO) received a revised corrective measures plan (CMP) titled Corrective Measures Plan, MW-2, Tremont Landfill Company, Tremont Sanitary Landfill, dated April 30, 2014 for the Tremont Landfill (Facility) located in Clark County. The revised CMP was submitted by Hull & Associates, Inc. on behalf of Tremont Landfill Company, to address Ohio EPA comments concerning drafts dated August 7, 2009, May 29, 2013, and November 25, 2013. The April 30, 2014 CMP also addresses comments received during the Facility's public meeting, held on January 21, 2014 in accordance with Ohio Administrative Code (OAC) Rule 3745-27-10(F)(4).

The Facility is a closed municipal solid waste landfill and is currently in assessment monitoring for statistically significant increases in arsenic in monitoring well MW-2. Ground water impacts appear to be associated with anaerobic iron reducing conditions that have mobilized native arsenic.

The CMP proposes the following nine alternatives for corrective measures:

1. discontinuation of operations at the container storage area
2. enhancing the landfill cap and stormwater/leachate management system
3. installation of active gas extraction system
4. institutional controls
5. installation of a cut-off wall
6. ground water extraction for source control (i.e. containment)
7. ground water pumping and treatment (i.e. containment and cleanup)
8. combination of a cut-off wall and ground water extraction
9. continued monitoring with action levels

Three of the nine alternatives, numbers 1, 2 and 3, were previously implemented through closure of the Facility. Ohio EPA, Division of Drinking and Ground Waters reviewed the CMP, and recommended selection of alternative number 9. Alternative number 9 is the preferred corrective measure to address the potential presence of waste derived constituents on the southern downgradient perimeter of the Facility because the nearest potential ground water receptor is Chapman Creek, located about 500 feet south and downgradient of the Facility. Ohio EPA, Division of Surface Water assessed two miles of Chapman Creek in the vicinity of the Facility in 2007. The results of chemical and biological testing found during the assessment indicate that the entire two miles were in full attainment of the Coldwater Habitat (CWH) aquatic life use designation.

In order to be protective of Chapman Creek, alternative number 9 consists of a tiered sampling approach with target concentrations and higher action level concentrations which, if exceeded, will trigger additional corrective actions. Uppermost aquifer monitoring wells MW-2 and A89-2 are designated as corrective measures monitoring wells to be sampled semi-annually for REDOX-sensitive parameters, Appendix I parameters, and Appendix II parameters which are historically designated waste-derived parameters. Annual monitoring has not detected Appendix II parameters for the past ten years. The primary constituent of concern is arsenic, present in monitoring well A89-2 above the 10 ug/L maximum containment limit (MCL). If arsenic concentrations reported in monitoring well A89-2 should exceed the action level (100 ug/L), deemed protective of agricultural use per OAC Rule 3745-01-07, and surface water quality criteria per OAC Rule 3745-01-07(C), for two consecutive semi-annual sampling events, then semi-annual surface water sampling of Chapman Creek will be implemented to assure that the aquatic life criterion established for arsenic of 150 ug/L will not be exceeded. Sampling results indicated that arsenic in monitoring well A89-2 increased from 80 ug/L in November 2012 to 90 ug/L in June 2013.

Surface water samples will be collected upstream, downstream, and adjacent to the Facility. Samples will be analyzed for arsenic and other waste-derived constituents, as presented in Table 4 of the April 30, 2014 CMP. Should arsenic concentrations in the downgradient locations exceed the upgradient location for two consecutive semi-annual events, then one or more of the following corrective measures activities will be initiated: 1) streambed piezometer/drive point installation and monitoring, 2) preparation of a flow path hydrogeochemical mixing model, 3) additional toxicity testing, and 4) other corrective measures to be determined.

Ohio EPA has reviewed the April 30, 2014 CMP and determined that the selected alternative number 9 meets the requirements of OAC Rule 3745-27-10(F). Therefore, I select corrective measure alternative number 9 to be implemented at the Facility as described in the CMP. Tremont Landfill Company shall implement the selected corrective measure in accordance with the April 30, 2014 CMP, as received May 5, 2014.

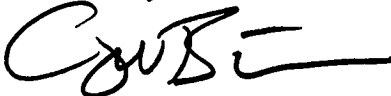
Mr. Tom Danis  
Tremont Landfill  
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You are hereby notified that this action of the Director of Environmental Protection (Director) is final and may be appealed to the Environmental Review Appeals Commission (Commission) pursuant to Ohio Revised Code 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 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 Street, 17<sup>th</sup> Floor  
Columbus, Ohio 43215

If you have any questions concerning this action, please contact Maria Lammers of Ohio EPA, SWDO at (937) 285-6046.

Sincerely,



Craig W. Butler  
Director

cc: Anne Kaup-Fett, Clark County Combined Health District  
Tracy Buchanan, DMWM-SWDO