



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

December 14, 2012

**RE: CLD/LEWIS LANDFILL
GROUND WATER
NOTICE OF VIOLATION**

CERTIFIED MAIL 7012 1010 0002 2260 2806

Mike Heher
CLD/Lewis Landfill
8100 South Stateline Road
Lowellville, OH 44436

Dear Mr. Heher:

The Ohio Environmental Protection Agency (Ohio EPA) has reviewed the following document:

May 2012 Semiannual Monitoring Event Report, Dated

The document contains:

- Results of the detection and assessment ground water monitoring event conducted in May 2012
- Notification of Statistically Significant Increases
- Notification of 3745-27-10(E)(5)(c) Appendix I and II Assessment Well Detections
- Semiannual Assessment Activities Report for the 1st half of 2012
- Semiannual Determination of Extent, Rate and Concentration
- MW-142C Third Round Background Sampling Results

The document is dated July 13, 2012 and was received on July 16, 2012. Silbaugh Hydrogeological Services prepared the document on behalf of County Land Development Landfill, LLC (CLD).

Detection and assessment samples were collected between April 30 and May 3, 2012. A resampling event was conducted on June 25 and June 27, 2012.

Listed below are confirmed statistically significant increases that occurred at detection wells. This list does not include VOC confirmations.

Confirmed statistically significant increases at detection wells

Detection Well	Parameter	May 2012 event mg/L	June 2012 resample, mg/L	Prediction Limit, mg/L
MW-2R	chloride	5.7	6.4	4.0
P-13B	potassium	9.6	8.9	8.2
MW-8D	chloride	2.4	2.0	1.8
MW-110C	chloride	77	78	68
MW-121C	chloride	40	66	25
MW-121C	sodium	24	34	16

The owner/operator plans to submit a demonstration report to allow for continued detection monitoring of these wells under OAC Rule 3745-27-10(D)(7)(c)(ii).

Ohio EPA has identified the following violation:

1. OAC Rule 3745-27-10 (E)(1); the owner or operator shall implement a ground water quality assessment plan capable of determining the concentration, rate, and extent of migration of waste-derived constituent(s) in the ground water.

The owner/operator did not follow the *Ground Water Quality Assessment Plan*. A sample was not collected from "MW-119C – spring." The spring did not have sufficient flow for sampling, and a sample was not collected during the May 2012 sampling event.

In order to return to compliance, the owner/operator must establish a new sampling location in this area that is capable of regularly yielding sufficient sample volume representative of ground water quality in the C-horizon. In the absence of a reliable sampling location, the owner/operator is unable to determine or verify the concentration and extent of migration of waste-derived constituents in ground water.

Ohio EPA requests the following additional information in order to determine compliance:

1. Compliance with OAC Rule 3745-27-10(C)(1) and OAC Rule 3745-27-10(B)(3) cannot be determined at this time. OAC Rule 3745-27-10(C)(1) states that the ground water monitoring program shall include consistent sampling and analysis procedures and statistical methods that are protective of human health and the environment and that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells installed, and OAC Rule 3745-27-10(B)(3) states that all monitoring wells shall be designed, installed, and

developed in a manner that allows the collection of ground water samples that are representative of ground water quality in the geologic unit being monitored.

Ohio EPA is unable to determine if the ground water quality sample results for AW-143C and AW-144C are representative. The owner/operator states that, "sodium is a soluble mineral that is a primary component of well installation materials (sodium bentonite used as an annular sealing material at AW-143C and AW-144C) and could potentially cause temporary changes in sodium concentrations." If, as suggested, sodium concentrations in wells AW-143C and AW-144C are due to well installation materials (sodium bentonite used as annular seal), then the wells may have been improperly installed.

In order to demonstrate compliance with OAC Rule 3745-27-10(C)(1) and OAC Rule 3745-27-10(B)(3), the owner/operator should determine if the ground water quality sample results for AW-143C and AW-144C are representative. The owner/operator should determine if AW-143C and AW-144C were properly installed.

Ohio EPA has the following comments regarding the submittal:

1. The owner/operator believes that potassium and sodium for assessment area MW-115C should be excluded from assessment considerations. The May 2012 Appendix I parameters 67-78 (excluding field parameters) were statistically evaluated at MW-115C. Chloride, potassium, and sodium statistically exceeded their intra-well prediction limits. At this time it appears that these parameters are waste derived and their rate and extent must be determined. The fact that they are non-hazardous and do not have established MCLs does not exclude them from the assessment process. Failure to determine the rate and extent of potassium and sodium will result in compliance issues.
2. Notification of Appendix I and II assessment detections was provided in accordance with OAC 3745-27-10(E)(5)(c). Volatile organic compounds were detected at assessment wells MW-122C, MW-112B, MW-111A, AW-131B and AW-127A and also Pond SG-4. TCE was detected at AW-135C in the May 1, 2012 sample but it was non-detect in the July 27, 2012 resample. VOC concentrations at AW-131B have increased and chlorobenzene, a new constituent of concern, has been confirmed present at AW-131B. VOCs have not been detected downgradient of AW-131B.
3. Ohio EPA has reviewed the *Semiannual Assessment Activities Report* for the 1st half of 2012 and has no comments.

Mike Heher
CLD/Lewis Landfill
December 14, 2012
Page 4

4. The results of the third background sampling event for MW-142C were reviewed and Ohio EPA has identified no compliance issues.

MW-142C is a detection well and was installed as a replacement of MW-6DR. It is located midway between MW-6DR and MW-122C in order to more fully characterize water quality in the C-horizon downgradient and on the east side of the CLD Landfill.

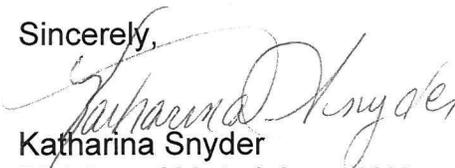
MW-142C was sampled on May 2, 2012. CLD submitted the laboratory results of Appendix I parameters 1-69 and turbidity, percentage of recovery of surrogates, and laboratory *Quality Assurance and Quality Control* report in accordance with OAC 3745-27-10(D)(5)(a) and 3745-27-10 (C)(10).

Laboratory results of background sampling of MW-142C detected no VOCs. However, results of some inorganic parameters, including chloride (240 mg/L) and sodium (140 mg/L) are high and are believed to be landfill waste-derived parameters.

Nothing in this letter shall be construed to authorize any waiver from the requirements of any applicable state or federal laws or regulations. This letter shall not be interpreted to release the Entity from responsibility under Chapters 3704, 3714, 3734, or 6111 of the Ohio Revised Code or under the Federal Clean Water or Comprehensive Environmental Response, Compensation, and Liability Acts for remedying conditions resulting from any release of contaminants to the environment.

If you have any questions concerning this letter, contact me at (330) 963-1257. Please submit a response to the notice of violation by January 14, 2013.

Sincerely,



Katharina Snyder

Division of Materials and Waste Management

KS:cl

cc: Kathryn Epp, DDAGW-NEDO
Dave Silbaugh, Silbaugh Hydrogeological Services
Joe Montello, Hydrogeology Manager, Republic Services, Inc.
Butch Bradburn
Mary Helen Smith, Mahoning County Health Department
Dave Fetchko, Mahoning County Health Department
File: [Singh/LAND/CLD/GRO/50] DMWM #4586