

\*REV\_4\*

Department:

Subdepartment:

\*DERR\*

\*NULL\*

DERR

<NONE>

Program:

\*RCRA\_C\_UNIT\_CLOSURE\*

DERR - RCRA C Unit Closure

Office Location:

Medium:

\*NWDO\*

\*WATER\*

NWDO

WATER

Doc Type:

Doc Subtype:

\*NOV\*

\*NULL\*

NOV

<NONE>

Facility County:

Facility ID:

\*48\*

\*348000589004\*

48 - LUCAS

348000589004

Date:

\*20130404\*

4/4/2013

Facility/Site/Location/Regulated Entity Name:

\*XXKEM,\_TOLEDO\*

Xxkem, Toledo

THIS BARCODE CONTAINS INVALID CHARACTERS...PLEASE REVIEW AND REENTER.

Facility Address 1:

\*NULL\*

Your input is 0 characters long (Max 40).

Facility Address 2:

\*NULL\*

Your input is 0 characters long (Max 40).

Facility City:

\*NULL\*

Facility State:

Facility ZIP: (00000 or 00000-0000)

\*NULL\*

\*NULL\*

<NONE>

Mailing Name:

\*NULL\*

Your input is 0 characters long (Max 40).

Mailing Address 1:

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Mailing Address 2:

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Mailing City:

\*NULL\*

Mailing State/Province:

Mailing ZIP: (00000 or 00000-0000 or X0X0X0)

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<NONE>

Project Name:

Project Type:

\*NULL\*

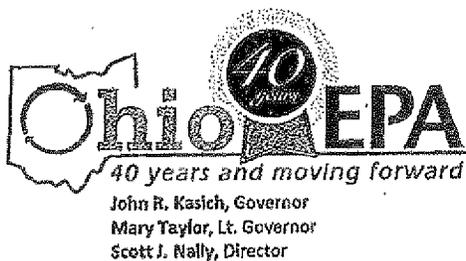
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Latitude:

Longitude:

\*NULL\*

\*NULL\*



April 4, 2013

Mr. Dan Pittman  
City of Toledo – Manager  
Hoffman Road Landfill  
3962 Hoffman Road  
Toledo, Ohio 43611

**Re: Notice of Violation  
Report of Groundwater Quality – November 2012 Sampling Event  
Former XXKem Site  
4015 Stickney Avenue, Toledo, Lucas County  
OHD 980 586 804**

Dear Mr. Pittman:

The Division of Environmental Response and Revitalization (DERR) requested that the Division of Drinking and Ground Waters (DDAGW) review the Former XXKem Facility's Report of Ground Water Quality for samples collected on November 27, 2012. The XXKem facility is owned by the City of Toledo, which is responsible for post-closure care of the facility. The document was reviewed to determine compliance with Ohio Administrative Code (OAC) Rule 3745-54-90 through 100 and the approved Post-Closure Plan. The subject document was received at the Northwest District Office on February 8, 2013.

#### Comments

#### **Violations**

- 1. Failure to maintain consistent sampling and analysis procedures to ensure monitoring results that provide a reliable indication of ground water quality**

The facility owner or operator (City of Toledo) is in violation of Ohio Administrative Code (OAC) Rule 3745-54-97(D), requiring that the ground water monitoring program include consistent sampling and analysis procedures and techniques that are designed to ensure monitoring results that provide a reliable indication of ground water quality below the waste management unit. To return to compliance, the City of Toledo must ensure that the procedures and techniques documented in the Post Closure Ground Water Monitoring Sampling and Analysis Plan (PCGWMSAP) (Appendix A of the Post-Closure Plan) are followed in future sampling events.

The PCGWMSAP Section 5.5 - Monitoring Well Purging - states that to ensure a representative ground water sample is being collected each monitoring well will be purged to remove any stagnant water in the well. The procedures to be followed during purging are included in SOP No. 1901. The SOP requires that after three well volumes have been purged, the facility must evaluate whether or not stabilization criteria have been achieved for three consecutive measurements. The stabilization criteria listed in SOP No. 1901 are as follows: pH  $\pm$  0.2 Standard Units (S.U.), specific conductance  $\pm$  3 percent, and temperature  $\pm$  0.5° Celsius.

The City of Toledo failed to meet the stabilization criteria for temperature at XMW-4 prior to collecting the sample. The Field Data Sheet for XMW-4 documents the following temperature measurements: initial volume = 14.7, 1<sup>st</sup> volume = 14.9, 2<sup>nd</sup> volume = 14.9, 3<sup>rd</sup> volume = 14.1, and 6/final volume = 14.1. The temperature measurement between three consecutive well volumes is greater than 0.5° Celsius.

## 2. Failure to use the approved PQLs

The City of Toledo is in violation of OAC Rule 3745-54-97(I)(5), requiring that any practical quantification limit (PQL) approved under OAC 3745-54-97(H) that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions that are available to the facility. To return to compliance, the City of Toledo must not exceed the PQLs approved in the PCGWMSAP during future ground water sampling events.

Listed below are the constituents analyzed during the November 2012, ground water sampling event that utilized a PQL above that approved in the Post Closure Plan. It should be noted that in letters dated September 27, 2011, and January 3, 2013, Ohio EPA advised the City of Toledo with respect to using the approved PQLs during ground water sampling events.

Constituent	November 2012 PQL (ug/l)	Approved PQL (ug/l)
Tetrahydrofuran	10	5
Cis-1,2-Dichloroethene	5	1
1,1,1-Trichloroethane	5	1
1,1,2-Trichloroethane	5	1
1,1-Dichloroethane	5	1
1,1-Dichloroethene	5	1
1,2-Dichloroethane	5	1
1,2-Dichloropropane	5	1

Constituent	November 2012 PQL (ug/l)	Approved PQL (ug/l)
1,4-Dioxane	100	50
2-Butanone	20	10
Benzene	5	1
Chlorobenzene	5	1
Chloroethane	5	1
Chloroform	5	1
Chloromethane	5	1
Ethylbenzene	5	1
Tetrochloroethene	5	1
Toluene	5	1
trans-1,2-Dichloroethene	5	1
Trans-1,3-Dichloropropene	5	1
Trichloroethene	5	1
Trichlorofluoromethane	5	2
1,2-Dichlorobenzene	5	1
1,4-Dichlorobenzene	5	1
Hexachlorobenzene	5	0.5

**More Information Needed to Determine Compliance**

**3. Missing PQL and MDL for Total Xylenes**

Compliance with OAC Rule 3745-54-97(I)(5), requiring that any PQL approved under OAC 3745-54-97(H) that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions that are available to the facility, cannot be determined at this time. For Ohio EPA to determine compliance, the City of Toledo needs to revise the analytical report to include the PQL used for total xylenes during the November 2012, ground water sampling event.

The analytical report for the November 2012, ground water sampling event does not contain the PQL or Method Detection Limit (MDL) for the constituent total xylenes. The approved PQL in the PCGWMSAP for total xylenes is 2 ug/l.

**4. Re-survey the top of casing elevation at XMW-3**

Compliance with OAC Rule 3745-54-97(F), requiring that the ground water monitoring program include a determination of the ground water surface elevation each time ground water is sampled, cannot be determined at this time.

For Ohio EPA to determine compliance, the City of Toledo needs to re-survey the top of casing elevation at XMW-3 using a professional surveyor licensed by the State of Ohio.

During a previous maintenance activity at the facility, The City of Toledo extended the PVC top of casing elevation at XMW-3 by approximately 2 feet. This maintenance activity was never followed up by re-surveying the top of casing elevation. Ohio EPA advised the City of Toledo that the top of casing needed to be re-surveyed at XMW-3 in letters dated June 7, 2012, and January 3, 2013. Failure to have the top of casing elevation re-surveyed by the May 2013, ground water sampling event may result in a violation.

#### Statements

##### 5. Checking for immiscible layers in the monitoring wells

Section 4.1.7 of the PCGWMSAP requires that the City of Toledo check for immiscible layers in the monitoring wells prior to purging. This information was not documented in the Field Data Sheets for the November 2012, ground water sampling event.

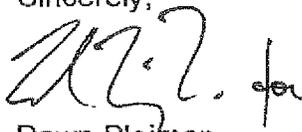
In a correspondence dated March 6, 2013, Hull & Associates, Inc. (Hull), on behalf of the City of Toledo, responded to Ohio EPA's letters dated May 2, 2012, and January 3, 2013, regarding comments provided during review of the reports of ground water quality for the November 2011, and May 2012, sampling events for the former XXKem facility. In the above referenced letters Ohio EPA requested more information to determine compliance with the Post Closure Plan. Specifically, Ohio EPA requested documentation of the presence/absence of an immiscible layer in each monitoring well, as required in the Post Closure Ground Water Monitoring Sampling and Analysis Plan. Hull's March 6, 2013, letter stated that for both the November 2011, and May 2012, sampling events Hull personnel used a Solinst Interface Probe to check for immiscible layers and that none were detected. Hull further stated that the Field Data Sheets (FDS) used to document the results of field activities will be revised to include the results of the immiscible layers check, and that the revised FDSs will be used beginning with the Spring 2013 semi-annual sampling event.

Ohio EPA confirmed with Ms. Stacia Dimit (Hull - Project Scientist) that Hull personnel checked for immiscible layers during the November 2012, ground water sampling event at the former XXKem facility and that none were detected. As documented in Hull's March 6, 2013 letter, Ohio EPA anticipates that the revised FDSs will include the results of the immiscible layer check beginning with the Spring 2013 ground water sampling event.

Mr. Dan Pittman  
April 4, 2013  
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A response addressing all areas indicated in the comments is required within 30 days from receipt. Please direct any questions about this document to Chad Zajkowski, Division of Drinking and Ground Waters, Northwest District Office, Ohio EPA at (419) 373-3097. All submittals should be sent to Dawn Pleiman, Division of Environmental Response and Revitalization, Northwest District Office, Ohio EPA, 347 North Dunbridge Road, Bowling Green, Ohio, 43402.

Sincerely,



Dawn Pleiman  
Environmental Specialist II  
Division of Environmental Response and Revitalization

//lr

pc: Ed Lim, Manager, Engineering, DERR, CO  
NWDO File: DERR-HW, Lucas County, XXKem, Ground Water  
RCRAInfo Data Entry, DMWM, CO

ec: Amy Wood, City of Toledo, Commissioner of Special Projects  
Michael Terpinski, Supervisor, DERR, NWDO  
Don Vogel, DERR, CO  
Chad Zajkowski, DDAGW, NWDO  
Dawn Pleiman, DERR, NWDO