

Northwest District Office

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Bob Taft, Governor
Bruce Johnson, Lieutenant Governor
Joseph P. Koncelik, Director

Re: Seneca County
Sunny Farms Landfill
Ground Water

January 9, 2007

Mr. Michael Holmes
Regus Industries, LLC
2730 Transit Road
West Seneca, NY 14224

Dear Mr. Holmes:

The Ohio Environmental Protection Agency (Ohio EPA) has reviewed a document titled, Review of the Statistical Analysis of Groundwater Quality Data May 2006 Semiannual Detection Monitoring Event, dated July 2006 for the Sunny Farms Landfill. The report was received by Ohio EPA on July 31, 2006.

The Sunny Farms Landfill is located in Loudon Township, Seneca County, Ohio. The solid waste ID number is 74-00-02. Seven wells are in assessment monitoring. Sixteen wells are in detection monitoring. Based on Ohio EPA's evaluation, the facility is presently operating under the correct ground water monitoring phases, the well system is adequate for the detection monitoring program and the owner/operator should continue to monitor under the current program. The assessment monitoring network is presently not adequate. Ohio EPA reviewed the report dated July, 2006 in order to determine compliance with OAC Rule 3745-27-10.

COMMENTS

VIOLATIONS

1. OAC Rule 3745-27-10(C)(7)(e): The owner/operator continues to be in violation of OAC Rule 3745-27-10(C)(7)(e), requiring: **The statistical method shall account for data below the limit of detection with one or more statistical procedures that ensure protection of human health and the environment. Any practical quantitation limit (PQL) used in the statistical method shall be the lowest concentration level that can be reliably achieved within the specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.**

According to the ground water detection monitoring plan (GWDMP) dated June 2005, page 29, **In the event all background data is reported below the laboratory PQL for an individual parameter, the nonparametric prediction limit is considered to be the highest historical PQL.**

According to the July 2006 data report, Appendix D, Test America laboratory sheet, "The ... (PQL) is the lowest concentration that the laboratory can reliably achieve..."

According to the July 2006 data report, Appendix D

Parameter	Nonparametric Intrawell Prediction Limit	PQL from January 2006 Sampling Event Appendix D
benzene	<2	<1
chloroethane	<10 ug/L	5 ug/L
1,1-dichloroethane	<5 ug/L	1 ug/L
antimony	<5 ug/L	1 ug/L
chromium	<10 ug/L	2 ug/L
cobalt	<100 ug/L	5 ug/L
selenium	<5 - <40 ug/L	5 ug/L
silver	<5 ug/L	0.5 ug/L

The prediction limits in the above table are based on the highest PQLs used for each of the parameters. The laboratory has been able to achieve lower PQLs than those listed above in the "prediction limits" column. This is reflected in the fact that the laboratory personnel have listed lower PQLs (these are listed in the "PQL from July 2006 Sampling Event Appendix D" column). In order to prevent this violation during future sampling events the owner/operator needs to use a PQL that is the lowest concentration level that can be reliably achieved within the specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility. The ground water detection monitoring plan needs to be revised to reflect this change. Any previous statistical analyses conducted using the higher PQLs need to be conducted again using the lower PQLs.

2. OAC Rule 3745-27-10(C)(7)(e): The owner/operator is in violation of OAC Rule 3745-27-10(C)(1)(a), requiring **(see the Rule citation in comment 2)**.

The background data sets for many of the parameters contain historical PQLs that are higher than the current PQLs. The parameters include benzene, chloroethane, 1,1-dichloroethane, vinyl chloride, antimony, barium, beryllium, cadmium, chromium, cobalt, selenium, and vanadium

Historic PQLs that are higher than the current PQLs may not be included in a background data set, as the lower current PQLs provide evidence that the historic PQLs no longer meet the requirements of OAC Rule 3745-27-10(C)(7)(e). In such circumstances, the owner/operator either needs to replace the higher historic PQLs with the lower current PQLs or analyze additional background samples and report the results using the lower current PQLs to replace the higher historic PQLs in the background data set.

3. OAC Rule 3745-27-10(C)(1)&(C)(1)(a): The owner/operator is in violation of OAC Rule 3745-27-10(C)(1)&(C)(1)(a), requiring: **(C)(1) 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.. (a) ...The owner or operator is required to use the procedures documented within the sampling and analysis plan.**

According to the **Groundwater Detection Monitoring Plan** dated May 2004 Revised June 2005, pages 15 & 16, **Four field parameters (pH, specific conductance, temperature, and turbidity) shall be measured...Sampling will proceed when the turbidity has improved and three successive measurements of the field parameters yield results within \pm 10 percent...**

According to the **Groundwater Monitoring well Record Forms** for wells MP1AR, 3A, 4A, 9A, 11A, 15A, 18A, 1B, 2B, 3B, 7B, 9B, 18B and resampled MP7B, the turbidity had not stabilized within 10 percent for the last three field measurements before sampling.

The owner/operator is in violation of OAC Rule 3745-27-10(C)(1)(a) for not following the **Groundwater Detection Monitoring Plan** requiring sampling to proceed when **three successive measurements of the field parameters yield results within \pm 10 percent**. The owner/operator is in violation of OAC Rule 3745-27-10(C)(1) for collecting samples that are not representative of the ground water quality. In order to meet the requirements of the rules in future sampling events, the owner/operator needs to follow the procedures in the **Groundwater Detection Monitoring Plan** and to purge the wells until stabilization is maintained over three successive measurements of the four field parameters.

MORE INFORMATION NEEDED TO DETERMINE COMPLIANCE

4. OAC Rule 3745-27-10(C)(1) & (10): Compliance with OAC Rule 3745-27-10(C)(1) & (10) cannot be determined at this time. For the (C)(1) rule citation see comment 4.

According to OAC Rule 3745-27-10(C)(10), **...All ground water elevation, sample analysis and statistical analysis results generated in accordance with paragraphs (B), (C), (D), (E) and (F) of this rule shall be submitted to Ohio EPA not later than seventy-five days after sampling the well...**

Parameter detections at concentrations greater than the MDL and less than the PQL need to be reported to provide an accurate representation of ground water quality per OAC Rule 3745-27-10(C)(1). Analytical results should be reported as less than the MDL if estimated concentrations, (i.e., concentrations between the MDL and PQL), are not detected. Estimated concentrations should be reported as numerical J-values or as present (P) or some other clear designation. However, owner/operator is not required to use the MDL or any values detected below the PQL for statistical comparisons unless a statistical method selected by the owner/operator incorporates these values as described above.

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The ground water results in this submittal for compliance and background do not appear to include estimated values or notation of their presence. The estimated values are considered to be data and are required to be included in data reports according to OAC Rule 3745-27-10(C)(10). The owner/operator needs to clarify whether any estimated values were detected, and if so, the estimated values or notation of their presence need to be submit to Ohio EPA within 30 days of the date of this letter.

If you have any questions please contact Jack Leow, C.P.G., at the Ohio EPA, Northwest District Office, Division of Drinking and Ground Waters, 347 N. Dunbridge Rd., Bowling Green, Ohio 43402. Submit all reports/data to Mary Ann Miller, Ohio EPA, Northwest District Office, Division of Solid and Infectious Waste Management, 347 N. Dunbridge Rd., Bowling Green, Ohio 43402.

Sincerely,



Mary Ann Miller, R.S.
Environmental Specialist
Division of Solid and Infectious Waste Management

/lb

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~~NWDO File: Seneca County, Sunny Farms Landfill, Groundwater~~

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