



State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Rd.
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Seneca County
Sunny Farms Landfill
Ground Water

March 28, 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 letter dated January 30, 2007 for the Sunny Farms Landfill. The letter was submitted in response to three Ohio EPA letters dated January 9, 2007 with the IDs 5-6238, 5-6239, and 5-6240.

The report is signed by a qualified ground water scientist, but the signature is not notarized.

COMMENTS

The format of the comments is as follows: A shortened version of the original Ohio EPA comment in **bold** type, a portion of the owner/operator's response (if necessary) in *italicized* type, and the Ohio EPA response in normal type.

Response to Ohio EPA ID 5-6238

EVALUATION OF THE OWNER/OPERATOR'S RESPONSE TO PREVIOUSLY CITED 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... To enter into compliance with this rule 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 (except for the parameters marked with the asterisk) The ground water detection monitoring plan has been revised to reflect this change.**

The owner/operator has adequately addressed the violation by revising the ground water monitoring plan (GWMP) in November 2006 and the background database. To avoid violations of OAC 3745-27-10(C)(7)(e) for future sampling events, the owner/operator should follow the revised GWMP for future sampling events and utilize the lowest reliably achievable PQLs.

Response to Ohio EPA ID 5-6239

EVALUATION OF THE OWNER/OPERATOR'S RESPONSE TO PREVIOUSLY CITED VIOLATIONS

1. **OAC Rules 3745-27-10(C)(6), (A) & (E)(6)(a). The owner/operator is in violation of the following rules, OAC Rule 3745-27-10(C)(6), requiring...**

The owner/operator has adequately addressed the violation of OAC Rules 3745-27-10(C)(6) and (A) by revising the ground water quality assessment plan (GWQAP) in November 2006. To avoid violations of OAC 3745-27-10(C)(6), and (A) for future sampling events, the owner/operator should follow the revised GWQAP for future sampling events and utilizing statistical limits equal to or below PQLs.

The owner/operator remains in violation of OAC 3745-27-10(E)(6)(a) for not making a first determination of rate, extent and concentration as stated in other letters.

2. **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 owner/operator has addressed the violation by revising the GWQAP in November 2006 and using the lowest PQLs achievable for analyzing the most recent ground water samples.

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

It is recommended that this violation be rescinded. The change in statistical limits did not constitute any changes in statistical methods: therefore, the owner/operator should not have been cited in violation of OAC Rule 3745-27-10(C)(1)(a) in this instance.

4. **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:**

According to the Groundwater Quality Assessment Plan Revision 3 dated May 2004 Revised June 2005, pages 30 & 31, 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 ± 10 percent...

According to the Groundwater Monitoring well Record Forms for wells MP2AR, 7A, 9A, 11A, 15A, 20A, 24A, 25A, 26A, and 27A, the turbidity had not stabilized within 10 percent for the last three field measurements before sampling. (note, the list of wells should have been MP7A, 9A, 20A, 24A, 25A, 26A, and 27A).

According to the letter, "Note that there is no reference to stabilization of turbidity. Therefore, the procedures in the GQAP (B&N June 2005) were followed, and were consistent with the current published guidance at the time..."

To state again According to the Groundwater Quality Assessment Plan Revision 3 dated May 2004 Revised June 2005, pages 30 & 31, 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 ± 10 percent...

The plan clearly states that there are four field parameters which included turbidity. The violation of OAC Rule 3745-27-10(C)(1)(a) is a historical violation that cannot be corrected.

In order to meet the requirements of OAC Rule 3745-27-10(C)(1)(a) in future sampling events, the owner/operator needs to follow the procedures in the November 2006 revision of the GWQAP and to purge the wells until stabilization is maintained over three successive measurements of the four field parameters.

The violation of OAC Rule 3745-27-10(C)(1) is a historical violation that cannot be corrected. The stabilization criteria in the GWQAP were not followed during the collection of samples; therefore, the samples were not representative of the ground water quality. Also the extremely high turbidity of the samples in MP24A and 27A were not representative of the ground water quality. These data cannot be added to the background data sets.

MORE INFORMATION NEEDED TO DETERMINE COMPLIANCE

5. **OAC Rule 3745-27-10(B)(3) & (B)(3)(e). Compliance with OAC 3745-27-10(B)(3) & (B)(3)(e) can not be determined at this time. According to OAC Rule 3745-27-10(B)(3),**

The field measurements recorded on the Groundwater Monitoring well Record Forms for wells MP24A (1st field measurement >1000 NTUs to 7th/final field measurement 308 NTUs) and 27A (1st field measurement 665 NTUs to 7th/ final field measurement >1000 NTUs) show excessive turbidity. The samples are not representative of the ground water quality and the wells have not been operated and maintained to perform to design specifications. The owner/operator needs to develop the wells, or install replacement wells, or determine whether or not the pumps are placed high enough above the bottoms of the wells to not agitate any fine material accumulating at the bottom and raise the pumps, in order to avoid this violation for future sampling events.

...It should be noted that the turbidity values were recorded as 72.5 NTU and 97.6 NTU in MP-24A and MP-27A, respectively, during the November 2006 sampling event, indicating that the natural turbidity concentrations have decreased since the May 2006 sampling event...

It cannot be determined at this time if the wells meet the requirements of OAC Rule 3745-27-10(B)(3) & (B)(3)(e) because of the significant change in turbidities concentrations. The owner/operator needs to explain how turbidities can change so drastically in wells that are suppose to be designed, installed, developed, operated and maintained to perform to design specifications throughout the life of the well.

At other sites in Ohio where low flow sampling has been employed, it has been determined that sufficient amounts of water had not been purged from the wells when low flow purging is used by the owner/operator. It was suggested by the Ohio EPA that the owner/operator purge additional water from the wells before collecting the samples. The turbidities were reduced by purging additional ground water from the wells before collecting the samples.

6. **Compliance with OAC Rule 3745-30-08(C)(1) cannot be determined at this time. OAC Rule 3745-27-10(C)(1) requires that,**

The owner/operator utilizes low flow purging with bladder pumps based wholly on stabilization of indicator parameters. According to the Groundwater Monitoring Well Record Forms, the owner/operator purged less than a screen volume from each well during the sampling round....

The owner/operator followed the guidelines in the Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring (TGM) dated February 1995 for sampling events prior to November 2006. The owner/operator has revised the procedures for purging wells and appear (quick review of the field data sheets for the November 2006 sampling event) to have utilized them for the November 2006 sampling event. The procedures in the Groundwater Quality Assessment Plan and the Groundwater Detection Monitoring Plan follow the guidelines in the revised Chapter 10 of the TGM. The owner/operator appears to have averted a violation of OAC Rule 3745-30-08(C)(1).

Response to Ohio EPA ID 5-6240

EVALUATION OF THE OWNER/OPERATOR'S RESPONSE TO PREVIOUSLY CITED VIOLATIONS

1. OAC Rule 3745-27-10(C)(7)(e): The owner/operator has addressed the violation of OAC Rule 3745-27-10(C)(7)(e), requiring: **The statistical method ...**

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.**

The owner/operator has addressed the violation by revising the GWDMP in November 2006 and revising the background database. To avoid violations of OAC 3745-27-10(C)(7)(e) for future sampling events, the owner/operator should follow the revised GWDMP and utilize the lowest reliably achievable 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 owner/operator either needs ...to replace the higher historic PQLs in the background data set.

The owner/operator has revised the background database for the detection monitoring wells by eliminating the higher historical PQLs; therefore, the violation has been addressed.

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**

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 ± 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.

Response: See response to Comment 4 of Ohio EPA letter ID 5-6239 above.

See Ohio EPA Comment 4 on page 3 and 4 above.

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.**

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.

A table summarizing the presence of estimated values between the PQL and MDL for the May 2006 sampling event has been submitted; therefore, the owner/operator has averted a violation.

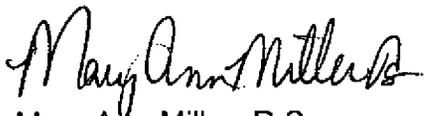
According to the owner/operator, "It should be noted that the May 2006 sampling event was conducted under the June 2005 GDMP and GQAP, which did not include the requirement to submit information with regard to estimated values."

Mr. Michael Holmes
March 28, 2007
Page 7

The owner/operator is reminded that the attachment to the January 21, 2005 letter from Dan Harris, the chief of the Ohio EPA, Division of Solid and Infectious Waste Management, stated **"Values greater than the MDL and less than the PQL can be reported either as an estimated concentration with a "J" qualifier or reported without a concentration with a notation that it was present. It is recommended that all owners who use this option use "P" indicating the presence of the constituent was detected. An explanation of the use of this nomenclature should be included in the ground water monitoring report. Reporting detections above the MDL also is compliant with OAC Rule 3745-27-10(A)(1), which requires SWLFs to implement a ground water monitoring program capable of determining the impact of the SWLF on the quality of ground water."** Not reporting the detection of parameters between the MDL and PQL is a violation of OAC Rule 3745-27-10(A)(1); therefore, it was a requirement.

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

/csl

pc: John Walker, Sunny Farms Landfill, LLC
Brendon Pantano, Sunny Farms Landfill, LLC
Nicki Rumschlag, Seneca County Health Department
Michael E. Leone, Burgess & Niple, Inc.
Carl Mussenden, DSIWM, CO
Nick Bryan, AGO
NWDO File: Seneca County, Sunny Farms Landfill, Groundwater

ec: Jack Leow, DDAGW, NWDO
Habib Kaake, DSIWM, NWDO
Carol Norman, DSIWM, NWDO
Mary Ann Miller, DSIWM, NWDO

id: 5-6704