



State of Ohio Environmental Protection Agency

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

Re: Notice of Violation
EOLM Construction & Demolition
Debris Landfill
Allen County

October 14, 2009

Mr. Ben Hefner
EOLM
1500 Ft. Amanda Road
Lima, Ohio 45804

Dear Mr. Hefner:

On August 27, 2009, I, representing the Ohio Environmental Protection Agency (Ohio EPA) accompanied Bill Kelly with the Allen County Health Department on an inspection of EOLM Construction and Demolition Debris Landfill (Facility).

The intent of this letter is to document the observations made during the August 27, 2009, inspection. Included with the letter are photos taken by Ohio EPA during the inspection, for your convenience they are numbered as referenced in this letter. For ease of reading this letter has been divided into six separate sections; leachate, cover, unauthorized materials, overfill, leachate recirculation, and compliance actions required.

Leachate

Construction demolition debris had been filled over the area in Cell 3, which during the June 3, 2009 inspection was observed to contain a large amount of ponded leachate. A temporary sump had been excavated through the waste, stopping just short of the drainage layer. Leachate was actively collecting in this area where it was being pumped out and discharged within the Active Licensed Disposal Area (ALDA), approximately 50-feet upslope of the temporary sump (Photos 1 and 2). At the time of the inspection approximately six inches of leachate was present in the temporary sump; however, based on staining within the excavated area, greater than two feet of leachate had been previously accumulated in the temporary sump. No efforts had been made to correct the issues with the operation of the leachate collection system. Additionally, a temporary drainage feature leading to a sump area had been excavated into waste along the southern side slope of Cell 2 (Photo 3).

Below are the violations related to this issue:

1. Ohio Administrative Code (OAC) Rule 3745-400-07(F)(5)(c)(ii) states, "The leachate collection system shall at a minimum be designed to be capable of maintaining less than one foot depth of leachate over the *in situ* and/or added geologic material or



The leachate collection system was not effectively maintaining less than one foot of head over the *in situ* liner at the Facility, six inches over the one foot of drainage layer was observed in the temporary sump and staining suggesting that a minimum of two feet of leachate had previously been present in the temporary sump. Additionally, the temporary sump is located approximately 30-feet upslope of the lowest point of the cell floor; therefore, it is likely that depths greater than what was observed in the sump exist in other areas of Cell 3. There are likely multiple contributing factors for this situation, one of which is the fact that there is only one sump area servicing two cells. Additionally, there are no plans for adding additional sump areas as additional cells are added. Based on the current observations of conditions at the Facility it does not appear that the design of a single sump system is sufficient for two cells, let alone additional cells that are proposed to be added. **The owner/operator is in violation of OAC Rule 3745-400-07(F)(5)(c)(ii) for not designing a leachate collection system capable of maintaining less than one foot depth of leachate over the *in situ* liner.**

2. Ohio Administrative Code (OAC) Rule 3745-400-07(F)(5)(c)(vi) states, "The leachate collection system shall at a minimum be designed to function without clogging."

The leachate collection system was not effectively directing leachate from Cell 3 to the leachate sump located in Cell 2, and appeared to be clogged either in the drainage layer or other component of the collection system. **The owner/operator is in violation of OAC Rule 3745-400-07(F)(5)(c)(vi) for not designing a leachate collection system that can function without clogging.**

3. OAC Rule 3745-400-11(E)(1) states, The owner/operator shall maintain the integrity of the engineered components of the facility and repair any damage to or failure of the components. "Engineered components" includes the components described in rule 3745-400-07 of the Administrative Code and components of the groundwater monitoring system(s) installed in accordance with rule 3745-400-10 of the Administrative Code.

The leachate collection system was not effectively directing leachate from Cell 3 to the leachate sump located in Cell 2 and appeared to be clogged either in the drainage layer or clogged/damaged in another component of the collection system. **The owner/operator is in violation of OAC Rule 3745-400-11(E)(1) for not maintaining the integrity of the engineered components of the facility and for not repairing any damage to or failure of the components.**

4. OAC Rule 3745-400-11(P)(1) states, "The owner or operator shall operate the leachate collection system to maintain no more than one foot of head anywhere in the *in situ* and/or added geologic materials or constructed liner with the exception of the sump area(s).

As previously stated leachate was observed to be accumulated at depths between six inches and two above the one foot of drainage layer, within the excavated sump and greater depths are likely present within Cell 3. **The owner/operator is in violation of OAC Rule 3745-400-11(P)(1) for not operating the leachate collection system to maintain no more than one foot of head anywhere in the *in situ* liner.**

5. OAC Rule 3745-400-11(P)(2) states, "The owner or operator shall maintain the leachate collection system in such a manner as to prevent blockage or clogging that could impede the proper collection of leachate. If a collection piping network is utilized in the leachate management system, the owner or operator shall inspect it to verify no crushing or clogging exists after placement of the first lift of debris and annually thereafter".

The leachate collection system was not effectively directing leachate from Cell 3 to the leachate sump located in Cell 2, and appeared to be clogged either in the drainage layer or other component of the collection system. Additionally, an inspection of the collection system after placement of the first lift of debris was never completed. **The owner/operator is in violation of OAC Rule 3745-400-11(P)(2) for not maintaining the leachate collection system in such a manner as to prevent blockage or clogging that could impede proper collection of leachate, and for not completing an inspection of the collection system after the placement of the first lift of debris and annually thereafter.**

6. OAC Rule 3745-400-11(P)(3) states, "The owner or operator shall manage and dispose of leachate in accordance with applicable regulations."

Allowing six inches to two feet of leachate to accumulate above the one foot of drainage layer is not proper management of leachate. **The owner/operator is in violation of OAC Rule 3745-400-11(P)(3) for not managing and disposing of leachate in accordance with applicable regulations.**

7. OAC Rule 3745-400-11(B)(1) states, "The owner or operator shall conduct all operations at the facility in strict compliance with the license, any orders, and other authorizing documents issued in accordance with Chapter 3714. of the Revised Code."

The owner/operator had constructed a temporary sump within waste in Cell 3 and a drainage feature leading to a temporary sump within waste in Cell 2. Neither of these features are included in the license application. **The owner/operator is in violation of OAC Rule 3745-400-11(B)(1) for not conducting operations at the Facility in strict compliance with the license.**

Cover

During the inspection it was observed that a portion of Cell 3 had been covered; however, large areas of both Cells 2 and 3 still remain uncovered (Photo 4). Many of these areas have never been covered, or have not been covered in years, as documented by previous Allen County Health Department inspection letters and observations made during inspections where Ohio EPA accompanied the Allen County Health Department. Areas that were covered are covered with foundry ash. Significant areas of erosion and flagging waste due to scoured cover material, were observed throughout the covered areas, indicating less than adequate cover (Photo 5). Below are the violations related to these issues:

8. OAC Rule 3745-400-11(Q)(2) states, "The owner operator shall grade the facility and provide drainage systems to insure minimal infiltration of water through the cover material and cap system."

Inadequate grading and drainage system were evident through observations of areas of erosion and/or stripped cover. These areas, in addition to the questionable ability of the cover material itself to withstand erosion and scouring on the steep slopes, were not ensuring minimal infiltration of water through the cover. Additionally, the owner/operator had excavated a drainage swale into waste on the south slope of Cell 2. The swale led to an excavated sump, allowing surface water to channel down the swale and collect in the excavated sump where it would then infiltrate into the cell.

The owner/operator is in violation of OAC Rule 3745-400-11(Q)(2) for not grading the Facility and providing drainage systems to insure minimal infiltration of water through the cover material.

9. OAC Rule 3745-400-11(Q)(3) states, "If ponding or erosion occurs in active or inactive licensed disposal areas, the owner or operator shall correct the conditions causing the ponding or erosion."

Significant erosion and scouring was observed in areas that were covered. Many of these areas, such as the western and northern slopes of Cell 2, have had erosion throughout several inspections in which Ohio EPA accompanied the Allen County Health Department, indicating that the owner/operator is not adequately addressing these areas in a prompt manner. **The owner/operator is in violation of OAC Rule 3745-400-11-(Q)(3) for not correcting the erosion and the conditions causing the erosion.**

10. OAC Rule 3745-400-11(H)(2) states, "Preparing and utilizing an alternative fire prevention plan acceptable to the licensing authority. The plan shall include the monthly application of noncombustible cover plus another method(s) to prevent fires."

Many of the areas of Cell 2 have never been covered or have not been covered in years, as documented by previous Allen County Health Department inspection letters and observations made during inspections where Ohio EPA accompanied the Allen County Health Department.

The owner/operator is in violation of OAC Rule 3745-400-11(H)(2) for not applying monthly cover of noncombustible cover.

Unauthorized Materials

Observations made of unloading areas, as well as uncovered areas, indicated various amounts of disposed solid waste, such as furniture cushions, clothing, non-construction demolition packaging (food wrappers, drink containers, etc.), mattresses, toys, and other miscellaneous solid waste. Additionally, during the inspection a load containing mostly packaging material was accepted and disposed of (Photo 6). Below are the violations related to these issues:

11. OAC Rule 3745-400-11(F)(2) states, "The owner operator of a facility shall not dispose of any solid waste except as follows:
 - (a) Packaging which results from the use of construction materials may be disposed **if it is incidental** to the load.
 - (b) Tree stumps, trunks and clean branches exceeding 4 inches (25 cm) in diameter may be disposed. For the purpose of this rule clean branches mean those without leaves and smaller branches attached.
 - (c) Asbestos materials subject to NESHAP, 40 CFR Part 61, subpart M, may be disposed only if the necessary air pollution control permits have been issued."

Observations made of unloading areas as well as uncovered areas indicated various amounts of disposed solid waste. Additionally, a load containing almost entirely packaging material was accepted and disposed of. **The owner/operator is in violation of OAC Rule 3745-400-11(F)(2) for disposing of solid waste.**

12. OAC Rule 3745-400-11(B)(1) states, "The owner operator shall conduct all operations at the facility in strict compliance with the license, any orders, and other authorizing documents issued in accordance with Chapter 3714. Of the Revised Code."

Tab 10 of the license application describes how through a pre-acceptance screening program operations at the Facility will be conducted to prevent **any** solid waste from being disposed of at the Facility. As stated above various amounts of disposed solid waste was observed throughout active areas of the Facility. Additionally, a load containing almost entirely packaging material was accepted and disposed of at the Facility. **The owner/operator is in violation of OAC Rule 3745-400-11(B)(1) for not conducting operations in strict compliance with the license, any orders, and other authorizing documents.**

Overfill

During review of the 2009 license application review process, prior to issuance of the 2009 license, it was discovered that areas of the northern and southern slopes of Cell 2 were filled beyond the active licensed disposal area (ALDA). The owner operator has been in violation, is in violation, and will continue to be in violation of the following until this issue is corrected:

13. OAC Rule 3745-400-11(B)(1) states, "The owner operator shall conduct all operations at the facility in strict compliance with the license, any orders, and other authorizing documents issued in accordance with Chapter 3714. Of the Revised Code. "

The license application outlines the limits of waste for the entire ALDA, including the northern side slope of Cell 2. During a review of the 2009 license application, and a comparison of drawings illustrating what was approved for construction of the northern and southern slopes of Cell 2 and what was actually constructed, it was discovered that the northern and southern side slopes were constructed beyond the approved limits. While the area along the southern slope was outside of the ALDA it was still within the inactive licensed disposal area (ILDA), in an area planned for future waste placement. The Allen County Health Department approved a change to the license application, extending the ALDA, and allowing the waste along the southern side slope to remain in place, resolving the violation in that area. However, waste along the northern side slope is outside of both the ALDA and ILDA, and therefore must be relocated. During the inspection it was observed that relocation activities were taking place along the northern side slope of Cell 2; however, no documentation regarding the relocation has been received by Ohio EPA to resolve this violation. **The owner/operator continues to be in violation of OAC Rule 3745-400-11(B)(1) for not conducting operations in strict compliance with the license.**

14. OAC Rule 3745-400-11(B)(2) states, "The owner operator shall dispose of construction and demolition debris only within the active licensed disposal area."

The license application outlines the limits of waste for the entire ALDA, including the northern side slope of Cell 2. During a review of the 2009 license application, and a comparison of drawings illustrating what was approved for construction of the northern and southern slopes of Cell 2 and what was actually constructed, it was discovered that the northern and southern side slopes were constructed beyond the approved limits. While the area along the southern slope was outside of the ALDA it was still within the inactive licensed disposal area (ILDA), in an area planned for future waste placement. The Allen County Health Department approved a change to the license application, extending the ALDA, and allowing the waste along the southern side slope to remain in place, resolving the violation in that area. However, waste along the northern side slope is outside of both the ALDA and ILDA, and therefore must be relocated. During the inspection it was observed that relocation activities were taking place along the northern side slope of Cell 2; however, no documentation regarding the relocation has been received by Ohio EPA to resolve this violation. **The owner/operator continues to be in violation of OAC Rule 3745-400-11(B)(2) for filling outside of the ALDA.**

Leachate Recirculation

Despite Ohio EPA's concerns, the Allen County Health Department has continued to approve the owner/operators request to recirculate leachate.

As illustrated by the first six violations, leachate continues to be a significant issue at the Facility. Additionally, the Facility does not have a groundwater monitoring program to ensure that leachate is not contaminating groundwater at the Facility. The majority of the issues pertaining to leachate may be minimized or eliminated by discontinuing leachate recirculation and appropriately disposing of leachate. If the Facility continues to recirculate, as they are approved to do, Ohio EPA encourages the owner/operator to do so in a responsible manner. This would include the following:

- During periods of high precipitation the owner/operator should consider pumping and disposing of leachate instead of recirculation.
- Currently recirculation activities consist of pumping leachate from the sump to the top of cell two where it drains onto a very limited area. The owner/operator should consider recirculation in a more effective manner such as; recirculating onto a larger area to disperse the leachate evenly over the waste and allow for even absorption, and recirculating onto the working face to aid in waste compaction.

Compliance Actions Required

The following action must be taken by the owner/operator to resolve violations and bring the Facility into Compliance:

Violations 1 through 6

- The owner/operator shall fully and adequately investigate why the leachate collection system is not functioning properly, this investigation shall include a physical or visual inspection of the entire leachate collection system piping network (camera, jet rod, etc.).
- Once the cause of the significant accumulation of leachate is determined the owner/operator shall demonstrate in writing to Ohio EPA and the Allen County Health Department, as to what the contributing factors were, and how this issue has been adequately corrected.

Violations 1 and 2

- The owner/operator shall analyze conditions leading to the failure of the current leachate collection system and address the inadequacies in the design of leachate collection systems in future cell construction.

- The owner/operator shall either submit justification to Ohio EPA and the Allen County Health Department of how a single sump system is sufficient for the entire planned Facility, or submit a redesigned plan in the 2010 license application, which will include a sufficient number of sump systems for the entire planned Facility.

Violation 6

- The owner/operator shall inspect the entire leachate collection system (jet rod, camera inspection, etc.) annually for the entire leachate collection system, and after the first lift of waste placement for future cells.

Violation 7

- The owner/operator shall immediately repair the temporary drainage feature constructed in waste, located along the south slope of Cell 2.

Violations 8 and 9

- The owner/operator shall respond in writing to Ohio EPA and the Allen County Health Department, indicating how current areas of erosion will be corrected, and how future areas of erosion will be corrected in a prompt manner.
- The owner/operator shall respond in writing to Ohio EPA and the Allen County Health Department, indicating how areas of future erosion will be prevented, as to insure minimal infiltration of water through the cover. As part of this response the owner/operator should consider the utilization of a more suitable cover material that will better withstand erosion and scouring on the steep slopes, or adjust the grade of the slopes and drainage to be more accommodating for the foundry ash cover.

Violation 10

- The owner/operator shall respond in writing to Ohio EPA and the Allen County Health Department, indicating how operations will be adjusted to insure that monthly cover is applied.

Violations 11 and 12

- The owner/operator must submit in writing to Ohio EPA and Allen County Health Department, a statement indicating how Facility operations will be altered to ensure that all solid waste is removed through the pre-acceptance screening process, prior to disposal. The owner/operator shall also include a statement under Tab 10 in the pre-acceptance screening program section, reflecting the inability to accept packaging material, with the exception of that which is incidental to the load, as specified in OAC 3745-400-11(F)(2)(a). Additionally, the owner/operator shall remove and properly dispose of all visible solid waste throughout all active areas of the Facility.

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Violations 13 and 14

- The owner/operator must relocate all waste, along the northern slope, that is outside of the limits of the ALDA. Additionally, documentation illustrating that waste is within the limits of the ALDA shall be submitted to Ohio EPA and the Allen County Health Department.

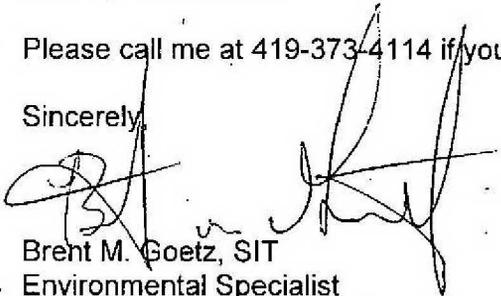
This correspondence addresses specific observations only for the areas of the EOLM C&DD Landfill that were inspected. Nothing present in, nor absent from this correspondence is intended to mean that no other violations existed at the Facility at the time of inspection.

Compliance with the requirements outlined in this letter, or the solid and infectious waste provisions contained in the Ohio Revised Code Chapter 3734, and the rules promulgated thereunder, does not relieve the owner/operator of EOLM C&DD Landfill from their obligations to comply with other applicable state and federal laws and regulations.

All written correspondence should be sent to my attention at 347 N. Dunbridge Road, Bowling Green, Ohio 43402.

Please call me at 419-373-4114 if you have any questions.

Sincerely,



Brent M. Goetz, SIT
Environmental Specialist
Division of Solid and Infectious Waste Management

/llr

pc: Bill Kelly, Allen County Health Department
(DSIWM-NWDO File: Allen County, CDD...)

ec: Mike Reiser, DSIWM-NWDO
Ed Merriman, DSIWM-NWDO
Rick Mazur, DSIWN-NWDO



Photo 1- Temporary sump constructed in Cell 3. Photo taken by Brent Goetz, 8/27/09



Photo 1- Discharge from temporary sump constructed in Cell 3. Photo taken by Brent Goetz, 8/27/09



Photo 3- Constructed sump/drainage feature on Cell 2. Photo taken by Brent Goetz, 8/27/09.



Photo 4- Area of no cover/inadequate cover on Cell 2. Photo taken by Brent Goetz, 8/27/09



Photo 5- Stripped/eroded cover material with flagging waste. Photo taken by Brent Goetz 8/27/09.



Photo 6- Load of mostly packaging material accepted and disposed. Photo taken by Brent Goetz 8/27/09