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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

September 14, 2009

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

Dear Mr. Hefner:

On June 3, 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). Tyler Madeker with Ohio EPA was also present during this inspection. During the inspection we spoke with Eric Hefner from the Facility.

Subsequent to the inspection, a June 9, 2009 follow-up letter was sent by the Allen County Health Department, to document observations made during the inspection. Based on Ohio EPA's review of the letter, the Allen County Health Department did not fully and accurately document the conditions observed during the inspection. Therefore, Ohio EPA is sending you this letter to fully document the violations observed during the June 3, 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

During the inspection a very large area of ponded leachate was observed along the western limits of Cell 3 (Photos 1 and 2). Upon closer inspection of the ponded area of leachate, it was estimated that the depth of the area of ponding ranged from two to four feet above the one foot of drainage layer. A very strong hydrogen sulfide odor was observed in areas surrounding the ponded leachate. Areas of erosion could be observed along the western limit of Cell 3 indicating the intrusion of surface water into the cell (Photo 3). Based upon the amount of leachate observed within Cell 3, it does not appear that the leachate collection system is functioning properly.

Additionally, the collection system was never inspected after the first lift of waste to ensure that no crushing and/or clogging of the leachate pipe network has occurred. 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 constructed liner, excluding the leachate sump collection point(s)."

The leachate collection system was not effectively maintaining less than one foot of head over the in *situ liner* at the Facility, in fact up to four feet over the one foot of drainage layer was observed in some 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(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 document representing Tab 5 of the license application states, "Leachate will only accumulate to of depth of greater than 1 foot in the immediate area of the sump." As previously stated leachate was observed to be accumulated at depths between two and four feet above the one foot of drainage layer. Significant accumulation of leachate was observed in areas greater than 400-feet from the leachate sump. **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.**

4. 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.**

5. 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 two and four feet above the one foot of drainage layer (three to five feet above the *in situ* liner). **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.**

6. 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.**

7. OAC Rule 3745-400-11(Q)(1) states, "The owner or operator shall divert surface and ground water from the active and inactive licensed disposal areas of the facility by nonmechanical means. The owner or operator shall not divert surface water under, over, or through disposal areas of a facility."

Erosion rills where surface water was actively flowing from west of Cell 3 into the cell could be observed along the western cell wall. This surface water was likely contributing to the generation of leachate in Cell 3 that was ponding along the western cell wall. **The owner/operator is in violation of OAC Rule 3745-400-11(Q)(1) for not diverting surface water from the active and inactive licensed disposal areas of the facility.**

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

Allowing two to four 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.**

Cover

During the inspection it was observed that large areas of both Cells 2 and 3 were not covered (Photos 4 and 5). 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 (Photos 6 and 7). Below are the violations related to these issues:

9. 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. **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.**

10. 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.**

11. 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 Christmas decorations, stuffed animals, clothing, non-construction demolition packaging (food wrappers, drink containers, etc.), mattresses, toys, and other miscellaneous solid waste (Photos 8 and 9). Additionally, during the inspection a load containing mostly solid waste was allowed pass the front office and dump into Cell 3; however, upon discovery of the solid waste the load was placed back into the truck and rejected by the Facility (Photo 10). Below are the violations related to these issues:

12. 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, such as Christmas decorations, stuffed animals, clothing, non-construction demolition packaging (food wrappers, drink containers, etc.), mattresses, toys, and other miscellaneous solid waste. **The owner/operator is in violation of OAC Rule 3745-400-11(F)(2) for disposing of solid waste.**

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. "

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, such as Christmas decorations, stuffed animals, clothing, non-construction demolition packaging (food wrappers, drink containers, etc.), mattresses, toys, and other miscellaneous solid waste were observed throughout active areas of 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:

14. 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 had not been completed, in fact relocation activities had not even begun. **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.**

15. 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 had not been completed, in fact relocation activities had not even begun. **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 Facility to recirculate leachate. As illustrated by the first six violations leachate continues to be a significant issue 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 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 respond in writing to Ohio EPA and the Allen County Health Department, as to what the contributing factors were, how they were corrected, and how a reoccurrence of this issue will be avoided during future operations in Cell 3.

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 respond in writing to Ohio EPA and the Allen County Health Department, as to how surface water will be managed in the area to the west of Cell 3 in order to prevent surface water from flowing into the active licensed disposal area.

Violation 8

- The owner/operator shall respond in writing to Ohio EPA and the Allen County Health Department, as to how leachate will be properly managed and disposed in the future.

Violations 9 and 10

- 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 11

- 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 12 and 13

- 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 insure that **all** solid waste is removed through the pre-acceptance screening process, prior to disposal. Additionally, the owner operator shall remove and properly dispose of all visible solid waste throughout all active areas of the Facility.

Violations 14 and 15

- 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

/csl

pc: Bill Kelly, Allen County Health Department
File: Allen County, CDD

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

Photo 1-Ponded leachate along western limit of Cell 3. Photo taken June 3, 2009 by Brent Goetz.

Photo 2-Ponded leachate along western limit of Cell 3. Photo taken June 3, 2009 by Brent Goetz.

Photo 3- Erosion from surface water flowing into Cell 3. Photo taken June 3, 2009 by Brent Goetz.

Photo 4-Portions of Cell 2 containing no monthly cover. Photo taken June 3, 2009 by Brent Goetz.

Photo 5-Portions of Cell 2 containing no monthly cover. Photo taken June 3, 2009 by Brent Goetz.

Photo 6-Flagging waste in area of inadequate monthly cover. Photo taken June 3, 2009 by Brent Goetz.

Photo 7-Flagging waste in area of inadequate monthly cover. Photo taken June 3, 2009 by Brent Goetz.

Photo 8- Disposed solid waste. Photo taken June 3, 2009 by Brent Goetz.

Photo 9- Disposed solid waste. Photo taken June 3, 2009 by Brent Goetz.

Photo 10- Load dumped, but latter rejected. Photo taken June 3, 2009 by Brent Goetz.