



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

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

April 10, 2007

RE: **NOTICE OF VIOLATION
GROUND WATER
EAST LIVERPOOL LANDFILL**

Tim Haaf
Waste Management
851 Robison Rd. East
Erie, Pennsylvania 16509-5339

Dear Mr. Haaf:

The Ohio Environmental Protection Agency (Ohio EPA) has completed a review of the document titled, "Ground-Water Quality Assessment Plan, East Liverpool Landfill, Inc. Columbiana County, Ohio, Revision 4," dated November 2006. The document was received by the Ohio EPA Northeast District Office on November 6, 2006.

The plan documents the ground water monitoring program implemented by East Liverpool, Inc. to determine the rate, extent, and concentration of any waste derived constituents found to have been released from the landfill, pursuant to Ohio Administrative Code (OAC) Rule 3745-27-10(E).

It was determined during the review of the above document that the following violation existed:

1. **OAC Rule 3745-27-10(C)(1):** *"The owner or operator shall comply with the following requirements regarding ground water sampling, analysis, and statistical methods...General requirements. 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 at the background and downgradient wells installed in accordance with paragraph (B), (D), or (F) of this rule. The following shall be included in the ground water detection monitoring plan, ground water quality assessment monitoring plan, compliance monitoring plan, and corrective measures plan:*
 - (a) *A written sampling and analysis plan, which documents the sampling and analysis procedures that shall be utilized in the ground water monitoring program. The owner or operator is required to use the procedures documented within the sampling and analysis plan.*
 - (b) *The statistical method selected by the owner or operator shall be in accordance with paragraphs (C)(6) and (C)(7) of this rule.*
 - (c) *The statistical determination of a statistically significant increase over background for a monitoring parameter shall be in accordance with paragraph (C)(8) of this rule.*

- (d) *The number of samples collected shall be in accordance with paragraph (C)(9) of this rule.*
- (e) *Submission of ground water and statistical analysis shall be in accordance with paragraph (C)(10) of this rule."*

OAC Rule 3745-27-10(E)(1): *"Ground water quality assessment monitoring program. The owner or operator shall comply with the following requirements regarding ground water quality assessment monitoring...Unless the director approves the report submitted in accordance with paragraph (D)(7)(c) of this rule, the owner or operator shall implement a ground water quality assessment plan capable of determining the concentration, rate, and extent of migration of waste-derived constituent(s) in the ground water upon determining a statistically significant increase over background in accordance with paragraph (D)(7) of this rule. The owner or operator shall implement and comply with the ground water quality assessment plan and the requirements of this rule."*

OAC Rule 3745-27-10(E)(4)(e)(i): *"Ground water quality assessment monitoring program. The owner or operator shall comply with the following requirements regarding ground water quality assessment monitoring...Ground water quality assessment plan elements. The plan to be submitted in accordance with paragraph (E)(3) of this rule shall include, at a minimum, detailed descriptions of the following...Data evaluation procedures, including but not limited to the following...Planned use of statistical data evaluation for the ground water quality assessment program and/or for compliance monitoring."*

Upon review of the above listed document, Ohio EPA has determined that the owner or operator failed to provide a detailed description of the statistical methods and data evaluation that would be used as part of the ground water quality assessment program. Section 6.2 of the revised Ground-Water Quality Assessment Plan (GWQAP), states the following:

"At present, there is not sufficient data to outline the specifics of any statistical data comparison methods that may be used to compare assessment well data to background. Once additional assessment monitoring data has been collected, the use of statistical data evaluation will be re-evaluated."

The date of this revised GWQAP is November 2006. However, in the introduction of this GWQAP, Section 1.1, it is stated:

"The ground water quality assessment investigation for the site was completed in December 2005 and the 'Ground Water Quality Assessment Report' summarizing the findings of the investigation was submitted to Ohio EPA on December 28, 2005."

Tim Haaf
Waste Management
April 10, 2007
Page 3

A cursory review of the Ground Water Quality Assessment Report (GWQAR) dated December 2005 revealed the owner or operator relied heavily upon the use of statistical analysis methods and statistical data evaluation to make important determinations regarding the nature of the ground water contamination at the landfill. The required purpose of describing the statistical analysis and data evaluation methods in the GWQAP is to ensure that no errors or incorrect assumptions in the statistical analysis are made such that the first determination of rate, extent, and concentration in the GWQAR is correct.

As it is written, the owner or operator gave no concrete indication in the GWQAP that statistical analysis and data evaluation methods would be relied upon as the primary tool for determining the nature of the ground water contamination at the landfill. However, since the owner or operator has already proceeded with the first determination and subsequent submittal of the GWQAR, this violation existed from January 2005, the date of the most recent revision to Chapter 6 of the GWQAP, through December 28, 2005, when the GWQAR was submitted to Ohio EPA.

In addition to the above violation, Ohio EPA would appreciate additional information in order to make sure that compliance with the following rules is being met:

- OAC Rule 3745-27-10(C)(1)
- OAC Rule 3745-27-10(C)(2)(c)(i)
- OAC Rule 3745-27-10(E)(4)(d)

Section 5.2.2.2 of the GWQAP contains procedures to be used during well evacuation or purging. Included in this section is a discussion of how collected purge water would be managed. This section outlines the following procedure for managing purge water:

“Collected purge water will be disposed by dumping downslope and away from the monitoring well unless previous sampling and analyses has shown the water to have total VOC concentrations that exceed 10 ug/l, or an MCL is exceeded that is not naturally occurring. In this case, the purge water will be contained in five-gallon plastic buckets with lids and disposed on the ground within the limits of waste placement. Purge water from such wells will be handled in this manner until it has been demonstrated that the water from the well is no longer harmful to human health or the environment.”

The use of the above procedure suggests that potentially contaminated ground water could be disposed by dumping collected purge water downslope and away from monitoring wells. Relying on previous sampling and analyses from a well cannot assure that purge water is not contaminated at the time a well is sampled. It would seem that all collected purge water should be contained until the current analyses show that no contamination exists. Please explain how the current practice of disposing potentially contaminated purge water directly onto the ground surface outside the limits of waste placement is protective to human health, safety, and the environment.

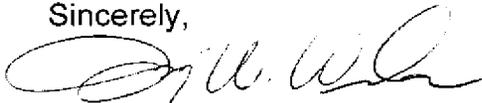
Tim Haaf
Waste Management
April 10, 2007
Page 4

Additionally, the use of this procedure for handling and disposing of purge water which is suspected to be contaminated within the limits of waste placement, simply means the contaminated water is discharged to the ground surface of the capped and closed landfill. Please explain how disposing of contaminated purge water to the ground surface is protective of human health and the environment. Several of the assessment monitoring wells at the East Liverpool Landfill contain concentrations of arsenic well above the MCL. Some concentrations are an order of magnitude greater than the MCL. Disposal of this water onto the ground surface of the capped and closed landfill does not seem to be a practice that is protective of human health, safety, and the environment. If this landfill were operating and had a leachate collection or treatment system, then disposal of the contaminated ground water in this manner (into an open cell containing waste) would be at least understandable because the contaminated water would be contained to prevent further exposure. However, this is not the case at the East Liverpool Landfill. It would seem that contaminated purge water, which is already containerized, could be transported to an approved POTW or other treatment facility for proper disposal.

To demonstrate compliance with the above rules, the owner or operator should explain how discharging contaminated, or potentially contaminated ground water, especially purge waters exceeding MCLs, to the ground surface is protective of human health, safety, and the environment. Or, the owner or operator may revise Section 5.2.2.2 of the GWQAP to specify a new procedure for disposing of contaminated, or potentially contaminated purge water generated at East Liverpool Landfill.

Please contact Mark Kroenke, Division of Drinking and Ground Waters, Northeast District Office, Ohio EPA, at (330) 963-1225 if you have any technical questions regarding this review. Please submit all correspondence to Jerry Weber, Division of Solid and Infectious Waste Management, Northeast District Office, Ohio EPA, 2110 East Aurora Road, Twinsburg, Ohio 44087.

Sincerely,



Jerry W. Weber, RS
Environmental Specialist
Division of Solid and Infectious Waste Management

JWW:cl

cc: Mark Kroenke, DDAGW-NEDO
Robert Morehead, Columbiana County General Health District
File: [Tukel/LAND/East Liverpool LF/GRO/15]



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

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

March 30, 2007

**RE: COMPREHENSIVE INSPECTION
A&L SALVAGE, LLC C&DD LANDFILL**

Mr. Ron Rager
A&L Salvage, LLC
11225 SR 45
P. O. Box 333
Lisbon, Ohio 44432

Dear Mr. Rager:

A comprehensive inspection of the A&L Salvage, LLC C&DD Landfill (A&L), located at 11225 State Route 45, Columbiana County, was conducted on the following dates:

- On March 16, 2007, Jerry Weber, representing the Ohio Environmental Protection Agency (Ohio EPA), conducted an inspection of all portions of the landfill, except for the facility's working face. Weather conditions on this occasion were windy and snowy with winds out of the northeast, and a temperature of approximately 30° F. Ron Rager, representing A&L, accompanied Ohio EPA during this inspection. Steve Callahan, representing A&L, was present at the facility during the inspection.
- On March 22, 2007, Katharina Snyder and Scott Winkler, representing Ohio EPA, conducted an inspection of the facility's unloading zone and working face. Weather conditions on this occasion were windy with intermittent rain showers, and a temperature of approximately 65° F. Ron Rager, representing A&L, accompanied Ohio EPA during this inspection. Steve Callahan, representing A&L, joined the inspection at the facility working face.

The purpose of the inspection was to determine compliance with Ohio Revised Code (ORC) Sections 3714. and 3734., and Ohio Administrative Code (OAC) Chapters 3745-400 and 3745-27. The following violations were identified during the inspection:

1. **Nuisance.** During the inspection on March 16, 2007, strong odors smelling like rotten eggs, related to hydrogen sulfide gas, were emanating from the landfill. These odors were detected both on the landfill, and off the landfill to a lesser extent, in the vicinity of the intersection of Applegate Road and Steubenville Pike Road. Winds were out of the northeast during this inspection. During the inspection on March 22, 2007, strong odors smelling like rotten eggs, related to hydrogen sulfide gas, were emanating from the landfill. These odors were detected on the landfill. Application of cover soil is an essential component in controlling the generation of leachate in a landfill, and also in controlling the escape of hydrogen sulfide gases from a landfill.

Mr. Ron Rager
A&L Salvage, LLC
March 30, 2007
Page 2

While the owner or operator of A&L has improved the covering practices at the facility, including covering more frequently and compacting cover soil, hydrogen sulfide emissions from the facility continue to produce strong odors.

Considering the numerous complaints received, the community surrounding the landfill finds the odors are offensive to the senses and interfere with the comfortable enjoyment of life and property.

Since January 3, 2007, Ohio EPA has documented hydrogen sulfide odors either on the landfill or in areas surrounding the landfill during its inspections, and Ohio EPA has continued to receive odor related complaints from individuals who live around the landfill.

A&L is in violation because it has failed to eliminate the conditions leading to the generation of hydrogen sulfide gas, and to control the release of hydrogen sulfide gas. Failure to eliminate the conditions leading to the generation of hydrogen sulfide gas, and failure to control the release of hydrogen sulfide gas which has resulted in odors offensive to the senses and interference with the comfortable enjoyment of life and property of the surrounding community has resulted in a violation of the following:

- a. **OAC Rule 3745-400-11(B)(15)**: *"The owner or operator shall not cause or allow operations to create a nuisance or health hazard from noise, dust, odors, and the attraction and/or breeding of birds, insects, rodents, and other vectors."*

In order to return to compliance with this rule, the owner or operator must immediately employ any and all measures necessary to eliminate the conditions leading to the generation of hydrogen sulfide gas, and to control the release of hydrogen sulfide gas from the landfill.

2. **Acceptance of Pulverized Debris.** During the inspection on March 22, 2007, one load of pulverized debris which was unidentifiable as construction and demolition debris (C&DD) was observed in the facility's unloading zone. The load initially appeared to be questionable, but after the bulldozer pushed the load around, it became obvious that it was mostly pulverized. The owner or operator agreed with Ohio EPA that the load was not acceptable, and it was rejected.

A&L is in violation because it accepted pulverized debris at the facility. Acceptance of pulverized debris is a violation of the following:

- **Ohio Administrative Code (OAC) Rule 3745-400-11(F)**: *"Prior to acceptance by the facility, debris shall be readily identifiable as construction and demolition debris and shall not have been shredded, pulverized, or otherwise rendered to the extent that the debris is unidentifiable."*

- **Ohio Revised Code (ORC) Section 3714.081(A):** *"A construction and demolition debris facility shall not accept pulverized debris."*

In order to comply with the above law and rule, the owner and operator must ensure that prior to acceptance, debris shall be readily identifiable as C&DD and shall not have been shredded, pulverized, or otherwise rendered to the extent that the debris is unidentifiable. Ohio EPA notified the facility owner or operator during the inspection that the load was unidentifiable as C&DD, and that the load must be removed from the facility and properly disposed at a licensed solid waste landfill.

The following observations were made during this inspection:

March 16, 2007

1. While determining if the odor of hydrogen sulfide could be detected outside the facility boundary, several piles of scrap tires and garbage were observed piled or stacked near the gates of several mining roads and along Applegate Road. Upon arriving at the facility, Mr. Rager informed Ohio EPA that he had facility personnel out picking collecting these solid wastes, which border A&L's property, or property that A&L leases. The wastes were being brought to the facility where they were documented and placed with outgoing solid waste and scrap tires for disposal. It was requested that A&L scale the waste in and keep a separate log for this waste, which was not brought to the facility for disposal.
2. No drag out of mud from the facility onto State Route 45 was observed.
3. Mr. Rager informed Ohio EPA that zeolite had been spread along the perimeter seams of the leachate pond cover to eliminate any odors that might be emitted from the pond.
4. No loads of pulverized or unidentifiable debris were observed in the facility's very small unloading zone. Two loads were observed in the facility's unloading zone, one load containing mostly dimensional lumber, and one load of industrial roofing.
5. A very small working face was being maintained, and it appeared that one load at a time was being moved from the unloading zone to the working face. A physical inspection of the working face was not conducted on this occasion.
6. Ponded water was observed on the access road leading to the uppermost portion of the Active Licensed Disposal Area (ALDA). A bulldozer was back-blading the access road during the inspection. The facility must eliminate any ponding water as soon as it is detected and soil conditions permit repairs to be made in order to prevent the opportunity for surface water to infiltrate through disposed debris.

Mr. Ron Rager
A&L Salvage, LLC
March 30, 2007
Page 4

7. Although snow partially covered the ground, it appeared that cover soil had been placed on all portions of the ALDA, except the areas being utilized as the unloading zone and working face.
8. A&L reported that it has identified areas on the landfill where hydrogen sulfide emissions were found high. These areas were reportedly covered with limestone and lime prior to applying cover soils in an effort to reduce hydrogen sulfide emissions. After applying cover soils A&L is driving over the cover soils with a vibratory roller in an effort to compact the soil and seal in gas emissions.
9. A&L had decided to use water to clean mud off the asphalt portions of the interior access roads before temperatures went lower.
10. During a review of the leased trailer parking area adjacent to the facility, A&L explained that access to the lot had been restricted to one entrance/exit area in an effort to reduce drag out of mud onto State Route 45. A&L plans to place rock in the entrance/exit on a regular basis.

March 22, 2007

1. Approximately 12 pickers were working in the facility working face, which measured approximately 200 feet by 80 feet.
2. The only prohibited solid waste observed disposed in the facility working face was one Gatorade bottle. The bottle was removed during the inspection.
3. A small pool of leachate was observed at the toe of the slope of the landfill. The owner or operator was reminded to address the problem and make sure that the leachate does not flow off the facility.
4. There appeared to be leachate on top of the synthetic liner on the leachate pond.
5. The unloading zone was clearly marked and separate from the working face.
6. Litter fences were in place.
7. Hydrogen sulfide odors were detected while on the landfill.

The owner or operator of A&L must immediately take all necessary measures to return to compliance with Ohio's solid waste and C&DD laws and rules. Please provide written notification to me within 15 days of receiving this letter which documents how the violations listed above have been corrected, and what measures will be implemented in the future to prevent any such recurrence of these violations.

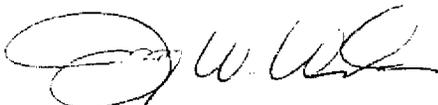
Mr. Ron Rager
A&L Salvage, LLC
March 30, 2007
Page 5

Failure to correct the above violations and operate this facility in accordance with all applicable state laws and rules may result in escalated enforcement action being taken against the owner or operator of this facility by Ohio EPA.

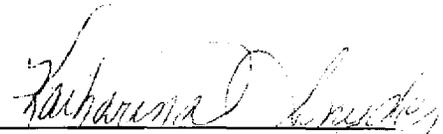
Nothing in this letter shall be construed to authorize any waiver from the requirements of any applicable state or federal laws or regulations. This letter shall not be interpreted to release the owner or operator of A&L Salvage, LLC, or others, from responsibility under Chapters 3704., 3714., 3734., or 6111. of the Ohio Revised Code or under the Federal Clean Water or Comprehensive Environmental Response, Compensation, and Liability Acts remedying conditions resulting from any release of contaminants to the environment.

If you have any questions regarding this letter, please feel free to contact me at (330) 963-1274, or preferably, e-mail me at "jerry.weber@epa.state.oh.us."

Sincerely,



Jerry W. Weber, R. S.
Environmental Specialist
Division of Solid and Infectious
Waste Management



Katharina Snyder
Environmental Specialist
Division of Solid and Infectious
Waste Management

JWW:cl

cc: Robert Morehead, Columbiana County Health Department
File: [Tukel/CONS/A&L Salvage/COR/15]