



Hillsborough County
Florida

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February 12, 2009

Dept. of Environmental Protection
FEB 17 2009
Southwest District

Ms. Melissa Madden
Florida Department of Environmental Protection
13051 N. Telecom Pkwy
Tampa, Florida 33637

RE: December 15, 2008 Inspection – Southeast County Landfill

Dear Ms. Madden:

On December 15, 2009, the Florida Department of Environmental Protection (FDEP) conducted an inspection of the Southeast County Landfill (Permit No. 34535-014-SO/01)

The referenced inspection report noted several items that required the Solid Waste Management Department's (SWMD) response. For ease of review, the FDEP comments are provided below in bold type, followed by our response.

FDEP Comment – 2.24

Question: Is the leachate collection and removal system maintained and operated as required?

Rule: 62-701.500(8)(h), 62-701.500(2)(j), 62-701.500(8)(b)

FDEP Explanation: During the inspection DEP staff observed that wind had blown foam from the process tank at the leachate treatment plant onto the building and outside of the containment. Facility staff indicated that the dried solids would be swept up from the ground and placed into the landfill dumpster. The process for cleaning the sides of the building should be carefully evaluated to prevent contact water from running off into stormwater.

Corrective Action: Please provide the Department with a plan for the clean-up of the building outside containment and the management of liquids generated. Any liquids

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should be treated as leachate unless the County can provide assurance otherwise. Specific Condition 7.b.

Response: The SWMD operates the Southeast County Landfill (SCLF) in substantial compliance with the Operation Plan. The foam from the activated sludge tank at the leachate treatment plant (LTP) that had blown onto the side of the tank, LTP building, and adjacent sidewalk were pressure washed on December 17, 2008. The wash water generated during the washing activities was collected and placed in the activated sludge tank at the LTP. Additionally, a skirt was added to the southeast rim of the tank to minimize re-occurrence (See Attachment A).

The foam that forms within the activated sludge of a biological treatment process is a byproduct of bacterial activity. Please see attached response from Jones Edmunds addressing this issue. In the future, if any foam is blown outside of the process tank, the following cleanup procedure will be used:

1. Pressure wash the affected areas.
2. The wash water will be collected and placed back in the activated sludge tank.

FDEP Comment – 2.8

Question: Are the following prohibited wastes or special wastes properly controlled, managed and disposed?

Rule: 62-701.300(11)(b), 62-701.300(8)(d), 62-701.300(10), 62-701.300(9), 62-701.300(11)(a), 62-701.300(6), 62-701.300(5), 62-701.300(8)(c), 62-701.300(8)(a), 62-701.300(8)(e), 62-701.300(4)

Explanation: A drum of used oil filters was observed in the Waste Management maintenance shop which did not have a label.

Corrective Action: Please label and store containers in accordance with 62-710.850(5)(a).

Response: The referenced drum of used oil filters was immediately labeled and staff has been instructed to check all drums delivered by US Filter for proper labeling prior to use.

FDEP Comment 2.30

Rule: 62-701.400(9)(c), 62-701.500(10)

Question: Is mixing of leachate and stormwater prevented or minimized?

Response: Please see response to Comment 2.24 above.

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FDEP Comment 2.31

Rule: 62-701.500(10)

Question: Is stormwater management system maintained and operated as required?

Explanation: During the inspection DEP staff observed ponded water along the top of the W slope. A stormwater conveyance had become blocked with sediment as a result of last weeks rainfall of 1.3 inches (on 12/11/2008).

Corrective Action: Facility was scheduled to restore flow w/in conveyance today or tomorrow. Specific Condition 7.e 22.b.

Response: The SWMD operates the SCLF in substantial compliance with the Operation Plan. After the December 11, 2008 rain event, the referenced area was re-graded to assure proper stormwater conveyance. Staff was already aware of this blockage and had repairs scheduled prior to this inspection. Repairs were completed on December 17, 2008.

The SWMD appreciates the opportunity to respond to the DEP's findings. Should the DEP have any questions or require additional information concerning the information provided, please contact me at 671-7707.

Sincerely,



Larry E. Ruiz
General Manager III
Solid Waste Management Department

Dept. of Environmental Protection

FEB 17 2009

Southwest District

LR/lr

Attachments

xc: Susan Pelz, DEP
Ron Cope, EPC
Patricia Berry, SWMD
Cindy Pelley, SWMD
Ernest Ely, WMI

Attachment A
Process Tank Photograph

Dept. of Environmental Protection
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Southwest District

Date: December 18, 2008
Site: Southeast County Landfill, Hillsborough County, FL
Description: Exterior of containment area and process tank. View of new filter fabric rim skirt.
Looking northwest.



Photograph Number 1

Attachment B
Letter from Jones Edmunds
(Dated February 11, 2009)

Dept. of Environmental Protection
FEB 17 2009
Southwest District



February 11, 2009

Ms. Patricia Berry
Section Manager
Solid Waste Management Department
P.O. Box 1110
Lithia, Florida 33601

Dept. of Environmental Protection

FEB 17 2009

Southwest District

RE: FDEP Inspection of Southeast County Landfill – 12/15/08
Question Number 2.24
Southeast County Landfill, Hillsborough County, Florida
Jones Edmunds Project No.: 08449-030-03 Task 1110

Ms. Berry:

As requested, Jones Edmunds evaluated Question No. 2.24 of the subject Inspection Report conducted by the Florida Department of Environmental Protection (FDEP). In the FDEP Inspection Report dated December 15, 2008, a potential violation is documented regarding wind blown foam from the activated sludge tank at the Leachate Treatment and Reclamation Facility (LTRF). Blown foam residuals were observed outside of the containment area as well as on the adjacent building. The FDEP report requested corrective actions and stated that any liquids or liquids generated during clean-up should be treated as leachate unless it can be proven otherwise. It is our opinion that the foam from the activated sludge tank, and thus the residuals documented on the side of the tank and the adjacent building, at the LTRF, is not leachate, but is a product of wind blown foam produced by microorganisms within the activated sludge tank of the LTRF and/or the existence of surfactants within the activated sludge tank.

Foaming from an activated sludge process is commonly associated with the presence of a microorganism known as Nocardia. Foam that is caused by Nocardia typically has a brownish color and can reproduce so quickly that it could easily overflow from a holding tank. In high-wind conditions it will blow from the tank to surrounding facilities. Assessing the pictures provided by the FDEP Inspection, we can see that the walls of the activated sludge tank, facility building, and the concrete sidewalk all have a brownish residual from dried, wind-blown foam. This is likely Nocardia foam that was blown from the process tank during high winds. This is a common occurrence at many wastewater treatment plants.

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In addition, young microorganisms produce polysaccharides within a biological reactor, such as an activated sludge tank for leachate treatment, which produces white, frothy, and sudsy foam that is commonly a result of intermittent loading, low food to mass ratios, and shorter Mean Cell Residence Times (MCRTs) within the activated sludge reactor. From the pictures mentioned above, provided with the FDEP Inspection Report, this may have contributed to the formation of additional foam in conjunction with foam production from Nocardia activity.

In conclusion, the foam is formed by one or a combination of microbiological activity or surfactants in the activated sludge tank. The resulting foam is not a hazardous substance or leachate.

Please call me or Tom Friedrich at 813-258-0703 if you have any questions or require additional information.

Sincerely,



Jason Timmons, P.E.
Project Engineer

Dept. of Environmental Protection

FEB 17 2009

Southwest District

cc: Larry Ruiz, SWMD
Megan Miller, SWMD
Tom Friedrich, Jones Edmunds