

**GUDE LANDFILL REMEDIATION**

**GLCC/DEP MEETING NO. 36**

DATE: June 25, 2015  
TIME: 7:30 PM to 9:00 PM  
LOCATION: Montgomery County Transfer Station

ATTENDANCE:

<u>Name</u>	<u>Organization</u>	<u>Designation</u>
Laszlo Harsanyi	Gude Landfill Concerned Citizens (GLCC)	Member
Dave Peterson	Gude Landfill Concerned Citizens (GLCC)	Member
Nick Radonic	Gude Landfill Concerned Citizens (GLCC)	Member
Julia Tillery	Gude Landfill Concerned Citizens (GLCC)	Member
George Wolohojian	Gude Landfill Concerned Citizens (GLCC)	Member
Peter Karasik	Montgomery County Dept. of Env. Protection (DEP)	Section Chief
Rao Malladi	Montgomery County Dept. of Env. Protection (DEP)	Senior Engineer
Dan Rogers	Montgomery County Dept. of Env. Protection (DEP)	Engineer I
Mark Gutberlet	EA Engineering, Science, and Technology, Inc., PBC (EA)	DEP Consultant

The Meeting Agenda is included as Attachment 1.  
Contact information for attendees is included as Attachment 2.  
Chronology of Closed Action and Follow-up Items is included as Attachment 3.  
Other Attachments are referenced within the text.

MINUTES:

1. Mr. Rao Malladi of DEP requested approval of the minutes from GLCC/DEP Meeting No. 35. GLCC approved the minutes.
2. Mr. Malladi stated that DEP received a letter of deficiency from Maryland Department of the Environment (MDE) on April 22, 2015 pertaining to the ACM Report. The letter outlined MDE's comments, which had been previously discussed in a meeting with MDE and discussed with GLCC at the March 11, 2015 meeting. MDE's comments (in italics) and DEP's responses to the comment are listed below.
  - a. *The ACM must address corrective measures for metal exceeding Maximum Contaminant Levels.*  
DEP did one round of low flow groundwater sampling in the spring of 2015 and intends to do a second round of low flow sampling in the fall of 2015. DEP's consultant will perform statistical analyses and then DEP will reassess the extent of the metals exceedances and include recommendations for addressing these in the revised ACM Report. Mr. George Wolohojian of GLCC asked if the sampling program had changed. Mr. Mark Gutberlet of EA stated that the

sampling methodology had changed, but sampling schedule and other program details had not changed.

- b. *The ACM shall provide justification as to the 500-foot spacing between monitoring wells based on site information.*

Due to extremely steep side slopes in several areas of the landfill as well as dense forested areas and streams, substantial waste excavation, grading, tree removal, and stream crossings will be necessary to provide drill rig access and permanent monitoring well access roads at 300-foot intervals around some areas of the perimeter of the landfill. DEP will work with its consultant to evaluate the site topography and conceptual feasibility of placing monitoring wells at closer intervals and describe the associated impacts and present the results in the revised ACM Report. The evaluation will also include a recommended monitoring well configuration and a discussion of whether the recommended well locations will allow the collection of sufficiently representative groundwater samples to monitor compliance and progress towards the Remedial Action Objectives (RAOs). Mr. Dave Peterson of GLCC asked if MDE had visited the site and was familiar with the slope areas. Mr. Peter Karasik of DEP stated that some MDE personnel have visited the site, but another site visit could be performed to help illustrate the challenges with installing additional monitoring wells in some locations.

- c. *The ACM shall provide specific information as to the percentage of waste in contact with groundwater.*

DEP has some limited records which indicate that underdrains were recommended for use during operation of the Gude Landfill to lower the water table and increase landfill capacity. In addition to this documentation, DEP will have its consultant develop and execute a plan to perform several borings through the landfill to record the surface elevation, the depth of waste, and the water table elevation. These will be used to develop one or more cross sections and an estimate of the percentage of waste in contact with groundwater. Mr. Nick Radonic of GLCC asked if ground penetrating radar or other geophysical methods had been considered to determine the extent of waste. Mr. Gutberlet stated that geophysics had been considered, but the conditions are not ideal to get accurate limits of waste from geophysical methods. Mr. Karasik added that DEP has requested additional time to perform the borings and evaluate the data.

- d. *Table 6-1 in the ACM shall include key timeframes for reaching Remedial Action Objectives ('RAOs') for numerical ranks under short- and long-term effectiveness.*

DEP will include these estimated time frames in the revised submittal of the ACM.

- e. *The ACM must include a viable contingency plan with a specific remedial alternative that addresses all RAOs should the preferred corrective measure fail to meet the objectives within the set timeframe.*

DEP will work with its consultant to provide a more detailed contingency plan to be included in the revised ACM Report. A specific contingency measure for meeting groundwater RAOs will be identified. DEP may recommend modifications to the contingency plan in the future based on additional information collected during implementation of the corrective measures.

- f. *The ACM shall contain a full engineering evaluation which led to the conclusions supported in Appendix A, Attachment 3 of the Nature and Extent Study Report, specifically that the cap has been engineered and maintained to support positive drainage and limit stormwater infiltration.* In conjunction with the revisions to the ACM Report, DEP will have its consultant prepare a drainage analysis and plan using an updated topographic map for the site. DEP has already initiated this work. The analysis will include delineation of drainage areas and flow directions, estimated runoff quantities, capacities of existing stormwater drainage features, and identification of areas that may need additional grading or other improvements. After the ACM Report is approved, DEP will develop a new stormwater management plan and include drainage around any new roads, benches, and grading modifications associated with the implementation of the approved corrective measures. In the interim, DEP will continue to inspect the site for localized ponded areas and use its general maintenance contractor to re-grade or otherwise correct these areas.
  - g. *The Groundwater and Surface Water Monitoring Plan for Gude Landfill must be revised so that it meets the Department approved Practical Quantitation Limits.* DEP will prepare and submit a new Groundwater and Surface Water Monitoring Plan. The sampling methodology in the current Monitoring Plan will be assessed, considering the experience and results with the low flow sampling approach used in the spring of 2015 and planned for use in the fall of 2015. Other factors such as persistent turbidity that may require well re-development or possibly the installation of new replacement wells in similar locations will be reviewed. Consequently, DEP may propose well modifications and well replacements as well as potential changes in sampling equipment and methodology in the revised Monitoring Plan. DEP has spoken with its contract laboratory, WSSC, and they will subcontract certain work to another laboratory capable of meeting the MDE required PQLs, already stated in the current Monitoring Plan.
  - h. *Should the County wish to pursue the use of MNA as part of a preferred alternative, it will need to fully evaluate trends in concentration and mass utilizing the guidelines established in the Office of Solid Waste and Emergency Response ("OSWER") Directive.* Monitored Natural Attenuation (MNA) is not currently part of the recommended alternative in the ACM Report. However, should DEP desire MDE to consider MNA for a portion of the Gude Landfill property, additional evaluation will be performed in accordance with applicable OSWER requirements.
3. Mr. Malladi provided an update on landfill gas:
    - a. Routine field activities continue to be performed, including monitoring the blower/flare station and perimeter monitoring wells for proper operation and monitoring.
    - b. Liquid levels regularly measured in the extraction wells along the perimeter of the landfill in the vicinity of monitoring probes indicated that perforations in the wells were above the liquid level and should be extracting gas efficiently.

- c. DEP's landfill gas contractor regularly performs routine blower/flare checks and pumped out the sump at the flare station. The condensate trap was pumped out and the header lines were drained, as needed.
  - d. Beginning July 1, 2015, DEP will have a new landfill gas operating contractor, CB&I Inc., for operating the Gude and Oaks LFGE and LFG collection systems. The current operating staff has been hired by CB&I Inc. to continue to operate the facilities.
  - e. Most of the methane gas monitoring wells on the northwest boundary of the Gude Landfill adjacent to the gas line right-of-way and the Derwood Station community have been in compliance with MDE standards (less than 5 percent methane by volume). In April and May, monitoring reports indicated occasional exceedances in some of these monitoring probes, but the last two weekly reports indicated no exceedances.
4. Mr. Malladi provided an update on Gude Landfill maintenance:
- a. Normal maintenance activities such as lawn mowing, weed control, etc. continued at regular intervals. The noxious weeds (primarily Canadian thistle) treatment started today.
  - b. During the June monthly inspections, five areas of surface water ponding and five areas of leachate seeps were observed.
  - c. Repairs of several ponding areas were finished the first week of June by adding additional soil and re-grading the landfill cover. Repaired areas were seeded and mulched. DEP showed photographs of the areas before and after the repairs were made.
  - d. Leachate seep repairs at five locations were also done simultaneously in June by excavating the area around the seep and backfilling it with gravel and covering it with well-compacted soil. This diverts the flow of leachate back into the landfill to allow natural bacteria in the soil to help break down contaminants and prevent the flow of leachate on the surface. DEP showed photographs of the areas before and after the repairs were made.

#### **Recently Closed Action and Follow-up Items**

- 34-3 The County will post a previously-performed LFG composition study and the County Executive's letter to GLCC on the remediation webpage.  
Status: Closed. The information was posted on April 11, 2015.
- 34-4 The County post new LFG data as it becomes available after future monitoring.  
Status: Closed. The information was e-mailed to GLCC on March 16, 2015.
- 35-1 County to review methane results and provide an update to GLCC.  
Status: Closed. The information was e-mailed to GLCC on March 16, 2015.
- 35-2 County to provide air emissions report to GLCC for review.  
Status: Closed. The information was posted to the website on March 18, 2015.

**Open Action and Follow-up Items**

- 34-2 The County will evaluate making the GLCC remediation webpage more accessible from the County's website.
- 34-5 GLCC will discuss potential near-term landfill use options they would like the County to consider and communicate them with the County.

Tentative next meeting date of November 12, 2015 to discuss any updates.

*The above summation is the writer's interpretation of the items discussed at the meeting. Comments involving differences in understanding of any of the meeting items will be received for a period of thirty (30) days from the date of these meeting minutes. Clarifications will be made, as deemed necessary. If no comments are received within the specified time period, the minutes will remain as written.*