#### **GUDE LANDFILL REMEDIATION**

### **GLCC/DEP MEETING NO. 38**

DATE: March 10, 2016 TIME: 7:30 PM to 9:00 PM

LOCATION: Montgomery County Transfer Station

#### ATTENDANCE:

<u>Name</u>	<u>Organization</u>	<u>Designation</u>
Nick Radonic	Gude Landfill Concerned Citizens (GLCC)	Member
George Wolohojian	Gude Landfill Concerned Citizens (GLCC)	Member
Lisa Feldt	Montgomery County Dept. of Env. Protection (DEP)	Director
Dan Locke	Montgomery County Dept. of Env. Protection (DEP)	<b>Division Chief</b>
Peter Karasik	Montgomery County Dept. of Env. Protection (DEP)	Section Chief
Rao Malladi	Montgomery County Dept. of Env. Protection (DEP)	Engineer III
Dan Rogers	Montgomery County Dept. of Env. Protection (DEP)	Engineer I
Mark Gutberlet	EA Engineering, Science, and Technology, Inc., PBC (EA)	<b>DEP Consultant</b>

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. 37. GLCC approved the minutes.
- 2. Mr. Peter Karasik of DEP provided updates on the Assessment of Corrective Measures (ACM):
  - a. DEP met with Maryland Department of the Environment (MDE) on January 14, 2016 in Baltimore regarding the ACM and MDE's position on Landfill Capping vs. Enhanced Bioremediation. There was discussion on reconsideration of remediation approach due to drilling data obtained in September/October 2015. DEP's consultant drilled through the landfill in September 2015 to identify the bottom of the waste and the groundwater elevation. Four borings were advanced through the waste and temporary piezometers were installed in those borings. The waste thickness ranged from approximately 25 to 55 feet with bottom elevations ranging from approximately 390 to 410 feet. Initial groundwater elevations measured right after drilling indicate that groundwater is below the waste mass at the four boring locations. Initially, DEP was under the assumption that the bottom of the waste mass was likely in the groundwater. Because the waste is not in the groundwater in any significant volume, capping could be an effective approach to meet the site remedial action objectives (RAOs).
  - b. DEP suspects that trace metals in the groundwater may be partially due to high turbidity of samples collected. Therefore, DEP changed the groundwater sampling method to low flow

sampling in the spring of 2015 to obtain more representative groundwater samples. The two low flow sampling events completed to date (Spring and Fall of 2015) continue to indicate the presence of metals at low concentrations. This will continue to be evaluated. If metals continue to exceed maximum contaminant levels (MCLs) in groundwater, the selected remedy must also address metals.

- c. Due to the above factors, DEP is considering capping as an alternative remediation approach. DEP received a sixty-day extension to submit the revised ACM Report (April 30, 2016) to evaluate the alternative approach and gauge community acceptance.
- d. Mr. Mark Gutberlet of EA described the advantages and disadvantages of capping versus enhanced bioremediation. Capping is considered effective for metals and volatile organic compounds (VOCs) because it is an overall leachate reduction practice. Enhanced bioremediation only targets VOCs and metals concentrations would not be directly affected. Capping would involve more site disturbance than enhanced bioremediation, including potential for noise, dust, and odors during site grading. DEP is considering "toupee" capping, which would consist of a geomembrane cap over the top portion of the landfill and on the west and northwest slopes, but no geomembrane would be placed on the steeper, forested slopes. Mr. Gutberlet described the cap construction materials and showed examples of them.
- e. Ms. Lisa Feldt of DEP emphasized that community input on the potential change in remedial approach was very important to DEP and is also a required element of the ACM.
- f. Discussion about the ACM followed. Major discussion included:

Mr. George Wolohojian of GLCC asked about long term future use of the site if it was capped and if trees could be planted on it. Mr. Karasik stated it would be covered in grass without trees, just like the County's Oaks Landfill near Laytonsville. DEP offered to take GLCC and community members on a tour of the Oaks Landfill if they were interested. Mr. Karasik suggested that long-term uses would likely include passive re-use options.

Mr. Wolohojian asked if capping would cause an increase in contaminant concentrations. Mr. Gutberlet responded that it would in the short term, but over the longer term, we expect the concentrations to decrease again.

Mr. Dan Locke of DEP offered to arrange a tour for GLCC and community members to see an active landfill capping project to get a feel for the potential site disturbance during construction. DEP and GLCC will discuss this further and determine if any nearby projects are in construction and if GLCC would like to travel to see one. Ms. Feldt thought the site visit may be helpful for GLCC to better understand the short-term impacts of capping at Gude Landfill. The group discussed GLCC's previous tour to Cecil County's Central Landfill during their waste relocation project, and recalled that the GLCC members on the tour did not think the construction activity would be very disruptive over a short timeframe.

Mr. Wolohojian offered his opinion that if enhanced bioremediation would be difficult to implement and may not be completely successful, and capping may be required in the future

as a contingent remedy, wouldn't capping now have less risk? DEP generally agreed with this assessment of risk for these two alternatives.

Mr. Nick Radonic of GLCC asked about the timeframe to start work. Mr. Karasik stated that the ACM Report submission is now due to MDE on April 30<sup>th</sup>. Mr. Gutberlet added that MDE could take many months to review and also referred to a handout with an approximate comparison of the implementation schedules for enhanced bioremediation versus capping.

Mr. Radonic asked if waste relocation was proposed as part of the toupee capping alternative. Mr. Gutberlet stated that waste relocation was not being considered as an element of the remedy, but that some minor waste relocation could be required to anchor the geomembrane cap around its perimeter.

- **3.** Mr. Malladi provided updates on the landfill gas to energy system and perimeter monitoring:
  - a. DEP's contractor who manages the landfill gas (LFG) system is CB&I. There were LFG exceedances close to LFG Monitoring Well 7 when a collection pipe collapsed due to snow load in February. The pipe was repaired on 3/4/16 and now gas concentrations have been decreasing in the monitoring wells and the only remaining exceedances in that area are in Wells 7S and 7I.
  - b. The County is evaluating converting LFG Monitoring Well 26S to an extraction well. CB&I is preparing a plan to do the conversion. Mr. Karasik added that the LFG monitoring well is so close to waste, so converting it to an extraction well will increase LFG capture and then a new monitoring well will be installed closer to property line in that area.
- **4.** Mr. Malladi of DEP provided an update on landfill maintenance activities:
  - a. Semi-annual groundwater sampling for 2016 is scheduled from March 15 through March 24, 2016.
  - b. Gas monitoring system adjustments are scheduled for March 15, 2016.
  - c. Gas and Groundwater monitoring well repairs will start in April 2016, depending on weather. EA is preparing a plan to repair some of the groundwater monitoring wells.
  - d. The Gude Landfill Remediation website is undergoing changes. The content will mostly remain the same, but the header and footer will be different. The changes are on –going and can be previewed at http://www.montgomerycountymd.gov/swsbeta/.
  - e. The website is updated with all the meeting minutes as of today.
  - f. The landfill gas-to-energy plant stack testing was completed on February 17, 2016. Initial reports indicate that the plant is in compliance. The report will be sent to MDE and placed on the website when it is finalized.
  - g. Inspection will be performed in the spring to see if any seeps are present on the slopes.
  - h. Some grading and low spot repairs will be performed in the spring (low spots identified during 2015 topographic survey).

Mr. Radonic asked if there would be any re-use of Gude Landfill in near term future and Mr. Malladi confirmed no re-use in the near future.

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

37-2 DEP will add updated information to the website, including recent GLCC/DEP Meeting Minutes and add dates to news items.

Status: Closed. The website was up-to-date as of this meeting.

# **Open Action and Follow-up Items**

- 34-5 GLCC will discuss potential near-term landfill use options they would like the County to consider and communicate them with the County.
- 37-1 DEP will review the landfill gas exceedance data from the last few years and evaluate if some measure could be performed to minimize the likelihood of increased exceedances this year.
- 38-1 GLCC members present will share information with other GLCC members and ask for best date to tour Oaks LF.
- 38-2 DEP will identify potential nearby closure construction and offer dates to GLCC for a tour.

The next meeting date will be determined after discussing options for site visits and a potential community meeting.

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.