Gude Landfill Remediation Update

Community Meeting

Date: October 19, 2016







Introductions 2

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- Gude Landfill Concerned Citizens (GLCC)
 - HOA Presidents and Other Interested Residents
- Montgomery County Department of Environmental Protection (DEP)
 - Dan Locke, Chief, DEP, Division of Solid Waste Services (DSWS)
 - Rao Malladi, DSWS Senior Engineer
 - Dan Rogers, DSWS Engineer I







Introductions

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 DEP engaged EA Engineering, Science, and Technology, Inc., PBC (EA) as a technical resource

- EA founded 1973 in Maryland
- Experienced in assessing groundwater contamination, performing risk evaluations, evaluating remediation alternatives at landfills, and landfill capping design and permitting
 - Mark Gutberlet, P.E. Project Manager





Outline 4

Outline

- Community Engagement
- Landfill Background
- Proposed Corrective Measure
- Land Reuse Process
- Next Steps
- County Contacts and Additional Information
- Questions and Discussions







Community Engagement and Communication

- GLCC/DEP Meetings 39 meetings since June 2009
- Community Meetings September 2009, September 2012, April 2016, October 2016
- Derwood Station HOA Newsletters since 2009
- DEP Remediation Webpage since June 2009
- DEP Letters and Fact Sheets







Landfill Background

- Landfill Operated: 1964 to 1982
- Post-Closure Care
 Maintenance Activities:
 - DEP monitors groundwater and surface water quality
 - DEP extracts landfill gas and uses it to generate electricity which is sold to the electric grid
 - DEP monitors landfill gas
 - DEP maintains the existing soil cap system









Landfill Background

- Maryland Department of the Environment (MDE) directed DEP to initiate comprehensive site investigations to characterize groundwater contamination in 2008
- The County and MDE entered into a consent order in May 2013 to formalize requirements for the landfill assessment and remediation









Landfill Background

- DEP submitted the Initial
 Assessment of Corrective
 Measures (ACM) Report to MDE
 in January 2014 and revised
 ACM in April 2016
- MDE approved the ACM Report in July 2016 and the recommended corrective measure of "Toupee Capping and Additional Landfill Gas Collection"



Larry Hogen Covernor

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July 8, 2016

CERTIFIED MAIL
Return Receipt Requested

Mr. Peter R. Karasik Department of Environmental Protection 16101 Frederick Road Derwood MD 20855

Dear Mr. Karasik:

The Maryland Department of the Environment (the "Department") received the Revised April 2016 Gude Landfill Assessment of Corrective Measures (ACM) Report. The Department has reviewed and hereby approves the ACM Report, which includes the recommended corrective measure of Toupee Capping and Additional Landfill Gas Collection. As part of this approval, the Department approves the workplan found in Appendix J: Work Plan for Recommended Corrective Measure Alternative of the ACM Report. The Department requests that Montgomery County provide a definitive implementation schedule once procurement/contracting activities for design have been obtained.

If there are any questions regarding this letter, please contact Mr. Ed Carlson, Head of the Investigations and Remediation Section, at (410) 537-3315.

Sincerely.

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Martha Hynson, Chief Solid Waste Operations Division

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Ms. Hilary Miller
 Mr. Brian Coblentz
 Andrea Baker, Esq.

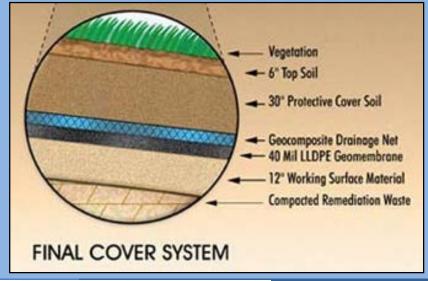






Landfill "Toupee" Capping and Additional Landfill Gas Collection

- Installation of a geomembrane cap over the flatter, grassed area of the landfill to reduce infiltration of rainwater and the potential for groundwater contamination and leachate seeps
- Installation of additional landfill gas extraction wells to reduce landfill gas migration

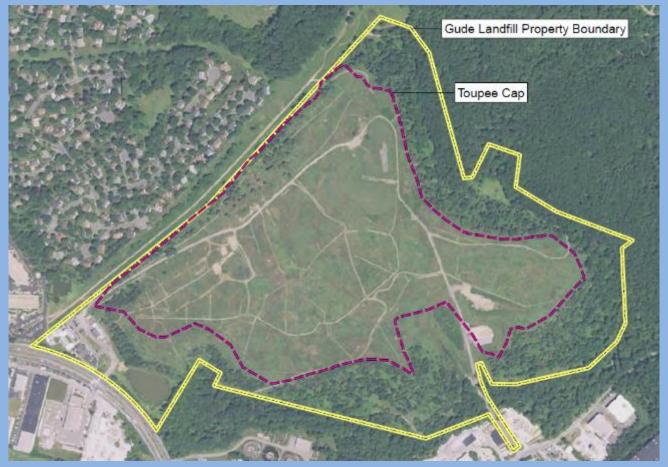








Landfill "Toupee" Capping and Additional Landfill Gas Collection









Potential Community Impacts and Mitigation Strategies

Work will be phased to limit the size of disturbed area and limit overall impacts

Potential Impact	Mitigation Strategies						
Noise	 Limit work to daylight hours 						
Dust	 Moisten exposed soil 						
Odor	 Minimize amount and duration of exposed waste Expose waste in winter Use foam or misters to reduce any odor migration 						
Truck Traffic	 Minimize truck traffic on west side of landfill 						
Restricted Access to Site	 Provide re-use opportunities after construction is complete 						







Example of Final Landfill Condition









Land Reuse Process

- 1. County agrees to continue holding regular status meetings with local community representatives at mutually agreeable dates and times. Discussion of land use and reuse will continue during the design and implementation of the corrective measure.
- 2. Written recommendations from the community should be sent to Lisa Feldt, Director, Department of Environmental Protection, 255 Rockville Pike, Suite 120, Rockville, MD 20850 by January 1, 2017. Any Community recommendations on post-closure use of the property must consider the integrity of the final cover, any other component of the containment system, or the function of the monitoring systems.







Land Reuse Process (cont.)

- 3. Upon receiving the Community recommendations DEP will forward them to the County Executive.
- 4. The County Executive will make a recommendation to the County Council concerning land reuse via the annual budget process.
- 5. The County Council controls funding and will vote on whether to formally approve the final project.
- 6. During the permitting phase of the project, the land re-use plan will go to the County M-NCPPC Planning Board for review under the Mandatory Referral Process.







Land Reuse Community Preference

- GLCC performed a survey of residents that indicated a preference for passive land reuse activities for the Landfill site, which include:
 - Running and walking trails
 - Bike paths
 - Model plane flying areas
 - Children's play areas
 - Dog park areas
 - Community gardening plots







Next Steps

Anticipated Schedule

- Design and permit capping and potential future land reuse
- Construct landfill cap and land re-use
- Monitor success of corrective measure

Anticipated Implementation Schedule												
	2016	2017	2018		2019	2020	2021	2031	2041	2051		
Project Phase	Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3	Q4 C	1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4		
GLCC Proposal for Landfill Re-use			•									
Procurement/Contracting Activities for Design												
Landfill Cap Design and Permitting												
Procurement/Contracting Activities for Construction												
Landfill Cap Construction												
Landfill Cap Maintenance*												
Evaluations of Cap Effectiveness												
*Maintenance of the cap will continue in perpetuity	NO SHAI	DING: NO SITE AC	TIVITY OF	ANGE S	HADING: CONS	TRUCTION	GDEEN SHAF	NING: CONSTRUCT	TION COMPLETE/E	IIII OPERATION		
	NO SHADING: NO SITE ACTIVITY ORANGE SHADING: CONSTRUCTION GREEN SHADING: CONSTRUCTION COMPLETE/FULL OPERATION											



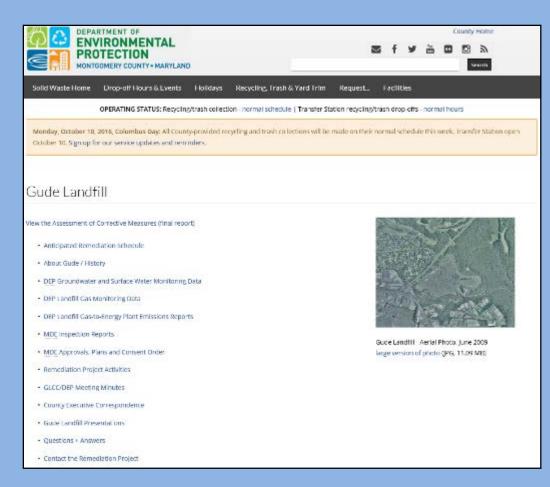




Next Steps 17

Ongoing Community Engagement

- Regular GLCC/DEP Meetings
- DEP will continue to present documents to the community at principal milestones
- DEP will continue to post documents to the remediation webpage









County Contacts & Additional Info.

- Rao Malladi
 - Senior Engineer, DSWS Central Operations
 - 240-777-6574; Rao.Malladi@montgomerycountymd.gov
- Gude Landfill Remediation Webpage
 - http://www.montgomerycountymd.gov/sws/facilities/gude/
- GLCC/DEP Meetings
 - Open to public and typically held the second Thursday of the month
 - Contact Rao Malladi for schedule





