

## **GUDE LANDFILL REMEDIATION**

### **COMMUNITY MEETING (Meeting No. 25.1)**

DATE: September 18, 2012  
TIME: 7:00 PM to 8:30 PM  
LOCATION: Montgomery County Service Park Building

ATTENDANCE: Sign-in sheet not attached.

The Meeting Handout is included as Attachment 1.  
Other Attachments are referenced within the text.

#### MINUTES:

- 1) Bob Hoyt of the Montgomery County Department of Environmental Protection (DEP) opened the meeting by stating its purpose and advising those present that the allotted time would be from 7:00 pm to 8:30 pm. Bob introduced the three (3) Community Association Presidents, the Gude Landfill Concerned Citizens (GLCC) members present, DEP and EA Engineering, Science, and Technology (EA) personnel. Fifty (50) residents and/or interested parties attended the meeting.
- 2) Peter Karasik of DEP provided a summary of the site investigations that have been performed at the Gude Landfill since 2009. The investigations included the Waste Delineation Study and Nature and Extent Study (NES). Peter then briefly described the history of the Landfill and the post-closure care maintenance activities that DEP has previously and continues to perform. He described how the Gude Landfill Remediation Project was initiated based on directives received from the Maryland Department of the Environment (MDE).
- 3) Steve Lezinski of DEP then described DEP's community engagement efforts including monthly meetings with GLCC members, establishment of a website to disseminate information and the distribution of information through DEP newsletters/fact sheets and through Derwood Station HOA newsletters.
- 4) Steve Lezinski provided an overview of the Gude Landfill Remediation Approach. This overview included a description of the goals of the Waste Delineation Study, the NES and Assessment of Corrective Measures (ACM). Steve then described the results of the Waste Delineation Study, including the discovery of waste on Maryland-National Capital Park and Planning Commission (M-NCPPC) property. He further detailed the current plan to exchange roughly seventeen (17) acres of County property (free of waste) for roughly seventeen (17) acres of M-NCPPC property (with trash).
- 5) Mark Gutberlet of EA described the process of the NES. The process included: a review of historical groundwater data, the monitoring of existing groundwater monitoring wells, the

- installation and monitoring of new groundwater wells and a review and analysis of all groundwater data. Mark described the primary findings of the NES, which included: groundwater concentrations of eleven (11) constituents near the landfill property boundary exceed MCLs, there are no human health concerns for exposure to contaminants by residents or pets from groundwater or surface water, and the Landfill is not adversely impacting adjacent surface water bodies.
- 6) Mark Gutberlet then described the ACM process and described the remedial action objectives defined for the site for groundwater, landfill gas and non-stormwater discharges (regarding leachate seeps). Mark stated that the ACM process includes a screening process for potential remediation technologies and methodologies to select the most effective and efficient alternative(s) for remediation of the Landfill site. He described eight (8) potential corrective measures that will be evaluated during the ACM process. He noted the final ACM report submitted to MDE will include a specific recommendation concerning how to move forward with the remediation of the Landfill.
  - 7) Steve Lezinski then presented the process for review and approval of the ACM Report, including MDE review and approval and incorporation of future Land Reuse with community engagement.
  - 8) Steve Lezinski described the on-going community engagement activities which will be consistent with current activities.
  - 9) Steve Lezinski presented an anticipated remediation and reuse schedule for the Landfill site, which also documented past and future activities.
  - 10) Bob Hoyt discussed the Land Reuse process that will incorporate community input and presented the results of a previous community survey. The 2010 community survey primarily identified passive land reuse options for the Gude Landfill.
  - 11) Bob Hoyt closed the presentation, thanked the attendees for coming and opened the floor for questions and comments.
  - 12) Several meeting attendees expressed displeasure that the promises made by the Derwood Station residential developer and/or former County planners regarding the Landfill property being converted into a park had never been realized. Assurance was sought from the County to incorporate and promote community input into the Landfill Reuse discussion, which centered upon passive recreational uses.
  - 13) Several meeting attendees also asked questions regarding the types of contaminants and the likely source of such contaminants found in the groundwater in vicinity of the Landfill property. Barb Roeper of EA described typical landfilling practices during the time that the Gude Landfill operated and the potential elements of the previous era's waste stream that may have contributed as sources of the contaminants.
  - 14) Several meeting attendees expressed confusion over the land exchange with M-NCPPC. Steve

Lezinski reiterated that during landfill operations in the late 1970s, waste was placed beyond the County's property boundary onto M-NCPPC property. This finding was confirmed during the Waste Delineation Study. Currently, the County is working with M-NCPPC to only exchange approximately seventeen (17) acres with trash for a similar acreage without trash. The County will still maintain all Landfill property with trash.

- 15) Several meeting attendees expressed displeasure that they have not been fully informed on all Landfill-related activities. Steve Lezinski reiterated efforts by the County including the twenty five (25) previous GLCC/DEP meetings, other community meetings and site activities that had public notices and the remediation webpage for sharing of information. The Derwood Station HOA presidents and GLCC members stated that any comments or questions can come to them. Alternatively, comments and questions can be directed the County representatives at the meeting or other County officials as deemed appropriate by the residents.
- 16) Regarding Land Reuse preferences, the Derwood Station HOA presidents and GLCC members emphasized to meeting attends to provide feedback to them and the County. The HOA's offered to include the current list of community preferred Land Reuse options in each upcoming HOA newsletter as well as conduct a secondary Land Reuse survey to obtain additional feedback from the community. Bob Hoyt emphasized for meeting attendees to maintain active correspondence with elected County officials such as the County Executive regarding Land Reuse preferences.
- 17) Aspects relating to the findings of the Waste Delineation Study, the NES and the ACM process appeared to be generally understood by meeting attendees at the conclusion of the meeting.
- 18) The community presentation is included as Attachment 2.

*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.*

**Gude Landfill  
Community Meeting  
Presentation of Environmental Studies**

**Meeting Handout**

- **Introductions**
  
- **Site Investigation Summary**
  
- **Landfill Background**
  
- **Community Engagement**
  
- **Remediation Approach Overview**
  
- **Next Steps**
  
- **Land Reuse Process**
  
- **County Contacts and Additional Information**
  
- **Questions and Discussions**

**Gude Landfill  
Community Meeting  
Presentation of Environmental Studies**

**Meeting Handout**

- **Bob Hoyt**
  - Director, DEP.
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- **Peter Karasik**
  - Section Chief, DSWS Central Operations.
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- **Stephen Lezinski**
  - Engineer III, DSWS Central Operations.
  - 240-777-6590; Steve.Lezinski@montgomerycountymd.gov
  
- **Jamie Foster**
  - Engineer I, DSWS Central Operations.
  - 240-777-656; Jamie.Foster@montgomerycountymd.gov
  
- **Gude Landfill Remediation Webpage**
  - <http://www6.montgomerycountymd.gov/swstmpl.asp?url=/content/dep/solidwaste/facilities/gude/index.asp>
  
- **GLCC/DEP Monthly Meetings**
  - Open to public and held the second Thursday each month.
  - Contact Steve Lezinski for schedule.

# Gude Landfill Remediation Approach Update

## Community Meeting

Date: September 18, 2012



# Outline

- Introductions
- Site Investigation Summary
- Landfill Background
- Community Engagement
- Remediation Approach Overview
- Next Steps
- Land Reuse Process
- County Contacts and Additional Information
- Questions and Discussions



# Introductions

- **Gude Landfill Concerned Citizens (GLCC)**
  - Dave Peterson (DS1 HOA President)
  - Laszlo Harsanyi (DS2 HOA President)
  - Nick Radonic (DS3 HOA President)
  - Keith Ligon, Julia Tillery and George Wolohojian
- **Montgomery County DEP**
  - Bob Hoyt, DEP Director
  - Peter Karasik, DSWS Section Chief
  - Steve Lezinski, DSWS Engineer III
  - Jamie Foster, DSWS Engineer I



# Introductions

- DEP engaged EA Engineering, Science, and Technology, Inc. (EA) as a technical resource
- EA – founded 1973
- Experienced in assessing groundwater contamination, performing risk evaluations and evaluating remediation alternatives at landfills
  - Mark Gutberlet, Project Manager
  - Barb Roeper, Sr. Technical Reviewer
  - Cynthia Cheatwood, Risk Evaluation Scientist



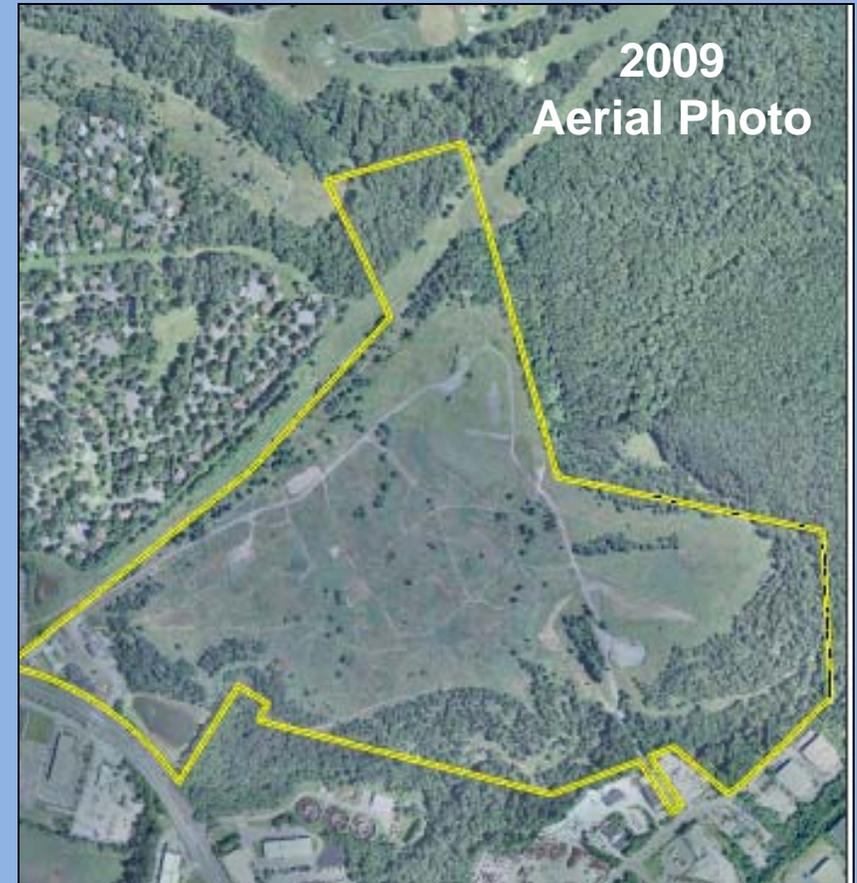
# Site Investigation Findings Summary

- Waste Delineation Study
  - Waste placed beyond Landfill property boundary; Land exchange required
- From the Nature and Extent Study
  - Volatile Organic Compounds (i.e. constituents) were detected in the groundwater monitoring wells in the vicinity of the Gude Landfill
  - Constituent concentrations are compared to U.S. EPA's Drinking Water standards (Maximum Contaminant Levels, or MCLs)
  - A limited number of constituent concentrations exceed MCLs
  - MDE requires comparison to MCLs even though the groundwater is not used as a source of drinking water
  - Detected constituents do not pose human health or ecological concerns for activities including walking, hiking, wading in streams, etc. in the vicinity of the Landfill. This includes adults, children and pets.



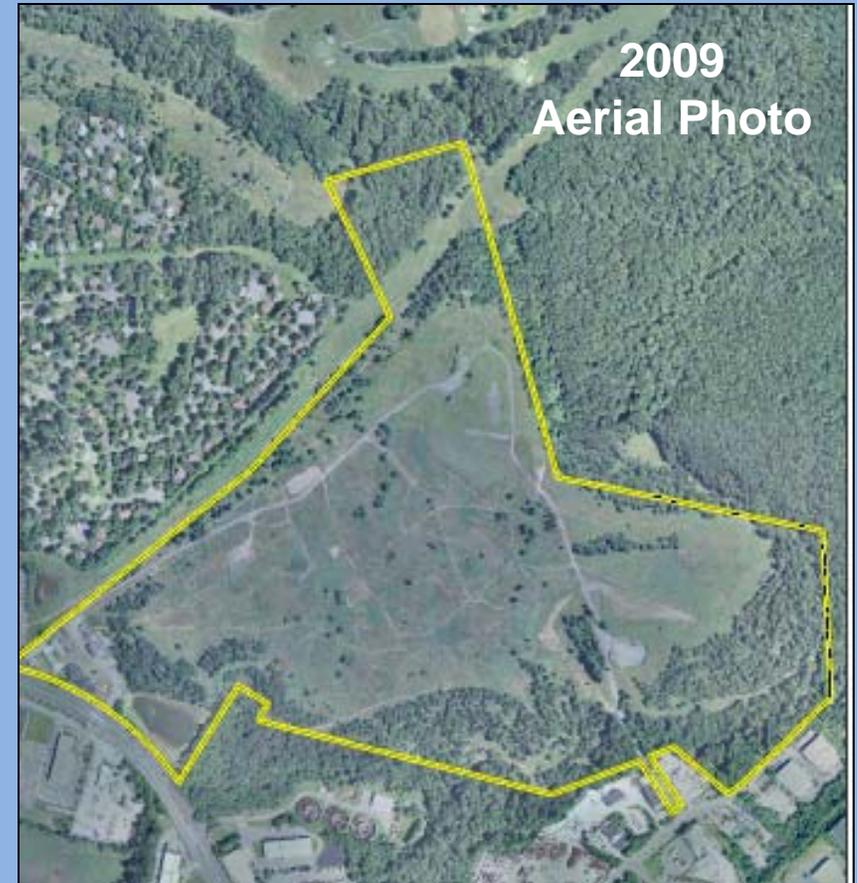
# Landfill Background

- Landfill Operated: 1964 to 1982
- DEP performs Post-Closure Care Maintenance Activities:
  - DEP monitors water quality via 39 groundwater monitoring wells and 5 stream locations
  - DEP manages landfill gas via 100+ gas extraction wells, 2 stack flares and a gas-to-energy facility
  - DEP monitors landfill gas via 17 gas monitoring wells
  - Along with other site inspections



# Landfill Background

- Maryland Department of the Environment (MDE) reviewed historical groundwater data in 2008 and directed DEP to initiate comprehensive site investigations to characterize groundwater contamination



# Landfill Background

- Groundwater and surface water quality analysis performed since 1984
- The groundwater in the vicinity of the Landfill is not used as a potable water supply
- Potable water for Derwood Station is supplied by the Washington Suburban Sanitary Commission (WSSC)



# Community Engagement

- GLCC/DEP Monthly Meetings – 25 meetings (since June 2009)
- DEP Remediation Webpage (June 2009)
- Community Meeting (September 2009)
- DEP Newsletters and Fact Sheets – 4 distributions (2010-2012)
- Derwood Station HOA Newsletters (2009-2012)



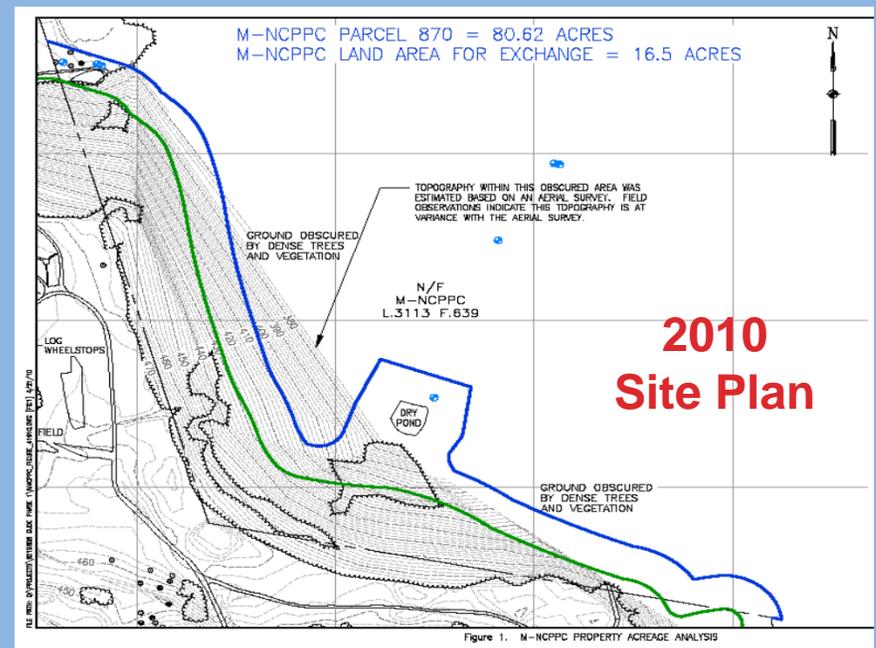
# Remediation Approach Overview

- **Waste Delineation Study – Complete (2009-2010)**
  - Define the horizontal extent of waste placed along the Landfill property boundary
  
- **Nature and Extent Study – Complete (2010-2012)**
  - Characterize and define the horizontal and vertical extent of groundwater contamination at and beyond the Landfill property boundary
  
- **Assessment of Corrective Measures – Ongoing (Aug. 2012–Jun. 2013)**
  - Assess the most feasible and effective technologies and/or processes to mitigate environmental contamination at and beyond the Landfill property boundary



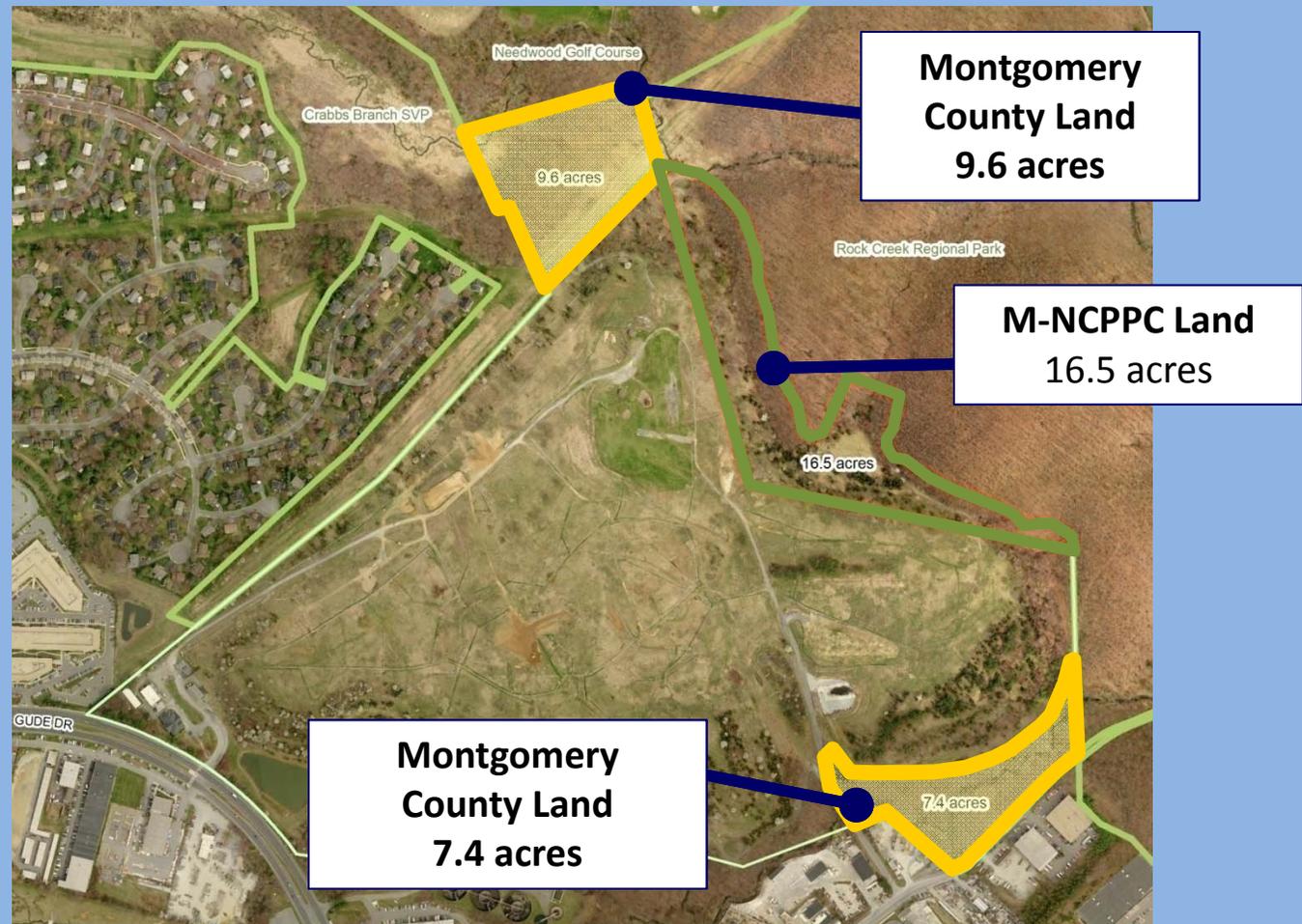
# Waste Delineation Study

- Investigation determined waste was placed approximately 250 feet beyond the Landfill property boundary; waste was placed in the late 1970s



# Exchange of Land with M-NCPPC

- Initiate land exchange with M-NCPPC for ~ 17 acre transfer
- Final Property Survey of 3 land parcels near complete



## Nature and Extent Study

- EA was engaged to perform an independent analysis of the extent of groundwater contamination
- EA reviewed historical County DEP data from existing monitoring wells (20)
- EA made recommendations for and installed additional monitoring wells (19) and performed their own groundwater sampling and analyses to complement the County's semi-annual sampling
- All aspects of the study were coordinated with MDE and the community



## Nature and Extent Study (cont.)

- Findings include:
  - Some concentrations near the landfill property boundary exceed MCLs set by U.S. EPA and enforced by MDE
  - No MCL exceedances were reported in the eight (8) groundwater monitoring wells installed in Derwood Station, with exception of tetrachloroethene (PCE) in one well (MW-09) near community border with right-of-way
  - There are no human health concerns for exposure to contaminants by residents or pets from groundwater or surface water within Derwood Station, the utility right-of-ways and nearby park land due to lack of exposure pathways and/or low concentrations
  - The Crabbs Branch and Southlawn Branch streams act as natural barriers to contaminant migration. The Landfill is not adversely impacting adjacent surface water bodies

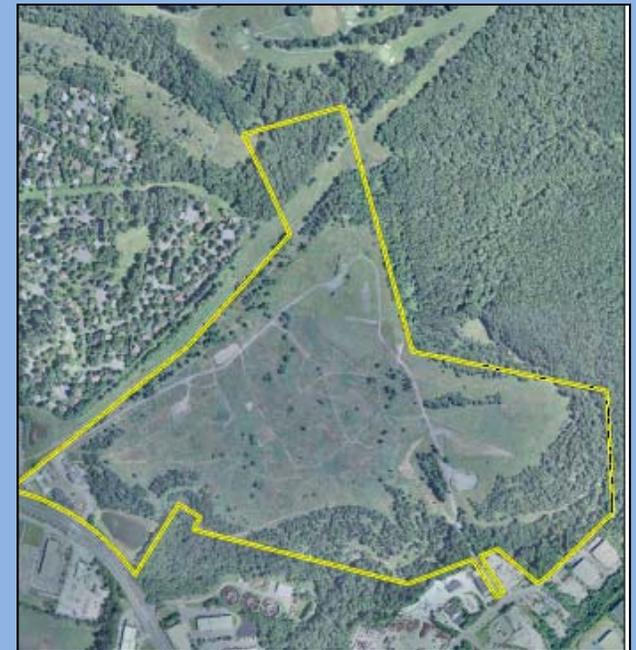




# Assessment of Corrective Measures

## Remedial Action Objectives:

- ***Groundwater:*** U.S. EPA's drinking water maximum contaminant levels (MCLs) will not be exceeded in the groundwater at the Gude Landfill property boundary
- ***Landfill Gas (LFG):*** Methane will not exceed lower explosive limit (LEL) at the Gude Landfill property boundary
- ***Leachate:*** No non-storm water discharges (leachate) will occur to waters of the State



# Assessment of Corrective Measures

- Define Remedial Action Objectives (RAOs) – These are very conservative guidelines and goals to ensure effective site remediation
- Develop and screen preliminary corrective measures alternatives
- Develop alternatives that may include combinations of technologies and methodologies retained during screening
- Analyze alternatives and select preferred alternative
  - Meet RAOs
  - Implementable, constructible, effectiveness, cost, etc.
  - Compatible with future land reuse



# Potential Corrective Measures

- **Waste Relocation**
  - Excavating, removing and relocating solid waste to remove the source of contaminants
  - Processing solid waste to screen cover soil and recyclable material
  - Selective or extensive in area



# Potential Corrective Measures

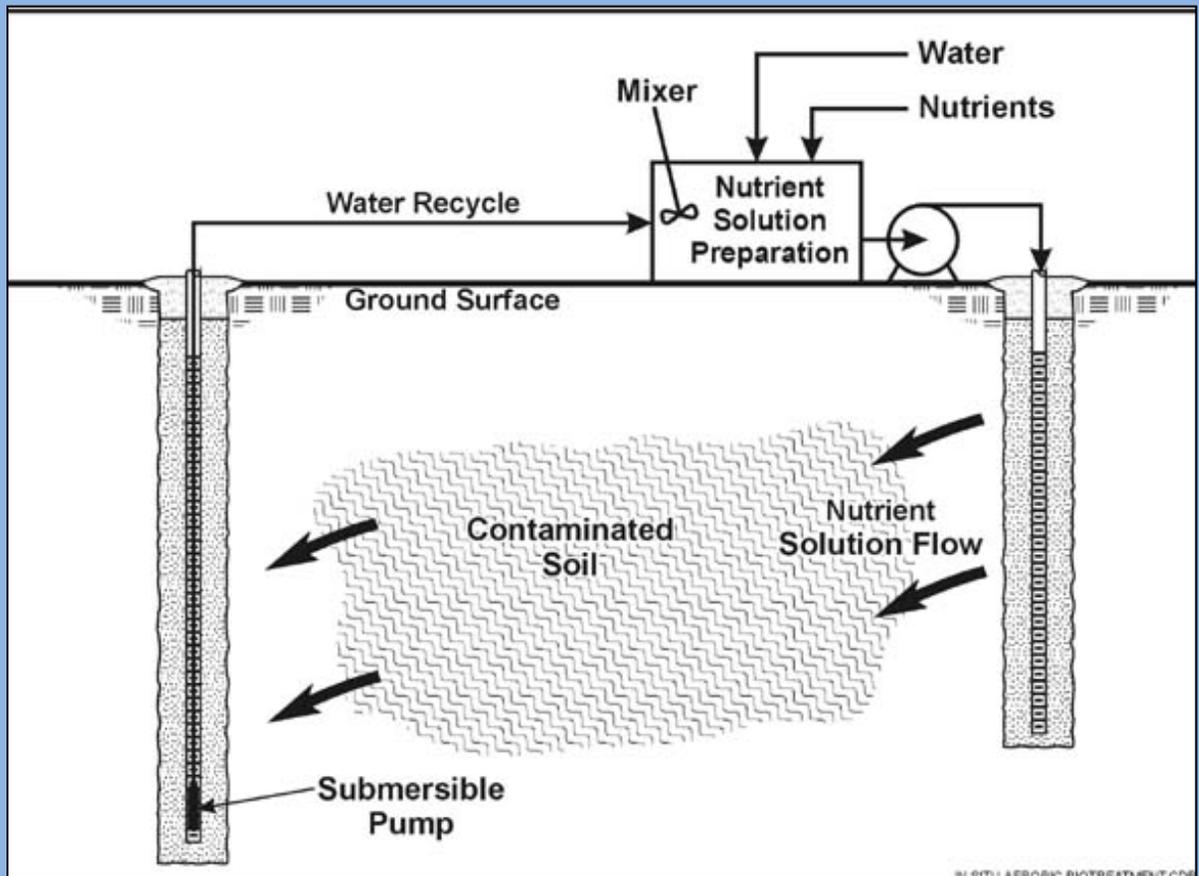
- **Phytoremediation**
  - The use of plants and/or trees to uptake groundwater as a mechanism to reduce the volume of contaminants in the groundwater



# Potential Corrective Measures

- **Bioremediation**

- Underground injection of nutrients and/or electron donors/acceptors, like vegetable oil or molasses, to stimulate microorganism activity to degrade and reduce contaminants

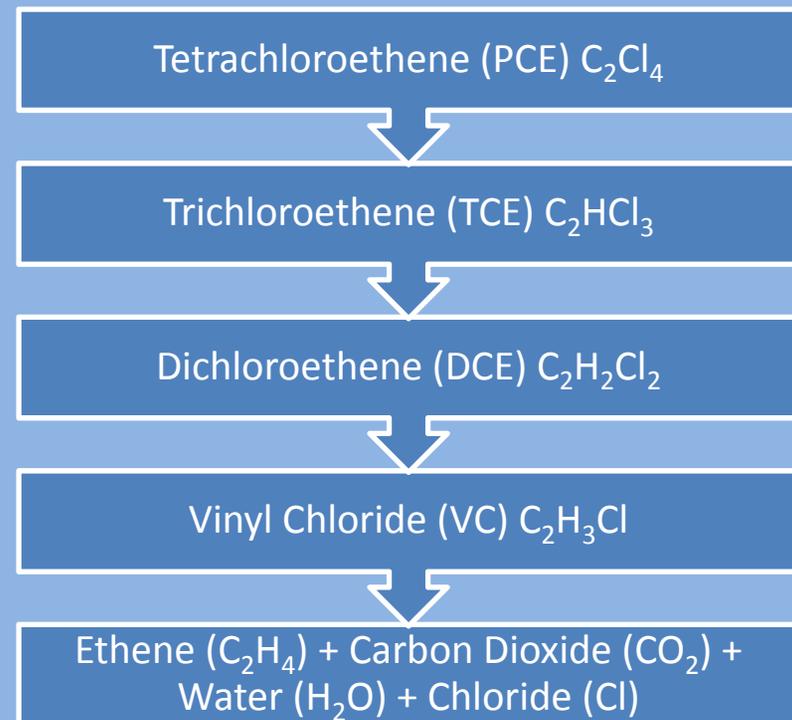


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# Potential Corrective Measures

- **Monitored Natural Attenuation**

- Natural biological processes within the subsurface that reduce contaminants in groundwater
- Processes transform organic contaminants to innocuous byproducts



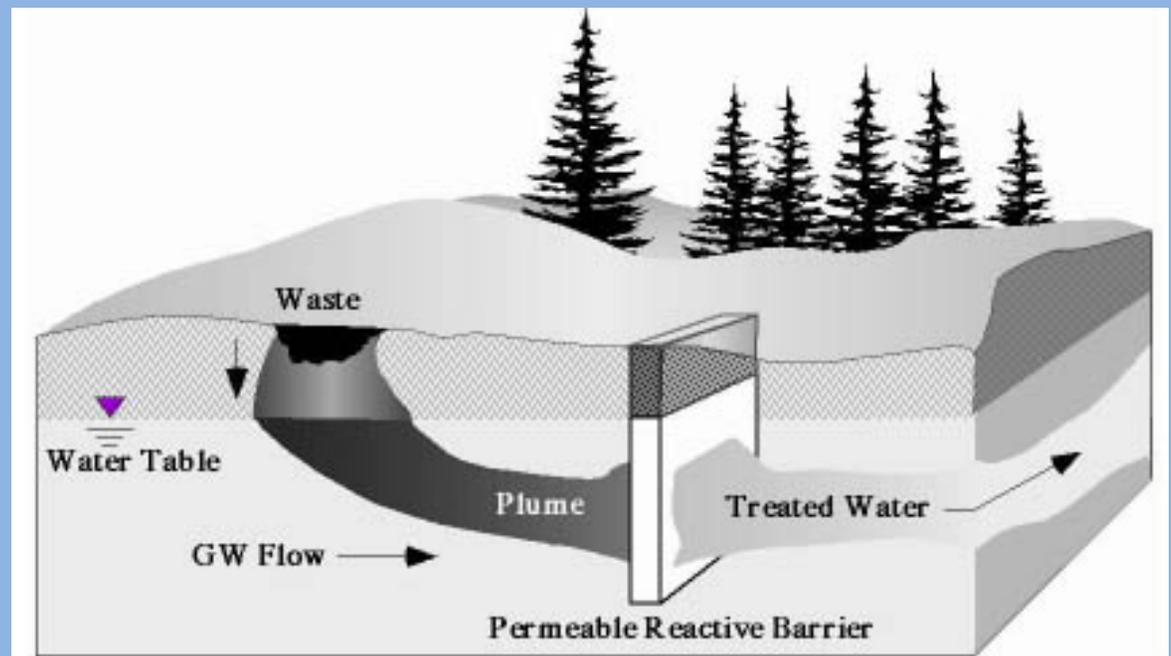
# Potential Corrective Measures

- **Landfill Capping**
  - Installation of a properly sloped engineered geosynthetic membrane system or soil cover system to cover a landfill
  - Reduces rainwater infiltration into the landfill and reduces leachate generation



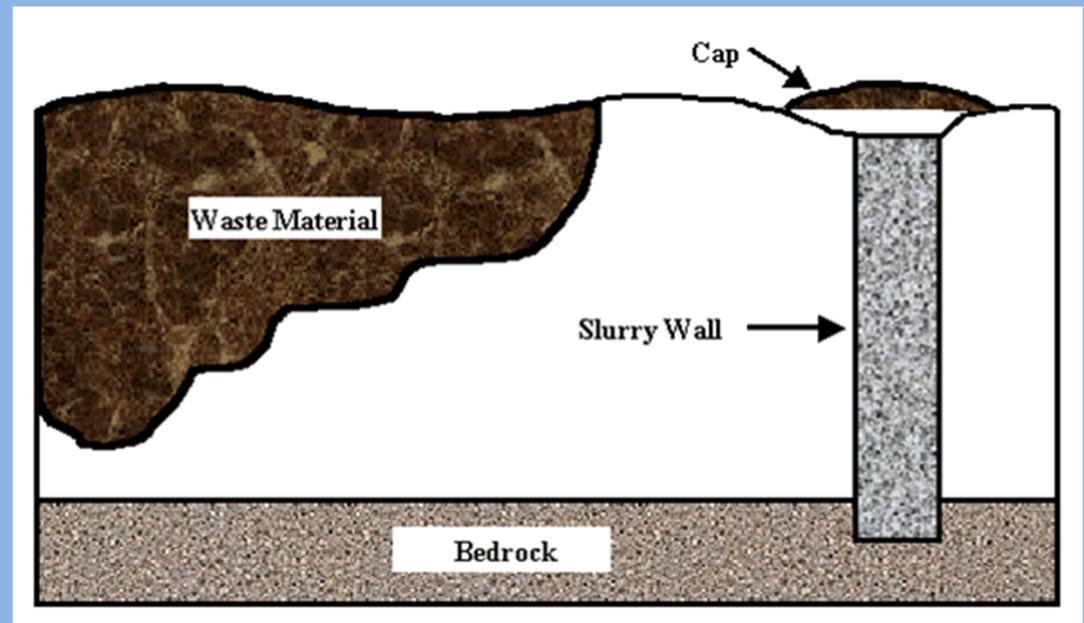
# Potential Corrective Measures

- In-situ Permeable Barriers
  - Constructed zones in the subsurface that allow groundwater to pass through them, while physically filtering or chemically reducing the contaminants



# Potential Corrective Measures

- Impermeable Barriers
  - Constructed zones in the subsurface that restrict the flow of groundwater and subsurface gases
  - Used to contain contamination as well as to divert water and gases from specific areas



# Potential Corrective Measures

- Pump and Treat
  - Extraction of groundwater from the subsurface by pumping (typically from groundwater extraction wells)
  - Groundwater is treated in an above-ground system and then discharged



## Assessment of Corrective Measures

- EA will prepare the final technical report
- MDE review and comment
- Revisions to ACM
- MDE ACM approval
- Potential future land reuses will be identified by the community, the County Executive and other interested parties
- Design and implement selected corrective measure(s), considering potential future land reuse options in design of corrective measure(s) to the extent feasible
- Monitor success of corrective measure(s)



# Ongoing Community Engagement

- Monthly GLCC/DEP Meetings
- Community representatives are welcome to initiate and continue discussions on future land reuse with the County Executive throughout the ACM process and final implementation of corrective measures
- DEP will continue to present documents to the community at principal milestones such as the completion of the ACM study
- DEP will continue to post documents to the remediation webpage



# Anticipated Schedule

Project Phase	2009		2010				2011				2012				2013				2014				2015				2016				2017			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Nature and Extent Study	█																																	
MDE Review									█																									
NES Amendment 1									█																									
MDE Review/Approval													█																					
ACM Work Plan													█																					
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ACM Amendment 1																	█																	
MDE Review/Approval																	█																	
Remedial Design *																					█													
Implementation *																									█									

\* Land Reuse Coordination



# Land Reuse Process

- Meetings with all parties interested in potential land reuses
- Community will have an opportunity to meet directly with the County Executive
- The County Executive will make a recommendation to MDE on the proposed remediation approach
- The County Executive's Office will put together a conceptual future land reuse plan considering information provided by all interested parties, which is also consistent with the remediation approach



## Land Reuse Process (cont.)

- The land reuse plan will go to the County M-NCPPC Planning Board for review under the Mandatory Referral Process
- Recommendations for approval or revision are provided by the Planning Board
- The County Council controls funding and will vote on whether to formally approve the final project
- If approved, the project will go forward as a full CIP project and design and permitting work will begin



# Land Reuse Community Preference

- Derwood Station HOAs 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
  - Garden plots



## County Contacts & Additional Info.

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# Questions and Discussions

