#### **GUDE LANDFILL REMEDIATION**

#### **GLCC/DEP MEETING NO. 33**

DATE:	November 7, 2013
TIME:	7:30 PM to 9:00 PM
LOCATION:	Montgomery County Transfer Station

#### ATTENDANCE:

<u>Name</u>	<u>Organization</u>	<b>Designation</b>
Laszlo Harsanyi	Gude Landfill Concerned Citizens (GLCC)	Member
Keith Ligon	Gude Landfill Concerned Citizens (GLCC)	Member
Dave Peterson	Gude Landfill Concerned Citizens (GLCC)	Member
Nick Radonic	Gude Landfill Concerned Citizens (GLCC)	Member
Charlie Regan	Gude Landfill Concerned Citizens (GLCC)	Member
Julia Tillery	Gude Landfill Concerned Citizens (GLCC)	Member
Peter Karasik	Montgomery County Dept. of Env. Protection (DEP)	Section Chief
Jamie Foster	Montgomery County Dept. of Env. Protection (DEP)	Engineer I
Mark Gutberlet	EA Engineering, Science, and Technology, Inc.	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) Jamie Foster of DEP requested approval of the minutes from GLCC/DEP Meeting No. 32. GLCC approved the minutes.
- 2) Mark Gutberlet of EA presented information about the consultant and DEP's recommended corrective measure alternative (which is still subject to review and approval by the County Executive). The presentation was very interactive and GLCC members asked questions about the details of the alternative, the expected activity at the site, the duration of activities, and the anticipated duration until the RAOs will be met. Questions included: where will the injection wells for the nutrients for the bioremediation be located (about a 100 feet back from the property line); how often will the portable generator be run for the nutrient injection system (about 24 hours every six months); what types of soils will be used in the soil cover improvements (not defined yet but low permeability soils could be specified in the future design documents); how can noise and disruption from construction equipment be controlled (construction hours can be built into the construction contracts; the noise ordinance also applies); and will the remediation approach affect differential settling (not likely since the injections will be in soil below the waste mass). Mark Gutberlet also explained how the tracer studies to better define groundwater flow direction and velocity will be used to help site the

second four injection wells in the pilot study. Dave Peterson of GLCC provided a comment that under "Community or Stakeholder Acceptance of Alternative" on Page 90 "Association" should be changed to "Associations" to reflect that the survey was performed by all three community associations.

3) Jamie Foster asked GLCC to discuss their talking points for the November 18, 2013 meeting with the County Executive. Keith Ligon of GLCC stated that the talking points provided by e-mail are in draft form. Keith stated that GLCC may add a talking point related to monitoring on-going settlement of the landfill and the potential impact of settlement on re-use. GLCC indicated that they did not favor a reuse decision on the site until the remediation approach has proven to be effective. Dave Peterson of GLCC asked who from the County would be present at the meeting. Peter Karasik of DEP stated that Bob Hoyt (DEP Director) will likely be present and Peter and Jamie may be present. Dave P. asked if any County Council members would be present and Peter K. said it was unlikely.

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

30-1 DEP to provide GLCC a revised draft of the ACM (with Chapters 1-8) that incorporated the consolidated comments from EA and the County.
 <u>Status</u>: Closed. DEP provided GLCC access to the complete Draft ACM Report in PDF format on November 5, 2013 via the Landfill Remediation Webpage.

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

33-1 GLCC to provide revised talking points for their meeting with the County Executive on November 18, 2013 and provide to DEP before the meeting with DEP staff and the County Executive on November 14, 2013.

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 Remediation Gude Landfill Concerned Citizens Monthly Meeting No. 33

#### Meeting Agenda

#### 1. Meeting Sign-In Sheet

a. Please sign-in.

#### 2. GLCC/DEP Meeting Minutes (Meeting No. 32 on 10/10/13)

a. DEP to request review and acceptance (see handout).

#### 3. Preparation for meeting with County Executive (CE).

- a. Discuss CE Meeting talking points prepared and submitted by GLCC (Attached).
- b. Identify County participants for CE Meeting.

#### 4. ACM – Alternative No. 5 Discussion

> Brief presentation to address GLCC's questions regarding Alternative No. 5 of the ACM.

#### STATUS ITEMS

#### 5. Remediation Project Activity Updates

- a. Land Exchange with M-NCPPC.
  - The County Office of Real Estate has completed their portion of the land disposition package and submitted it to M-NCPPC. The County Office of Real Estate is now waiting to be contacted by M-NCPPC to schedule a closing meeting to finalize the land exchange.
  - The surficial debris identified during the site visit with M-NCPPC will be removed once the property maintenance contractor's proposal is reviewed and approved.
- b. Consent Order.
  - DEP developed a Work Plan and Schedule as required under the Consent Order, which was submitted to MDE on 7/17/13. GLCC received a copy of this document on 8/1/13 via e-mail.
  - Since MDE requested that the ICM approach be integrated into the ACM, the Work Plan and Schedule for the Consent Order will be finalized once MDE approves the Assessment of Corrective Measures (ACM) Report.
- c. Assessment of Corrective Measures.
  - On August 12, 2013, DEP requested an extension for the submission date of the ACM in order to evaluate the option of drilling through waste to install bioremediation wells instead of performing waste excavation around the perimeter of the landfill to create a buffer zone for bioremediation wells. MDE approved the extension for the ACM submittal. The revised submittal date is January 31, 2014.
  - > DEP to brief County Executive on the revised Draft ACM on November 14, 2013.
  - ▶ GLCC to meet with County Executive at 4:30 p.m. on November 18, 2013.
  - DEP to receive feedback from the County Executive and other County Agencies as well as comments from GLCC.
  - EA incorporates comments and prepares the Final ACM for submission to MDE on or before January 31, 2014.

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#### Gude Landfill Remediation Gude Landfill Concerned Citizens Monthly Meeting No. 33

#### **Meeting Agenda**

d. Landfill Remediation Webpage – updates continue

#### 6. Current Gude Landfill Operations

- a. Standard post-closure care activities.
  - Landfill Gas Management the perimeter landfill gas monitoring wells along the N.W. property boundary were in compliance for the month of October 2013. Monitoring well W-28 along the southwest boundary near Pond 1 was the only well slightly exceeding the lower explosive limit (LEL) of 5% by volume of methane gas. Methane gas was detected at 6.6 % at W-28 during last week's sampling.
  - Well field adjustments to increase vacuum in that area of the Landfill continues to be made by the County's Landfill Gas Management Contractor. The County has also discussed installing another extraction well in this area to mitigate exceedences.

#### 7. WSSC Water Main Maintenance

- a. The County and WSSC are in the process of finalizing the right-of-entry (ROE) agreement for signature. Once the Office of Risk Management approves the mandatory insurance requirements, the County will submit the ROE agreement to WSSC for signatures.
- b. This agreement will allow WSSC to use an existing groundwater monitoring well access road at the Gude Landfill, located near the Southlawn Lane entrance, to access their sewer lines for maintenance.

#### 8. Action/Follow-up Items and Next Meeting

- a. Closed Action Items
  - > 30-1. DEP to provide GLCC the revised Draft ACM for review and comment.
- b. Open Action Items
  - > No open action items at this time
- c. Summarize New Action Items from Meeting
- d. Next Meeting date.
  - ▶ November 18, 2013 with the County Executive.
  - ▶ Next GLCC Meeting: TBD

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	1 T T 7 7				
Time	Time 7:30 -9:00 PM		Meeting No. 33		
Meeting	Meeting Gude Landfill Remediation: GLCC/DEP	ation: GLCC/DEP			
Name	Initial if Present	Affiliation	Phone	Email	Address
Peter Karasik	PK	DEP	240-777-6569	Peter.Karasik@montgomerycountymd.gov	16101 Frederick Road Derwood, MD 20855
Jamie Foster	JCF	DEP	240-777-6564	<u>iamie.foster@montgomerycountymd.gov</u>	16102 Frederick Road Derwood, MD 20855
Mark Gutberlet	MIR	EA Eng.	410-329-5135		15 Loveton Circle Sparks, MD 21152
Dave Peterson		GLCC/DS1 HOA			7612 Anamosa Way Derwood, MD 20855
Keith Ligon	1682	GLCC	301-340-3358	keligon56@gmail.com	15501 Moravia Court Derwood, MD 20855
Julia Tillery	12 -1	GLCC			15461 Indianola Drive Derwood, MD 20855
Laszlo Harsanyi	F	GLCC/DS2 HOA	301-840-3822	LaszloH@comcast.net	7228 Titonka Way Derwood, MD 20855
Nick Radonic	, MR	GLCC/DSS HOA	301-294-9124		15408 Indianola Drive Derwood, MD 20855
George Wolohojian	D	GLCC/DSS HOA	301-738-7148	gwolohojian@aol.com	15448 Indianola Drive Derwood, MD 20855
Charles Regan	SX	GLCC/DSS HOA	202-510-1363	ll.com	15532 Grinnell Terrace Derwood, MD 20855
Other Meeting Attendees					
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- 5-01 DEP and EA to research the existence of a comprehensive database for closed landfill reuse options.
  <u>Status:</u> Closed. EA provided a list of landfill reuse resources, which was attached to the minutes for Meeting No. 7.
- 5-02 GLCC to schedule next Derwood Community Meeting; second quarter 2010. <u>Status:</u> Closed. GLCC noted that the Community will continue to be welcome at the monthly meetings, and these will be included in the DEP letter to the HOAs and the residents. Therefore, GLCC does not plan to schedule another community meeting at this time.
- 5-03 DEP to contact MDE regarding the spring and northwest slope surface water sampling, and leachate seep repairs on northwest slope.
  <u>Status:</u> Closed. DEP and MDE met on December 21, 2009 and discussed these issues. The outcome was summarized in Attachment No. 4 of the Meeting No. 7 minutes.
- 5-04 DEP to post the recent aerial survey of the Gude Landfill on the remediation project website.Status: Closed. The image has been posted on the website.
- 5-05 DEP to evaluate if Biochemical and Chemical Oxygen Demand (BOD/COD) can be included for analysis purposes in surface water samples. <u>Status:</u> Closed. After further discussion, GLCC agreed that BOD sampling would not be conducted, since it would be difficult to discern whether the results were affected by the landfill. DEP agreed to collect samples for COD analysis. The objectives and plan for COD sampling was and agreed to between DEP and GLCC.
- 5-06 DEP to reschedule the dioxin/furan testing of the Gude Landfill gas-to-energy engine. <u>Status:</u> Closed. The testing was conducted in early March 2010 but the results have not yet been reported.
- 5-07 EA to provide a list of the chemical analytes that were detected in the Gude Landfill groundwater/surface water sampling that are carcinogens.
  <u>Status:</u> Closed. EA provided a summary of risk and carcinogenic effects for chemical analytes, which is included as Attachment No. 6 to the Meeting No. 7 minutes.
- 6-01 DEP and EA to create a list of open agenda items (i.e., action and follow-up items). <u>Status:</u> Closed. This list is included in the meeting minutes and will be carried into subsequent minutes.
- 6-02 DEP and EA to finalize more precise locations of the new monitoring wells. Follow-up work with permitting agencies, utility locators, and adjoining property owners will be conducted.
  <u>Status:</u> Closed. Additional location information finalized.

- 6-03 GLCC/DEP/EA to finalize an approach to communicate all aspects of the expanded monitoring well program to the Derwood Community. <u>Status:</u> Closed. Initial letters to be sent to the HOAs, with follow-up letters to residents in the immediate area of proposed intrusive activities.
- 7-01 DEP to complete interim measures for leachate redirection at seep locations. <u>Status:</u> Closed. Completed May/June 2010.
- 7-02 DEP to finalize and send letter to HOAs regarding the landfill remediation project and proposed groundwater monitoring well locations within the Community.
  <u>Status:</u> Closed. DEP prepared the Community notification letter dated 2-26-10 for distribution to the residents via the HOA presidents.
- 7-03 DEP to obtain dioxin/furan test results for flare and engine. <u>Status:</u> Closed. Results provided to GLCC June 2010.
- 8-01 EA will provide DEP with a full version of the Draft Study Plan as a PDF for posting on the website and an abbreviated PDF version for distribution to GLCC members.
  <u>Status:</u> Closed. Received by County on August 6, 2010. County to post on remediation webpage.
- 8-02 GLCC will distribute the DEP Community Letter in a special edition of each of the three HOA newsletters, both by e-mail and standard mail, by the end of March. <u>Status:</u> Closed.
- 9-01 DEP and EA will provide a list of milestones and dates to include as a schedule update with minutes from each meeting. <u>Status:</u> Closed.
- 9-02 DEP and EA will identify special instructions for residents and the driller to be used during the actual well drilling for inclusion in the individual resident notification letters. <u>Status:</u> Closed. Completed June 2010.
- 10-1 EA will prepare a Maryland Toxic Air Pollutant regulation compliance demonstration for dioxin/furan emissions from the flares and engines at Oaks and Gude. <u>Status:</u> Closed. DEP will post on the Remediation webpage.
- 10-2 GLCC will meet independently on June 20, 2010 to discuss the process of early integration of end use objectives into the corrective action planning process and will propose a pathway and procedure to DEP at the July 8, 2010 DEP/GLCC meeting. <u>Status:</u> Closed. During Meeting No. 11, GLCC provided the County guidance on preferred end uses from the Community for the Gude Landfill site.

- 11-1 GLCC requested Bob Hoyt, Director of DEP to attend the next GLCC/DEP monthly meeting on September 15, 2010 to discuss the Request for Expression of Interest (REOI). <u>Status</u>: Closed.
- 11-2 GLCC inquired if the County had investigated the potential for a Brownfields Grant for the Remediation/Land Reuse project.
  <u>Status</u>: Closed. Grant funding options were presented to GLCC on 4/14/11.
- 12-1 Using the risk evaluation methodology, EA will back calculate contaminant concentrations that would represent a human risk concern for vapor intrusion from groundwater into indoor air.
  <u>Status</u>: Closed. The calculation was made by EA and included in the analysis and provided to GLCC.
- 13-1 EA will revise the last two sentences in paragraph 5) of the minutes for Meeting No. 12 to clarify the concept.
  <u>Status</u>: Closed. Changes are reflected in Meeting No. 12 Minutes.
- 13-2 EA will prepare and submit to DEP for review a summary of the project status including background, status, and the remaining activities to complete the project. The HOA Presidents will distribute this summary to Derwood Station residents.
  <u>Status</u>: Closed. The Nature and Extent Study Fact Sheet was e-mailed to GLCC/HOA Presidents by Steve Lezinski on 12/23/10 for distribution to the Derwood Station Residential Community.
- 13-3 EA will research the applicability of 40 CFR Part 258 Subpart E and report back to DEP and GLCC.
  <u>Status</u>: Closed. A response was provided via e-mail by Steve Lezinski to GLCC on 11/3/10 the regulation is not applicable to Gude Landfill.
- 14-1 DEP will address conformance of the current monitoring program to the 2001 County Groundwater Protection Plan.
  <u>Status</u>: Closed. It was determined that the Ground Water Protection Strategy is not an active program within DEP.
- 14-2 DEP will contact the County Attorney and the County Real Estate Office concerning potential property value impacts and seller's obligations. <u>Status</u>: Closed. The Office of the County Attorney cannot provide legal advice to members of the Community. If members of the Community desire advice on property value impacts and seller's obligations, they would have to obtain this legal advice from their own legal counsel.
- 15-1 DEP and EA will establish a list of key project milestones for inclusion in the Project Communications Plan.
   <u>Status</u>: Closed. As part of the Project Communications Plan, an updated project

schedule and key project milestones were presented to GLCC on 4/14/11.

- 15-2 DEP and EA will determine the current regulation for setbacks at new landfills and report this information to GLCC.
  <u>Status</u>: Closed. Applicable setback requirements were determined and presented to GLCC on 4/14/11.
- 15-3 DEP will submit the proposed action plan for further investigation and analysis to satisfy MDE's concerns about the Nature and Extent Study to MDE by March 18, 2011.
  <u>Status</u>: Closed. The work plan of Amendment No. 1 to the Nature and Extent Study was submitted to and accepted by MDE in March 2011.
- 16-1 DEP and EA will evaluate the potential corrective measure of excavation and relocation of waste in greater detail, and present this to GLCC at a future monthly meeting.
  <u>Status</u>: Closed. DEP and EA presented the potential corrective measure of waste excavation and reclamation during the GLCC/DEP Meeting No. 17.
- 16-2 DEP and EA will further evaluate end use options and present these to GLCC in a future monthly meeting.
  <u>Status:</u> Closed. This action item was combined with other action items into new item 29-1.
- 17-1 DEP will contact senior County representatives and stakeholders regarding their attendance at a future GLCC/DEP monthly meeting to discuss the County's decision making process for Landfill site reuse, potential County site reuse options and the integration and consideration of the Community's reuse options.
  <u>Status:</u> Closed. This action item was combined with other action items into new item 29-1.
- 17-2 DEP will add a timeline/milestone review section to future meeting agendas. Status: Closed. DEP added this item as a standard topic for future agendas.
- 17-3 DEP will create a quarterly newsletter to orient the larger Community and other adjacent property stakeholders on the Landfill. The newsletter will contain an update on the Nature and Extent Study activities that have occurred in the past three months. The newsletter will be provided to GLCC to include in an upcoming HOA newsletter. <u>Status</u>: Closed. DEP provided the Quarterly Newsletter to GLCC and the Derwood Station HOA's on June 30, 2011.
- 18-1 Once the Landfill land reuse discussion is documented and agreed upon in a decision memo with the County Executive and/or other stakeholders, DEP will share the final findings of the agreed upon process with GLCC.
  <u>Status:</u> Closed. This action item was combined with other action items into new item 29-1.

- 20-1 DEP and EA will provide a map that combines analytes with MCL exceedences and their individual inferred extent of contamination. DEP stated this could be accomplished after MDE approval of the NES Amendment No.1 Report. Status: Closed. DEP and EA presented the information at GLCC/DEP Meeting No. 21.
- 20-2 DEP and EA will prepare a written explanation of the chemical degradation of TCE and PCE.

Status: Closed. DEP and EA presented the information at GLCC/DEP Meeting No. 21.

- 20-3 DEP will prepare a Fact Sheet for the NES Amendment No. 1 after MDE approval of the Report.
  <u>Status:</u> Closed. DEP provided the draft fact sheet for review and will prepare the final version by the end of May. DEP provided the fact sheet to GLCC via email on May 31, 2012 for inclusion in the June 2012 Derwood Community Newsletter.
- 20-4 DEP will prepare a Fact Sheet to summarize the ACM process after MDE approval of the NES Amendment No.1 Report.
  <u>Status:</u> Closed. DEP provided the draft fact sheet for review and will prepare the final version by the end of May. DEP provided the fact sheet to GLCC via email on May 31, 2012 for inclusion in the June 2012 Derwood Community Newsletter.
- 20-5 DEP to coordinate with GLCC to organize a larger community meeting to present the accepted findings of the NES and introduce the ACM process. This will be initiated after MDE approval of the NES Amendment No.1 Report. GLCC/DEP will review dates for the larger community meeting. DEP will confirm dates with appropriate staff and consultants. GLCC/DEP will develop the agenda for the larger community meeting. GLCC suggested the following major topics: 1) review of the overall purpose and process for the project, 2) a status update on recent activities, 3) explain the next steps, and 4) discuss landfill re-use options. GLCC will secure meeting space. Potential meeting date for September 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, or 18<sup>th</sup> will be confirmed. Meeting on September 18 at Candlewood Elementary School has been tentatively decided. The date or location could be changed based on Montgomery County Public School calendar and Candlewood Elementary School availability.

<u>Status:</u> Closed. Community meeting has been scheduled and the draft presentation was reviewed with GLCC.

- 22-1 DEP to provide electronic copy of fact sheets via e-mail so GLCC can comment in those documents.
  <u>Status:</u> Closed. DEP e-mailed Microsoft Word versions of the fact sheets to GLCC via email prior to finalization on May 31, 2012.
- 22-2 DEP to develop workshops starting with the next GLCC meeting (MNA and bioremediation topics suggested). Part 1 of the workshop was presented at GLCC/DEP Meeting No. 23. Part 2 of the workshop was presented at GLCC/DEP Meeting No. 24. <u>Status:</u> Closed. Workshops were presented.

- 25-1 DEP will revise the community presentation based on the feedback and discussion at GLCC/DEP Meeting No. 25.
  <u>Status:</u> Closed. Presentation was revised and presented at the Community Meeting on September 18, 2012.
- 25-2 DEP will prepare the public notice for the community meeting and send it to GLCC for distribution to the community.
  <u>Status:</u> Closed. The public notice was provided before the Community Meeting.
- 25-3 GLCC will distribute the public notice provided by DEP via e-mail and door-to-door through existing HOA communication networks. <u>Status:</u> Closed. The public notice was distributed before the Community Meeting.
- 25-4 DEP will prepare and provide two signs announcing the community meeting to be placed along the streets at the two entrances to Derwood Station. <u>Status:</u> Closed. The signs were provided and posted before the Community Meeting.
- 26-1 DEP will provide a briefing on the draft of Section 4 of the ACM Report at the December 2012 GLCC/DEP Meeting.
  <u>Status</u>: Closed. A briefing was provided at the December 2012 meeting.
- 26-2 DEP will post the overall remediation schedule on the Gude Landfill Remediation Website.
  <u>Status</u>: Closed. The anticipated schedule is posted on the Remediation webpage.
- 26-3 DEP will post the M-NCPPC pamphlet of the Gude-Southlawn Recreational Area dated 1973 on the Gude Landfill Remediation Website.
  <u>Status</u>: Closed. The pamphlet is posted on the Remediation webpage.
- 27-1 GLCC will review the draft Table 4-2 from the ACM and provide any comments or ask questions about the initial analysis summarized in the table. <u>Status:</u> Closed. Table 4-2 was discussed at GLCC/DEP Meeting No. 28.
- 29-1 Based on discussions during GLCC/DEP Meeting No. 29, GLCC requested an update and consolidation of the outstanding Action and Follow-up Items (16-2, 17-1 and 18-1) regarding land reuse at the Landfill and the future stakeholder meeting.

During future GLCC and DEP monthly meetings, discussions will be held to plan and schedule the land reuse and stakeholder meeting. The meeting shall include discussions regarding the County's decision making process for site reuse at the Landfill, potential County land reuse options and the integration and consideration of the community's preferred reuse options. Attendees at this meeting will include senior County representatives (such as the County Executive), County stakeholder agencies (such as DEP, DGS or OMB), other potential stakeholders (such as M-NCPPC) and GLCC/ the

community. A general summary of DEP and GLCC responsibilities for the land reuse and stakeholder meeting are provided below:

- GLCC to provide DEP a general timeframe for holding the meeting. In GLCC/DEP Meeting No. 30, GLCC expressed that a timeframe of September 2013 would be acceptable for the meeting.
- DEP to coordinate with County representatives and stakeholders, provide facility accommodations and prepare the meeting agenda with input from GLCC/the community.
- County representatives will discuss the County's decision making process for site reuse at the Landfill and any potential County land reuse options known at this time. GLCC/the community and other stakeholders will have the opportunity to comment on the potential decision making process for site reuse at the Landfill.
- GLCC/the community and the other stakeholders will formally present their preferred land reuse options to County and other stakeholders. County representatives will have the opportunity to comment on the preferred land reuse options presented by GLCC/the community and other stakeholders.
- After the meeting, County representatives will prepare draft meeting minutes or a decision memo to summarize the discussions including the decision making process for site reuse at the Landfill. GLCC/the community and other stakeholders will have the opportunity to comment on the draft meeting minutes or decision memo. Once all comments are received, County representatives will finalize the meeting minutes or decision memo and distribute to meeting attendees.
- For future GLCC/DEP monthly meetings, County representatives will present any potential land reuse options that are being considered and the aspects of their feasibility and implementation.
- Regarding DEP's responses to GLCC's questions from May 2013, GLCC would like DEP to set up a GLCC/DEP meeting to discuss the technical feasibility of reuse options and a timetable to address the impacts of remediation activities on the community.
- The description for this Action and Follow-up Item was accepted by Keith Ligon and George Wolohojian via email on 7/6/13.

Status: Closed. This meeting has been scheduled for November 18, 2013.

29-2 GLCC will contact homeowners who received a letter from the County offering a new methane gas detector to make sure the homeowners saw the letter. DEP will provide the list of homeowners who received the letter to GLCC.

<u>Status</u>: Closed. DEP provided the list of homeowners and GLCC contacted homeowners via e-mail on June 4, 2013.

- 29-3 DEP will provide a PDF copy of the Consent Order for the Landfill to GLCC via e-mail. <u>Status</u>: Closed. DEP provided a PDF copy of the consent order to GLCC via e-mail on June 4, 2013.
- 30-1 DEP to provide GLCC a revised draft of the ACM (with Chapters 1-8) that incorporated the consolidated comments from EA and the County.
  <u>Status</u>: Closed. DEP provided GLCC access to the complete Draft ACM Report in PDF format on November 5, 2013 via the Landfill Remediation Webpage.
- 30-2 GLCC asked DEP to obtain responses from the Office of the County Attorney regarding the County's responsibility and/or liability to the adjacent property owners of the Gude Landfill. DEP will place the information request and obtain responses. <u>Status</u>: Closed. DEP provided responses to GLCC from the Office of the County Attorney via e-mail on July 10, 2013.

#### GLCC Meeting with County Executive Ike Leggett November 18, 2013 Talking Points

GLCC appreciates the opportunity to discuss the remediation and reuse of the Gude Landfill with the County Executive. GLCC also appreciates the current strong working relationship that has been developed with County staff and officials, founded upon an active dialogue, timely consultation, and transparency.

#### • What is GLCC?

- Gude Landfill Concerned Citizens Committee (GLCC) is a committee established by three homeowner's associations located in Derwood Station and Hollybrooke subdivisions.
- GLCC membership is comprised of three HOA presidents and other community leaders.
- o GLCC represents approximately 500 households in the Derwood Station community.
- The Derwood Station community borders the Gude Landfill the landfill is literally 150 feet away from our residents' backyards.
- GLCC anticipates continued active involvement in the remediation and reuse of the Gude Landfill.

#### • What is GLCC concerned about?

 GLCC is focused on the remediation of the landfill, the impact on the community during remediation, the eventual passive reuse of the landfill, ensuring that the rights of the community arising from the failure of the County to properly contain the landfill waste and toxic materials are protected and recognized, and seeking fulfillment of the County's commitment to reuse the Gude Landfill in such fashion that it provides tangible benefits to the Derwood Station community.

#### • What are GLCC views on remediation alternatives?

GLCC supports the conduct of a pilot study to demonstrate the effectiveness of the bioremediation approach; to be conducted contemporaneously with partial regrading and waste relocation along the northwest border. We agree with County staff that more invasive approaches (such as wide-spread waste relocation or extensive capping) are not presently necessary given the level of MCL exceedences and groundwater contamination. We have questions and concerns about the impact on the community and the long-term effectiveness of the remediation options, but are comfortable in our ability to address same with County officials over time.

#### • What are GLCC views on reuse of the property?

- It will be 5 10 years at a minimum for the evaluation and completion of approved corrective measures.
- Reuse will not prove viable until the remediation efforts have been completed, the settling of the landfill has ceased or at minimal levels and methane levels have been well-controlled (below MCLs) for an extended period of time, such that reuse is possible.
- Reuse alternatives should be restricted to passive activities that provide significant and meaningful benefit to the Derwood Station community.
- Reuse should not include (i) commercial activities,(ii) activities that are themselves damaging to the environment (i.e. commercial yard waste processing).
- The passive reuses listed in the attachment are considered preferable.

#### • What does GLCC want?

- GLCC asks the County Executive to commit to support remediation alternatives that strongly consider the impact on the Derwood Station Community resulting from the selected corrective measures to be employed at the Gude Landfill, including noise, traffic, dust, odors, animals and scavengers, unsightliness, and duration.
- GLCC asks the County Executive to commit to non-commercial and passive reuse of the Gude Landfill that benefits the Derwood Station community and that does not result in increased environmental risk (i.e. to not locate or expand the commercial yard waste processing facility at the landfill).

#### • Background:

- Since 2008, the GLCC has been actively engaged with County and State officials regarding the groundwater contamination and methane gas emissions at the landfill, and has been involved in the County's Nature and Extent Study, and the pending Assessment of Corrective Measures.
- It has been established is that groundwater contaminants have moved off the landfill site, methane levels have been seen above the explosive limit, waste has been found to be outside the landfill boundaries, and surface water and soil samples have been shown to exceed minimum contamination limits.
- At this time, the County is finalizing its Assessment of Corrective Measures, which includes options ranging from bioremediation to waste relocation and landfill capping.

#### **Gude Landfill Future Use**

- 1. Running/walking trails (access to Rock Creek Trail System)
- 2. Community garden plots
- 3. Dog Park
- 4. Children's play area
- 5. Model plane flying area
- 6. Picnic area

# Recommended Corrective Measures Alternative 5

Presented at GLCC/DEP Meeting No. 33

Date: November 7, 2013





### **Remedial Action Objectives:**

- *Groundwater:* 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







### What is Alternative 5?

- Enhanced Bioremediation to meet groundwater RAO
- Cover System Improvements to meet leachate RAO
- Additional Landfill Gas Collection to meet LFG RAO





## What is Enhanced Bioremediation?

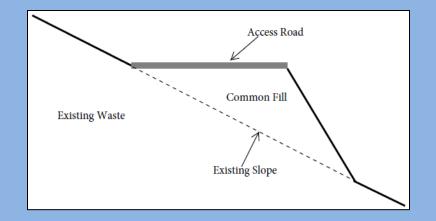
- Underground injection of nutrients and/or electron donors/acceptors to stimulate microorganism activity to degrade and reduce contaminants
  - Food-grade substrate: vegetable oil, sodium lactate or molasses
- Effective for chlorinated compounds such as PCE, TCE, DCE and VC found at Gude Landfill

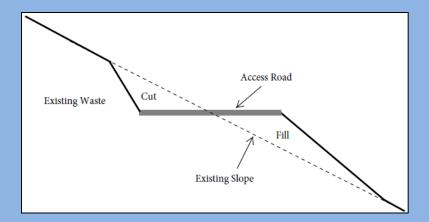




### **Bench Construction**

- Injection wells will likely be installed on landfill side-slopes to provide time for biodegradation before the groundwater reaches the property boundary.
- Benches provide flat surfaces to construct access roads and install injection wells.
- Approximately 6,600 feet of benches may be needed.



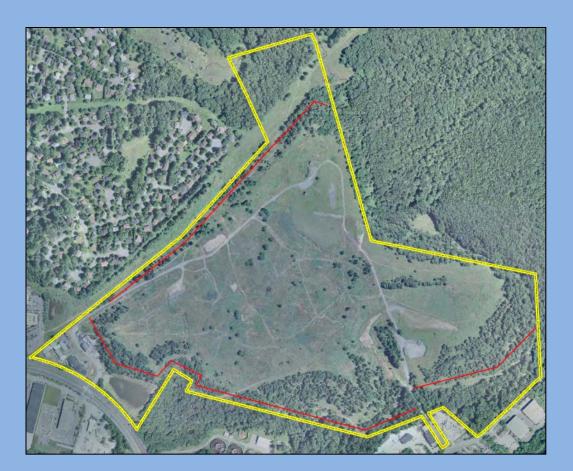






### **Access Roads**

• Required for accessing areas for injection well installation, monitoring, and periodic injections.







### **Access Roads**

• Selective clearing of tree-covered areas will be required.



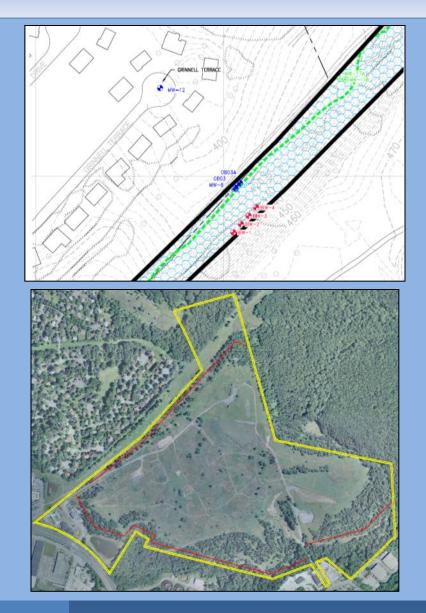




### Alternative 5

## **Injection Wells**

- Installation of injection wells through waste.
- The proposed injection well spacing is estimated to be 30 feet. The wells will be installed approximately 100 feet from the property boundary.
- Final spacing will be determined after site investigations and pilot testing.







## **Enhanced Bioremediation O&M**

- Operation and Maintenance Requirements
  - Annual recharge of emulsified vegetable oil (EVO) and pH buffer
  - Molecular analyses and bioaugmentation with commercial Dehalococcoides cultures (i.e., KB-1<sup>®</sup>) if required
  - Semi-annual groundwater monitoring of monitoring wells
- Likely equipment usage during O&M
  - Water truck
  - Generator
  - Temporary tanks/totes
  - Pumps/hoses/piping



Alternative 5



## **Bioremediation Equipment**

### Water truck



### Generator for running pumps







## **Bioremediation Equipment**

### Totes for mixing EVO/water for injection



### Manifold for injecting EVO/water







## **Timeline and process**

	Year 1		Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Project Phase	Q1 Q2 Q3	Q4 Q1	Q2 Q3 Q4	Q1 Q2 Q3 Q4	4 Q1 Q2 Q3 Q4	4 Q1 Q2 Q3 (	Q4 Q1 Q2 Q3 C	4 Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4			
Procurement/Contracting Activities												
Enhanced Bioremediation System Pilot Northwest												
Phase 1 - Field Investigations												
Phase 2 - Pilot Design and Installation												
Phase 3 - Operation, Maintenance, and Monitoring												
Enhanced Bioremediation System Installation Northwest												
Cover System Improvements												
Installation of Gas Extraction Wells												
Enhanced Bioremediation System Installation South												
Enhanced Bioremediation System Installation SW												
Enhanced Bioremediation System Installation W												
Enhanced Bioremediation System Installation SE												
Enhanced Bioremediation Operation and Maintenance*												

\*Operation and maintenance for enhanced bioremediation will last until the RAOs are met.

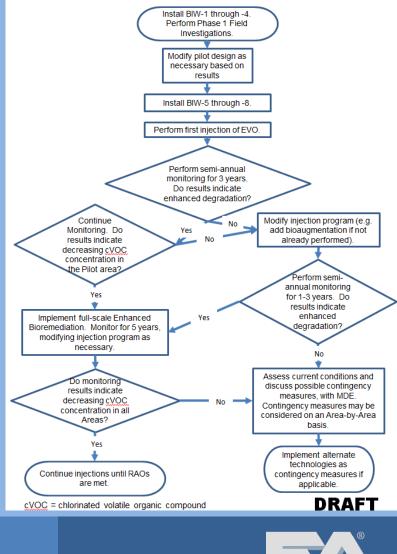




### Alternative 5

## Pilot – Measures of Success and Failure

- Comparison of total cVOC concentrations before and after injections.
- Reduction in molar concentrations of combined PCE, TCE, DCE, and VC indicates success.





### **Contingency Plan**

- Extension of the pilot design period may be requested if groundwater velocities are lower than assumed.
- Well spacing may change due to results of the field investigation and pilot study.
- Frequency of injection may decrease over time.
- Evaluate other treatment methods if Enhanced Bioremediation is not effective.
- Potential contingency measures include:
  - Groundwater pump and treat
  - Selective waste excavation





### **Cover System Improvements**

- Along the Northwest and West Area slopes.
- Selective clearing of trees and re-grading may be required.
- Leachate seeps will be repaired prior to cover soil placement.
- 2 feet of cover soil
  - 20" vegetative support soil
  - 4" topsoil
  - Vegetative stabilization (grass)







### Landfill Gas Collection

• Additional extraction wells will be installed to provide direct control over landfill gas migration in Northwest, West, and Southwest Areas.









### Alternative 5

## Location of Additional Landfill Gas Collection Wells

