

**GUDE LANDFILL REMEDIATION**

**GLCC/DEP MEETING NO. 15**

DATE: March 10, 2011  
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             |
| Keith Ligon     | Gude Landfill Concerned Citizens (GLCC)          | Member             |
| Peter Karasik   | Montgomery County Dept. of Env. Protection (DEP) | Section Chief      |
| Steve Lezinski  | Montgomery County Dept. of Env. Protection (DEP) | Engineer III       |
| John Kumm       | 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) Steve Lezinski of DEP requested approval of the draft minutes from GLCC/DEP Meeting No. 14. GLCC accepted the minutes as written.
- 2) Steve Lezinski reviewed the formerly presented Gude Landfill Remediation Communication Plan for public outreach to GLCC and the Derwood Station Residential Community. The Communication Plan included the following mechanisms for public outreach: GLCC/DEP Monthly Meetings; project fact sheets and the HOA Newsletters; the Remediation project webpage; and the possibility of focused group meetings to address specific issues as necessary. The discussion also reviewed information distribution channels.
- 3) Keith Ligon of GLCC stated that GLCC would prefer communication from DEP to be more programmed, in terms of format and pre-planned events. This type of systematic approach would help assure that if there is a turn-over in either DEP or GLCC personnel in the future, communication about the remediation project would continue according to a well established plan. Keith also requested that DEP provide monthly to quarterly updates for inclusion with the HOA newsletters. GLCC also asked DEP to include stakeholders outside of Derwood Station in the vicinity of the Landfill site.

- 4) Julia Tillery of GLCC reiterated that GLCC can continue to function as a conduit for information about the project from DEP to the residents of the Derwood Station Community, but is not prepared or qualified to interpret project information for residents. DEP acknowledged this statement and will provide informational materials on the Remediation project to GLCC for distribution as the project progresses.
- 5) Peter Karasik of DEP suggested that focused discussions with residents about certain project aspects could be tied to key Remediation and Reuse project milestones. DEP and EA agreed to identify these milestones for communications planning purposes. DEP will update the Remediation and Reuse project schedule and create a milestone schedule.
- 6) Steve Lezinski addressed an earlier “misunderstanding” between DEP and GLCC concerning the perception by GLCC that DEP was endeavoring to influence EA to afford greater emphasis to less expensive alternatives in the Remediation Feasibility Memorandum. DEP and EA explained that the focus of this preliminary analysis was on finding the most effective and time efficient solution to achieve the pre-established remediation goals for the Landfill site per the Maryland Department of the Environment (MDE).

The future Assessment of Corrective Measures (i.e. formerly designated by DEP as the Remediation Alternatives Investigation) will share the same focus points – to achieve the remediation goals. John Kumm of EA explained that the default corrective measure by MDE for the Landfill site (i.e. installation of a site-wide impermeable cap) may not be the most effective or timely mechanism to attain compliance with the remediation goals. Further investigation and analyses will have to be conducted for all potential corrective measures for the Landfill site.

- 7) Steve Lezinski addressed the Open Meetings Act and stated that it applies to recognized, legally defined public bodies such as the County Council. Although GLCC represents the public it is not a “public body” and neither are staff of DEP or MDE nor the meetings between such staff. Peter Karasik explained that such meetings are working meetings where public attendance is not appropriate.
- 8) Keith Ligon stated that GLCC’s concern about participation outside of the GLCC/DEP monthly meetings is that GLCC wants to be part of the decision making process for the Remediation and Reuse of the Landfill and do not want to be informed after an important project decision is finalized or essentially *fait accompli*. John Kumm pointed out that most provisions for public participation in the environmental regulatory process do not provide nearly as many avenues for communication or citizen input as have already been established by DEP for GLCC and the Derwood Station Community for the Gude Landfill Remediation Project.
- 9) Keith Ligon expressed appreciation to DEP for their open communication about the February 23<sup>rd</sup> meeting with MDE and for providing a summary after the meeting. Keith advised that GLCC has requested a meeting with MDE to discuss the process, the regulations, and how they can be involved. MDE has agreed to the meeting and it is in the process of being scheduled.

- 10) It was agreed that an updated Communication Plan would be included with the next HOA newsletter and that the newsletter may be used as a mechanism for exploring the level of interest in focus group meetings.
- 11) Steve Lezinski reviewed the main points coming out of the February 23<sup>rd</sup> meeting with MDE and outlined MDE's additional requirements for the Nature and Extent Study. Draft Meeting Minutes from the DEP, EA & MDE is included as Attachment 4. Steve indicated that additional investigations would include one (1) or two (2) new permanent groundwater monitoring wells in the Derwood Station Community and approximately ten (10) temporary sampling points to the north and south of the Landfill site to further identify the extent of impacts to groundwater, and multiple stream gauge locations to establish surface water levels for integration with the groundwater contours.
- 12) The possible locations of the new groundwater monitoring wells in the Derwood Station Community were discussed. John Kumm explained that if they are too close to the existing monitoring wells they will not provide additional data and if they are too far out from existing wells they may surpass the edge of impacts.
- 13) Nick Radonic of GLCC asked if it was possible to sample groundwater from the existing landfill gas extraction wells to supplement existing groundwater monitoring well samples. Peter Karasik pointed out that gas wells are deliberately constructed to avoid groundwater intrusion so the presence of groundwater in them is incidental. Peter also pointed out MDE will not permit groundwater monitoring or data collection wells to be drilled within the waste mass footprint of the Landfill.
- 14) Steve Lezinski explained the next steps for the Nature and Extent Study (NES), which included: MDE's approval of a DEP work plan (Amendment No.1) to address additional investigations and analysis to address MDE comments; execution of the work plan; and submission of Amendment No.1 to the NES for MDE review and approval.
- 15) The issue of potential impacts from the Landfill on Rock Creek was discussed. Steve Lezinski explained that MDE had originally included surface water impacts and additional testing requirements on the February 23<sup>rd</sup> DEP, EA & MDE meeting agenda. During discussions, EA pointed out that the risk evaluation within the NES report had included ecological risk and found that ecological receptors are not at risk based on risk screening values for detected constituents. MDE acknowledged that no further assessments on potential surface water impacts from the Landfill are required at this time as part of the NES.
- 16) The Remediation Feasibility Memorandum was discussed. Steve Lezinski advised that this was the first step in considering correction measures (i.e. formerly remediation alternatives), but that the next step in the Remediation and Reuse project after the amended NES is accepted by MDE, will be an Assessment of Corrective Measures (ACM) – the formal process of identifying the most effectively and timely remedial action(s).
- 17) Steve Lezinski reviewed the interim corrective measures implemented so far at the Landfill site,

which included: leachate seep repairs and landfill gas collection system improvements. Steve also indicated that MDE had agreed that selective excavation and relocation of waste would be an acceptable interim corrective measure. Since a certain amount of waste relocation will likely be necessary given a variety of potential corrective measures, the County may proceed with this interim action selectively in parallel with the additional NES investigations and the Assessment of Corrective Measures. DEP noted that to selectively relocate a significant portion of waste at the Landfill site, MDE would require mitigation plans for dust, odor, noise, leachate seeps, gas management, etc. and an operational management plan for work sequencing.

- 18) Peter Karasik stated that the landfill gas collection system improvements have been working very effectively and that all perimeter landfill gas monitoring wells are in compliance and showing non-detect levels of methane. GLCC acknowledged DEP's monitoring results and response actions taken to mitigate landfill gas migration.
- 19) In the context of potentially relocating waste back from the northwestern border of the Landfill, GLCC asked about the legal requirement for setbacks for new landfills. DEP and EA committed to investigate this request.
- 20) Steve Lezinski reviewed DEP's current monitoring schedule for groundwater, surface water and landfill gas at the Landfill site.
- 21) Steve Lezinski reported on the post-closure care activities at the Landfill site with respect to landfill gas and access road repairs. Peter Karasik mentioned the remaining short-term emergency storm debris management needs and activities at the Landfill site.
- 22) The next GLCC/DEP meeting will be scheduled as needed, based on project progress.

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

- 11-2 GLCC inquired if the County had investigated the potential for a Brownfields Grant for the Remediation/Land Reuse project. The County has not to date.  
Status: Open.

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

- 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.  
Status: 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.
- 14-1 DEP will address conformance of the current monitoring program to the 2001 County Groundwater Protection Plan.  
Status: 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.

Status: 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.

**New Action and Follow-up Items**

- 15-1 DEP and EA will establish a list of key project milestones for inclusion in the Communications Plan.

Status: Open.

- 15-2 DEP and EA will determine the current regulation for setbacks at new landfills and report this information to GLCC.

Status: Open.

- 15-3 DEP will develop and submit the proposed action plan (Amendment No. 1) for further investigation and analysis to address MDE's comments on existing information provided in the Nature and Extent Study.

Status: Open.

*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.*

**ATTACHMENT 1**



**Gude Landfill Remediation  
Gude Landfill Concerned Citizens  
Monthly Meeting No. 15**

**Meeting Agenda**

- 1. Review and Approval of GLCC/DEP Meeting Minutes (Meeting No. 14)**
- 2. Gude Landfill Remediation – Communication Plan**
  - a. Continue to hold GLCC/DEP Monthly Meetings
  - b. Provide fact sheets and newsletters to update Project progress
  - c. Continue to update the Project webpage with documentation
  - d. Solicit Focused Group Meetings as Necessary
    - Nature and Extent Study, Assessment Corrective Measures (former designation –(Remediation Alternatives), Corrective Measure Implementation and Land Reuse
  - e. Information Distribution Channels
    - DEP to GLCC
    - DEP to HOA's to Homeowners
    - DEP to Individual Homeowners
- 3. DEP Remediation Feasibility Memorandum Transmittal to MDE dated 1/11/11**
  - a. GLCC “Misunderstanding” – refers to content of GLCC to MDE letter dated 12/20/2010.
    - Page 2 – “The County is working to modify the consultants’ analysis, apparently focusing on the price tag of alternatives, rather than their effectiveness or timeliness.”
  - b. Content of DEP Transmittal to MDE 1/11/11
    - Page 1 – “The Memo is not intended to be a comprehensive evaluation of each remediation alternative, nor does it represent defined courses of action selected by the County at this time... DEP has and will continue to evaluate remediation alternatives to determine which will best achieve the pre-established remediation objectives set forth by MDE.”
- 4. GLCC Participation at Meetings – Open Meetings Act**
  - a. The Open Meetings Act applies to recognized, legally defined public bodies such as the County Council, M-NCPPC Planning Board, etc. conducting public business. Only public bodies are subject to the Open Meetings Act.
  - b. Groups of County and MDE staff members meeting do not constitute a public body, thus the meeting held between DSWS staff and MDE staff is not subject to the Open Meetings Act.
  - c. GLCC represents the public, but they are not a recognized public body.
  - d. The County will continue to meet public participation requirements through regularly scheduled monthly meetings, additional meetings with County representatives upon request, larger community meetings and document and information sharing networks via email, phone and webpage management.

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**Meeting Agenda**

**5. DEP/MDE Meeting on 2/23/11**

- a. Nature and Extent Study (NES) – Primary Action Items
  - Further define the Nature of Contamination
    - ❖ Landfill vs. Heavy Industry vs. Urban Environment related, etc.
    - ❖ Waste, leachate, surface water in industrial area, landfill gas, etc.
  - Further define the Extent of Contamination
    - ❖ VOCs, Metals and exceedances of other groundwater protection standards
    - ❖ Northwest, Northeast, South Central and South by Southeast Landfill Boundaries
    - ❖ Relative Vertical and Horizontal Extent
    - ❖ One or Two New Groundwater Monitoring Wells in Derwood Station
    - ❖ Five to Ten Direct Push (Geo-probe) and/or Hand Auger temporary groundwater monitoring wells in proximity to the surface water bodies
    - ❖ Computer modeling beyond new data collection points to estimate attenuation to a non-detect value or to a level that approaches groundwater protection standards
  - Metal Exceedences (Chromium)/Elevated Turbidity
    - ❖ Further define potential sources of exceedences
    - ❖ Allow monitoring well recharge after purging; before sampling
    - ❖ Perform unfiltered and filtered samples to investigate
  - Include Leachate Indicator Parameters such as turbidity, alkalinity, hardness, pH, chloride, specific conductance, nitrate, Chemical Oxygen Demand (COD), ammonia, sulfate, and total dissolved solids in all future sampling events
  - Take surface water elevations to tie together and close groundwater contour data
  - Submit draft plan of action items to address MDE comments.

**6. Rock Creek**

- a. As concentrations of volatile organic compounds (VOCS) have been non-detect to minimal detections that are less than MDE Cleanup Standards For Groundwater, if VOCs are reaching the surface water, volatilization is expected to be occurring.
- b. The NES Report identified cobalt as the only metal exceedence found in surface water relative to MDE Cleanup Standards for Groundwater.

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- c. The Ecological Risk Evaluation concluded that the concentration of cobalt in surface water does not pose exposure risks to aquatic receptors in the surface water body.
- d. MDE has reviewed the surface water sampling data and Ecological Risk Evaluation from the NES Report and has concluded that no further assessments on potential surface water impacts from the Landfill are required at this time.

**7. Remediation Feasibility Memorandum**

- DEP confirmed to MDE that the Memorandum was intended to be a summary of technically feasible corrective measures considered viable for further evaluation – not a formal Assessment of Corrective Measures.
- Following completion of the NES Report an Assessment of Corrective Measures (ACM) will be required by MDE.
- An ACM is a formal evaluation of potential corrective measures to alleviate site specific compliance issues and achieve pre-established remediation goals. Each corrective measure is evaluated based on effectiveness given specific site conditions and constraints, which also considers: monitoring data, performance and reliability data, ease of implementation, potential site impacts, time duration of analysis and implementation, short and long term effectiveness, and costs.
- MDE confirmed that the potential corrective measures outlined in the Memorandum were potential corrective measure alternatives for evaluation for the Gude Landfill, individually or in combination.

**8. Interim Corrective Measures**

- a. An industry proven and regulatory accepted remedial activity, which is expected to provide immediate and measurable results to mitigate site compliance issues that also generally has a short-term implementation schedule.
  - Example 1 – Landfill Gas Collection System Improvements – expectations to see immediate and measurable site improvements relative to reducing gas migration and improving gas collection.
  - Example 2 – Leachate Seep Repair – expectations to see immediate and measurable site improvements relative to reducing surface expressions of leachate and the potential to contaminant stormwater, thus improving overall surface water quality.
  - Example 3 – Selective Waste Excavation – expectations to improve groundwater quality by removing in-place waste material that is contributing to groundwater contamination and replacing that material with a suitable backfill that will enhance natural bioremediation and attenuation of contaminants.

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**Meeting Agenda**

- b. Most of the Corrective Measures listed in the Remediation Alternatives Memorandum are not considered Interim Corrective Measures because of the duration of implementation and time period to potentially record measurable results.

**9. MDE Monitoring**

- a. Review and approval of Corrective Measurements and mitigation plans (dust, odor, noise, leachate seeps, gas management, etc.)
- b. Monitoring of Corrective Measure Implementation
- c. Monitoring and Enforcement of Mitigation Plans

**10. DEP Monitoring**

- a. DEP Groundwater – Semi-Annual. Typically conducted in March/April and September/October.
- b. DEP Landfill Gas – Weekly.
- c. Contractor Landfill Gas – Quarterly.

**11. Current Gude Landfill Operations**

- a. Post-Closure Care
  - Landfill Gas – All monitoring wells are in compliance.
  - Site Maintenance – County DOT and DSWS Landfill Maintenance Contractor will be delivering asphalt millings and stone for roadway and groundwater monitoring access road maintenance in March 2011.

**12. Next Meeting/Action Items**

- a. To Close
  - 13-2 – The Nature and Extent Study Fact Sheet was emailed to GLCC/HOA Presidents by Steve Lezinski on 12/23/10 for distribution to the Derwood Station Residential Community.
  - 14-1 – Per DEP – The implementation of the Ground Water Protection Strategy is not an active program within DEP.
  - 14-2 – Per the Office of the County Attorney – 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.
- b. To Leave Open
  - 11-2
- c. New Actions Items from Meeting

**ATTACHMENT 2**



|         |                                     |                |
|---------|-------------------------------------|----------------|
| Date    | March 10, 2011                      | Meeting No. 15 |
| Time    | 7:30 - 9:00 PM                      |                |
| Meeting | Gude Landfill Remediation: GLCC/DEP |                |

| Name            | Affiliation | Phone        | Email                                  | Address                                    |
|-----------------|-------------|--------------|--|--|
| Steve Lezinski  | DEP         | 240-777-6570 | Steve.Lezinski@montgomerycounty.md.gov | 16101 Frederick Rd<br>Derwood, MD 20855    |
| Dave Peterson   | GLCC        | 301-921-6357 | kmpdhp@hotmail.com                     | 7612 Anamosa Way<br>Derwood, MD 20855      |
| Julia Tilley    | GLCC        | 202-329-8740 | Julia@TilleyOffice.com                 | 15461 Indianola Dr.<br>Rockville, MD 20855 |
| Peter Karasik   | DEP         | 240-777-6569 | peter.karasik@montgomerycounty.md.gov  | 1601 Frederick Rd.<br>Derwood, MD 20855    |
| GENT UGAN       | GLCC        | 301-340-3358 | KLIGONFAMILY@VM.IZON.NET               | 15501<br>MORNIDR                           |
| John Kumm       | EAERS       | 410-329-5141 | j.kumm@eaers.com                       | 15 Lovebon Circle<br>Sparks, MD 21052      |
| Laszlo Harsanyi | DSHOA2      | 301-840-3822 | LASZLOH@CONCAP.NET                     | 7228 TITONKA WAY                           |
| Nick Radonic    | DSHOA       | 301-244-9124 | BIG.RAD@GMAIL.COM                      | 15408 Indianola Dr.                        |
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**ATTACHMENT 3**



Chronology of Closed Action and Follow-up Items  
as of  
GLCC/DEP Meeting No. 15

- 5-01 DEP and EA to research the existence of a comprehensive database for closed landfill reuse options.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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).  
Status: 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.  
Status: Closed. Additional location information finalized.

Chronology of Closed Action and Follow-up Items  
as of  
GLCC/DEP Meeting No. 15

- 6-03 GLCC/DEP/EA to finalize an approach to communicate all aspects of the expanded monitoring well program to the Derwood Community.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: Closed. During Meeting No. 11, GLCC provided the County guidance on preferred end uses from the Community for the Gude Landfill site.

Chronology of Closed Action and Follow-up Items  
as of  
GLCC/DEP Meeting No. 15

- 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).  
Status: Closed.
- 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.  
Status: 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.



**ATTACHMENT 4**



**GUDE LANDFILL REMEDIATION**

**DEP, EA ENGINEERING & MDE MEETING**

DATE: February 23, 2011  
TIME: 12:30 PM to 2:30 PM  
LOCATION: MDE Office – Baltimore, MD

ATTENDANCE:

| <u>Name</u>         | <u>Organization</u>                              | <u>Designation</u>                           |
|---------------------|--|--|
| Binyam Woldemichael | Maryland Department of the Environment           | Regulator                                    |
| Kassa Kebede        | Maryland Department of the Environment           | Regulator                                    |
| Martha Hynson       | Maryland Department of the Environment           | Regulator                                    |
| Ed Carlson          | Maryland Department of the Environment           | Regulator                                    |
| Andrew Grenzer      | Maryland Department of the Environment           | Regulator                                    |
| John Kumm           | EA Engineering, Science, and Technology, Inc     | DEP Consultant                               |
| Barb Roeper         | EA Engineering, Science, and Technology, Inc     | DEP Consultant                               |
| Laura Oaks          | EA Engineering, Science, and Technology, Inc     | DEP Consultant                               |
| Peter Karasik       | Montgomery County Dept. of Env. Protection (DEP) | Section Chief                                |
| Steve Lezinski      | Montgomery County Dept. of Env. Protection (DEP) | Engineer III                                 |
| Dave Lake           | Montgomery County Dept. of Env. Protection (DEP) | Special Assistant/<br>Office of the Director |

The Meeting Agenda is included as Attachment 1.  
Contact information for attendees is included as Attachment 2.

MEETING SUMMARY:

- 1) The purpose of the meeting was to review the Maryland Department of the Environment's (MDE) comments on the Gude Landfill – Nature and Extent Study and the Remediation Feasibility Memorandum. Representatives from the County DEP, EA Engineering (EA) and MDE attended.
- 2) MDE reviewed the Gude Landfill – Nature and Extent Study (NES) Report and is requesting additional information to more fully characterize the extent of potential impacts to groundwater. Potential impacts should be presented to the single constituent (i.e. parameter) level that exceed groundwater protection standards, as well as the factors that may be causing the impacts in the vicinity of the Landfill. MDE indicated that this information is necessary to finalize the NES, prior to assessing potential corrective measures. Some of the information requested by MDE may require additional groundwater sampling and analyses. Other information may require clarifications on and more detailed analyses of existing information previously gathered and

reported. The County agreed to submit a Draft Amendment Plan to MDE that will address MDE's comments and to reach agreement before proceeding with any additional NES work.

- 3) MDE indicated that the horizontal and vertical extent of potential impacts of the Landfill should be bounded, whether it is based on groundwater/surface water sampling data (up gradient/down gradient), computerized modeling or other defensible explanations regarding site constraints surrounding the Landfill such as hydraulic barriers or limited site access. MDE's primary areas of the Landfill site for further assessment include the: northwest, northeast, south-central and southeast.
- 4) Since maximum contaminant level (MCL) exceedances were noted at the Landfill property boundary beyond the waste footprint and in the Derwood Station Community, additional analyses need to be conducted. These can include: installation of additional groundwater monitoring wells, additional groundwater sampling and/or fate and transport modeling to enable identification or extrapolation of detected constituents to a non-detect (ND) or to a level that approaches groundwater protection standards. These additional analyses will serve to better identify the full extent of the potential impacted areas in the vicinity of the Landfill. Seasonal variation trends in the groundwater sampling data (e.g. fluctuations in constituent concentrations) should also be considered and evaluated. MDE specifically requested an additional groundwater monitoring well down gradient of MW-9 in the Derwood Station Community.
- 5) Where surface water bodies may act as hydrogeologic divides (e.g. hydraulic barriers), the NES report should describe why this feature potentially limits the migration of constituents that exceed groundwater protection standards from the Landfill.
- 6) The graphical depiction of detected Volatile Organic Compounds (VOCs) on a Total VOC basis for the NES Report Constituents of Concern is a good starting point to assess the extent of potential impacts to groundwater from the Landfill. However, the nature and extent and graphical depictions of other constituents including metals that exceed individual groundwater protection standards should also be provided and discussed. Note that while VOCs are potentially discharged to surface water via groundwater, they are not detected in the bordering surface water bodies to the Landfill.
- 7) Regarding the nature of potential impacts to groundwater from the Landfill, MDE indicated that the NES Report should include information on the contribution to potential impacts from waste, stormwater infiltration, leachate, surface water runoff in an industrial area, and/or landfill gas.
- 8) MDE requested that the NES Report more thoroughly address the source of metals exceedances, particularly chromium in the groundwater sampling data.

- 9) MDE agreed that groundwater sample turbidity may be interfering with the metals analysis; however, the NES Report should identify turbidity as an issue and address it accordingly. In the short term, groundwater sample filtration or a longer waiting period for recharge after the 3-volume well purge (up to 24-hours), may produce samples that are more representative. In the long term, redevelopment may be necessary for certain groundwater monitoring wells. MDE suggested taking filtered and unfiltered samples from the groundwater monitoring wells.
- 10) Although MDE did not require leachate indicator parameters to be included in the NES groundwater sampling program, MDE requested such parameters be included on subsequent sampling and analyses. The leachate indicator parameters include: pH, alkalinity, hardness, chloride, specific conductance, nitrate, COD, turbidity, ammonia, sulfate and total dissolved solids. It was noted that the leachate indicator parameters were included in the County's semi-annual groundwater sampling event in September 2010 as planned per the approved Groundwater and Surface Water Monitoring Plan. MDE requested that samples be collected from the original (20) and newly installed (16) groundwater monitoring wells until further notice. The County agreed to this as part of the semi-annual sampling events.
- 11) MDE recommended that the site topographic map be used as the base map for presenting both the groundwater contour data and the groundwater sampling data as well as for delineating the locations of bordering surface water bodies (i.e. Crabbs Branch Stream and Southlawn Branch Stream).
- 12) MDE requested that the NES Report text and graphics related to the groundwater contour map consider more closely the relationship of site topography and the apparent flow direction of surface water bodies along the perimeter property boundary of the Landfill. More localized (e.g. radial) groundwater flow components should be addressed in these areas of the site in an attempt to close the groundwater contours.
- 13) MDE suggested that surface water elevations from bordering streams be measured and included in the groundwater contour details. This information can be used to tie-in elevation data for the perimeter Landfill property boundary and groundwater monitoring wells (per the topographic survey) with the measured elevation of the surface water body.
- 14) MDE suggested that the NES Report address landfill surface hydrology, including the way in which topography and existing stormwater drainage structures minimize ponding and infiltration, as well as the seasonal variations.
- 15) MDE suggested that the NES Report address the potential impacts of industrial operations along Southlawn Lane on surface water and groundwater quality in the vicinity of the Landfill.

- 16) MDE suggested that the positive effects of the recent landfill gas collection system expansion on both gas migration and groundwater VOC concentrations, which is essentially an interim corrective measure, be described in the NES Report. The County may want to compare landfill gas composition data with groundwater sampling data as supporting documentation.
- 17) MDE confirmed that the excavation and relocation of waste, in areas where it is close to or outside the property boundary, would be an acceptable interim corrective measure to potentially reduce landfill gas migration and improve localized groundwater quality for the Landfill site. MDE noted that interim corrective measures are approved by the Department and could be implemented in advance of the final remediation approach. The County would need to submit a waste excavation, relocation and contingency plan to MDE for approval. The Plan would need to address: waste handling procedures, leachate seep control, stormwater run on/runoff, erosion and sediment control, final waste disposal (i.e., back in the Gude Landfill or to the Transfer Station), phasing and schedule, dust and odor control, fire protection and worker safety. MDE noted there are other facilities in Maryland that have performed similar work, including Cecil County and Worcester County. Trench excavation or borings (from previous or new landfill gas extraction wells) could potentially be used to characterize the extent of waste decay.
- 18) MDE reviewed the Remediation Feasibility Memorandum (Memorandum). MDE requested confirmation that the Memorandum was intended to be a summary of technically feasible corrective measures considered viable for further evaluation – not a formal Assessment of Corrective Measures. The County and EA confirmed this understanding. MDE indicated that the next step after completion of the NES Report would be an Assessment of Corrective Measures. MDE confirmed that the potential corrective measures outlined in the Memorandum were acceptable potential corrective measure alternatives for evaluation for the Gude Landfill, individually or in combination.
- 19) MDE suggested that runoff calculations for various capping systems, cover systems or contour changes to the surface grades of the Gude Landfill be included in the future Assessment of Corrective Measures. Such potential changes should be compared to the effectiveness of an approved low permeable capping system per the Code of Maryland Regulations (COMAR).
- 20) MDE expressed satisfaction with the County's past practices and continued plans for communicating with the GLCC and Derwood Station Community.
- 21) MDE stated that the Human Health and Ecological Risk Evaluations are not typical submissions in a NES; however, the information appears to have been pertinent to the County's relationship and on-going dialog with the GLCC and the neighboring Derwood Station Community.
- 22) MDE agreed to defer the discussion of possible sampling and analysis of groundwater via Bio-Monitoring test procedures (Whole Effluent Toxicity Testing and Toxicity Reduction Evaluation)

to a separate meeting with MDE Science Services Administration. Bio-Monitoring is typically used to assess point source discharges into surface water bodies, not area discharges or potential discharges from groundwater to a surface water body. EA noted that an ecological risk evaluation was included as part of the NES Report, which may provide some related information for MDE review.

- a. Telephone Follow-Up: On February 24, 2011, at approximately 3:18 PM, Steve Lezinski received a call from Ed Carlson of MDE. Mr. Carlson stated that after internal MDE evaluation, the County does not have to perform Bio-Monitoring at the Gude Landfill, with respect to the Nature and Extent Study.

**Action and Follow-Up Items**

- 1) DEP to provide a summary list of action items (Draft Amendment Plan) related to additional information and clarifications to the NES Report as requested by MDE. This summary list will be used by DEP and MDE as points of agreement to finalize the NES.

*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.*