Prepared By: EA Engineering, Science, and Technology, Inc.
Final Prepared: 1/7/10

GUDE LANDFILL REMEDIATION

GLCC/DEP MEETING NO. 6

DATE: December 10, 2009
TIME: 7:30 PM to 9:00 PM
LOCATION: Montgomery County Transfer Station

ATTENDANCE:

Name	Organization	Designation
Bob Day	Gude Landfill Concerned Citizens (GLCC)	Member
Dean Dozier	Gude Landfill Concerned Citizens (GLCC)	Member
Dave Peterson	Gude Landfill Concerned Citizens (GLCC)	Member
Keith Ligon	Gude Landfill Concerned Citizens (GLCC)	Member
Nick Radonic	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
Steve Lezinski	Montgomery County Dept. of Env. Protection (DEP)	Engineer III
Barb Roeper	EA Engineering, Science, and Technology, Inc. (EA)	DEP Consultant
Pete Lekas	EA Engineering, Science, and Technology, Inc. (EA)	DEP Consultant
John Kumm	EA Engineering, Science, and Technology, Inc. (EA)	DEP Consultant

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

MINUTES:

1) Steve Lezinski of DEP requested final comments on the draft minutes from GLCC/DEP Meeting No. 5 on November 12th. GLCC indicated that the minutes were acceptable. Steve Lezinski stated that the minutes would be finalized and posted on the website.

2) Keith Ligon of GLCC requested that in the future, open items from the GLCC/DEP meetings be carried in a separate list of open items at the end of the meeting minutes. The County agreed to this procedure.

3) Pete Lekas of EA presented the Proposed Groundwater Monitoring Well Location Map and discussed the reasons for the proposed new monitoring locations, including new monitoring wells on the landfill itself, on WSSC property, on M-NCPPC property, and within the Derwood Station South Community. The proposed monitoring well location map and well drilling photos are included as Attachment 3.

4) Barb Roeper of EA explained that although the existing monitoring well data (depth to water) indicates a general groundwater gradient flowing to the East North East, the mounding effect of the

Landfill itself may produce a radial groundwater gradient flowing outward in all directions from the Landfill that is not apparent from the historical data. This is part of the justification for installing additional monitoring wells to fill in potential data gaps for the Nature and Extent Study.

5) Dean Dozier of GLCC commented that clay and other types of confining layers can also affect localized groundwater gradients.

6) Bob Day of GLCC commented that the water surface elevation in existing monitoring well OB03 is above the elevation of some of the Derwood property elevations.

7) Pete Lekas proceeded to summarize the 24 proposed new monitoring wells, indicating that some are shallow wells (~ 30 feet), some are deep wells (~ 100 feet), and that some are shallow/deep pairs at the same locations. He also described the technical and regulatory requirements for the wells to be considered permanent monitoring wells with the State of Maryland. Pete Lekas also distributed photographs depicting typical well drilling activities, a schematic view of a typical well, and the external appearance of the well head once in place, and explained the mechanics of well drilling and well construction.

8) GLCC, the County and EA discussed the possible locations for the monitoring wells in the community with respect to advantages and disadvantages. For example placing wells in common areas versus on county property, such as in the center of the paved courts. The final locations will need to be field located and will depend largely on the best approach for avoiding underground utilities, obtaining permitting approvals, and minimizing disturbance to the Community.

9) Pete Lekas explained how the monitoring wells, if placed in some of the paved courts, would be flush mounted and sealed to prevent contamination from stormwater runoff.

10) Dean Dozier asked about soil sampling during drilling. Pete Lekas confirmed that soil cuttings from well drilling would be collected for observation and potential analysis. Pete also explained that regional anticipated concentrations (i.e., 'background') for metals in soil in Maryland are available for comparison.

11) GLCC inquired about the timing of the drilling of the new wells. The County and EA advised that well drilling would commence upon receipt of County, MDE and/or M-NCPPC approval for each specific well location. Drilling is anticipated to start in late February or early March, but is contingent upon permitting approvals. EA estimated the actual installation time per well to be one to one and a half days, depending upon well depth.

12) The County confirmed that the new monitoring wells will be owned and maintained by the County.

13) EA confirmed that purge water from the existing and any new monitoring wells will be containerized and sent to the Oaks Landfill for treatment at the Leachate Pretreatment Plant.

14) The appropriate notification concerning the drilling of the new wells was discussed. GLCC and the County agreed that the January Derwood Station HOA newsletters should contain information about the planned well drilling. The County would also send letters to the individual homeowners

whose property abuts the proposed locations for the new wells at least thirty (30) days prior to any drilling operations. A special Community meeting might also be held in January or February to explain the drilling program to residents if GLCC deemed that necessary.

15) The County and GLCC agreed that a Memorandum of Understanding (MOU) between the County and the specific Derwood HOA may also be appropriate if any of the new monitoring wells are located on community common property.

16) GLCC/DEP meetings will continue to be held on the second Thursday of each month. The next meeting will be held on Thursday, January 14, 2010 from 7:30 to 9:00 PM at the Transfer Station.

Action & Follow-up Items

5-01 – DEP and EA to research the existence of a comprehensive database for closed landfill reuse options.

5-02 – GLCC to schedule next Derwood Community Meeting; second quarter 2010.

5-03 – DEP to contact MDE regarding the spring and northwest slope surface water sampling, and leachate seeps repairs on northwest slope.

5-04 – DEP to post the recent aerial survey of the Gude Landfill on the Remediation project website.

5-05 – DEP to evaluate if Biochemical and Chemical Oxygen Demand (BOD/COD) can be included for analysis purposes in surface water samples.

5-06 – DEP to reschedule the dioxin/furan testing of the Gude Landfill gas-to-energy engine.

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.

6-01 – DEP and EA to create a list of open agenda items (i.e. action and follow-up items).

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.

6-03 – GLCC/DEP/EA to finalize an approach to communicate all aspects of the expanded monitoring well program to the Derwood Community.

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. 6

Meeting Agenda

1. **Review and Approval of GLCC/DEP Meeting Minutes (Meeting No. 5)**

2. **Proposed Groundwater Well Locations**

   a. Overview of Locations

   b. Type of Groundwater Monitoring Structure
      - Temporary Piezometers, Temporary Wells, Permanent Wells
      - Permitting – County/MDE
      - Approach to choosing Monitoring Location and Structure Type
        - Stakeholders – Community, County, MDE
        - Short Term vs. Long Term data needs
        - Data Availability vs. Structure Stability

   c. Installation of Groundwater Monitoring Structure
      - Equipment – Drilling Rig vs. Geo-Probe
      - Related Safety Procedures

   d. Required Ingress/Egress
      - Disturbance and Restoring Land to Existing Conditions
      - Type of Access/Installation Agreement

   e. EA test plan for <u>most efficient</u> way to do the groundwater study (schedule, test locations, test types)

   f. EA test plan for the <u>minimal residential intrusive</u> groundwater study (schedule, test locations, test types)

3. **Next Meeting/Action Items**

Montgomery County Transfer Station
December 10, 2009
7:30 PM – 9:00 PM

ATTACHMENT 2

Date	December 10, 2009
Time	7:30 -9:00 PM
Meeting	Gude Landfill Remediation: GLCC/DEP

Name	Affiliation	Phone	Email	Address
Stephen Lezinski	MC DEP	240-777-6590	steve.Lezinski@montgomerycountymd.gov	16101 Frederick Rd Derwood MD 20855
Nick Radonic	DSS HOA	240 8889990	hoa_nick_radonic@comcast.net	15408 Indianola Dr
Peter Karasik	DEP/DSWS	240-777-6569	peter.karasik@montgomerycountymd.gov	16101 Frederick Rd. Derwood, MD 20855
Kenny Lugon	GLCC	301 340 3358	—	—
Dave Peterson	GLCC	301-921-6357		
John Kumm	EA Eng.	410-329-5411	jkumm@eaest.com	15 Carlton Circle Sparks MD
Peter Lekas	EA Eng.	410-329-5117	plekas@eaest.com	" "
Barb Roeper	EA	410-329.5150	broeper@eaest.com	" "
Julia Tillery	GLCC	202-329-8740	julia@tilleryoffice.com	15461 Indianola Dr.
Dean Dozier				
Bob Day				

ATTACHMENT 3

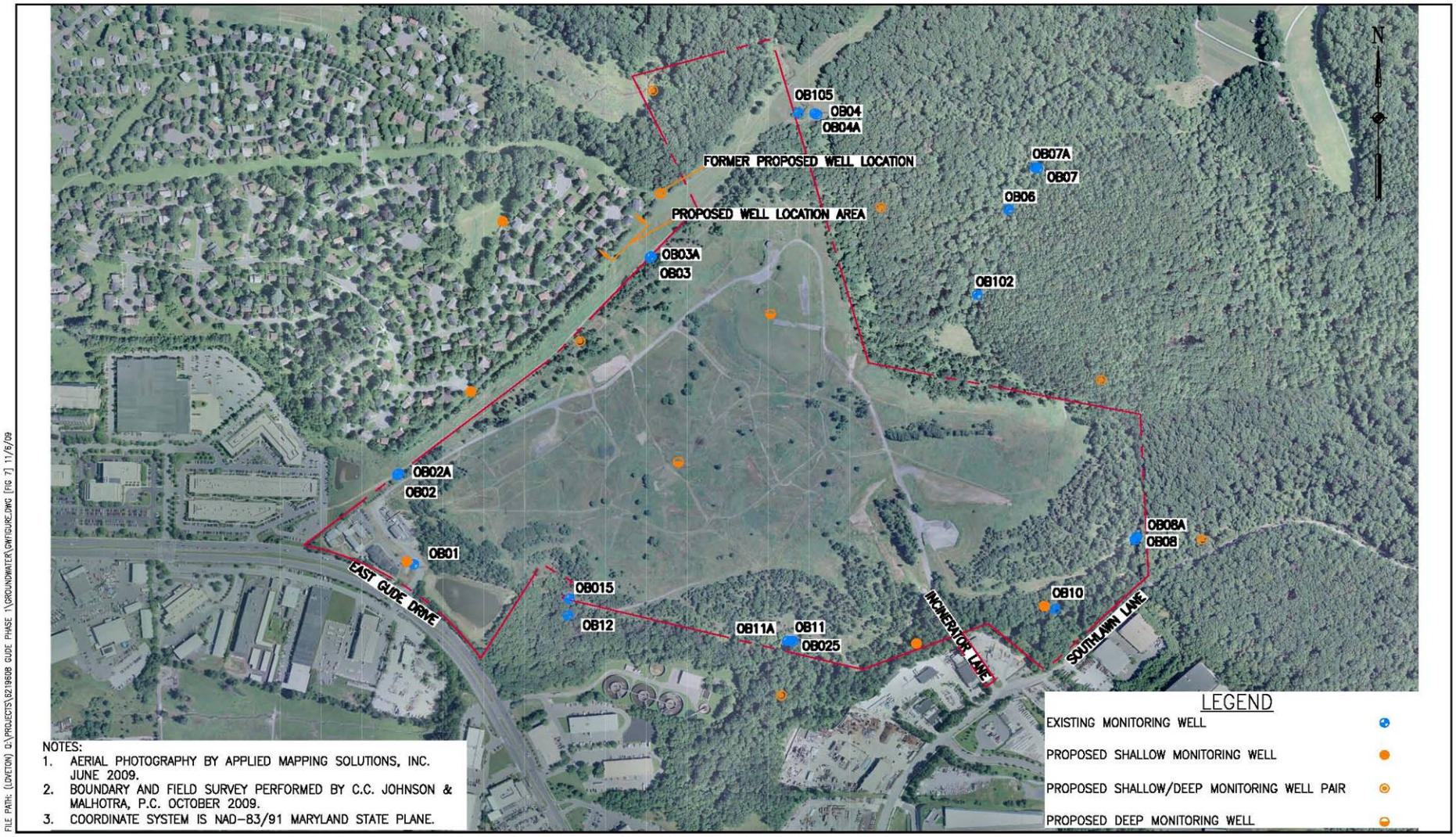


Figure 7. PROPOSED GROUNDWATER MONITORING WELL LOCATION MAP
SCALE: 1"=500'

DRAFT

PROPOSED GROUNDWATER WELL LOCATIONS

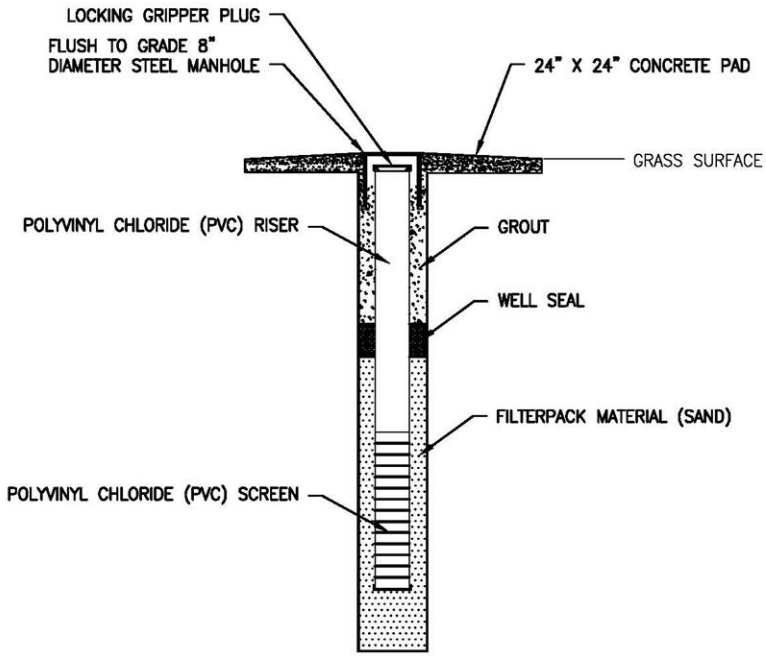
DRILLING RIG

DRILLING RIG AUGER

GEO-PROBE

PERMANENT GROUNDWATER WELL INSTALLATION

(FLUSH WITH SURFACE)



TYPICAL MONITORING WELL CONSTRUCTION DIAGRAM
(FLUSH MOUNT)

NOT TO SCALE

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

NATURE AND EXTENT STUDY
GUDE LANDFILL
MONTGOMERY COUNTY, MARYLAND

TYPICAL MONITORING WELL CONSTRUCTION DIAGRAM (FLUSH MOUNT)

PROJECT MGR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT NO	FIGURE
JK	PL	LB	–	NOT TO SCALE	11-24-09	6219608	–

FILE PATH: (LOKETON) Q:\PROJECTS\6219608 GUDE PHASE 1\GROUNDWATER\WMDETAIL.DWG [LAYOUT1] 11/24/09

GROUNDWATER WELL CONSTRUCTION DETAIL