

Georgia Department of Natural Resources

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Mark Williams, Commissioner
Environmental Protection Division
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Land Protection Branch
Mark Smith, Branch Chief
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404/657-8600

May 2, 2011

VIA EMAIL AND REGULAR MAIL

FILE COPY

Georgia World Congress Center Authority
c/o Wayne Rosser, Maintenance/Physical Plant Manager
285 Andrew Young International Blvd., NW
Atlanta, Georgia 30313-1591

Re: Annual Groundwater Sampling Reports #4 and #5
Landfill Maintenance and Inspection Reports Quarters #24 -#27
Northside Drive Landfill, HSI No. 10222
Tax Parcel No. 14-82-6-12-1
457 Northside Drive
Atlanta, Fulton County, Georgia

Dear Mr. Rosser:

EPD has completed its review of Annual Groundwater Sampling Report (Annual Report) #5 dated January 23, 2011, Annual Report #4 dated March 9, 2010, and Landfill Maintenance and Inspection Reports for Quarter 24 (May 27, 2010), Quarter 25 (June 29, 2010), and Quarters 26/27 (January 7, 2011) for the above referenced site. The documents were submitted by Tetra Tech on behalf of the Georgia World Congress Center Authority (GWCC) as required by the Monitoring and Maintenance Plan for Type 5 Risk Reduction Standards-Northside Drive Landfill, Atlanta, Georgia, December 2003, Revised July 2005 (M&M Plan). EPD has the following comments:

Annual Groundwater Sampling Reports

1. EPD does not concur with TetraTech's recommendation to remove wells MWC-1A, MWC-1B, and MWC-1C from the monitoring network, as the wells are used to monitor any potential breeches in the slurry wall that surrounds the landfill. Please continue to monitor these wells on an annual basis.
2. Table 2 of Annual Reports #4 and #5 indicates that turbidity levels have significantly increased from previous sampling events. According to the Region 4 USEPA guidance document titled "Groundwater Sampling" (SESDFPROC-301-R1), "10 Nephelometric Turbidity Units (NTU) is normally considered the minimum goal for most groundwater sampling objectives". The document also states that "lower turbidity has been shown to be easily achievable in most situations and reasonable attempts should be made to achieve these lower levels". Please provide an explanation for the elevated turbidity measured in most wells at the site, and in future sampling events, please make every attempt to achieve turbidity values of less than 10 NTU.
3. Note that turbidity decreased from 34.6 to 19.8 NTU at MM-04 within 3 purge volumes and from 140 to 104 NTU at MM-01 within 3 purge volumes during the December 2010 sampling event. Tetra Tech should consider removing a minimum of 5 well volumes at well locations that have elevated turbidity readings if the readings indicate a decreasing trend.

4. The minimum well volumes calculated for well MWC-3C during the December 2009 sampling event (Annual Report #4) was 3.01 gallons. However, a total of only 7.5 gallons of water were removed from the well during purging, which is less than 3 times the minimum well volume (9.03 gallons). In addition, the gallons purged from well MWC-1C were not recorded in the field logbook. In all future sampling events, please ensure that a minimum of 3 to 5 well volumes are removed prior to sample collection to achieve an adequate purge, along with stabilization of field parameters, and that all notes are recorded in the field logbook as required by Section 3.2 of the M&M Plan.
5. Pursuant to Section 3.2.2 of the M&M Plan, observations of the purge water appearance should be recorded in a logbook and on the groundwater-sampling sheet. Please provide the information in future reports.
6. The Reports do not indicate the level of the pump intake in the water column during the purging process. For low flow/low stress sampling, the pump intake should be located at the top of the water column and lowered with the water level until the water level stabilizes or three to five well volumes are removed. In future sampling events, please record the depth to pump intake in the field logbook per Section 3.2 of the M&M Plan.
7. Section 2.3.2 of Reports #4 and #5 indicate a field duplicate sample was collected from one of the wells in the monitoring network. Please post the duplicate results in appropriate tables of future annual reports.
8. Monitoring well MWC-1A has been documented as dry or having insufficient water during the past 4 annual sampling events conducted in December 2007, December 2008, December 2009, and December 2010. However Tables 3 and 4 of the Annual Reports did not reflect the dry conditions for 2007 and 2008. Please correct the tables in future annual reports. EPD notes that Tetra Tech has used the EPA low flow (low stress) technique for sample collection, which requires the removal of 3 to 5 well volumes prior to sample collection. Please consider using the low flow/ low volume technique, if there is adequate water available for sample collection and analysis.
9. Please note that the risk reduction standards (RRS) for anthracene, fluoranthene, fluorene, and pyrene posted on Table 4 of Annual Reports #4 and #5 are not correct. The correct RRS are anthracene (6.6 µg/L), fluoranthene (1,000 µg/L), fluorene (1,000 µg/L), and pyrene (1,000 µg/L). Please ensure the correct posting in future annual reports (See Table 1 of Section 3.1.2 of the M&M Plan).
10. It was not EPD's intention to change laboratory reporting methods for sample analysis with Comment 19 of EPD's February 1, 2010 letter that addresses data flagged by the laboratory with a J-qualifier. Prior to future sample collection and analysis at the site, please request that your lab return to their standard procedures used to analyze previous groundwater samples. Please post sample results flagged by the lab with a J-qualifier as determined through their standard methods and validation procedures as X.XX J.
11. A summary and evaluation of the maintenance of the final cover, drainage system, and wells for years 2004 – 2008 was not provided as requested in Comment 20 of EPD's February 1, 2010 response letter. Pursuant to Section 4.4 of the M&M Plan, please ensure the summary and evaluation for Years 2004 – 2014 are included in the next M&M Five Year Review Report, which is due by February 14, 2014.

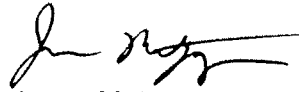
12. Pursuant to Section 5.1 of the M&M Plan, the landfill must be inspected annually to ensure its use by owners, tenants, and other occupants remains nonresidential. The inspection should also include a review of all contracts, lease agreements, and informal agreements to ensure consistency with non-residential use, and a review of the conservation easement to ensure it is in place and the uses of the property conform to the restrictions placed on the property. Please acknowledge property usage and *the status of property instruments* in the next Annual Report. The results of the inspection should be documented in a landfill use statement along with the certification found in Section 5.2 of the M&M Plan.

Landfill Maintenance and Inspection Reports

13. Comments 2, 8, and 9 of EPD's February 1, 2010 letter were not addressed in any Reports and are reiterated below (Comments 13A-13C). Please address Comments 13.A-13.C in the next semiannual report.
 - A. Section 4.2.1 "Drainage System" of the M&M Plan requires one quarterly inspection to be performed annually during a significant rain event to evaluate the drainage system. This inspection was apparently not performed annually, and it appears that the first inspection documented as being not conducted in association with a rain event was in Quarter 19 (December 2008), as there appears to be wet pavement in Photo 5. Please ensure that at least one quarterly inspection is performed annually during a significant rain event in order to evaluate the drainage system.
 - B. Photo 9 of the Quarter #16 Report shows a sidewalk that was cut to lay down utility lines on the eastern perimeter of the property. Please identify the location of the repair on a figure. Please also provide a narrative description of the repair including the final elevation of the dig and denote whether the installation impacted any major components (i.e. liner system) of the landfill cap/ or slurry wall.
 - C. Photo 15 of the Quarter #16 Report shows an excavated area north of the new access road. Please provide the reason for the dig, the size and depth of the excavation, it's location on a figure, and identify the firm that conducted the work. EPD also needs to know if any major components of the landfill cap and/ or slurry wall were impacted. Please note that EPD is trying to determine whether major damage has occurred at the location of the excavation.
14. The Quarter #24 through #26/27 Reports note extensive cracking (still classified as minor damage) in the asphalt surface due to weathering. The areas of particular concern lie along the storm water drainage pathway and at the connections where strips were originally lain down during the paving process. While Tetra Tech recommended filling the cracks, resealing the surface and restriping to prevent penetrating the underlying fill, GWCC has resealed the surface leaving the cracks in place. EPD agrees with Tetra Tech's recommendations and will require repairs pursuant to the M&M Plan if the asphalt surface develops major damage. Please provide the rationale for only sealing the surface. Please notify EPD in accordance with Section 4.1.4 if major damage to the lot occurs.
15. The descriptions for Photograph 16 and 17 of the Quarter #27 Report indicate Jersey barriers cover monitoring wells MWC-1A and MWC-1B, respectively, while the barriers are not visible in the photographs. Please ensure that the photo descriptions accurately describe site conditions in future Annual Reports.

Please address the comments listed above in the next semiannual report due by August 15, 2011, or the next annual report due by February 15, 2012, as appropriate. If you have any questions regarding this matter, please contact Ms. Antonia Beavers of the Response and Remediation Program at (404) 657-8600.

Sincerely,



Jason Metzger
Acting Unit Coordinator
Response and Remediation Program

c: Shandra Williams, Georgia World Congress Center Authority
Andy Kandray, Tetra Tech
Joan Sasine, Bryan Cave Powell Goldstein

File: HSI# 10222

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