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July 21, 2015

Ms. Jaclynne Drummond
Compliance Hydrogeologist
NC Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

**RE: Groundwater Exceedance and Verification Sampling Results
OmniSource Kernersville Landfill, Permit No. 34-20
Kernersville, North Carolina
JOYCE Project No. 00799.1601.12, Task No. 02**

Dear Ms. Drummond:

On behalf of OmniSource Southeast, Joyce Engineering is submitting this notification of an exceedance of Groundwater Protection Standards during the first semiannual water quality monitoring event of 2015 for the OmniSource Kernersville Landfill, Permit No. 34-20. The monitoring event was conducted on April 29, 2015, and the samples were delivered to GCAL analytical laboratory in Baton Rouge, LA. During this monitoring event, benzene was detected in the upgradient background well, MW-1R, at a concentration of 1.43 µg/L, which is in exceedance of the NC 2L Groundwater Standard of 1.0 µg/L for benzene. No benzene or any other organic constituents were detected in any of the downgradient monitoring wells during this event.

A resampling event for MW-1R was conducted on May 27, 2015, and the sample was again delivered to GCAL for analysis for benzene. The results confirmed the exceedance with a benzene concentration of 1.45 µg/L. A second resampling event was conducted on June 24, 2015, and this time the sample was split and delivered to two laboratories: GCAL and Pace Analytical. The results of the second resampling event show the benzene concentration reduced to below the NC 2L Standard, with concentrations of 0.966 µg/L (GCAL) and 0.88 µg/L (Pace).

Well MW-1R is located approximately 345 feet upgradient from the edge of waste for the landfill; therefore, it is very unlikely that the landfill is the source of the benzene detected in MW-1R. This is an old industrial site with a long history of various activities, as well as ongoing activities, which could be the source of the benzene. A reconnaissance of the area immediately surrounding MW-1R observed semi-trailers, discarded equipment, and small piles of debris, but no obvious spills, stained soil, or other indications of a recent release; therefore, the specific source of the benzene is unknown. The fact that the results of the most recent resample found concentrations diminished to below the 2L Standard indicates that this may have been a transitory event.

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JOYCE recommends continued semiannual monitoring to determine whether the benzene concentrations remain below the NC 2L standard or return to exceedance levels before determining whether further action or investigation is necessary. Since we do not believe the landfill to be the source of the benzene, we recommend that the landfill remain in assessment monitoring.

A complete Semiannual Water Quality Monitoring Report, including the laboratory reports, field sampling logs, and other documentation for the April, May, and June sampling events, will be submitted in the near future. Please feel free to contact me at (336) 323-0092 if you have any questions regarding this incident.

Sincerely,
JOYCE ENGINEERING



Van Burbach, Ph.D., P.G.
Senior Technical Consultant

C: James Winegar, OmniSource Southeast, LLC