Groundwater Monitoring Parameters and Frequency

Groundwater samples will be collected and analyzed for those parameters in accordance with the hazardous waste permit on a semi-annual basis listed as follows:

- Volatile Organic Compounds (13)
- Pentachlorophenol
- Cadmium
- Lead

In addition the following parameters will be recorded in the field and documented within the groundwater sampling field report as follows:

- pH
- Temperature
- Specific Conductance
- Total Dissolved Solids

Analytical Procedures

All laboratory analyses are to be approved EPA procedures and are listed in SW 846. Site specific listing of individual analysis as follows:

Parameter	Detection Limit mg/L	Original Permit Detection Limit	Current MCL or RSL	EPA 846 Method
Pentachlorophenol	0.001	0.01	0.001	8270
Cadmium	0.002	0.001	0.005	6010
Lead	0.005	0.01	0.015	6010
*Benzene	0.001	0.001	0.005	8260
*Toluene	0.001	0.001	1.0	8260
*Ethylbenzene	0.001	0.001	0.7	8260
*Xylenes	0.001	0.001	10.0	8260
*Isopropylbenzene	0.001	0.001	- 0.45	8260
*n-propylbenzene	0.001	0.001	- 0.66	8260
*1,3,5-trimethylbenzene	0.001	0.001	- 0.06	8260
*tert-butylbenzene	0.001	0.001	- 0.69	8260

*1,2,4-trimethylbenzene	0.001	0.001	-	0.056	8260
*sec-butylbenzene	0.001	0.001	-	2.0	8260
*isopropyl toluene	0.001	0.001	-	-	8260
*n-butylbenzene	0.001	0.001	-	1.0	8260
*napthalene	0.005	0.001	-	0.00012	8260

*Volatile Organic Compounds

Data Evaluation and Reporting

Groundwater analytical results will be reviewed and the end of each semi-annual sampling event and compared to the Maximum Contaminant Levels (MCL's) or current Regional Screening Levels (RSL's) for tap water where MCL'S are not available.

Once the all data has been reviewed, and evaluated a Semi-Annual Groundwater Monitoring Report shall be submitted to the Cabinet within 60 days of sampling or 15 days after receipt of analyses, whichever is sooner. This report shall contain a cover letter, groundwater potentiometric surface map, groundwater sample data reporting form, groundwater sample analysis form, and laboratory data.

E-5 (c): Procedures for Establishing Background

The groundwater monitoring program will be composed of nine (9) monitoring wells located around the perimeter of the capped landfill to monitor both an upper and lower transmitting zone within the perched aquifer. The upper perched aquifer transmitting zone will consists of one upgradient background well (SB#1) and four downgradient compliance wells (SD#1, SD#2, SD#3, & SD#4). The lower perched aquifer transmitting zone will consist of one upgradient background well (DB#1) and three downgradient compliance wells (DD#1, DD#2, & DD#3). Below is a listing of monitoring wells;

Well ID#	Upper or Lower Aquifer Zone	Up or Down Gradient	Well Depth	Casing Diameter
SB#1	Upper	Up	16.30	2"
SD#1	Upper	Down	16.35	2"
SD#2	Upper	Down	11.80	2"
SD#3	Upper	Down	9.98	2"
SD#4	Upper	Down	8.70	2"

Financial Assurance

- $98,248 remains in balance per the original Escrow Agreement 6035J and 6035I
- $1,000,000 remains in balance per the original Trust Agreement to Demonstrate Liability Coverage 6035P.

*This was verified on March 19th, 2018 by BB&T Bank Vice President Marlene Rogers.

Financial Assurance documents are provided in Appendix O.