



## STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF SOLID WASTE MANAGEMENT COOKEVILLE ENVIRONMENTAL FIELD OFFICE

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September 7, 2017

Mayor James Mayberry Crossville City Mayor 392 N. Main Street Crossville, TN 38555

RE:

Crossville Closed Landfill

Groundwater Statistical Analysis Report – June 29, 2017

Ground Water Sampling, Analysis, and Recordkeeping Requirements

Facility ID # SNL 18-103-0206

Dear Mayor Mayberry:

The Division of Solid Waste Management-Cookeville Office (Division) has reviewed the referenced Environmental & Civil Engineering Services Groundwater Statistical Analysis Report (Report). The Division has the following comments concerning Solid Waste Processing and Disposal Rule Requirements:

## Rule 0400-11-01-.04(7)(a)4(i):

- (7) Ground Water Protection/Monitoring Standards
  - (a) Class I Disposal Facilities must be designed, constructed, operated, maintained, closed, and cared for after closure such that the following standards are met:
    - 4. Sampling, Analysis, and Recordkeeping Requirements
      - (i) The ground water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the upgradient and downgradient wells installed pursuant to part 3 of this subparagraph.

The upgradient and the downgradient wells at the Crossville Landfill are turbid (muddy) and do not accurately represent the ground water quality at the landfill. The Division of Solid Waste Management-Cookeville Office (Division) will require representative ground water sampling at the Crossville Landfill.

The Crossville Landfill has been using lab filtering to address the turbid monitoring well water. The June 29, 2017 Report indicates that the lab filtering is not being used consistently and is no longer considered applicable for ground water monitoring at the Crossville Landfill.

The City of Crossville must incorporate new measures to acquire representative ground water samples. The Division should be notified within 30 days of receiving this letter of the new measures. The new measures should be established before the next sampling event. The June 29, 2017 Report indicated Maximum Contaminant Level (MCL) exceedances for Mercury (1) and Arsenic (1). Both MCLs were reported for unfiltered ground water samples. Future MCLs will result in groundwater assessment and more stringent monitoring.

## Rule 0400-11-01-.04(7)(a)4.(v)

- (7) Ground Water Protection/Monitoring Standards
  - (a) Class I Disposal Facilities must be designed, constructed, operated, maintained, closed, and cared for after closure such that the following standards are met:
    - 4. Sampling, Analysis, and Recordkeeping Requirements
      - (v) The owner or operator must select and report to the Commissioner a statistical method to be used in evaluating ground water monitoring data. The statistical test chosen shall be conducted separately for each hazardous constituent in each well and shall be one of the following statistical methods: ......

The June 29, 2017 Report Groundwater Monitoring Program Summary of Statistical Exceedances Table indicated statistical exceedances for 1,2-Dibromo-3-Chloropropane and 1,3,5-Trimethylbenzene. These two compounds were not detected in any sampling points. There must be an explanation submitted to document that the statistical method being used is a valid statistical method. The explanation must be submitted with the new measures to acquire representative ground water samples.

If you have any questions concerning this correspondence, contact me at <u>Doug.Brady@TN.gov</u> or call (931) 520-6664.

Sincerely,

Douglas C. Brady, P.G. CHMM

**Environmental Consultant** 

Division of Solid Waste Management-Cookeville

Cc: Cookeville SWM Office

Ec: Chuck Burgess - Environmental & Civil Engineering

Tim Begley – City of Crossville Engineering Department

Ashley Holt – Division Deputy Director James Clark – Division Chief Geologist

Wastebin - Division Tracking