

**Bridgeton Landfill and West Lake Landfill  
Analytical Results for Storm Water  
Collected April 30, 2017**

**June 23, 2017** - During the historic rain event that occurred in the St. Louis area in late April and early May, the department responded to storm water overflow concerns along the northeastern boundary of Bridgeton Landfill by assessing the situation and collecting a storm water sample for analyses. The turbid sample was sent to the department's contract laboratory and analyzed for gross alpha, gross beta, isotopic Uranium, Radium-226 and Radium-228.

Due to the stringent standards for drinking water, the department chose to compare the storm water sample results with state drinking water standards. Results indicate gross beta, total Uranium, and combined Radium were below drinking water Maximum Contaminant Levels (MCLs) or screening values. Results for gross alpha exceeded MCLs, and could not be fully attributed to Radium and Uranium results, therefore analysis for isotopic Thorium was ordered. Those results will be posted when available. All data has been shared with EPA.

| <b>Bridgeton Landfill / West Lake Landfill Superfund Site<br/>Analytical Results for Radionuclides in Storm Water<br/>Sampled on April 30, 2017</b>   |                 |              |                      |              |            |                             |              |            |
|---|-----------------|--------------|----------------------|--------------|------------|-----------------------------|--------------|------------|
|   |                 |              | <b>Parent Sample</b> |              |            | <b>Laboratory Duplicate</b> |              |            |
| <b>Radionuclide</b>   | <b>MCL</b>      | <b>Units</b> | <b>Result</b>        | <b>Error</b> | <b>MDA</b> | <b>Result</b>               | <b>Error</b> | <b>MDA</b> |
| <b>Gross Alpha</b>  | 15              | pCi/L        | 15.65 J              | 6.87         | 10.47      | 20.61                       | 7.34         | 10.44      |
| <b>Gross Beta</b>   | 50 <sup>A</sup> | pCi/L        | 27.45                | 6.28         | 10.10      | 22.22                       | 5.98         | 9.92       |
| <b>Total Uranium<sup>B</sup></b>  | 30              | µg/L         | 3.6                  | 1.1          | 0.6        | 5.4                         | 1.9          | 1.1        |
| <b>Uranium-234</b>  | -               | pCi/L        | 1.15                 | .37          | .13        | 2.03                        | .69          | .33        |
| <b>Uranium-235</b>  | -               | pCi/L        | 0.11 U               | 0.13         | 0.18       | 0.65 J                      | 0.41         | 0.35       |
| <b>Uranium-238</b>  | -               | pCi/L        | 1.18                 | 0.37         | 0.16       | 1.71                        | 0.62         | 0.30       |
| <b>Radium-226</b>   | 5 <sup>C</sup>  | pCi/L        | 0.73 U               | 1.72         | 3.34       | 2.10 J                      | 1.9          | 2.38       |
| <b>Radium-228</b>   |                 | pCi/L        | 1.49                 | 0.49         | 0.88       | 0.28 U                      | 0.46         | 0.95       |
| <sup>A</sup> Screening Level for additional testing<br><sup>B</sup> Total Uranium was computed from Isotopic Uranium analysis<br><sup>C</sup> MCL is for combined Ra-226+228<br>pCi/L = Pico Curies per Liter<br>µg/L = Microgram per Liter<br>MDA = Minimum Detectable Activity<br>MCL = Drinking Water Maximum Contaminant Level<br>U = Laboratory data qualifier: Radionuclide was not detected above the MDA<br>J = Laboratory data qualifier: Value is estimated |                 |              |                      |              |            |                             |              |            |