## Bridgeton Landfill and West Lake Landfill Analytical Results for Storm Water December 28, 2015

Following the historic flooding that occurred in the St. Louis area, the department responded to concerns of excess surface water flowing along the northeastern boundary of the West Lake Landfill by assessing the situation and collecting storm water samples for analyses. The 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 samples with the drinking water standards. Results indicate gross alpha, gross beta and isotopic Uranium were below drinking water standards. The laboratory analyses for the Radium-226 and Radium-228 are still in the process. Those results will be posted when available. All data has been shared with the EPA.

| Radionuclide   | Result | Error  | MDA    | Qualifiers | Units |
|----------------|--------|--------|--------|------------|-------|
| Gross Alpha    | 7.94   | 3.85   | 6.46   | J          | pCi/L |
| Gross Beta     | 12.40  | 3.73   | 6.58   |            | pCi/L |
| Total Uranium* | 0.0041 | 0.0018 | 0.0010 |            | mg/L  |
| Uranium-234    | 1.47   | 0.65   | 0.32   |            | pCi/L |
| Uranium-235    | 0.22   | 0.29   | 0.40   | U          | pCi/L |
| Uranium-238    | 1.34   | 0.61   | 0.28   |            | pCi/L |

pCi/L = Pico Curies per Liter

mg/L = Milligram per Liter

MDA = Minimum Detectable Activity

Qualifier = Laboratory Data Qualifier

U = Radionuclide was analyzed for but not detected above the MDA

J = Value is estimated

<sup>\*</sup> Total Uranium was computed from Isotopic Uranium analysis