



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

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DEC 15 2016

CERTIFIED MAIL # 7009 3410 0001 9190 3306
RETURN RECEIPT REQUESTED

Ms. Erin Fanning
Division Manager
Bridgeton Sanitary Landfill
13570 St. Charles Rock Road
Bridgeton, MO 63044-2430

RE: Bridgeton Sanitary Landfill, Permit Number 0118912, Subsurface Fire

Notice of Violation # SWP1617

Dear Ms. Fanning:

The Missouri Department of Natural Resources continues to review data submitted regarding the ongoing conditions at the Bridgeton Sanitary Landfill. This data, in addition to information obtained at meetings and observations of the landfill property, demonstrates that the landfill continues to experience a subsurface fire. Due to the ongoing nature and intensifying conditions at the landfill, the department is formally documenting, with this Notice of Violation letter, these events and other related violations. Individual violations are discussed in more detail below:

Missouri Solid Waste Management Law

1. Section 260.210.1(4) of the Revised Statutes of Missouri (RSMo) prohibits the storage or disposal of solid waste in a manner that creates a public nuisance or adversely affects public health. Through the month of November 2016 and continuing to the present date, a subsurface fire has been occurring and the landfill owner/operator has failed to control and extinguish the subsurface fire which has been allowed to expand within, at least, the South Quarry of the landfill. The subsurface fire has created odors and air emissions which continue to migrate offsite and have resulted in odor complaints received by the department. Offsite monitoring conducted by the department has documented odors attributable to Bridgeton Sanitary Landfill at several established offsite monitoring locations.
2. Regulation 10 CSR 80-2.020(1)(F) requires that the operation of solid waste disposal areas comply with the terms and conditions set forth in the permit to prevent or minimize

potential health hazards or conditions that could create a public nuisance or environmental pollution. Through the month of November 2016 and continuing to the present date, a subsurface fire has been occurring and the landfill owner/operator has failed to control and extinguish the subsurface fire which has been allowed to expand within, at least, the South Quarry of the landfill. Permit #0118912 does not allow for solid waste to be burned. The subsurface fire has created conditions that have and continue to damage the environmental control systems' infrastructure at the landfill, including the leachate collection system and the gas collection and control system allowing for uncontrolled emissions, including odor, from the facility that extend beyond the permitted boundary of the facility into the surrounding communities.

Condition 6D of Permit #0118912 requires that leachate levels in the leachate collection sumps located in the South Quarry not exceed 30 feet from the landfill's bottom and not exceed 50 feet from the landfill's bottom in the North Quarry. Through the month of November 2016, liquid levels in LCS-1D, LCS-2D, and LCS-4B have either exceeded these levels and/or the facility has been unable to demonstrate compliance.

3. Regulation 10 CSR 80-3.010(5)(C)1 requires that the landfill be constructed and operated in accordance with the approved plans and specifications. Through the month of November 2016 and continuing to the present date, a subsurface fire has been occurring and the landfill owner/operator has failed to control and extinguish the subsurface fire which has been allowed to expand within, at least, the South Quarry of the landfill. Further, 10 CSR 80-3.010(9)(C)1 requires that the leachate collection system be properly installed, operated and maintained per the permit and approved plans. Specifically, such operation of a leachate collection system is to minimize pollution of groundwater, surface waters and soil.
4. Regulation 10 CSR 80-3.010(13)(C) prohibits the burning of solid waste at a sanitary landfill, except in accordance with Chapter 643 RSMo, its corresponding rules, the terms, conditions, or both, of the plans, permit, or both, and all local requirements. Further, Section 260.210.1.(3) prohibits solid waste burning operations in violation of the rules and regulations of the Missouri Air Conservation Commission or the department. Through the month of November 2016 and continuing to the present date, a subsurface fire has resulted in solid waste being burned in, at least, the South Quarry of the landfill. As a result of the solid waste burning, there have been odors/emissions documented leaving the property boundary. Additionally, significant settlement has been observed in the South Quarry. The amount and duration of the settlement indicates that a significant amount of waste has been and continues to be consumed by the subsurface fire.
5. Regulation 10 CSR 80-3.010(14)(C)2 prohibits methane from exceeding two and one half percent (2.5%) by volume in the soil at the property boundary. Further, 10 CSR 80-

3.010(14)(C)1 prohibits decomposition gases from migrating laterally from the landfill. During the month of November 2016, weekly landfill gas monitoring data submitted by Bridgeton Sanitary Landfill shows decomposition gases in the following gas monitoring/compliance wells or probes at/beyond the property boundary have contained methane gas above the regulatory limit, either for the entire month or a portion of the month: GMP-03, GMP-4D, GMP-4S, GMP-09, GMP-14D, and GMP-14S.

6. Regulation 10 CSR 80-3.010(19)(A) requires that sanitary landfills be operated in a manner which protects the health and safety of personnel and others associated with and affected by its operation. Through the month of November 2016 and continuing to the present date, a subsurface fire has been occurring and the landfill owner/operator has failed to control and extinguish the subsurface fire which has been allowed to expand within, at least, the South Quarry of the landfill. Due to the subsurface fire, several hazards exist and have been documented on an on-going or periodic basis at the site including, but not limited to, odors/emissions, elevated carbon monoxide, benzene and hydrogen levels, excessive heat and pressure, groundwater contamination, and collapse potential from waste mass reduction at or in proximity to the subsurface fire impacted areas.

Air Conservation Law

1. 10 CSR 10-6.165 requires that “no person shall cause, permit, or allow emissions of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than 15 minutes apart within the period of one (1) hour.” During the month of November 2016, the Department has documented an exceedance of the 7:1 Dilution-to-Threshold (D/T) ratio on two (2) monitoring events within one (1) hour.
2. Based upon review of the landfill’s “Odor Mitigation Pilot Study Report,” submitted November 14, 2014, and the “Sulfur Removal Technology Evaluation, Stage 2,” report submitted January 23, 2015, the department’s Air Pollution Control Program has conducted calculations for the landfill gas and determined the combined emissions from the flares exceeds 250 tons of sulfur dioxide per year. Therefore, the construction permits should have been submitted for review pursuant to 10 CSR 10-6.060(8), Prevention of Significant Deterioration (PSD) program. Bridgeton will remain in violation of 10 CSR 10-6.060 until Bridgeton obtains applicable PSD permit(s) pursuant to 10 CSR 10-6.060(8), or until Bridgeton initiates control measures that reduce emissions to below de minimus levels allowing them to obtain a de minimus, Section (5) permit.

Ms. Erin Fanning
Bridgeton Sanitary Landfill
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Should you have any questions concerning this Notice of Violation, please contact me at (573) 751-0763, P.O. Box 176, Jefferson City, MO 65102-0176, or at aaron.schmidt@dnr.mo.gov. Thank you.

Sincerely,

DIVISION OF ENVIRONMENTAL QUALITY



Aaron Schmidt
Deputy Director

AS:mpt

- c: Mr. Jim Teter, Republic Services, Inc.
Mr. Bill Beck, Lathrop & Gage
Ms. Ally Cunningham, Lathrop & Gage
Ms. Laura Yates, St. Louis County Department of Public Health
Mr. Mark Milward, R.G. St. Louis County Department of Public Health
Ms. Kathrina Donegan, St. Louis County Department of Public Health
Ms. Peggy Whipple, Assistant Attorney General
Mr. Chris Nagel, Solid Waste Management Program
Mr. Steve Sturgess, Hazardous Waste Program
Ms. Kyra Moore, Air Pollution Control Program
Mr. John Madras, Water Protection Program
St. Louis Regional Office via Shared Electronic Files