



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

JUL 23 2012

CERTIFIED MAIL #7006 0100 0005 2145 1505
RETURN RECEIPT REQUESTED

Mr. David Vasbinder
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044-2430

RE: Bridgeton Sanitary Landfill, Permit Number 118912, Subsurface Smoldering Event

Notice of Violation

Dear Mr. Vasbinder:

The Solid Waste Management Program (SWMP) has reviewed data submitted regarding the ongoing conditions at the Bridgeton Sanitary Landfill. This data, along with several meetings and site visits conducted at the landfill, demonstrate that the landfill is experiencing a subsurface smoldering event (SSE). Bridgeton Landfill, LLC (Bridgeton) has worked with the SWMP since staff at the landfill noticed differences in site conditions in December 2010, and landfill staff have implemented some procedures over the past year to monitor and attempt to control the impact of this SSE. Due to the ongoing nature and intensifying conditions at the landfill, the SWMP is formally documenting this event and other related violations in the enclosed Notice of Violation (NOV) #30428. By issuing this NOV, we may now proceed with choosing and implementing corrective actions and negotiating a settlement to resolve the violations. The individual violations are discussed in more detail below:

Section 260.210.1.(4) of the Revised Statutes of Missouri (RSMo.) prohibits the storage or disposal of solid waste in any manner that creates a public nuisance or adversely affects public health. Data provided by landfill staff indicates that an SSE is occurring in the landfill. This event has created odors which are migrating off-site and have resulted in numerous odor complaints. These odors currently continue to cause a nuisance. If emissions from the SSE are not controlled or conditions intensify further, these emissions could potentially pose a risk to public health.

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. Bridgeton Sanitary Landfill Permit #118912 does not allow for solid waste to be burned. An SSE raises the potential for health hazards or conditions that could create additional public nuisances or environmental pollution especially if the SSE moves to the north quarry and impacts the nearby radioactive waste. This event has created conditions that have and continue to damage environmental control infrastructure at the landfill, including damage to the soil cap, leachate collection system, and gas extraction system. Actions must be taken to limit damage to the environmental control infrastructure and avoid additional public nuisances, creation of a health hazard or environmental pollution.

10 CSR 80-3.010(13)(C) prohibits the burning of solid waste at a sanitary landfill, except in accordance with Chapter 643 RSMo., the Missouri Air Conservation Law, its corresponding rules, the terms, conditions, or both, of the plans, permit, or both, and all local requirements. Observed settlement of approximately 25 feet indicate a significant amount of waste is being consumed, which is indicative of an SSE. As a result, odor complaints are occurring and are documenting that emissions are leaving the landfill and impacting those off-site. Emissions from the SSE must be monitored and controlled to prevent a nuisance, risk to public health, or an adverse impact to the environment.

10 CSR 80-3.010(14)(C)2. prohibits methane from exceeding 2.5% by volume in the soil at the property boundary. Methane has exceeded this regulatory limit in gas monitoring wells BRIGMP01, BRIGMP04, BRIGMP05, and BRIGMP06 on multiple days since November 4, 2011. Although the SWMP recognizes normal gas control measures may not be feasible in areas near the SSE, corrective actions may be feasible near BRIGMP01 to keep methane on-site and to prevent a threat to occupied structures on adjacent properties.

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. Some of the hazards that must be considered due to the SSE include: elevated carbon monoxide and benzene levels, elevated hydrogen levels, heat, and other hazardous emissions near the impacted area and the potential for collapses and, to a lesser extent, in areas beyond the impacted zone. Conditions created by the SSE necessitate that landfill staff conduct enhanced monitoring and implement health and safety plans to ensure on and off-site worker and citizen safety.

Required Actions

- a) **Subsurface Smoldering Event** – The SWMP has reviewed the draft summary report and contingency plan submitted to the SWMP on April 6, 2012, and presented by Republic Services during our April 12, 2012, meeting. The provided comments focus

on the need to conduct adequate monitoring, develop adequate data to assess the depth, extent, and progression of the SSE, and respond proactively to the situation. Once you review our comments, we believe it would be beneficial to meet to discuss our comments in more detail, so that we can all feel confident about the corrective actions to be taken and contingency plans in place to address this situation in the future. This method of agreement is preferred over Republic Services developing a Plan in 90 to 120 days and then undergoing a lengthy and iterative review process. The SWMP believes the Plan and Actions should be agreed upon and then simply documented to expedite Bridgeton's response to this SSE before any additional landfill area is impacted. The goals of any corrective actions and the contingency plan are to assure that if conditions at the site worsen or intensify such that a rapid response is needed to protect the public health, prevent environmental pollution, or prevent the spread of the SSE, Bridgeton will quickly mobilize and respond to that situation and that the conditions are not allowed to reach the north quarry because of the presence of nearby radioactive waste.

- b) **Methane Gas Migration** – Although the SWMP acknowledges the technically challenging nature of controlling methane in a landfill experiencing an SSE, methane generated at the landfill must be controlled, where feasible, to prevent migration off-site. On September 30, 2011, Bridgeton was approved to install investigative wells around monitoring well BRIGMP01. Bridgeton has yet to install these wells. Bridgeton submitted a letter dated May 3, 2012, which transmits a proposal to modify the landfill gas monitoring network. The SWMP is currently reviewing this proposal. The letter also requests to reinstate the timeframes outlined in the January 17, 2011, Settlement Agreement. In accordance with the January 17, 2011, Settlement Agreement, the SWMP is requesting that Bridgeton submit a landfill gas corrective action plan to reduce the methane concentration in BRIGMP01 and bring it back into compliance. The SWMP is also requesting a methane control plan that explains how Bridgeton will continue to make progress on reducing methane concentrations in wells BRIGMP04, BRIGMP05, and BRIGMP06, while ensuring that the control of methane does not cause the SSE to intensify or spread. Please submit the methane control plan for BRIGMP04, BRIGMP05, and BRIGMP06 (may include control plans for potential future compliance wells in this area also), as well as the landfill gas corrective action plan for BRIGMP01 within 45 days of receipt of this letter. This process can occur concurrently while we review and discuss the modified landfill gas monitoring network proposal.

The project manager, Mr. Dan Norris, will be in contact with you to discuss settlement terms to resolve the above violations. Please advise him if we need to discuss these terms with a different individual. If you have any questions concerning this letter, please contact Mr. Norris by telephone at (573) 751-5401 or in care of the SWMP at P.O. Box 176, Jefferson

Mr. David Vasbinder
Bridgeton Sanitary Landfill
Page 4 of 4

City, Missouri, 65102-0176. We appreciate Bridgeton's efforts to ensure that this event is contained and the ongoing violations are resolved as quickly as possible. Thank you.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM



Larry Lehman
Compliance/Enforcement Section Chief

LL/dnj

Enclosure: Notice of Violation #30428

c: Mr. Clarke Lundell, Republic Services, Inc.
Mr. James Martin, Republic Services, Inc.
Mr. Jim Teter, Republic Services, Inc.
Ms. Jessie Merrigan, Lathrop & Gage
Dr. Timothy Stark, Consultant
Mr. Todd Thalhamer, Consultant
Mr. John Haasis, St. Louis County Department of Health- Solid Waste Management Program
Ms. Kathrina Donegan, St. Louis County Department of Health- Air Program
Mr. Tim Duggan, Assistant Attorney General
Mr. Alan Reinkemeyer, Division of Environmental Quality
Mr. Aaron Schmidt, Division of Environmental Quality
Mr. Steve Feeler, Division of Environmental Quality
Ms. Linda Jaegers, Division of Environmental Quality
Mr. David Lamb, Hazardous Waste Program
Ms. Kyra Moore, Air Pollution Control Program
St. Louis Regional Office
Mr. Skip Ricketts, Route 66 Satellite Office



MISSOURI DEPARTMENT OF NATURAL RESOURCES
NOTICE OF VIOLATION

REGION/PROGRAM
 KC NE SE SL
 SW DW HWP ACP
 LRP SWMP WPC

VIOLATION NUMBER

No. 30428

DATE AND TIME ISSUED

JUL 23 2012

AM

PM

SOURCE (NAME, ADDRESS, PERMIT NUMBER, LOCATION)

Bridgeton Sanitary Landfill
 Permit 118912
 13570 St. Charles Rock Road
 Bridgeton, MO 63044-2430

MAILING ADDRESS

13570 St. Charles Rock Road

CITY

Bridgeton

STATE

MO

ZIP

63044-2430

NAME OF OWNER OR MANAGER

David Vasbinder, Bridgeton Landfill, LLC

TITLE OF OWNER OR MANAGER

Environmental Manager

COUNTY

St. Louis

LAW, REGULATION, OR PERMIT NUMBER

- 1) Section 260.210.1. (4) Revised Statutes of Missouri
- 2) 10 CSR 80-2.020 (1)(F)
- 3) 10 CSR 80-3.010 (13)(C)
- 4) 10 CSR 80-3.010 (14)(C)2.
- 5) 10 CSR 80-3.010 (19)(A)

DATE(S)

- 1) 1/4/11 to present
- 2) 1/4/11 to present
- 3) 1/4/11 to present
- 4) 11/4/11, 11/7/11, 11/17/11, 11/21/11, 12/1/11, 12/8/11, 12/16/11, 12/20/11, 12/29/11, 1/6/12, 1/9/12, 1/20/12, 1/24/12, 2/3/12, 2/9/12, 2/15/12, 2/24/12, 3/1/12, 3/9/12, 3/14/12, 3/20/12, 3/30/12, 4/6/12, 4/10/12
- 5) 1/4/11 to present

TIME(S)

NATURE OF VIOLATION

- 1) Combustion of the disposed and stored waste is creating a public nuisance.
- 2) Allowing combustion of the waste is not in accordance with the plans and specifications approved by the Department for solid waste disposal area permit 118912.
- 3) Burning at the sanitary landfill not conducted in accordance with Chapter 643, RSMo., the corresponding rules, the terms conditions, or both, of the plans, permit, or both, and all local requirements.
- 4) On the dates listed above, decomposition gases in one or more of the following gas monitoring wells at the property boundary contained methane above the regulatory limit of 2.5% methane by volume: BRIGMP01, BRIGMP04, BRIGMP05, BRIGMP06.
- 5) By allowing the combustion of the waste, the sanitary landfill is not operated in a manner so as to protect the health and safety of personnel and others associated and affected by the operation.

SIGNATURE (PERSON RECEIVING NOTICE) CERTIFIED NUMBER

Sent via certified mail #7006 0100 0005 2145 1505

SIGNATURE (PERSON ISSUING NOTICE)

Dan Norris

NAME, TITLE OR POSITION

Mr. David Vasbinder, Environmental Manager

NAME, TITLE OR POSITION

Dan Norris, Environmental Specialist

MISSOURI DEPARTMENT OF NATURAL RESOURCES, P.O. BOX 176, JEFFERSON CITY, MO 65102

01-11-00 11:00