



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

DEPARTMENT OF NATURAL RESOURCES

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May 1, 2015

Mr. James Getting
Bridgeton Landfill
13570 Saint Charles Rock Road
Bridgeton, Missouri 63044

Dear Mr. Getting:

Thank you for your letter dated April 20, 2015, addressing requests made by the Missouri Department of Natural Resources in letters dated February 11, 2015, and March 25, 2015. After reviewing your letter, the department has the following comments on your response.

1. Bridgeton Landfill indicates that, "*It is unknown at this time whether a permanent treatment system will consist of a single stage or multiple stage process employing a single or multiple treatment technologies.*" As a part of the permit application required by item 5 in the March 25, 2015 letter, Bridgeton Landfill needs to conduct a control strategy analysis consistent with EPA's "top-down" method for determining Best Available Control Technology (BACT). This analysis must include both single stage and multiple stage processes utilizing single or multiple treatment technologies.
2. On page two, Bridgeton Landfill states, "*If required a formal BACT or BACT-like analysis will be prepared as part of any air permit package. . .*" The department's March 25, 2015, letter clearly states that a permit application is required by **September 21, 2015**, pursuant to 10 CSR 10-6.060, *Construction Permits Required*, and that the permit application must contain a control technology analysis consistent with EPA's "top-down" method for determining BACT.

On page three, Bridgeton Landfill states, "*. . . Bridgeton Landfill began testing total reduced sulfur concentrations within the LFG via EPA Method 15/16 on a weekly basis beginning the week of March 12th, 2015. Bridgeton Landfill will continue weekly testing of sulfur concentrations through conclusion of the pilot test program . . .*" The results of the gas analysis and flow rate measurements must be provided to the department on a monthly basis. The reports must be submitted to the department by the 20th of the following month in which the data was collected. The first report is due by **May 20, 2015**. Bridgeton Landfill must receive written approval from the department to stop conducting the weekly gas sampling analysis and flow rate measurements. The landfill gas testing and flow rate measurements must not stop at the conclusion of the pilot test program, but are required to continue until otherwise notified by the department.

3. The department received an air quality modeling protocol on April 24, 2015, from Bridgeton Landfill. Subject to Bridgeton Landfill incorporating the department's comments in the attached document, Bridgeton Landfill's modeling protocol is approved.
4. Bridgeton Landfill has conducted at least six different landfill gas analyses in association with the Odor Mitigation Pilot Study. Preliminary potential emissions (PTE) from the installation can, and must be calculated for all pollutants using the data that is currently available. Bridgeton Landfill will need to update the calculations as more data becomes available. The department's March 25, 2015, letter required PTE calculations be submitted by April 24, 2015. Bridgeton Landfill did not meet this requirement. Within 7 days from receipt of this letter, Bridgeton Landfill shall submit for review and approval PTE calculations for the Bridgeton Landfill installation on an emission unit basis for each pollutant found in 10 CSR 10-6.020(3)(A), *Table 1 – De Minimis Emission Levels*. The PTE calculations shall be based upon current operating conditions and the submittal shall include supporting explanations and documentation for the calculations. Failure to meet this requirement may result in additional enforcement actions. Dependent upon the results of the PTE calculations, the department may require Bridgeton Landfill to evaluate control options for other pollutants as part of the permit application discussed in item 6 below.
5. On page five, Bridgeton Landfill states, "*Within 30 days of receiving approval of the air modeling protocol prepared by Trinity, Bridgeton Landfill will provide MDNR with air quality impact analysis for SO₂ currently being emitted. The air quality analysis will be based on the best data available at that time as it relates to LFG flow rate and sulfur concentrations. However, Bridgeton Landfill reserves the right to update the air quality impact analysis for SO₂ in accordance with our proposed schedule to obtain additional data and complete updated emission calculations. . .*" The modeling analysis should be based upon the potential emission rates utilizing the best available data. As more data becomes available allowing the emission rates to be more accurately estimated, Bridgeton Landfill can update the air quality impact analysis with emission rates approved by the department.
6. Item 5 of the March 25, 2015, letter requires Bridgeton Landfill to submit a permit application by September 21, 2015. The application must include, at a minimum, the following components:
 - a. A control strategy, or process changes, that result emissions reductions equivalent to BACT for SO₂ and any other pollutant whose PTE exceeds the de minimis levels found in 10 CSR 10-6.020(3)(A), *Table 1 - De Minimis Emission Levels*. The control strategy analysis shall be based upon EPA's "top-down" method for determining BACT.

- b. PTE calculations for each pollutant found in 10 CSR 10-6.020(3)(A), *Table 1 - De Minimis Emission Levels*, on an emission unit basis for the entire installation. The PTE calculations must take into account the proposed control strategy. The submittal must include supporting explanations and documentation for each of the calculations.
 - c. An air quality impact analysis for sulfur dioxide and any pollutant whose PTE exceeds the de minimis levels found in 10 CSR 10-6.020(3)(A), *Table 1 - De Minimis Emission Levels*.
 - d. A compliance schedule, including a completion date for construction of control technologies and/or implementation of process changes identified in a. above.
7. As noted in Bridgeton Landfill's response, field activities for the Sulfur Removal Technology Evaluation (Stage 2) are anticipated to begin in May or June 2015 with technical results anticipated being available at the end of June or beginning of July 2015. Seven days prior to the start of field activities, Bridgeton Landfill must provide written notification to the department of the planned start date. Bridgeton Landfill must submit the results of this study by **July 15, 2015**, along with any amendments to the submitted PTE.

Your letter does not address the department's request contained in its March 25, 2015, to provide the following supporting documentation:

- Copies of all landfill gas analysis reports;
- Copies of all documents (including, but not limited to internal memos, discussion papers, raw lab data or lab analysis, reports and electronic correspondence) addressing sulfur content of landfill gas or any other reports identifying sulfur dioxide or other air emissions from the flare in excess of permit conditions or limits;
- Copies of all flare performance test reports and any related laboratory analysis; and
- Copies of all flare related SO₂ emission calculations.

This information must be included in the monthly landfill gas analysis reports discussed in item 2 above and as supporting documentation for the updated PTE calculations discussed in item 4 above. **All data referenced above collected prior to the date of this letter must be included in the initial May 20, 2015 monthly report.**

If the results of the air quality impact analysis discussed in item 5 above and in item 4 of the March 25, 2015, letter demonstrate a potential exceedance of the National Ambient Air Quality Standard found in 10 CSR 10-6.010, *Ambient Air Quality Standards*, Bridgeton Landfill will be required to conduct ambient air monitoring pursuant to a department-approved Quality Assurance Project Plan. This requirement was set forth in the March 25, 2015, letter.

Following modification of the construction permits identified above, Bridgeton Landfill will be required to incorporate these changes into the Title V operating permit renewal currently being

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reviewed by the department. Please note that the corrective actions identified in this correspondence are being required to address deficiencies with the construction permits in light of the updated potential emissions calculations. The department reserves the right to require additional corrective actions to further resolve these deficiencies and any other instances of non-compliance at the Bridgeton Landfill.

The requirements of this letter do not resolve the violations documented in previous Notices of Violation issued by the department. The Missouri Air Conservation Law provides for penalties not to exceed \$10,000 per day, per violation. Further enforcement actions will be addressed under separate correspondence.

All submittals and documentation required above shall be submitted to Ms. Darcy Bybee with the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176. Should you have any questions regarding this correspondence, you may contact me at the department's same address above or by phone at (573) 751-0763.

Sincerely,

DIVISION OF ENVIRONMENTAL QUALITY



Leanne Tippett Mosby
Division Director

Enclosure

LTM:dbm

c: Ms. Kathrina Donegan, St. Louis County Department of Health
Mr. Tom Phillips, Missouri Attorney General's Office
Mr. Aaron Schmidt, Division of Environmental Quality
Mr. Chris Nagel, Solid Waste Management Program
Mr. Tom Markowski, St. Louis Regional Office
Ms. Becky Weber, US EPA Region 7
Mr. Bill Beck, Lathrop & Gage
Ms. Ally Cunningham, Lathrop & Gage
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