

GREAT
RIVERS



Environmental Law Center
Lawyers for the Environment



Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, Missouri 65102
ATTN: NPDES Permits and Engineering Section/Permit Comments
publicnoticenpdes@dnr.mo.gov

VIA ELECTRONIC MAIL

August 18, 2017

*Re: Comments on Bridgeton Landfill, LLC's
Draft Missouri State Operating Permit No. MO-0112771*

Dear Sir or Madam:

The following comments are submitted by the Missouri Coalition for the Environment (“MCE”) and Great Rivers Environmental Law Center (“Great Rivers”) concerning the reissuance of Draft Missouri State Operating Permit No. MO-0112771 (“Draft Permit”) to Bridgeton Landfill, LLC.

MCE is a nonprofit independent, citizen’s environmental organization advocating for clean water, clean air, clean energy and a healthy environment. MCE works to educate, organize, and advocate in defense of Missouri’s people and their environment. Its members use the waters of Missouri for drinking water, recreation, and enjoyment. Great Rivers is a non-profit law center that provides free or reduced rate legal services to individuals and organizations working to protect the environment and public health.

The proposed Draft Permit would likely increase the amount of pollutants allowed to enter waters of the state, thus contributing to the impairment of water quality and the environment. Most importantly, the Draft Permit does not impose any monitoring requirements for radioactive materials despite the known presence of these pollutants at the site. MCE and Great Rivers urge the Missouri Department of Natural Resources (“MDNR”) to edit the Draft Permit to address our comments in this letter because the permit as currently written is contrary to the intent of the Clean Water Act and would contribute to the continued degradation of Missouri’s waterways and endanger public health.

I. The Draft Permit Fails to Set Effluent Limits or Monitoring Requirements for Radioactive Materials Discharged from the Site Despite Recent Testing Demonstrating the Presence of Such Materials in Storm Water Outfalls at the Site in Contravention of the Clean Water Act and Missouri Clean Water Law

Federal Water Pollution Control Act (“FWPCA”) amended by the Clean Water Act (“CWA”) (33 USC §1251 *et seq.*) regulates the discharges of pollutants, including radioactive materials, into the waters of the United States. It authorizes EPA and states to set and enforce quality standards for surface waters related to radioactive contaminants. The primary objective of the CWA is to restore and maintain the integrity of the nation's waters. The definition of “pollutant” under federal regulation 40 CFR § 122.2 includes radioactive materials. The definition of “pollution” under the Missouri Clean Water Law (“MCWL”) includes “radioactive...substance.” Section 644.016(17) RSMo. As the delegated authority to implement and enforce the National Pollution Discharge Elimination System (“NPDES”) permitting program in the State of Missouri, MDNR clearly has the authority and duty to regulate radioactive materials in storm water NPDES permits.

The Draft Permit for Bridgeton Landfill, LLC fails to discuss, much less set limits or require monitoring for, radioactive materials discharged from the site. According to the Facility Description in the Fact Sheet, “West Lake Landfill Operable Unit 1 (OU-1) consists of separate areas identified in the 2008 OU-1 Record of Decision as Area 1, Area 2, and the Buffer Zone/Crossroad Property. Areas within OU-1 contain radiologically-impacted material (RIM) and are under the oversight of the EPA Superfund program....Also at the time of this permit, storm water from portions of Westlake Operable Unit 1 drain to outfall #007 and outfall #008 and thus the limit sets for these outfalls contain parameters that reflect the expected discharge from West Lake Landfill Operable Unit 1.” Yet, the Draft Permit itself fails to contain any parameters that reflect the expected discharge from Operable Unit 1 related to radioactive materials, and MDNR completely avoids the issue in the Draft Permit and Fact Sheet.

This deficiency is especially troubling in light of an MDNR report issued on Jun 23, 2017 which contained results from sampling conducted at the site on April 30, 2017 that demonstrated elevated levels of Gross Alpha particles in storm water discharges from outfalls that are under the purview of the Draft Permit (i.e. Outfall #007, which “[r]eceive[s] storm water from various closed landfills on the property (including West Lake Landfill OU-1, OU-2 Demolition Landfill, and OU-2 Inactive Sanitary Landfill)). The report recommended additional analysis for Thorium to determine if the elevated levels of gross alpha were attributable to RIM at West Lake Landfill.¹ It is very troubling that on July 21, 2017, a letter was sent by Bridgeton Landfill, LLC to EPA disclaiming MDNRs sampling results and on that same day, MDNR placed the Draft Permit on public notice with no mention of the April 30, 2017 sampling and the recommendation for additional analysis. On August 16, 2017, nearly a month after putting the

¹ Interestingly, this document was available at <http://dnr.mo.gov/bridgeton/docs/20170430StormWaterResults.pdf> and was removed from MDNR’s website as of August 17, 2017. Per request of the commenters on that day, MDNR replaced the document on its website on August 18, 2017.

Draft Permit out for public comment, MDNR issued a document concluding that the Thorium analysis demonstrated that the radionuclides in the sample are not from RIM at West Lake Landfill.

The justification in the letter from Bridgeton Landfill regarding why storm water discharges from the site do not present a risk to human health or the environment and therefore should not be monitored is that (1) MDNR used the wrong testing method because of high dissolved solids in the samples taken and (2) EPA already implements a storm water monitoring plan at West Lake Landfill under its Superfund regulatory program. The inconsistencies between MDNR's sampling results and the West Lake Landfill Potentially Responsible Parties ("PRPs") should not result in MDNR completely abdicating its NPDES authority and duty regarding radioactive storm water discharges from the site. Neither should MDNR's conclusion in its August 16, 2017 report that the Thorium results demonstrate that the April 30, 2017 sample did not contain RIM from West Lake Landfill. Rather, there is reasonable potential for RIM to be discharged from the Bridgeton landfill given that it receives storm water flows from West Lake Landfill, which necessitates continued monitoring at the site to ensure that radioactive materials are not being discharged from Outfall #007, #008, or anywhere else within or off of the site. Below is a picture from along the St. Charles Rock Road of Operable Unit 1 Area 1 discharging water between Outfall #007 and #008.



The notion of MDNR requiring monitoring for radioactive materials in NPDES storm water permits is not unprecedented, even in the face of a federal program with similar

requirements. A review of the NPDES permitting history for the United States Department of Energy Weldon Spring Site (MO-0107701) demonstrates that MDNR has set effluent limits and monitoring requirements for radioactive materials for both storm water and wastewater even while the Department of Energy under the Weldon Springs Site Remedial Action Plan (“WSSRAP”) required similar monitoring.² While current MO-0107701 only addresses wastewater and contains effluent limits based on safe drinking water standards, prior versions of the permit set monitoring requirements for Gross Alpha and other radioactive materials at storm water outfalls.³

That MDNR felt compelled to test storm water runoff in December 2015 and April 2017 is sufficient justification to add effluent limits or monitoring requirements for RIM in the final permit. Once authorized, the NPDES permit for Bridgeton Landfill will be in effect for five years, likely until the fall of 2022. As an active participant in the EPA’s decision-making process for Operable Unit 1, MDNR is acutely aware the EPA will issue a proposed remedy in the near future. Regardless of the decision reached by the EPA, there will be landfill activities within the areas of known radioactive contamination at the surface of the landfill. The NPDES permit being issued by MDNR is highly likely to be the permit of record during the implementation of the EPA’s Record of Decision. MDNR needs to add effluent standards or monitoring requirements for radioactivity knowing there will be landfill activities within the areas of known radioactive contamination during the implementation of the EPA’s Record of Decision. As mentioned previously, MDNR established radioactive requirements in the NPDES permit for Weldon Spring that are complimentary to the Dept. of Energy. MDNR should do the same at Bridgeton/West Lake Landfill.

Even if MDNR & EPA conclude the storm water sampling from April 2017 does not contain radioactive material traceable to the West Lake Landfill, there was a release of Gross Alpha that exceeds the MCL. Moreover, the EPA and PRPs test results for radioactivity in an area described as receiving storm water runoff from West Lake in January 2016 and March 2016 met the definition of RIM.⁴ From the EPA:

In January and March of 2016, EPA took a total of five split sediment samples at the West Lake Landfill, while overseeing sediment sampling conducted by the PRPs. One of those samples, SED4, along the northeast edge of the West Lake Landfill, indicated that the sediment collected met the definition of RIM. The combined thorium concentrations

² See e.g., Weldon Spring Site Environmental Report for Calendar Year 1996, Pages 108-131, located at <https://www.osti.gov/scitech/servlets/purl/532696> (stating in Section 7.2 that “[t]he environmental monitoring and protection program for surface waters at the [WSSRAP] is prescribed in the Environmental Monitoring Plan (Ref. 420) and includes monitoring discharge points permitted under the [NPDES] program...” The report goes on to state in Section 7.3 that both programs work “in conjunction...to measure the success of the project’s goal to clean up the site with no increase in contaminant discharge or degradation of the off-site water bodies.)

³ *Id.*, Tables 7-1, 7-2, and 7-3.

⁴ See the fourth paragraph from an EPA update on additional sediment sampling results for radioactivity near the boundary of Operable Unit 1 Area 2. <https://www.epa.gov/mo/west-lake-landfill-additional-sediment-sampling-results>

for the PRPs' SED4 and EPA's duplicate sample from that same location were 16.16 pCi/g and 20.63 pCi/g, respectively.

Considering that EPA identifies the area where the sample was collected as meeting the definition of RIM and receiving storm water from the West Lake Landfill, MDNR must include effluent limits or monitoring standards for radioactivity in the permit prior to issuance. While SED4 was collected from the north slope of OU-1 Area 2, RIM may reasonably become present in storm water conveyed to Outfall #007 from OU-1 Area 2.

Without, at a minimum, requiring monitoring for Gross Alpha and other radionuclides, MDNR cannot meet its statutory duty to restore and maintain the integrity of the nation's waters or to protect public health. Clearly, the site has a reasonable potential to discharge radionuclides in an amount that violates safe drinking water standards as demonstrated by EPA's and MDNR's own samples. MDNR cannot completely avoid this potential by entirely ignoring this issue in the Draft Permit and abdicating its CWA and NPDES obligations to EPA's storm water monitoring program at the West Lake Landfill. MDNR's complete avoidance of any discussion of or attempts to address radioactive storm water discharges in the Draft Permit despite the documented reasonable potential for discharges of these pollutants into the environment renders any decision by MDNR to issue a Final Permit without monitoring for such pollutants arbitrary and capricious and not in accordance with law.

MDNR should amend the permit to require monthly radioactive monitoring for the following parameters:

- Gross Alpha
- Gross Beta
- Total Uranium (U-234, U-235, and U-238)
- Combined Thorium (Th-228, Th-230, and Th-232)
- Combined Radium (Ra-226 plus Ra-228)
- Individual analysis of the above mentioned isotopes

II. Due to Compliance History of Bridgeton Landfill and The Significant Frequency of Outbreaks of Leachate and ELG from the Facility, The Draft Permit Must Require Monthly Sampling Subsequent to Rainfall Events

The Draft Permit and Fact Sheet clearly document a poor and significant compliance history at the site related to frequent outbreaks of leachate at the facility. Requiring only quarterly monitoring for these parameters is not justified and will result in more pollutants being discharged into the environment. While the permit does not authorize the discharge of leachate, if Bridgeton Landfill, LLC is only required to sample after one rainfall event at a maximum of four times per year,⁵ the facility will not be able to adequately determine whether leachate is

⁵ It should be noted that if there is no rainfall in a quarter, then the facility may report as "no discharge," whereas if there are several rain events in a quarter, the facility only has to sample once. This infrequency of monitoring will fail to test adequately for the release of pollutants into waters of the state.

being discharged from the site in violation of the permit. While quarterly monitoring may be appropriate for most industrial storm water permits, clearly this facility should not be treated the same given both its own compliance history and the presence of RIM at the site. MDNR clearly has the authority to require more frequent monitoring in the face of historic non-compliance, and the facts available to MDNR regarding the compliance history of the facility and the presence of RIM at the site require MDNR to add monthly sampling to all outfalls in the Draft Permit.

III. Best Professional Judgment of the Permit Writer Should Require the Same Parameters for Outfall #008 as Outfalls #003, #004, #005, and #007.

The discussion in the Facility Performance History & Comments Section and the Effluent Limits Determination in the Fact Sheet, demonstrates that Outfall #008 should have the same parameters as Outfalls #003, #004, #005, and #007, with the addition of monthly monitoring as discussed above. The permit writer states that:

It is in the best professional judgment of the permit writer the inclusion of [ELG] parameters at all outfalls is prudent, considering the number of leachate outbreaks at this facility which have impacted the storm water collection structures. The elevated aluminum, iron, TSS, COD, and BOD5 at outfalls #003, #005, and #007 may indicate contamination of the storm water with leachate. Outfall #004 does not have increased levels of many of these constituents, but in the interest of assuring consistent site BMP performance, will share these parameters with the other outfalls.

This rationale is equally applicable to Outfall #008, which will now receive storm water from existing locations within the site. For example, if storm water which would be conveyed to Outfall #007 is conveyed instead to Outfall #008 because of a 100 year precipitation event, then it is reasonable to assume that the storm water that would have otherwise had the potential to be contaminated at Outfall #007 would likewise have the potential to be contaminated at Outfall #008. MDNR's rationale that the lack of DMR data or samples with the application justify more lenient parameters for Outfall #008 is unconvincing and directly contradicted by the permit's own analysis. Additionally, the discussion in the General Criteria Consideration that tries to draw a distinction between Outfall #007 and Outfall #008 similarly fails because both outfalls will receive the same storm water pollutants at different times. Therefore, Outfall #008 should be subject to the same parameters (effluent limits, benchmarks, and monitoring requirements) as the other outfalls at the site.

IV. MDNR Needs to be Clear when Describing the 'Subsurface Event'

MDNR continues to be the lead jurisdiction of the ongoing subsurface smoldering event (SSE) in the south quarry of the Bridgeton Landfill since it started in 2010. The MDNR website that hosts the homepage with updates, reports, and other important information for the public related to the Bridgeton Landfill says:

This page provides citizens with access to pertinent information and online forms regarding ongoing compliance issues and activities related to a subsurface smoldering

event and associated odors around Bridgeton Sanitary Landfill at 13570 St. Charles Rock Road in Bridgeton.

MDNR uses more explicit terms when describing the event in the south quarry as a subsurface fire in its Notices of Violation to Republic Services, the landfill owner, as recently as June 15, 2017.⁶

However, throughout the Draft Permit, the situation in the south quarry is only described as a ‘subsurface event.’ MDNR should be clear in the permit about what exactly is occurring in the south quarry to correctly detail the site conditions for the public. This permit is part of the historic record and should fully detail site conditions. Please replace the appearance of ‘subsurface event’ with ‘subsurface smoldering event’ or ‘smoldering fire’ so the permit is consistent with actual facts at the site. There is no need to downplay or reduce the significance of what is happening in the south quarry by referring to it as a ‘subsurface event.’

CONCLUSION

The Draft Permit undermines the intent and purpose of the Clean Water Act by failing to require Bridgeton Landfill, LLC to limit and monitor for radioactive materials being discharged from the site, by not requiring monthly monitoring for ELG and other parameters given the compliance history of the facility, and by allowing more lenient standards for Outfall #008 than the other outfalls without adequate justification. Hence, the Draft Permit issued to Bridgeton Landfill with the current modifications proposed is unreasonable, and MDNR should not go forward until MCE and Great Rivers’ concerns are addressed.

Thank you for accepting and considering these comments. We look forward to your response.

Sincerely,



Ed Smith
MCE Policy Director

Sincerely,



Bob Menees
Great Rivers Staff Attorney

⁶ MDNR Notice of Violation to Bridgeton Landfill LLC.
<http://dnr.mo.gov/bridgeton/docs/Bridgeton-NOVSWP1709-6-15-17.pdf>