

# ***Bridgeton Landfill, LLC***

January 27, 2014

Mr. Chris Nagel  
Director  
Solid Waste Management Program  
Missouri Department of Natural Resources  
PO Box 477  
Jefferson City, MO 65102

**Re: Bridgeton Landfill, LLC. – Response to Extreme Weather Temperatures**

Dear Mr. Nagel:

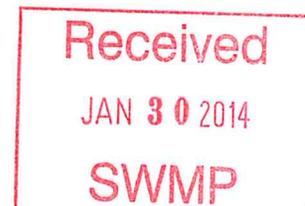
As we discussed during recent update calls, Bridgeton Landfill has prepared this letter to summarize the significant resources allocated to the period of historical low temperatures realized in early January of 2014. As you know the historically low temperatures in the St. Louis region during January 5<sup>th</sup> through 7<sup>th</sup>, along with the substantial snow fall and winter storm conditions, presented complicated operating challenges for the Bridgeton Landfill. However, we were able to keep the facility team fully staffed on site at all times in order to rapidly and effectively respond to these challenges.

Through the massive effort of the Bridgeton Landfill team and outside contractors, the facility was able to address and manage the impacts of freezing conditions without delay. These efforts included significant allocation of overtime, contractor services and new equipment to maintain a high level of competency with regards to environmental controls at the Bridgeton Landfill during the historic low temperatures. Generally, the site initiated the following measures:

- Installed and maintained portable heaters and blankets on critical infrastructure components to ensure functionality of liquids and gas collection systems.
- Significant overtime hours were allocated to third-party contractors and Bridgeton Landfill employees to maintain infrastructure during the inclement weather period.
- Bridgeton Landfill completed 24 hour maintenance of the landfill gas flares during this period in order to minimize downtime and ensure complications were promptly addressed.

The Bridgeton Landfill would like to note several specific items that were realized or accomplished during this effort:

- During troubleshooting efforts to the candlestick flares it was realized the manufacturer did not include the lid to deflect moisture above the pilot tube. The manufacturer has



- been alerted to the issue and the site will be installing the correct lid. As an added protection the site is planning to heat trace the pilot tube as well.
- Due to the extreme cold, several temporary liquid transport lines froze. To restore functionality and resume liquids collection, new lines were constructed immediately to service the system. It should be noted that the site is in the middle of upgrading the majority of the force-main at the site. The newly constructed system has been designed and constructed to handle much lower ambient temperatures than the temporary system.
  - The inclement weather complicated off-site hauling and disposal of leachate. Poor road conditions limited trucking capabilities and the dangerous weather resulted in the closure of the MSD hauled waste station for two days. Because of this, significant efforts were required to maintain the emergency liquids storage and processing facilities at the landfill. The site is currently constructing 4 one-million gallon storage tanks and a pre-treatment facility on site. The long term facility will be designed to industry standards and have the ability to handle the lower ambient temperatures in comparison to the emergency system.
  - The historic low temperatures caused significant contraction of pipe boots and clamps connecting the synthetic final cover to the vertical infrastructure (Gas Extraction Wells, Leachate Extraction Wells, etc.). Pressure on the synthetic liner due to down time of the flares also contributed the pressure. The Bridgeton Landfill technicians worked significant hours of overtime to maintain these connections.

The effort and resources allocated to maintain the facility during this historic weather event were substantial. However, it allowed us to minimize negative effects of the debilitating weather and promptly manage the complications. Additionally, we have already identified and begun implementation of process and site improvements, as discussed above, to better prepare our team and facility for future weather related events.

Please feel free to contact me with any questions you may have.

Sincerely,



Brian Power  
Environmental Manager