

# ***Bridgeton Landfill* LLC**

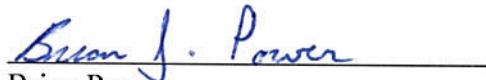
October 27, 2015

Mr. Chris Nagel  
Director, Solid Waste Management Program  
Missouri Department of Natural Resources  
1738 East Elm Street  
Jefferson City, MO 65102

Dr. Mr. Nagel:

Please find enclosed the Slope Stability Assessment summarizing the slope stability analysis for third quarter of 2015, conducted pursuant to Paragraph 10 of the Second Amendment of the First Agreed Order.

Best regards,



Brian Power  
Environmental Manager  
Bridgeton Landfill, LLC

P. J. Carey & Associates, P.C.

5878 Valine Way, Sugar Hill, Georgia 30518  
Telephone (678) 482-5193  
Fax (866) 845-3898  
Email [pjcarey@pjcarey.com](mailto:pjcarey@pjcarey.com)

October 16, 2015

Brian J. Power  
Environmental Manager  
Bridgeton Landfill, LLC.  
13570 Saint Charles Rock Road  
Bridgeton, MO 63044

RE: Bridgeton Stability

Dear Brian,

On July 21 and 22, 2015 I performed an inspection of the Bridgeton Landfill for the purpose of identifying any visual evidence of instability or incipient failure. The inspection included the north and south quarry fill areas. This inspection was for the third quarter of 2015. The previous inspection was performed on June 3, 2015.

The observation of the slopes for both the north and south quarry areas was performed to look for telltale signs of movements related to instability, including areas of suspension of the membrane on the upslope areas that would result if scarping, not visible due to the temporary membrane cap, existed.

The inspection revealed the presence of surficial slumps in the south east edge of the landfill, between the perimeter ditch and perimeter liquid collection trench installed at the time of capping. These slumps were observed during the previous 3 inspections and have not progressed uphill into the general slope. No indications of instability were noted uphill of this location. The slump shapes suggest they are the result of daylighting of seepage under the cap membrane and subsequent erosion/or slippage of the surficial soils downslope being transported and deposited at the perimeter uncap swale below. The slumps, as seen in the attached photograph, have a shape that is wider at the top and narrow at downslope, indicative of a shallow seepage driven event. Given that these slump shapes have not progressed up slope it is not necessary to repair them at this time.

Since the inspections were begun in 2013, the sloping portions of the landfill are noticeably flatter and therefore, less prone to instability. In addition, a review of the monthly settlement at grid points was performed. I did not see any indication of instability in the data since January. It should be noted that extensive settlement of the south quarry has occurred during this time without any instability of consequence. This strongly demonstrates the lack of coupling of instability and settlement at this site.

This is the twelfth review I have performed of this type at the Bridgeton since the fall of 2012. To date, no signs of impending instability of any consequence has been identified or occurred.

● Page 2

I hope this information is helpful to you. Please call if there are any questions.

Sincerely,

A handwritten signature in black ink that reads "Peter J. Carey". The signature is written in a cursive style with a large initial "P" and a distinct "J" and "C".

Peter J. Carey, PE  
President



Bridgeton Landfill July 21, 2015  
South slope east side  
Undercap Erosion Shape  
Photo by Peter J. Carey

