



April 28, 2021

Ms. Erin Fanning
Division Manager
Bridgeton Landfill, LLC.
13570 Saint Charles Rock Road
Bridgeton, MO 63044

RE: Bridgeton Slip Failure and Separation Assessment
1st Quarter 2021 Inspection

Dear Erin,

On March 22, 2021, 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 1st quarter of 2021. The previous inspection was performed on December 15, 2020.

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. In addition, areas that showed indicated localized differential settlement were walked over to determine if any open tension cracking, an indication of separation, was present. The observations were made while walking along the areas within the landfill boundaries.

The inspection did not identify any previously unobserved (and reported) movements or signs of movement within the North or South Quarry that could be potential signs of instability. The landfill surface in the South Quarry shows signs of continued settlement with minor areas of tension in the membrane along the eastern side approximately above the underlying Quarry wall related to differential settlement in the area. No increase in tension within this area was observed.

Since the quarterly inspections were begun in 2013, the sloping portions of the landfill are noticeably flatter and therefore, less prone to instability. As mentioned in the past few inspection reports, there are very few areas within the heat-affected portions of the South Quarry that have slopes exceeding 20%. This general reduction in vertical relief has essentially eliminated any potential for instability of any consequence in the South Quarry. The only slopes that are close to the original ground surface slopes in the South Quarry are those south of the neck area. These areas were examined for any signs of movement and none was observed.

No significant fill had been placed in the south quarry since the last inspection. No open tension cracking was indicated in area of the differential settlement when pressing the membrane down to contact the underlying ground surface in this area. Fill material placement and lining has been completed northeast of the north quarry fill limits at the time of this inspection.

The North Quarry cap construction has been completed since the second quarter inspection of 2017. No signs of instability were observed in the North Quarry.

In addition, a review of the monthly settlement at grid points in the South Quarry for the past quarter and settlement in the North Quarry between January 18, 2021 and April 15, 2021 was performed. I did not see any indication of instability in the data. No indication of instability was observed in the South Quarry based on settlement patterns. As mentioned in previous reports, the Bridgeton site has not exhibited a coupling of instability and settlement.

This is the thirty-third (34) review I have performed of this type at the Bridgeton Landfill since the fall of 2012. To date, no signs of impending instability of any consequence has been identified or occurred.

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

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Sincerely,



Peter Carey, P.E.
Feezor Engineering, Inc.