January 10, 2018

Xcel Energy, Inc.
Sherburne County Generating Station
13999 Industrial Blvd.
Becker, MN, 55308

Re: 2017 Annual Inspection of Unit 3 Landfill

The Unit 3 Landfill (landfill) inspection was conducted on November 8th, 2017 by Daniel J. Riggs, a professional engineer licensed in the State of Minnesota. This was the third inspection done in accordance with the EPA's published Coal Combustion Residual (CCR) Rules under section 257.84. Inspections prior to 2015 were conducted by the Minnesota Pollution Control Agency (MPCA).

The following items were evaluated as a part of the Section 257.84 Inspection:

i) Any changes in geometry of the structure since the previous annual inspection

Annual topographic surveys have been conducted on the landfill since initial construction. During that time, no changes in landfill geometry or embankment alignment have been observed.

ii) The approximate volume of CCR contained in the unit at the time of the inspection

There was approximately 7.1 Million Cubic Yards of CCR in the landfill at the time of inspection.

iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit

The landfill was inspected for structural weakness by walking a traverse at the base and top of the embankment. There were no signs that structural weakness had previously or is presently occurring on the landfill.

The active area sump panel controls and riser access panels were opened to verify that the leachate management system is functioning properly. There are no conditions disrupting the operation or safety of the CCR unit.

iv) Any other changes(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection

The CCR placed in the landfill is a lime-stabilized, Type C fly-ash with pozzolanic properties. This creates a structurally stable fill that is not subject to settlement or shifting once placed and compacted.

I have reviewed the CCR Unit Design and Construction information and have observed no deviations from those documents.

Sincerely,
Daniel J. Riggs, PE

License No. 49559
Senior Engineer
Carlson McCain, Inc.

FIGURE 1

UNIT 3 LANDFILL 2017
ANNUAL INSPECTION

PHOTO LOCATIONS

1/8/2018

P:\Projects\XCEL\3404-13 Sherco Dam Safety Inspection\Nov 2017 CCR Inspection\figures\Figure 1 - U3LF photos.dgn

Unit 3 Landfill Annual Inspection - 2017

Photo 1 11/8/2017	Open portion of the landfill, looking north.

Photo 2 11/8/2017	Newly installed final cover along the east side of the landfill, looking north.

Photo 3 11/8/2017	Leachate run-off containment flap along edge of final cover, looking north.

Photo 4 11/8/2017	Run-on/run-off containment berm along south side of open area, looking west.

Photo 5 11/8/2017	Run-on/run-off containment berm along south side of open area, looking east.

Photo 6 11/8/2017	Exterior of north embankment, looking west.

Photo 7 11/8/2017	Run-on/run-off containment berm along west side of landfill, looking south.

Photo 8 11/8/2017	Access road on top of north embankment, looking east.

Photo 9 11/8/2017	Display screen on properly function Pump No. 1.

Photo 10 11/8/2017	Display screen on properly function Pump No. 2.

Photo 11 11/8/2017	Newly installed final cover along the north side of the landfill, looking east.

Photo 12 11/8/2017	Open portion of landfill, looking west.