

Technical Memo



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To: Geoff Strack, SKB (Austin) Environmental, LLC.
From: Dave Parenteau, PE (MN), Wenck Associates, Inc.
Date: January 14, 2016
Subject: Annual Inspection SKB Lansing - Report of CCR Landfill Inspection
Wenck Project # B3053-0034

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota.

A handwritten signature in blue ink, appearing to read 'David M. Parenteau', is written over a horizontal line.

David M. Parenteau
PE # 41243

Jan 14, 2016

Purpose

This memorandum fulfills the requirements of 40 CFR § 257.84 Inspection Requirements for CCR Surface Landfills, Part b, regarding annual inspection by a qualified professional engineer.

Background and Applicability

SKB (Austin) Environmental, LLC owns and operates the SKB Lansing Landfill, a Class III facility operating under MPCA Solid Waste Permit SW-514, originally issued in 1996.

The site is located off of 243rd Street and State Highway 218, north of Austin Minnesota. The attached Figure 1 presents an overview of the site.

There are 4 permitted disposal cells in the Landfill. Cell 1 is unlined and has not received any CCR material. Cell 2 is composite lined and has a portion of the liner that overlies the south slope of Cell 1. Phase 4 of Cell 2 was recently constructed and is immediately north of Cell 2 Phases 1, 2 and 3. The active area is within Cell 2. The site began receiving CCR material in June of 2015 and it has all been placed in Cell 2.

CCR Landfill Inspection (40 CFR § 257.84)

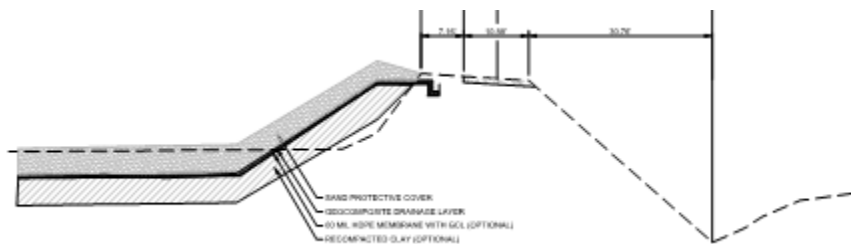
On December 21 2015, Dave Parenteau conducted the on-site inspection the CCR Landfill. During the inspection the following activities were performed.

- ▲ Available information regarding status and condition of the CCR unit, including, but not limited to, files available in the operating record were reviewed. Past inspection reports were reviewed on site, and SKB (Austin) Environmental LLC

provided copies of cell construction documentation reports for review in preparing this report.

- ▲ The documentation reviewed covered the following topics
 - CCR unit design and construction information required by § 257.73(c)(1);
 - Previous periodic structural stability assessments required under § 257.73(d); It should be noted that §257.74 does not apply as the site is not new, nor is it a lateral expansion of an existing impoundment/landfill, therefore this is not addressed.
 - The results of inspections by a qualified person (contained below);
 - Results of previous annual inspections;

The landfill cell embankments were constructed using on-site and import controlled fill materials, and compacted in lifts. A typical perimeter section, taken from the Cell 2, Phase 2 Construction Documentation Report, prepared by CRA in November, 2012 is shown below.



- ▲ A visual inspection of the CCR units to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and

There were no observed signs of distress or malfunction on either the CCR Impoundment or the CCR Landfill and their corresponding appurtenant structures. Photos taken during the inspection are provided in Attachment 1 and Figure 2 shows where the photos were taken.

CCR Landfill Inspection Report

40 CFR § 257.84, Subpart b.2 requires the following topics in italics be addressed within this report. The requirements are shown in italics with the response immediately afterwards for each item.

- (i) *Any changes in geometry of the impounding structure since the previous annual inspection;*

There were no apparent changes from the geometry of the impoundment when compared to the permit drawings or the past construction documentation reports.

- (ii) *The approximate volume of CCR contained in the unit at the time of the inspection;*

The approximate volume of CCR material contained in the landfill at the time of the inspection is 19,300 cubic yards.

- (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 and appurtenant structures; and*

None of the following were observed that could indicate structural weakness;

- Signs of slumping or rotational movement.
- Lateral or vertical distortion of the embankment crest
- Seepage on the outboard slope;
- Burrowing activity of varmints;

- (iv) *Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.*

There were no changes noted that may could potentially affect the stability or operation of the impoundment. Observations were consistent with those noted in that report.

Notification Requirements

SKB (Austin) Environmental LLC will comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g) by the January 18, 2016 deadline.

Conclusions and Recommendations

The soils used for embankment construction have been placed in a controlled manner. The cells are lined with a geomembrane ensuring that there is no leachate seeping through the embankment from the waste material. The landfill embankment crests are wide in width, have slopes no steeper than 3H:1V, and are relatively short in height, ranging from zero to approximately 15 feet in height. The slopes are well vegetated and the site is well run and maintained.

40 CFR § 257.83, Subpart b.5 and 40 CFR § 257.84, Subpart b.5 each require that if a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

There were no deficiencies or releases identified during the inspection that require remedy as soon as possible.

Attachment 1

Photos

**Photos of Coal Ash Inspection
SKB Environmental Landfill, Lansing, MN
December 21, 2015**



1. West End of South Slope
Facing East
Top of Slope



2. West End of South Slope
Facing East
Middle of Slope



3. West End of South Slope
Facing East
Bottom of Slope



4. Mid section of South Slope
Facing West
Top of Slope



5. Mid section of South Slope
Facing East
Top of Slope



6. Mid section of South Slope
Facing West
Middle of Slope



7. Mid Section of South Slope
Facing West
Bottom of Slope



8. Mid Section of South Slope
Facing East
Bottom of Slope



9. Mid Section of South Slope
Facing East
Middle of Slope



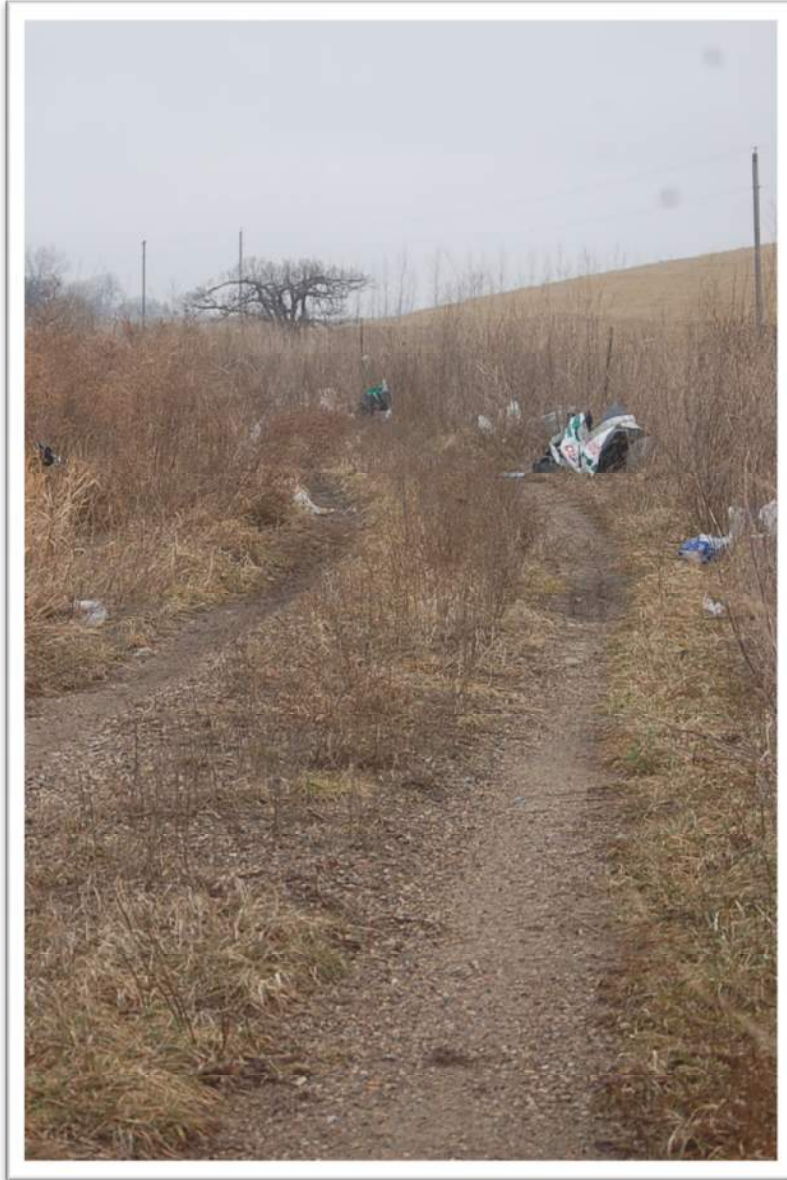
10. East End of South Slope
Facing West
Top of Slope



11. East End of South Slope
Facing West
Middle of Slope



12. South End of East Slope
Facing North
Top of Slope



13. South End of East Slope
Facing North
Middle of Slope



14. North End of East Slope
Facing South
Top of Slope



15. Mid Section of East Slope
Facing South
Bottom of Slope



16. East Side of Site
Facing West
Lined Outer Berm



17. Near Middle of Site
Facing East
Lined Outer Berm



18. Near Middle of Site
Facing South
Lined Outer Berm




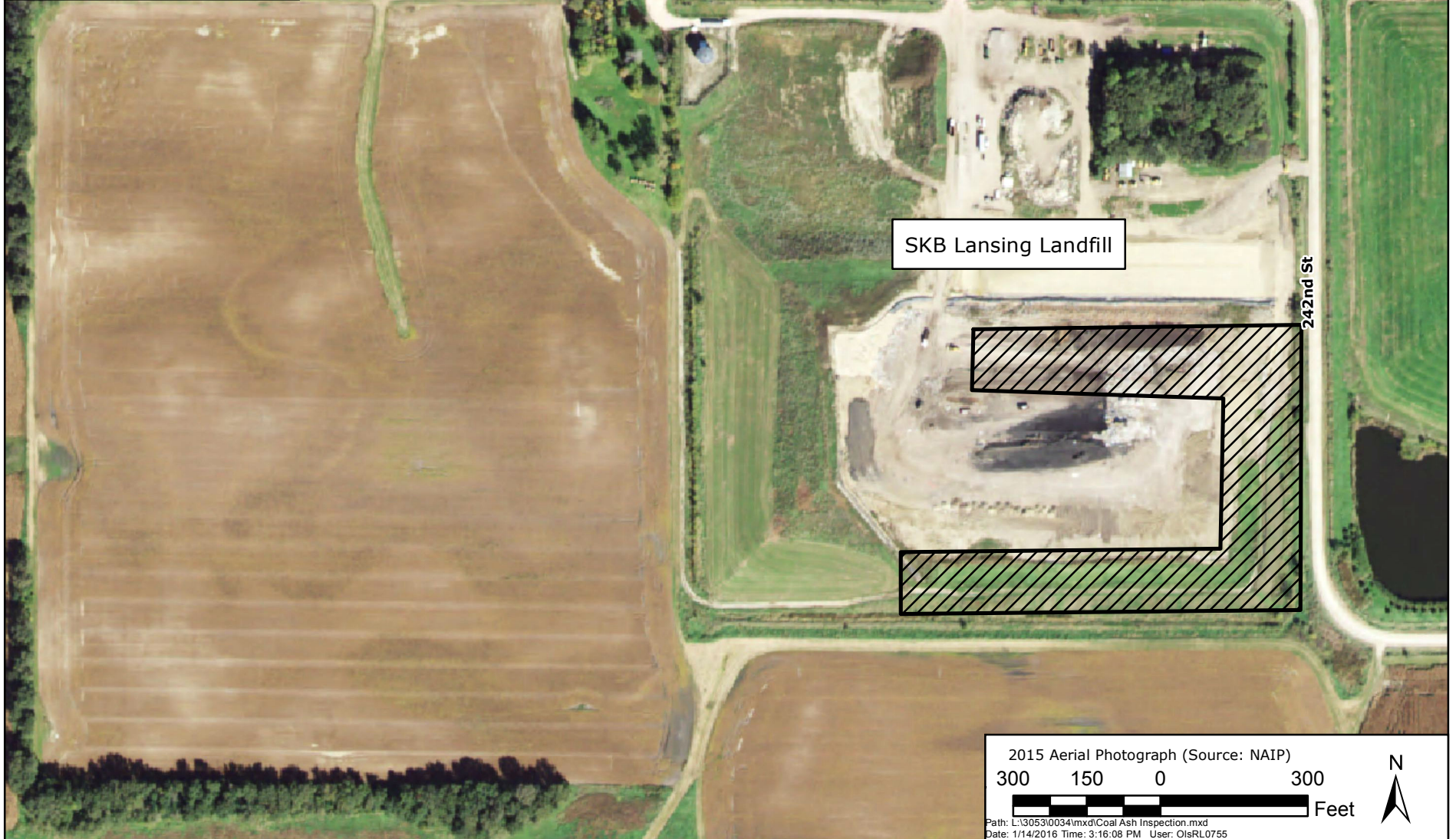
19) South East of Site
Facing Northwest



20) South East of Site
Facing North

Legend

 Area of Inspection



SKB (AUSTIN) ENVIRONMENTAL, LLC - SKB LANSING LANDFILL

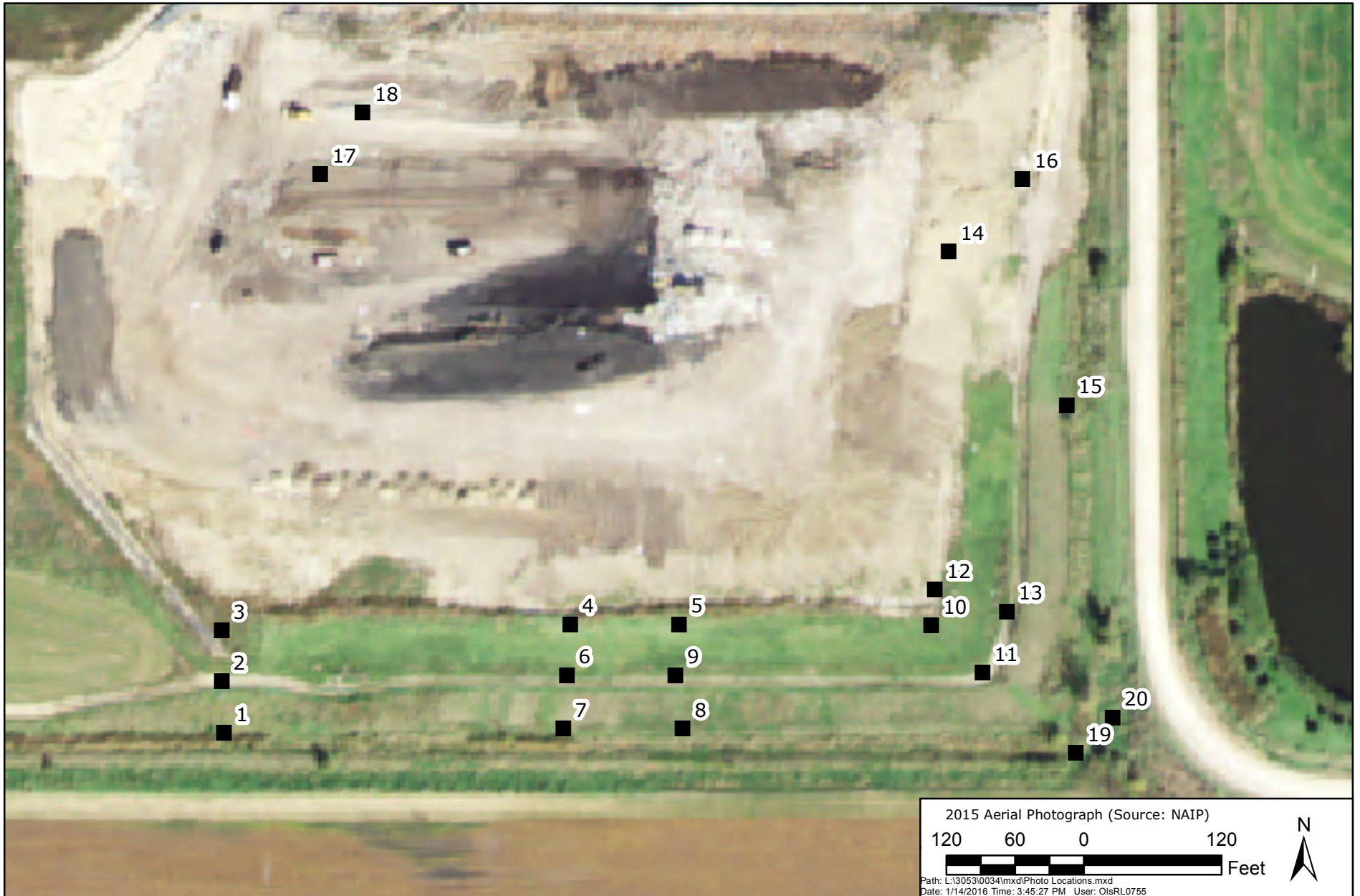
Coal Ash Inspection



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Figure 1



SKB (AUSTIN) ENVIRONMENTAL, LLC - SKB LANSING LANDFILL

Photo Locations of Coal Ash Inspection



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Figure 2