

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

September 26, 2012

Mr. James DiCola  
Midwest Generation, LLC  
1800 Channahon Road  
Joliet, IL 60436

VIA E-MAIL and U.S. MAIL

KPRG Project No. 15209.5

Re: Joliet #29 Former Ash Burial Area Runoff Erosion Repair 2012

Dear Mr. DiCola:

KPRG and Associates, Inc. (KPRG) completed a walk-over inspection of the former ash burial area on the northeast side of the Joliet #29 property, both inside and outside the fenced boundary of the facility. The inspection was performed on September 12, 2012. The purpose of the inspection was to identify any erosional features that may expose the underlying buried ash/slag and channel runoff toward the Des Plaines River which is immediately south of this area. It is our understanding that the ash burial area is included within the storm water/discharge permit for the facility and the inspection/repairs are part of permit compliance requirements.

During the inspection, KPRG identified four areas where either sheet wash erosion or rilling had exposed, or may expose, the underlying ash/slag resulting in potential transport of material to the Des Plaines River. These are identified as Areas 1 through 4 below. The cover repair work was performed on September 25, 2012. Allied Landscaping was contracted by KPRG to perform the work under the direction of a KPRG scientist/engineer. For each of the areas, the following repair work was performed:

- Area 1 – Located at coordinates N41° 29.846'/W88° 07.021'. This was a flat area at the top of the embankment where the vegetal cover had been eroded and ash exposed. This area was approximately 450 square feet in size.

The repair consisted of covering the area with topsoil with a mix of all purpose seed and annual rye. This was then covered with an erosion mat/blanket.



- Area 2 – Located at N41° 29.883'/W88° 06.954'. At this location, a storm event uprooted a small tree at the base of the slope/water interface of the intake channel. The toppled tree had resulted in an escarpment. Although no visible ash was exposed, the presence of the escarpment would facilitate continued erosion into the toe of the embankment.

The repair consisted of removing the fallen tree, placing and anchoring (to the extent possible due to the steepness of the side slope and looseness of the soil) a geo-grid over the exposed soil of the escarpment and then placing rip-rap on top of the geo-grid to protect against continued erosion. Any exposed area above the rip-rap was seeded and an erosion mat/blanket was placed on top. A sediment log was also placed above the area for additional short-term protection against sheet runoff as the seed germinates.

- Area 3 – Located at N41° 29.884'/W88° 06.932'. This was an area where there was a small incision into the top of the bank. The incised feature was approximately 25 feet long, 15 feet wide and up to 1 foot deep.

The repair consisted of filling in the incised area with clayey top soil, mechanical compaction and then seeding with a mix of all purpose seed and annual rye. This was then covered with a wood fiber erosion blanket. A straw log was placed along the top of the subject area to help reduce runoff energy while the seed germinates.

- Area 4 – Located at N41° 29.886'/W88° 06.854'. This was an upland area of rill development which eventually turned into sheet runoff as the ground flattens prior to flowing toward the channel bank. The rill was approximately 75 feet long, 3 feet wide and up to 1.5 feet deep.

The repair consisted of filling in the rill with clayey top soil, mechanical compaction and seeding with a mix of all purpose seed and annual rye. It was then covered with a wood fiber erosion blanket. A straw sediment log was placed along the top of the subject area to help reduce runoff flow energy while the seed germinates.

Photographs documenting the repair work are provided in Attachment 1.

All other areas along the cover that have undergone repair over the last four years appear in good condition with no additional detrimental erosion effects being displayed at this time.

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KPRG appreciates the continued opportunity for providing our technical services to Midwest Generation. If there are any questions, please contact me at 262-781-0475.

Sincerely,  
KPRG and Associates, Inc.

*Richard R Gnat*

Richard R. Gnat, P.G.  
Principal

*Attachment*

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KPRG and Associates, Inc.

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**ATTACHMENT 1**  
**Photodocumentation**



Photo 1 – Area 1, prior to repairs.



Photo 2 – Area 1, during repairs.



Photo 3 – Area 1, after completion.

*Site Photographs – Joliet #29 Ash Burial Area Repair, September 2012*



Photo 4 – Area 2, prior to repairs.



Photo 5 – Area 2, during repairs.



Photo 6 – Area 2, after completion.



Photo 7 – Area 3, prior to repairs.



Photo 8 – Area 3, during repairs.



Photo 9 – Area 3, after completion.



Photo 10 – Area 4, prior to repairs.



Photo 11 – Area 4, during repairs.



Photo 12 – Area 4, after completion.