



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

1838130004

-02-

October 31, 2014

EPA-DIVISION OF RECORDS MANAGEMENT
RELEASABLE

Director Marc Miller
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702

OCT 05 2014

REVIEWER RDH

Marc
Dear Director Miller:

I am writing you in response to media reports on September 19, 2014 about the Department of Natural Resource's closure of Pond 6 within Kickapoo State Park (Park) due to runoff from the Bunge Milling, Inc. Coal Combustion Byproduct (CCB) fill site (Bunge site) located in the unincorporated community of Grays Siding near Oakwood Illinois. After subsequent discussions between our technical and legal staffs, and learning that an enforcement case has been referred by the Department to the Office of the Attorney General on this matter, I directed my staff to conduct further investigations concerning potential off-site impacts from fly ash that was deposited and covered on the Bunge site. As you will see from the discussion of the results of these investigations below, Illinois EPA believes the Bunge site poses no significant off-site environmental impacts at this time.

On September 25, 2014 a surface water sample was taken by Bureau of Water staff from a surface runoff/groundwater collection pool on the Bunge site that flows into a ravine leading to Pond 6 on Park property. That surface water sample has been analyzed by the Illinois EPA Laboratory in Springfield, with mercury analysis done through a contract lab; results are discussed in more detail below. On October 15, 2014 an annual site inspection was conducted by Bureau of Land staff of the entire Bunge site and the cover system constructed over the fly ash fill areas. Inspection items requiring corrective action as part of on-going operation and maintenance activities for the site are outlined below and have been transmitted to Bunge in an October 23, 2014 letter. The company has indicated to my staff that they will repair erosion areas identified during the October 15th inspection by December 1st and address other issues raised. The Agency will monitor compliance of these on-going maintenance activities.

On September 25, 2014, Bureau of Water staff visited the Bunge site, also referred to as the "Rocky Acres Soil Cover Ravine" in our inspection and lab reports, for the purpose of collecting a sample of water from a ravine that receives stormwater and groundwater from the capped fly ash disposal area. At the time of sampling, water was discharging from a 36-inch culvert into a pool that is the origin of the ravine. The most recent rainfall occurred on September 21st and was less than 0.1 inch so the water in the pool did not include runoff. The depth of the water was estimated to be three feet deep in the middle section of the ravine. The field pH was 8.2 standard units and the water temperature was 19 degrees C. The water samples collected from the pool were analyzed for low level mercury, total metals, chloride, sulfate, and total suspended solids. The low level mercury analysis was conducted by Tek Lab in Collinsville and analyses for the other parameters were conducted by the Illinois EPA Laboratory in Springfield.

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The results of the water quality analysis of the sample collected from the ravine on September 25, 2014 showed that the ravine had good water quality; specifically, no water quality standards were exceeded and none of the results even approached a water quality standard. Boron in water is an indicator of the presence of coal ash as boron is abundant in coal ash and is very soluble. Coal ash ponds and other waters obviously affected by coal ash typically have a boron concentration from 3 to 12 mg/L. The ravine water boron concentration was only 0.1 mg/L, indicating that the inflow to the ravine at the time the sample was collected had little or no contact with coal ash. Although the sample was collected at a time when no surface runoff was occurring, base flow from local groundwater made up part of the water present. Mercury, another substance of concern in coal ash, was also found at a very low concentration, 3.2 ng/L. This is much lower than the human health water quality standard (12 ng/L). In sum, the ravine water quality on the sample date was typical of an Illinois stream unaffected by any sources of contamination. The full inspection report and laboratory analyses are enclosed for your review.

On October 15, 2014, Bureau of Land staff visited the Bunge site for the purpose of conducting an annual inspection and, in particular, evaluating the integrity of the cover system over the fly ash fill areas. Overall, it was observed that the cap/cover system appeared to be in good condition with vegetative cover and no erosion. The exception was in the primary stormwater runoff collection area where vegetation is "patchy" and erosion is exposing minor amounts of what appears to be fly ash. There is also a lack of vegetation over an interior maintenance roadway running along the west-central side of the site presumably due to vehicle use. Additionally, a couple of site security/safety issues were noted that do not raise any environmental concerns. The full inspection report with photos and the October 23rd corrective action letter to Bunge are enclosed for your review. Mr. Loren Polak of Bunge has verbally committed to address the cover erosion issues by December 1st of this year and the Agency will verify that this work is completed.

We would be happy to meet with Department staff and those involved at the Office of the Attorney General about these investigations if you think that would be helpful. John Kim of my staff is our point of contact to set up such a meeting and can be reached at 217/782-5544. Of course, please feel free to contact me directly with any questions you may have. Thank you.

Sincerely,



Lisa Bonnett
Director

Enclosures (5)



Illinois Environmental Protection Agency

Bureau of Land & Field Operations Section & Champaign Regional Office

1838130004—Vermilion County
 Oakwood Twp/Bunge Milling Inc
 FOS File
 Inspection Date: 10/15/2014
 Inspector: Jeff Turner

Coal Combustion Byproduct Fill Site Inspection Report

Introduction

I conducted an inspection of the above-captioned site on 15 October 2014 from 10:00 to 11:10 A.M. (times approximate). The purpose of the visit was to conduct an annual inspection of the site. I conducted the inspection in accordance with authority granted under sections 4(c) and 4(d) of the Illinois Environmental Protection Act.

No one else was present during the inspection. Weather conditions were drizzly with occasional light rain and temperatures in the low 50s. I took fourteen photographs.

Site history

On 8 June 1994, Jack Salts Trucking of Covington, Indiana, requested a solid waste determination from the Permit Section of the Bureau of Land for fly ash from Bunge Milling in Danville.¹ The solid waste determination granted on 1 July 1994 found that the fly ash would not be a waste when used as a soil stabilizer for construction projects or as partial replacement for cement for the manufacturing of concrete.

During a RCRA inspection at Bunge on 28 June 1994, the Illinois EPA learned that fly ash had been used as fill at the Blue Needles Golf Course near Carlin. Fill was not one of the uses contained in the solid waste determination and consequently the Illinois EPA cited violations to Bunge, its contract power plant operator, and the golf course on 7 November 1994. At a meeting held to discuss the apparent violations, it was agreed that Bunge would submit a revised request to the Permit Section to determine whether use of fly ash as fill would exclude it from the solid waste universe.

Bunge submitted the revised determination request on 5 January 1995. On 16 February 1995, the Illinois EPA issued a solid waste determination to Bunge that stated that coal/lime combustion ash from the facility would not be a solid waste when used for the following purposes.

¹ During the earlier part of this period, the generator was known as Lauhoff Grain Company. However, Bunge has owned Lauhoff since 1979. <https://www.bunge-northamerica.com/about/history>, accessed 20 October 2014. *Bunge20141015Inspection.docx*

1. As a soil stabilizer for construction projects such as roadways, drives, and base materials for building support;
2. As a partial replacement for cement for the manufacturing of concrete; and
3. As fill on construction projects.

This determination was subject to the following conditions.

- a. Material transported off-site for use shall not be stored in waste piles greater than 6 months from the date it was transported from the site of generation.
- b. The use does not allow the coal combustion residue or any constituent thereof to be emitted into the air or discharged into any water, including groundwater.
- c. The coal combustion residue shall not be mixed with any other waste prior to use under this determination.
- d. The coal combustion residue shall be managed in a manner that minimizes the generation of airborne particles and dusts.
- e. The coal combustion residue shall be managed in a manner that does not result in any violation of the Illinois Environmental Protection Act.
- f. In all situations where coal/lime combustion ash is used as fill/soil stabilizer, it must be covered and maintained with a surface coat of portland concrete, asphalt, seal coat and aggregate or a layer of cohesive soil to minimize the infiltration of surface waters. Side slopes must: 1) be designed and maintained to prevent erosion and 2) be covered by a one foot layer of soil to prevent exposure of the ash and allow the growth of a vegetative cover.
- g. Prior to authorizing the use of the coal combustion residue as described above, the generator shall provide a copy of this Solid Waste Determination to the user.
- h. The generator shall maintain a record of all materials utilized under this determination. The record must contain the address or location of each site where the material is utilized, and the amount of material used.

The determination further stated that while use of this material may be exempt from the permit requirements of 35 Ill. Adm. Code §807.201, such use could not violate any other provision of the Act or regulations. Any material not used in accordance with the determination would revert to waste status, subject to applicable regulations. Also, if at any time the generating process were to change (e.g., due to a new coal supply), resampling and analysis must be performed and submitted to the Agency for reevaluation.

With a freshly minted, blanket determination in hand (the determination was not specific to the destination site), Salts Trucking hauled fly ash from Bunge to the Parks (later Salts) and Porter properties (now consolidated as the subject Bunge site) near the unincorporated community of Grays Siding on US Route 150 east of Oakwood, beginning sometime in 1995. The fly ash was used to fill in a ravine that drains northeast toward Kickapoo State Park.

Because the intent of the blanket determination was to eliminate the determination/approval process for each successive project, which in turn eliminated specific notifications², the Champaign Regional Office apparently first became aware of the site in the late 1990s via citizen complaints to the Vermilion County Health Department about the deposition of the ash and to the Illinois EPA's Bureaus of Air and Water about ash leaving the site via those media. The County initially handled the site as an open dump until Bureau of Land staff in the Champaign Region became involved and the site was identified as operating under the 1995 solid waste determination.

Also in 1995, the General Assembly added Section 3.94 (later renumbered to 3.135) to the Illinois Environmental Protection Act, defining "coal combustion by-product" and situations in which the material is not waste. It stated,

"Coal combustion by-product" (CCB) means coal combustion waste when used beneficially for any of the following purposes.... 8. Structural fill, when used in an engineered application or combined with cement, sand, or water to produce a controlled strength material and covered with 12 inches of soil unless infiltration is prevented by the material itself or other cover material."

Subsection 10 of the definition placed further qualifications upon the usage, but even subsection 8, in stating "structural fill, when used in an engineered application" was more restrictive than the "as fill on construction projects" language of the solid waste determination. Obviously, the language of the law, as contained in §3.94, would apply to new sites going forward.³ I suspect the Oakwood site may have been grandfathered under the less restrictive, pre-existing solid waste determination language while active filling continued after the advent of §3.94, but that would be a matter for interpretation by the Illinois EPA's Division of Legal Counsel. In any event, the Regional Office did continue to monitor the development of the site, including taking samples of fly ash for chemical analysis. One set of samples resulted in the removal of a certain number of loads of ash in 2006, as the samples exceeded boron limits referenced by §3.94/3.135.

Moreover, "structural fill" is not defined in the Act nor referenced to definitions in other parts of state law, a *bête noire* that complicated the regulation of the site. At one point the Illinois EPA was interpreting it to mean fill upon which a structure was to be built, but later it was interpreted as fill that was itself structured. At various points in time, the Illinois EPA was given to understand that the fill was intended to allow construction of a nightclub, a racetrack, and/or a parking lot, and roadway access to an agricultural field north of the ravine.⁴ Further south, a now-dilapidated pole barn exists on the part of the property formerly owned by Robert Porter. It may stand on fill; it is certainly very close to it if not actually on it.

Due to local residents' concerns about the fly ash's potential impact on the aquifers supplying their wells, the Illinois EPA has twice tested water samples from nearby residential wells (2002 and 2006).

² This predates the notification requirements of §3.135(a-5)(C) of the Act.

³ In a 27 June 2000 letter to a Brad Moews of Henning, Illinois, the Illinois EPA clarified that the addition of §3.94 to the Act had removed the Agency's power to approve or deny use of CCB as structural fill—if the use meets the requirements of the Act, it is automatically approved.

⁴ Letter from Rich Gerard of Illinois EPA to Loren Polak of Bunge, 15 February 2001; and memo from Rich Gerard, 9 February 2005.

Lead exceeded the Part 620 limits in two wells. The Illinois Department of Public Health advised the well owners not to use the well water for drinking or cooking.

Filling at the site reportedly ceased around February 2006. Subsequently, Bunge conducted several phases of groundwater investigation to identify potential CCB impact on groundwater quality at the site. The investigations were designed and carried out by the consulting firm Burns and McDonnell (B&M) of St. Louis. As §3.135 of the Act imposes very few requirements on CCB sites, the Illinois EPA commented on B&M's investigation plans but did not approve or reject them.

B&M installed monitoring wells and collected groundwater samples near the fill for several years. The groundwater investigation was somewhat limited in scope and did not conclusively establish groundwater flow directions, at least to my satisfaction. B&M interpreted the results to indicate that in the area immediately southeast of the fill (nearest the residences), flow direction in the shallower of the two aquifers used by local wells was toward the ravine. That at least agreed with what one would expect, that shallow groundwater would flow toward and discharge into the ravine.

B&M's groundwater investigation could not conclusively rule out the possibility of CCB impact due to uncertainty about flow directions. However, samples of both monitoring wells and private drinking water wells indicate that some of the inorganic exceedances, such as those for lead and iron, disappear when the sample is filtered. Lead and iron are both naturally occurring chemical elements, present in various concentrations in various minerals. Because Bunge's monitoring wells and residents' private wells are completed in clays and weathered shales, which are abundant sources of suspended sediment, this was a sufficient (if not necessarily the exclusive) explanation of the exceedances noted in the Illinois EPA private wells samples.

These findings did not leave the Illinois EPA in a strong position to compel further investigation. Because the Act imposes so little regulation on CCB structural fills, management determined in the face of current budgetary limitations that we would perform no further review and Bunge could proceed to cap the site.

By late 2010, Bunge had bought both the Porter and the Salts properties to facilitate capping and maintenance of the fill. The entire site was covered with twelve inches of topsoil by late 2012. Earlier plans to construct a composite cap, similar to a landfill cap, were abandoned in favor of the minimum cover required by the Act.

Regulatory requirements

§3.135(a) of the Illinois Environmental Protection Act currently states,

“Coal combustion by-product” (CCB) means coal combustion waste when used beneficially in any of the following ways: ... (8) Structural fill, designed and constructed according to ASTM standard E2277-03 or Illinois Department of Transportation specifications, when used in an engineered application or combined with cement, sand, or water to produce a controlled strength fill material and covered with 12 inches of soil unless infiltration is prevented by the material itself or other cover material.

The “designed and constructed according to ASTM standard E2277-03 or Illinois Department of Transportation specifications” portion was added by Public Act 97-510, effective 23 August 2011. The Bunge site should be considered grandfathered relative to this particular requirement, since filling was completed before then, and may possibly be considered grandfathered relative to other parts of §3.135, as filling began before the addition of §3.94 (§3.135) to the Act, as discussed previously.

The existence of the fill definitely allows vehicular access to the fields north of the former ravine area and so it fulfills that stated purpose of the project. Whether it meets relevant requirements as “structural fill” is beyond what I can determine at this point. Thus for the purposes of the current inspection, the relevant requirement is considered to be that the fly ash is covered with soil.

Inspection findings

I arrived on-site around 10:00 A.M. I anticipated finding Aric Silver already at the site, as we had arranged the inspection in advance so that he could be present to unlock the gate for me. Bunge has fenced the southern edge of the property to prevent access from Grays Siding Road (1680 North Road). However, he was not present. I tried contacting him but could only leave a voicemail. After about fifteen minutes, I decided that I should merely circumvent the fence (which does not surround the entire property). Thus, I walked to the west end of the fence and proceeded into the site.

The entire fill area was regraded, covered, and seeded in 2012. A network of riprap-lined channels crosses the cap to direct stormwater. Much of the runoff gathered by the channels is routed directly to a primary collection area, a large amphitheater-like area at the head of the ravine (photo 002). Some of the runoff from the southernmost part of the site near the pole barn flows into a smaller collection area (photo 001), from which a lift station pumps the water to the main collection area. A fenced-off area east of the pole barn contains the lift station control panel and backup generator. Runoff from the western side of the fill is directed by a separate drainage channel system into a 36" drainage grate that drops the water into a pre-existing culvert that is the high-level overflow of a large pond on private property west of the site. This culvert runs under the fill to discharge to the ravine. Similarly, a 15" pipe serves as a high-level overflow for the small pond on the south end of the site and directs that water into the nearby riprap channel. Ultimately, all runoff from filled and covered areas drains to the ravine.⁵

I first passed through the pole barn labeled “Rocky Acres;” this was Robert Porter’s shop when he owned the property. It is now in rather dilapidated condition, with some of the large doors falling off. Part of the interior was in use for storage of bales of straw. Whether these are a relic of past use or whether Bunge has leased the building out for storage, I don’t know. It occurred to me that given the number of illegal methamphetamine lab discoveries in Vermilion County (which outnumber

⁵ While the Bureau of Water issued Bunge a construction stormwater permit, apparently the site does not require an ongoing stormwater permit because it was never permitted as a landfill and does not fit any of the SIC codes that require an industrial stormwater permit.

those from the other eighteen Champaign Region counties combined), Bunge should either secure this building or demolish it, lest it become home to a meth lab.

From the pole barn, I proceeded a short way northeast to the secondary runoff collection area (photo 001). This area receives stormwater runoff from the southeastern part of the site. From here it is pumped to the main runoff collection area further north (photo 002).

I walked from the secondary collection area to the main collection area, attempting to walk along the edge of the cap, where erosion might be expected to be more evident. This was somewhat difficult, as the boundary is not necessarily easy to pick out, the ground is somewhat uneven, and things tended to be wet and slippery due to the rain.

Along the south edge of the main runoff collection area, where it is bordered by woods, the ground looked a little gullied adjacent to a riprap channel (photo 003). Whether this was actual erosion or just uneven ground left by the capping project is unknown. It was not extensive, and I noted no evidence of fly ash there.

Further into the main collection area, there was an area of patchy vegetation, with exposure of what was possibly nodules of fly ash (photos 004–005). These were gravel-to-grape-sized, black, roundish, cindery-looking lumps. I didn't pace the area but it wasn't huge—perhaps 100–200 square feet. There were some other bare spots in the area (photos 007–008). The area should be reseeded, possibly with the addition of some extra topsoil.

A riprap channel forms the southern edge of the main collection area and the more downstream part of it was covered with algae (photo 006). This part of it receives discharge from a culvert with backflow preventer that I believe probably emanates from the secondary collection area. While I was nearby, a pump kicked on and the culvert discharged for a moment. By the time I was suitably positioned and had my camera ready, the discharge had ceased. With the amount of rain we had this year, it is not difficult to see how algae could become established on the riprap.

At the eastern edge of the main runoff collection area, the riprap channels and the 36" culvert from the pond west of the site converge on what is now the head of the ravine (photos 009–010). At certain times of the year, the ravine is presumably a dry channel, as there is no site runoff or pond overflow into it. During the inspection, there was considerable flow in the ravine. Discharge from the 36" culvert was probably at least 150 GPM, and there would have been additional flow emanating from the riprap channels and periodically from the line from the other collection area. In the area immediately around the mouth of the culvert, the water appeared relatively clear; I noted some areas of duckweed along the edges of the stream. In approaching this area, I startled a great blue heron, which then took flight toward the park.

From this area, I continued north along the east edge of the fill until approximately the edge of the agricultural field, where I turned westward. I did not walk the northwesterly fill arm due to the weather. Instead, I proceeded southward along the western edge of the fill.

Overall, the site looked good. In most areas, the cap appeared to be in good condition, with vegetative cover and no erosion, except in the main runoff collection area as previously discussed. There is an access road that enters the site from the south and runs up the west-central part of this site (this is clearly visible on aerial photos such as the Google Earth image I used for my site base map). If Bunge plans to continue to use this roadway, it should probably cover it with gravel to help preserve it and keep it from rutting. Otherwise, Bunge should reseed it.

Near the southwest corner of the site, I observed a folding canvas chair of the camping chair variety (photo 014); this suggests that people occasionally enter the site for recreational purposes. §3.135 of the Act neither restricts such use nor requires site access control. Since this is Bunge's private property and the ash fill has had a relatively high profile in the media and the eyes of the community, Bunge may want to consider a complete perimeter fence. If nothing else, it would limit liability from persons entering the site and becoming injured in some fashion.

After making the above observations, I departed the site. As I was on my way back to Champaign, I received a call from Aric Silver. He had thought that we were inspecting the site on the following day, which was why he had not been present at this time. I briefly discussed my observations with him and told him I would send him a copy of my report, in addition to sending one to Loren Polak, Bunge's corporate environmental manager from their St. Louis office.

Attachments

- 1 Site diagram
- 2 Inspection photos

1838130004—Vermilion County
Oakwood Twp/Bunge Milling Inc
FOS File



N

Bunge CCB Site



Key: ← Photographs (# = exp. #)
 Locations/directions approximate
 Google Earth image date: 4/18/2014



DIGITAL PHOTOGRAPHS

File Names: 1838130004 ~ 10152014-[Exp. #].jpg



Date: 10/15/2014
Time: 10:34 A.M.
Direction: East
Photo by: Jeff Turner
Exposure #: 001
Comments: Secondary runoff collection area



Date: 10/15/2014
Time: 10:40 A.M.
Direction: North
Photo by: Jeff Turner
Exposure #: 002
Comments: Main runoff collection area

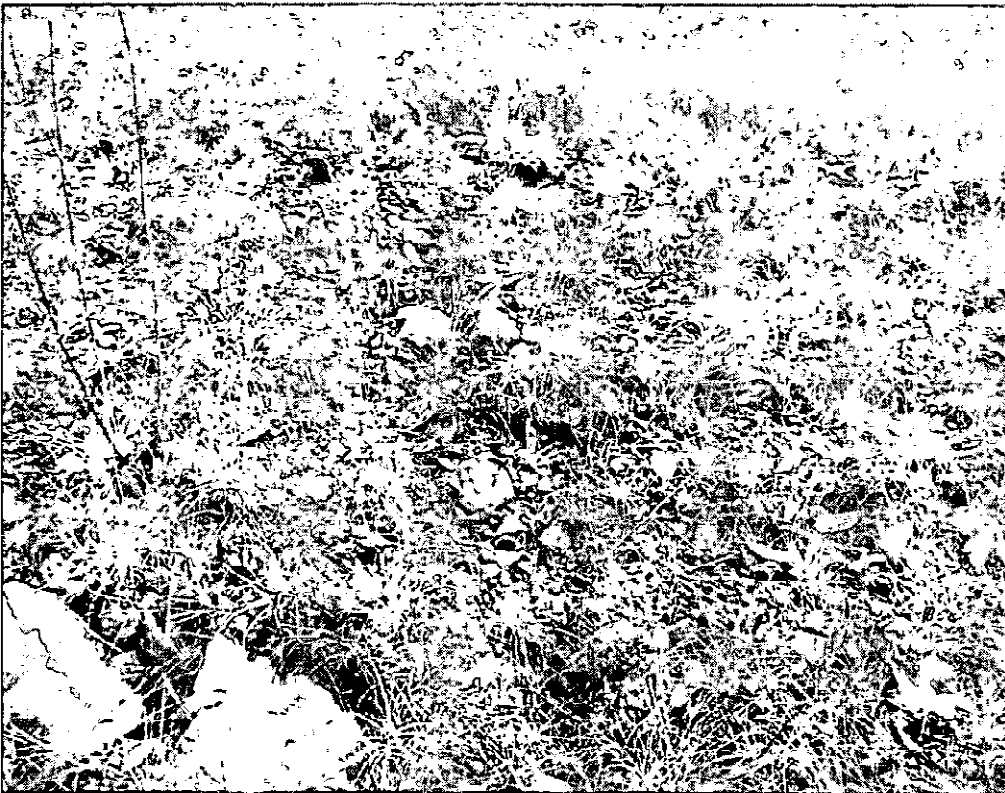


DIGITAL PHOTOGRAPHS

File Names: 1838130004 ~ 10152014-[Exp. #].jpg



Date: 10/15/2014
Time: 10:42 A.M.
Direction: North
Photo by: Jeff Turner
Exposure #: 003
Comments: Possible erosion at edge of stormwater channel at main runoff collection area

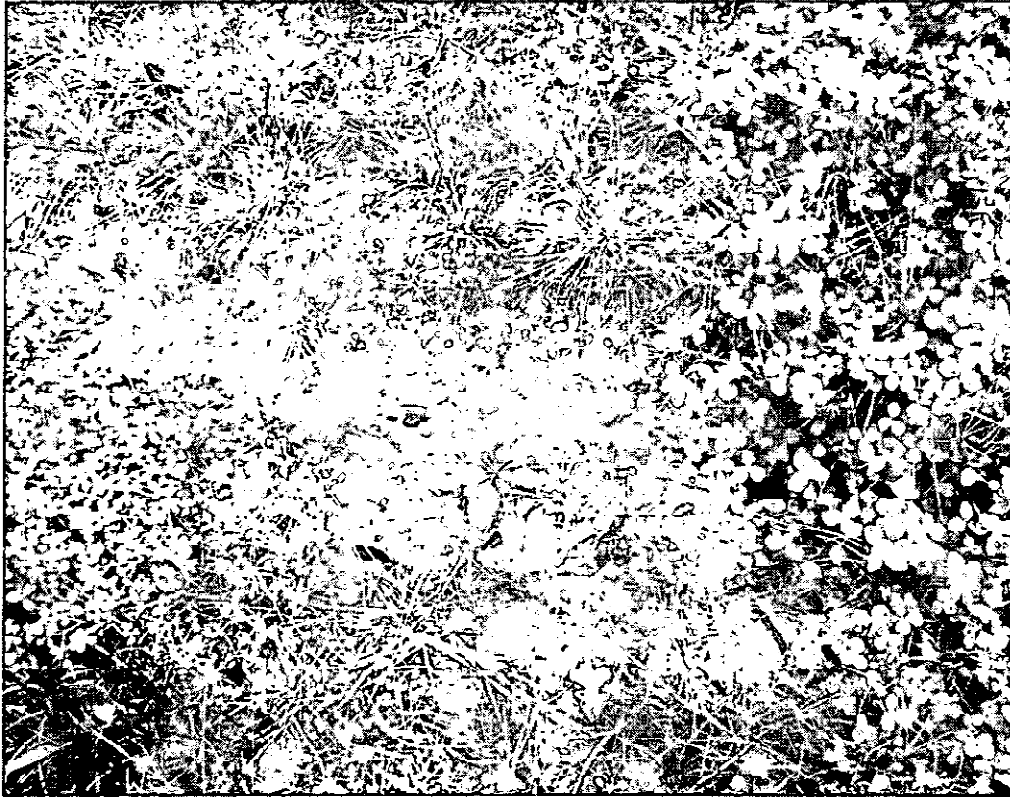


Date: 10/15/2014
Time: 10:44 A.M.
Direction: West
Photo by: Jeff Turner
Exposure #: 004
Comments: Exposed apparent fly ash nodules in main runoff collection area

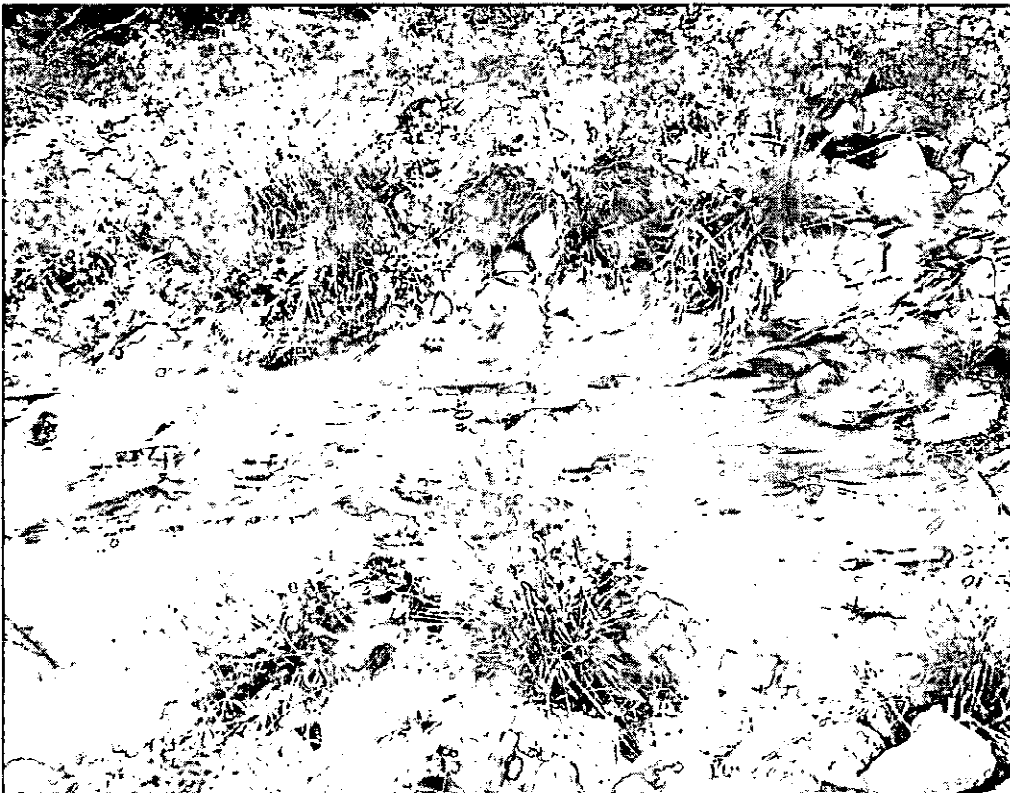


DIGITAL PHOTOGRAPHS

File Names: 1838130004 ~ 10152014-[Exp. #].jpg



Date: 10/15/2014
Time: 10:45 A.M.
Direction: South
Photo by: Jeff Turner
Exposure #: 005
Comments: Exposed
apparent fly ash
nodules in main
runoff collection
area



Date: 10/15/2014
Time: 10:46 A.M.
Direction: East
Photo by: Jeff Turner
Exposure #: 006
Comments: Algae in
stormwater channel



DIGITAL PHOTOGRAPHS File Names: 1838130004 ~ 10152014-[Exp. #].jpg

Date: 10/15/2014
Time: 10:47 A.M.
Direction: Southwest
Photo by: Jeff Turner
Exposure #: 007
Comments: Bare areas
in main runoff
collection area



Date: 10/15/2014
Time: 10:49 A.M.
Direction: North
Photo by: Jeff Turner
Exposure #: 008
Comments: Exposed
culvert in main
runoff collection
area



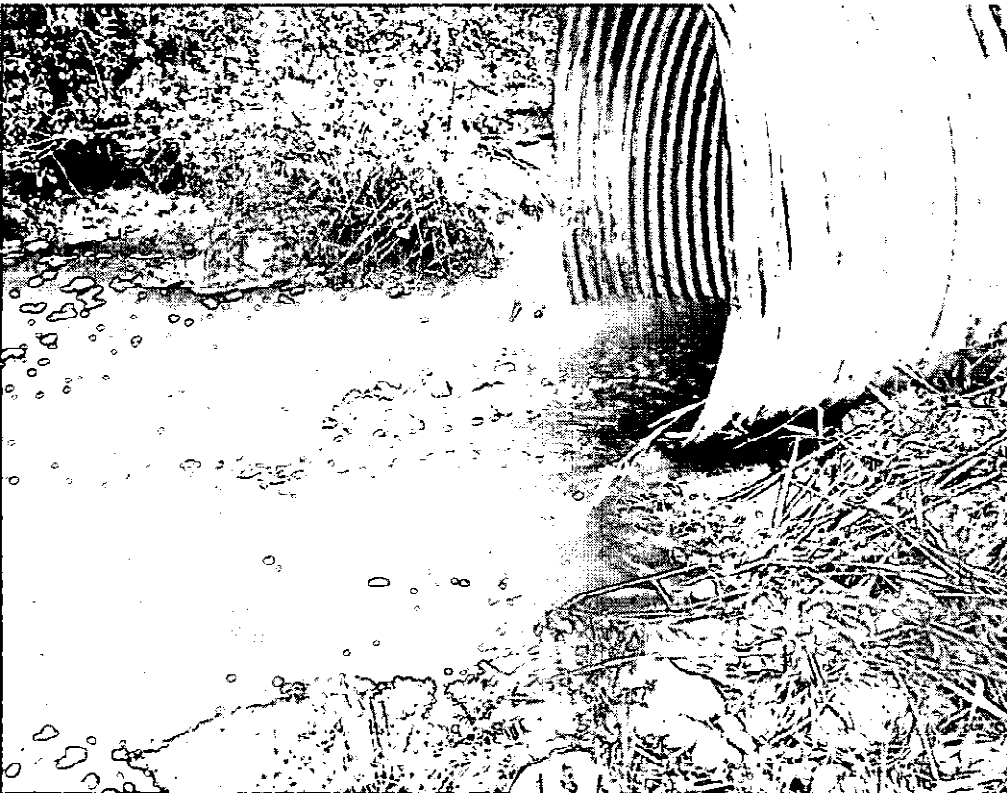


DIGITAL PHOTOGRAPHS

File Names: 1838130004 ~ 10152014-[Exp. #].jpg



Date: 10/15/2014
Time: 10:51 A.M.
Direction: South
Photo by: Jeff Turner
Exposure #: 009
Comments: Receiving
pool at head of
ravine



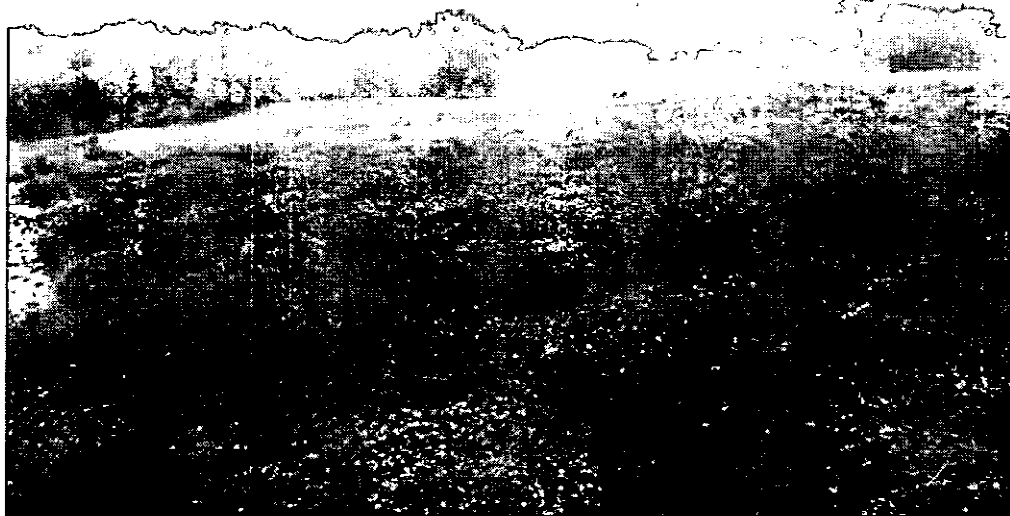
Date: 10/15/2014
Time: 10:51 A.M.
Direction: South
Photo by: Jeff Turner
Exposure #: 010
Comments: Receiving
pool at head of
ravine



DIGITAL PHOTOGRAPHS

File Names: 1838130004 ~ 10152014-[Exp. #].jpg

Date: 10/15/2014
Time: 11:01 A.M.
Direction: Southeast
Photo by: Jeff Turner
Exposure #: 011
Comments: View of fill
from north-central
area



Date: 10/15/2014
Time: 11:01 A.M.
Direction: South
Photo by: Jeff Turner
Exposure #: 012
Comments: View of fill
from north-central
area



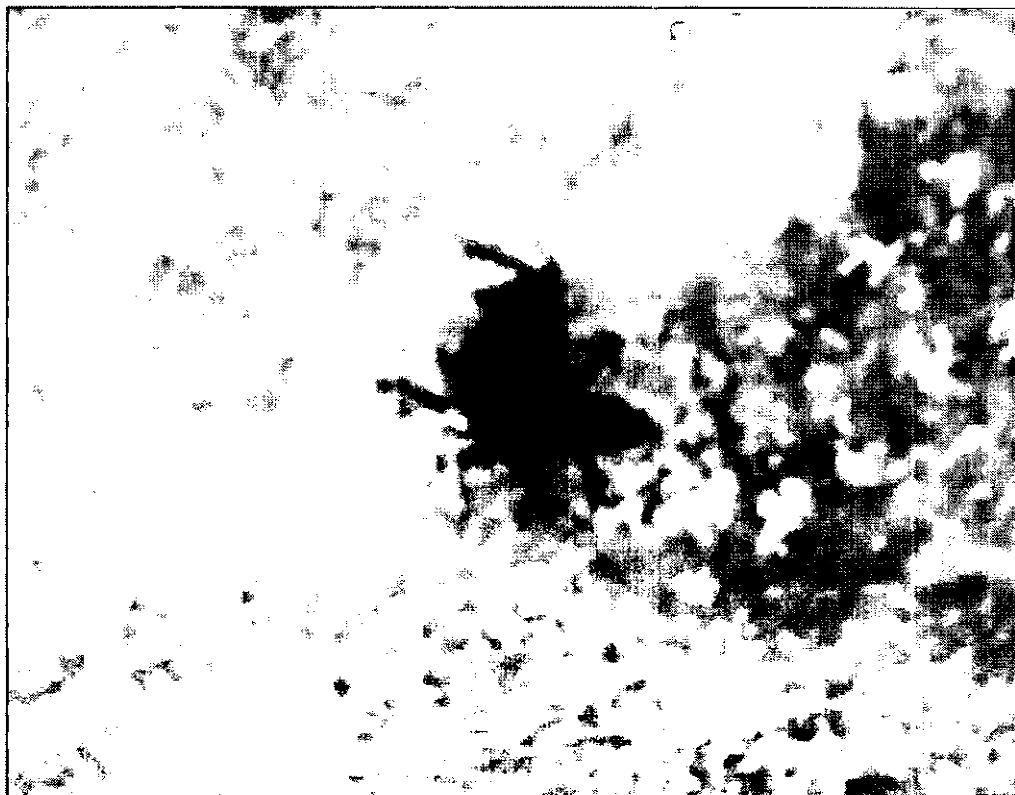


DIGITAL PHOTOGRAPHS

File Names: 1838130004 ~ 10152014-[Exp. #].jpg



Date: 10/15/2014
Time: 11:02 A.M.
Direction: South
Photo by: Jeff Turner
Exposure #: 013
Comments: Sideslope
on west side



Date: 10/15/2014
Time: 11:06 A.M.
Direction: Southwest
Photo by: Jeff Turner
Exposure #: 014
Comments: Camping
chair near south end



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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

Memorandum

Date: October 22, 2014
To: Marcia Willhite
From: Holly Hirschert BOW/DWPC/FOS-Champaign *HHWA*
Subject: Bunge Milling-Rocky Acres Soil Cover Ravine Sampling
 Vermilion County

During a meeting on September 22, 2014 I was tasked with collecting samples from a ravine that receives drainage from the closed Rock Acres fly ash disposal area located north of US Highway 150 and Gray's Siding Road, just east Vermilion County Road 1000 E.

On September 23 I met with Bob Mosher, Water Quality Standards Manager, who provided me with two pages from a drfat report called "Confirmation of the Presence of Fly Ash in Pond 6, Kickapoo State Park" that was prepared for the Illinois Department of Natural Resources. On an aerial photograph of the site of the site, he had highlighted four possible sampling locations along the ravine. On the second page, a table listing the sampling locations, he wrote the parameters to be addressed for this sampling event. These pages are included in Attachment A. Mr. Mosher recommended collecting samples to be analyzed for total metals, chloride, sulfate, and total suspended solids (TSS) at all four locations. Samples collected at two of the locations would be analyzed for low level mercury. He provided sample kits from Tek Lab for this purpose.

On September 24, I met with Aric Silver and Chris Poggendorf of Bunge at the Rocky Acres site to determine the feasibility of collecting water samples at the four selected locations. We walked down the slope in a northeast direction toward the location that is labeled as 2S on the sampling locations page in Attachment A. Groundwater and stormwater runoff pools there at the bottom of the slope and then flows in the ravine toward Pond 6. This pool was receiving water from a 36-inch culvert that transports water that overflows from a private pond west of the site and drainage from the west section of the site. While we were there a pump came on and discharged water from a basin that collects drainage from the southernmost section of the site.¹

The depth of the pool was about three feet. I considered walking the along the stream bank to the other recommended sampling locations, but it was lined with trees and other thick vegetation that made it difficult to see the ground and the ravine. Similarly it would be unsafe to walk in the ravine bed to access those locations. I determined that one sample should be collected from the pool. I took photographs of this location that are included as Attachment B.

Mr. Silver agreed to meet me back at the site at 10:30 AM the next day to collect samples. He said Eric Dulle from Burns & McDonnell would be joining us to collect duplicate samples.

After I left the site I drove to a residence at the east end of 1760 N Road (northeast of the soil cover site) hoping I could access Pond 6 from there. An elderly gentleman told me it would have been easy many years ago to do that, but the trail is overgrown with vegetation. He advised me not to try it. After checking conditions at the trail head, I decided it was not worth the risk.

¹ The drainage patterns are described in reports that were prepared by Jeff Turner, BOL, that are dated December 5, 2013 and October 15, 2014.

Bunge Milling-Rocky Acres Soil Cover Ravine Sampling Page 2

On September 25, I placed the two mercury sample kits, two 64-ounce plastic jugs and four 250-milliliter plastic bottles in a vehicle before driving to the Rocky Acres site. I met Messrs. Silver and Dulle at the locked gate on the south side of the site. We drove onto the site and I parked my vehicle. We joined Mr. Dulle in his vehicle and he drove us to the center of the site. Equipped with a GPS meter, a pH meter, nitrile gloves, a sample pole, a clip board with chain of custody sheets, and a small cooler containing sample bottles, I descended the slope to the pool of water. Messrs. Silver and Dulle joined me there so they could collect samples. There was a steady flow of water from the 36-inch culvert into the pool.

I donned gloves and opened up one of the mercury sample kits. Per the instructions provided by Tek Lab, I poured deionized water from an 8-ounce field blank glass jar into an empty 8-ounce field blank glass jar that I marked with the time and date. Then I collected water from the pool about three feet from the bank using a 32-ounce plastic bottle attached to the sample pole. The pH of the water was 8.2 standard units. I poured some of the water into the remaining 8-ounce glass jar from the mercury sample kit and marked the date and time on the jar. I recorded the time and date that the samples were collected on the Tek Lab chain of custody sheet.

Using the sample pole, I collected additional water from the pool to fill a 64-ounce plastic jug and two of the 250-milliliter plastic bottles. Some of the water was used to fill sample bottles provided by Bunge's contract lab². I recorded the pH on an IEPA-DWPC-FOS-LAB SHEET along with the date, time, air temperature, and water temperature. I placed all of the samples in the cooler with blue ice. A scan of the chain of custody sheet and the lab sheet are included as Attachment C.

We walked back up the slope and I realized I had forgotten to take a reading on the GPS meter. I returned to the bank of the pool and recorded the coordinates, latitude: N 40.1173 degrees and longitude: W 087.7443 degrees.

When I returned to the office, I placed the samples to be tested for mercury in a styrofoam cooler with the chain of custody sheet and sealed it with tape for shipping to Tek Lab. Mark Thomas, sampling technician, placed the samples to be tested for total metals, chloride, sulfate, and total suspended solids in a cooler along with the lab sheet and blue ice for shipment to the IEPA Rutledge Laboratory. Both coolers were picked up by UPS that afternoon.

On October 1, the low level mercury results were sent via email to Bob Mosher by Shelly Hennessey, a project manager at Tek Lab. That report is included as Attachment D.

On October 21, Thomas J. Weiss, Manager at the IEPA Lab sent the metals, chloride, sulfate, and TSS to me via email. That report is included as Attachment E. I forwarded the report to Mr. Mosher.

² Mr. Dulle said he has been collecting samples of stormwater from the site for the past two months. He has been instructed to share the analytical results with the Illinois EPA. After this sampling event, I provided Bob Mosher's contact information for that purpose.

ATTACHMENT A



Figure 1. Sampling locations map.

Table 1. Sampling stations, times sampled, GPS coordinates, and brief descriptions of samples taken.

Station	time CST (7/5/13)	N decimal degrees	W decimal degrees	Description
1S	10:40	40.11742	87.74360	side channel about 40 feet from main channel
2S	10:50	40.11725	87.74435	fine sediments taken from pool 10 feet below main culvert draining capped fly ash disposal site
3S	11:15	40.11773	87.74437	North bottom edge of waste pile
4S	11:35	40.11687	87.74468	South edge of waste pile. Broke open and sampled 8 inch diameter fly ash chunk
5S	12:07	40.11822	87.74268	stream bank fines from a few cm deep. Black and rotten smell
6S	12:32	40.12003	87.74043	stream bank sample
7S	12:40	40.12087	87.73935	stream bed sample taken at big bend just upstream of delta
8S	12:47	40.12115	87.73887	Stream delta ponar sample
9S	1:00	40.12048	87.73857	ponar sample from pond 6 above delta and istmus
10S	1:07	40.12115	87.73887	Station 8S (delta) nodule samples
11S	1:40	40.12287	87.73870	Pond 6 downstream outfall.

mercury →

mercury →

Total Metals
Chloride
Sulfate
TSS

ATTACHMENT B

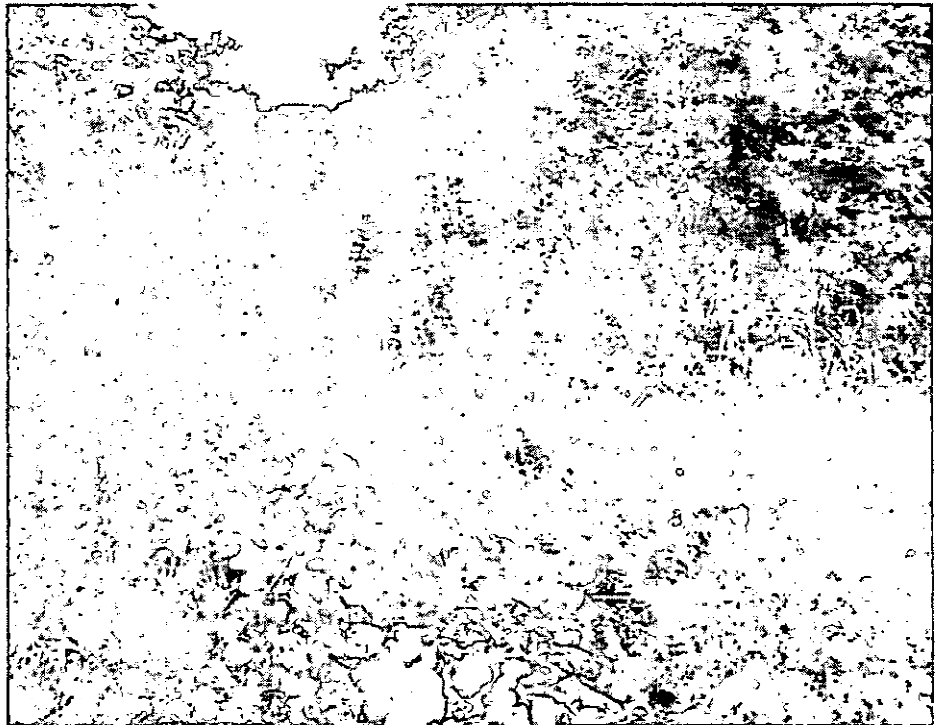
Rocky Acres Soil Cover Ravine-Vermilion County
September 24, 2014
Photographs by H.N. Hirschert

page 1 of 3

Photograph 1
Looking northeast where
the soil cover slopes
toward the ravine



Photograph 2
Looking east where the
ravine disappears into the
brush



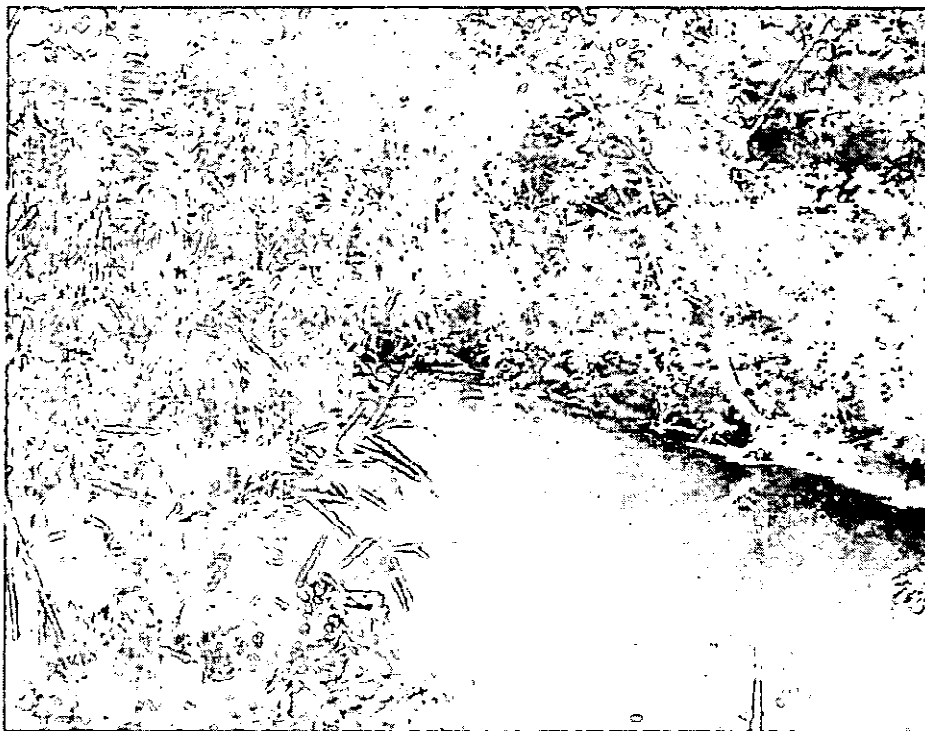
Photograph 3
Looking southwest at a
36-inch culvert that
routes water from the soil
cover and water from a
private pond west of the
site to a pool that feeds
the ravine



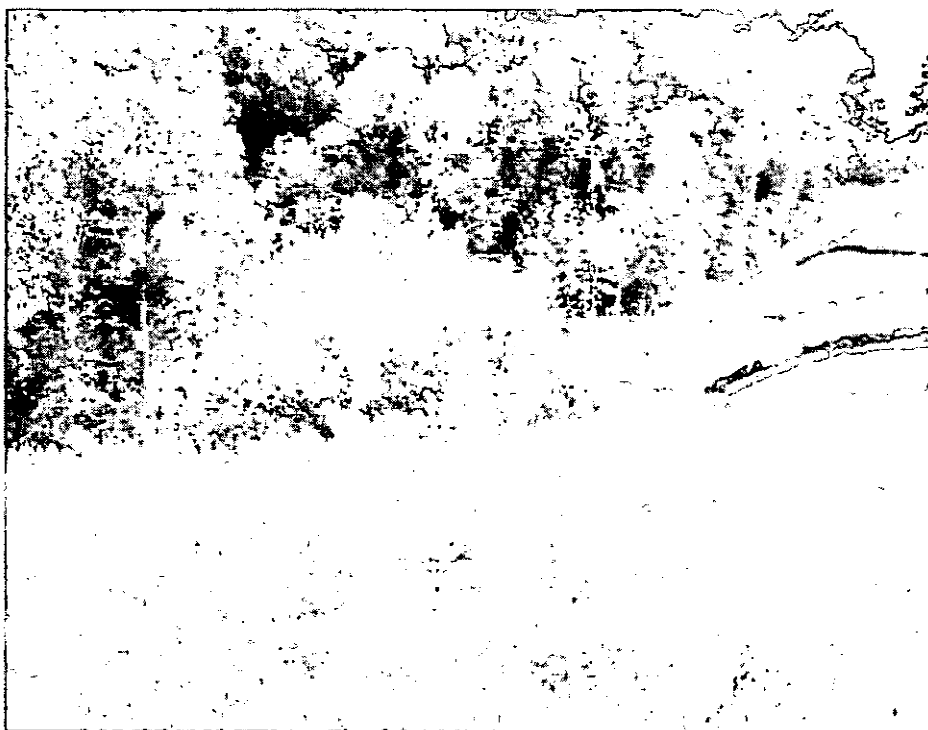
Photograph 4
A wider view of the
location in photograph 3



Photograph 5
Looking southeast where
water from the pool flows
into the ravine



Photograph 6
Looking southeast down
the slope toward the
ravine



Lab Sheet Color: White IEPA - DWPC - FOS - LAB SHEET Field ID No.: HNH1

09-Funding Code: WP 0 2 10-Agency Routing C 0 12-File Code: OTHR 13-Sample Type: X

15-Reporting: B 16-DID: Basin _____ County _____ Plant _____ 17-Sampling Program: M 6

18-Facility/Sample Pt: ROCKY ACRES SOIL COVER
RAVINE 19-Begin 1 4 0 9 2 5 20-Begin 1 0 4 8

Date: Y Y M M D D H H M M
(24-hour clock)
21-Collected by: HNH 22-Transported by: UPS

23-Instructions to Lab: _____

27-Received by: _____ Date: _____
Y Y M M D D

Received by: _____ Date: _____
Y Y M M D D

Composite Sample

Ending Date: 5 2 9 F 0
Y Y M M D D

Ending Time: 5 2 9 F 0
H H M M
(24-hour clock)

Circle One: Effluent Stream Specials:
Influent Process Flows WWTP
Sludge Cooling Water Other

Program: Rocky Acres Soil Cover

03-Lab Parameter Group: _____

Additional Field
Lab Parameters Parameters Results

Total Metals 501F0 Air Temp (°C) 7 2

(Method 200.7) 502F0 Water Temp (°C) 1 9

ICP 22 504F0 Dissolved O₂ _____

503F0 Conductance _____

Chloride 500F0 pH 19.30C 8.2

NPDES No. _____

Receiving Stream Name: _____

Receiving Stream Conditions (velocity, etc): _____

Effluent Conditions: _____

Sulfate

TSS

Comments & Unusual Conditions & Severity: (If applicable, Stamp- No Visible Problem This Visit")

Weather Conditions: Warm

Remarks: _____

Sampling Techniques: _____

FOR LABORATORY USE ONLY

LAB ID NO. _____


Sample Received By: _____

Date Received: _____

Time Received: _____ AM _____ PM

Lab Section: _____

Supervisor: _____

Mail To: 



October 01, 2014

Bob Mosher
Illinois EPA
1021 N. Grand Ave. East
Springfield, IL 62794
TEL: (217) 558-2012
FAX:



RE: Rocky Acres Soil Cover

WorkOrder: 14091497

Dear Bob Mosher:

TEKLAB, INC received 2 samples on 9/26/2014 10:23:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Illinois EPA

Work Order: 14091497

Client Project: Rocky Acres Soil Cover

Report Date: 01-Oct-14

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Receiving Check List	6
Chain of Custody	Appended



Definitions

<http://www.teklabinc.com/>

Client: Illinois EPA

Work Order: 14091497

Client Project: Rocky Acres Soil Cover

Report Date: 01-Oct-14

Abbr Definition

- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
- DNI Did not ignite
- DUP Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MB Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TNTC Too numerous to count (> 200 CFU)

Qualifiers

- | | |
|--|--|
| # - Unknown hydrocarbon | B - Analyte detected in associated Method Blank |
| E - Value above quantitation range | H - Holding times exceeded |
| J - Analyte detected below quantitation limits | M - Manual Integration used to determine area response |
| ND - Not Detected at the Reporting Limit | R - RPD outside accepted recovery limits |
| S - Spike Recovery outside recovery limits | X - Value exceeds Maximum Contaminant Level |



Case Narrative

<http://www.teklabinc.com/>

Client: Illinois EPA

Work Order: 14091497

Client Project: Rocky Acres Soil Cover

Report Date: 01-Oct-14

Cooler Receipt Temp: 22.6 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2015	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2015	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2015	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2015	Collinsville
Arkansas	ADEQ	88-0966		3/14/2015	Collinsville
Illinois	IDPH	17584		5/31/2015	Collinsville
Kentucky	KDEP	98006		12/31/2014	Collinsville
Kentucky	UST	0073		1/31/2015	Collinsville
Missouri	MDNR	00930		5/31/2015	Collinsville
Oklahoma	ODEQ	9978		8/31/2015	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Illinois EPA

Work Order: 14091497

Client Project: Rocky Acres Soil Cover

Report Date: 01-Oct-14

Matrix: AQUEOUS

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
MERCURY BY EPA METHOD 1631E (TOTAL)									
Mercury									
14091497-001A	HNH1	NELAP		0.5	3.22	ng/l	1	09/30/2014 10:55	09/25/2014 10:57
14091497-002A	Field Blank	NELAP		0.5	< 0.5	ng/l	1	09/30/2014 11:25	09/25/2014 10:55



Receiving Check List

<http://www.teklabinc.com/>

Client: Illinois EPA

Work Order: 14091497

Client Project: Rocky Acres Soil Cover

Report Date: 01-Oct-14

Carrier: UPS

Received By: SRH

Completed by:

Emily E. Pohlman

Reviewed by:

Elizabeth A. Hurley

On:

26-Sep-14

Emily E. Pohlman

On:

26-Sep-14

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C 22.6
Type of thermal preservation?	None <input checked="" type="checkbox"/>	Ice <input type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water - at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Any No responses must be detailed below or on the COC.

Samples were preserved with bromine chloride for low level mercury analysis upon arrival at the laboratory. EEP 9/26/14

ATTACHMENT E



Illinois Environmental Protection Agency Laboratory

825 N. Rutledge Springfield, Illinois 62702 217.782.9780

LABORATORY RESULTS

Name: ROCKY ACRES SOIL COVER RAVINE
 Project/Facility Number: [none] Date Received: 09/26/14
 Funding Code: WP02 Visit Number:
 Trip ID: Temperature C: 5.00
 Client Sample ID: HNH1 Lab Sample ID: SI41319-01
 Matrix: Water Collected By: HNH Date/Time Collected: 09/25/14 10:48
 Sample Type: Sample Depth: Total Depth: 0

Chloride by Standard Method 4500 Cl-E

Method: 4500-CL E Prepared: 10/20/14 08:16
 Units: mg/L Analyzed: 10/20/14 11:56

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Reporting Limit</u>	<u>Regulatory Level</u>
Chloride	55.4		1.00	

Metals by EPA Method 200.7 - ICP/Hardness by Standard Method 2340B

Method: 200.7/2340B Prepared: 09/30/14 10:42
 Units: ug/L Analyzed: 10/07/14 12:48

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Reporting Limit</u>	<u>Regulatory Level</u>
Aluminum	92.8	V	60.0	40000
Arsenic	ND	B1	10.0	
Barium	49.3		5.00	
Beryllium	ND		1.00	
Boron	102	B1	10.0	
Cadmium	ND	B2	5.00	
Calcium	101000		300	100000
Chromium	ND		5.00	
Cobalt	ND		10.0	
Copper	ND	B2	10.0	
Iron	137		50.0	40000
Lead	ND	B1	5.00	
Magnesium	29100		300	100000
Manganese	284		15.0	
Nickel	ND		5.00	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Test results meet all requirements of NELAC (accredited by Florida DOH #E37645). If you have any questions about this report, please contact Tom Weiss, Laboratory Manager, at 217.782.9780.

Reported:
 10/21/14 14:46
 Page 1 of 4



Illinois Environmental Protection Agency Laboratory

825 N. Rutledge Springfield, Illinois 62702 217.782.9780

LABORATORY RESULTS

Name: ROCKY ACRES SOIL COVER RAVINE
 Project/Facility Number: [none] Date Received: 09/26/14
 Funding Code: WP02 Visit Number:
 Trip ID: Temperature C: 5.00
 Client Sample ID: ENH1 Lab Sample ID: SI41319-01
 Matrix: Water Collected By: HNH Date/Time Collected: 09/25/14 10:48
 Sample Type: Sample Depth: Total Depth: 0

Metals by EPA Method 200.7 - ICP/Hardness by Standard Method 2340B

Method: 200.7/2340B Prepared: 09/30/14 10:42
 Units: ug/L Analyzed: 10/07/14 12:48

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Reporting Limit</u>	<u>Regulatory Level</u>
Potassium	18200		1400	100000
Selenium	ND	B1	10.0	
Silver	ND		3.00	
Sodium	38700		300	
Strontium	418		5.00	
Vanadium	ND	B1	5.00	
Zinc	ND		25.0	
Hardness	372000		1980	

Sulfate by EPA Method 375.2

Method: 375.2 Prepared: 10/16/14 12:20
 Units: mg/L Analyzed: 10/17/14 13:42

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Reporting Limit</u>	<u>Regulatory Level</u>
Sulfate	76.6	J3	10.0	

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Reported:
 10/21/14 14:46
 Page 2 of 4



Illinois Environmental Protection Agency Laboratory

825 N. Rutledge Springfield, Illinois 62702 217.782.9780

LABORATORY RESULTS

Name:	ROCKY ACRES SOIL COVER RAVINE		
Project/Facility Number:	[none]	Date Received :	09/26/14
Funding Code:	WP02	Visit Number:	
Trip ID:		Temperature C:	5.00
Client Sample ID:	ENH1	Lab Sample ID:	SI41319-01
Matrix:	Water	Collected By:	HNH
		Date/Time Collected:	09/25/14 10:48
Sample Type:		Sample Depth:	
		Total Depth:	0

Total Suspended Solids by Standard Method 2540D

Method:	2540D	Prepared:	10/01/14 08:24
Units:	mg/L	Analyzed:	10/01/14 10:25

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Reporting Limit</u>	<u>Regulatory Level</u>
Total Suspended Solids	11		4	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Test results meet all requirements of NELAC (accredited by Florida DOH #E37645). If you have any questions about this report, please contact Tom Weiss, Laboratory Manager, at 217.782.9780.

Reported:
10/21/14 14:46
Page 3 of 4



Illinois Environmental Protection Agency Laboratory

825 N. Rutledge Springfield, Illinois 62702 217.782.9780

LABORATORY RESULTS

Name:	ROCKY ACRES SOIL COVER RAVINE	Date Received :	09/26/14
Project/Facility Number:	[none]	Visit Number:	
Funding Code:	WP02	Temperature C:	5.00
Trip ID:			

Notes and Definitions

- V Indicates the analyte was detected in both the sample and the associated method blank and was outside method blank acceptance criteria.
- J3 The reported value failed to meet the established quality control criteria for either precision or accuracy possibly due to matrix effects.
- B2 The sample matrix caused possible effects on measurement. The result may be biased high.
- B1 The sample matrix caused possible effects on measurement. The result may be biased low.
- ND Analyte NOT DETECTED at or above the reporting limit
- * Non-NELAP accredited

Report Authorized by:

Celeste M. Crowley
Bench Analysis and Support
Unit Supervisor

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Test results meet all requirements of NELAP (accredited by Florida DOH #E37645). If you have any questions about this report, please contact Tom Weiss, Laboratory Manager, at 217.782.9780.

Reported:
10/21/14 14:46
Page 4 of 4



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/278-5800
217/278-5808 fax

23 October 2014

Bunge Milling, Inc.
Attn: Mr. Loren L. Polak,
Director of Environmental Management
11720 Borman Dr., POB 28500
St. Louis, MO 63146-1000

Re: 1838130004—Vermilion County
Oakwood/Bunge Milling Inc
Compliance File

Dear Mr. Polak:

On 15 October 2014, the above-captioned site was inspected by Jeff Turner of the Illinois Environmental Protection Agency. The purpose of this inspection was to determine the condition of the site cover required by §3.135(a)(8) of the Illinois Environmental Protection Act.

No violations are cited at this time. However, the inspection revealed a number of issues that I would like to bring to your attention.

1. In the primary stormwater runoff collection area in the northeastern part of the site, vegetative cover was patchy and erosion is exposing minor amounts of what appears to be fly ash. Bunge should act promptly (before winter weather conditions set in) to patch and re-vegetate this area.
2. The "Rocky Acres" building formerly belonging to Robert Porter is in dilapidated condition and access to the interior is not controlled. Given the relatively high number of illegal methamphetamine labs that occur in Vermilion County, it would seem in Bunge's best interest either to repair and secure this structure or to raze it.
3. A camping chair was observed under the trees in the southwest part of the site, indicating that people are entering the property. The Illinois Environmental Protection Act places no access restrictions on sites such as this one. However, you will undoubtedly want to determine whether to restrict site access to protect Bunge from potential liabilities, which could be as mundane as someone falling and becoming injured.
4. The site currently has an interior roadway running along the west-central side. This roadway is simply an unvegetated dirt trail. If you wish to retain this roadway, you should improve it, such as by placing gravel. Otherwise, the path should be vegetated to impede erosion.

For your information, a copy of the inspection report is enclosed. Please contact Jeff Turner at 217/278-5800 if you have any questions regarding this inspection.

Sincerely,



Paul M. Purseglove, Manager
Field Operations Section
Bureau of Land

PMP:JST

Enclosure

cc: Aric Silver
Vermilion County Health Department
bc: Bureau File
Regional File
Holly Hirschert, BOW