BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
	)	
SIERRA CLUB, ENVIRONMENTAL LAW AND POLICY CENTER, PRAIRIE RIVERS NETWORK, and CITIZENS AGAINST RUINING THE ENVIRONMENT	)	
	)	**PCB 2013-015**
Complainants,	)	**(Enforcement – Water)**
	)	
v.	)	
	)	
MIDWEST GENERATION, LLC,	)	
	)	
Respondent.	)	

NOTICE OF FILING

TO: Don Brown, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, IL 60601

Attached Service List

PLEASE TAKE NOTICE that I have filed today with the Illinois Pollution Control Board Respondent, Midwest Generation, LLC's Motion to Reconsider and Clarify the Interim Order and Respondent's Memorandum in Support of its Motion to Reconsider and Clarify the Interim Order, a copy of which is hereby served upon you.

MIDWEST GENERATION, LLC

By: /s/ Jennifer T. Nijman

Dated: September 9, 2019

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CERTIFICATE OF SERVICE

The undersigned, an attorney, certifies that a true copy of the foregoing Notice of Filing, Certificate of Service and Respondent, Midwest Generation, LLC's Motion to Reconsider and Clarify the Interim Order and Respondent's Memorandum in Support of its Motion to Reconsider and Clarify the Interim Order was filed on September 9, 2019 with the following:

Don Brown, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, IL 60601

and that true copies were emailed on September 9, 2019 to the parties listed on the foregoing Service List.

/s/ Jennifer T. Nijman

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MIDWEST GENERATION, LLC'S MOTION TO RECONSIDER AND CLARIFY THE INTERIM ORDER

Pursuant to 35 Ill. Adm. Code 101.520, Respondent, Midwest Generation, LLC ("MWG"), by its undersigned counsel, respectfully requests that the Illinois Pollution Control Board ("Board") reconsider and clarify key portions of its Interim Opinion and Order dated June 20, 2019 ("Interim Order"). In the Interim Order, the Board erred in application of the law, made inconsistent findings, and overlooked facts in the record. In support of its Motion, MWG submits the attached Memorandum in Support and states as follows:

1. In a motion to reconsider, the Board may consider new evidence, a change in the law, or errors in the Board's application of the law. 35 Ill. Adm. Code 101.520, 101.902. A motion to reconsider may also specify "facts in the record which were overlooked." *City of Quincy v.* Illinois *Environmental Protection Agency*, PCB 08-86, 2010 Ill. ENV LEXIS 213, *48 (June 17, 2010, *citing Wei Enterprises v. IEPA*, PCB04-23, slip op. at 3 (Feb. 19, 2004). The Board has discretion to address new issues presented in a motion for reconsideration where there is a reasonable explanation for why the additional issues were not raised at the original hearing. *People*

of the State of Illinois v. Packaging Personified, Inc., PCB04-16, 2012 Ill. ENV LEXIS 103, *31 (March 1, 2012).

2. In this case, MWG respectfully asserts that the Board erred in its application of the law by deciding *sua sponte* that Class I groundwater violations apply after MWG had implemented groundwater management zones ("GMZ"). All parties agreed and stipulated during the hearing that once a GMZ is established the Class I groundwater standards do not apply, and there was no notice or opportunity to raise objections or arguments regarding the applicability of GMZs. Because MWG had no notice that the Board was contemplating that the GMZs had expired, the Board deprived MWG the opportunity to be heard or make any arguments on the issue. *Niles Twp. High Sch. Dist. 2019 v. Ill. Educ. Labor Rels. Bd.*, 369 Ill. App. 3d 128, 136, 859 N.E.2 57, 64 (1st Dist. 2006).

3. The Board erred in its application of the GMZ regulations, contrary to the plain language of the GMZ regulations and against Board precedent. Specifically, the Board made the following errors of law:

a. The clear and unambiguous language of the Board's regulations states that a GMZ does not expire on the completion of the "active" work and may extend to include monitored natural attenuation. 35 Ill. Adm. Code 620.250.

i. The Board misapplies the "timely and appropriate" language to the GMZs at the MWG Joliet 29 Station, Powerton Station, and Will County Station collectively "MWG Stations"). Section 620.250(a) provides for the creation of a GMZ as an area containing groundwater being managed to mitigate impaired that is *either* **(a)(1)** subject to a "corrective action process" approved by the Agency **OR (a)(2)** is a "corrective action" performed voluntarily by an owner "in a timely and appropriate manner." 35 Ill. Adm. Code 620.250(a). Because the corrective action processes at the MWG Stations were approved by the Illinois EPA per section 620.250(a)(1), the Board was in error to apply the timely and appropriate standard per section 620.250(a)(2).

ii. The Board fails to accurately apply section 620.250(c) to determine when a GMZ expires. Pursuant to the plain language in section 620.250(c), a GMZ only expires if *both* the Agency-approved "corrective action process" had been completed by MWG, *and* the applicable standards had been attained. 35 Ill. Adm. Code 620.250(c). The Board was required to, but did not, apply both parts of section 620.250(c).

iii. The Board incorrectly finds that MWG's "corrective action process" pursuant to the GMZs was completed by confusing the Compliance Commitment Agreement ("CCA") compliance statements with the appropriate documentation that confirms completion of the corrective action process. Section 620.250(c) requires "appropriate documentation" which confirms both the completion of the action taken pursuant to 620.250(a) and the attainment of the applicable standards. 35 Ill. Adm. Code 620.250(c). The CCA compliance statements simply state that MWG performed each of the actions set forth in the CCAs.

iv. The Board is in error to conclude that groundwater monitoring for natural attenuation is not a part of the Agency approved corrective action process. The approved GMZ applications incorporated by reference the requirements in the CCAs, and also specifically included monitored natural attenuation and quarterly groundwater monitoring as a corrective action.

v. The Board is in error to conclude that monitored natural attenuation is not an ongoing remedy which will return the groundwater to the Class I standards. The Board overlooks the temporal trend analysis conducted by MWG's expert, which showed that the concentrations of constituents in the groundwater were decreasing at Joliet 29 Station, and stable at Powerton and Will County Stations. Additionally, the Board also failed to consider that section 620.250(c) requires the Agency to review the on-going adequacy of controls at least every five years.

b. The Board fails to apply the groundwater restoration standards of Section 620.450(a). Pursuant to section 620.450(a)(3), if a corrective action process is not completed, the Class I standards do not apply.

i. The Board incorrectly concludes that the corrective action process is complete, and then fails to conduct the evaluation required by section 620.450(a)(4), which states that the Class I standards do not apply when the concentrations are above the applicable groundwater standards, the

exceedance has been minimized to the extent practicable and the threats to the public health and the environment have been minimized. 35 Ill. Adm. Code 620.450(a)(4).

ii. The Board overlooks evidence in the record that MWG meets the requirements in Section 620.450(a)(4)(B): that to the extent practicable, the extensive measures MWG took at its Stations were the appropriate remedy and that any threats to the public health and groundwater have already been minimized. 35 Ill. Adm. Code 620.450(a)(4)(B).

c. The Board improperly and in contravention of Illinois law replaces the plain language of sections 620.250 and 620.450 with policy. *King v. First Capital Fin. Servs. Corp.*, 215 Ill. 2d 1, 26, 293 Ill. Dec. 657, 671-72, 828 N.E.2d 1155, 1169-70 (2005) ("If the language of the statute is clear, its plain and ordinary meaning must be given effect without resorting to other aids of construction."). The Board strips GMZs of any value because the Board's opinion invalidates the protection from violations GMZs provide. The Board's opinion also precludes the reliance on monitored natural attenuation for remediation of a site.

4. The Board erred by shifting the burden to MWG to disprove allegations of violation. The Board finds that the historic coal ash areas at Joliet 29 and Powerton were contaminating the groundwater despite the fact that no evidence was presented showing contamination relating to those areas.

5. In addition, the Board incorrectly shifts the burden of proof to MWG by finding that ash on the ground at Powerton for two months in 2012 was a water pollution hazard in violation of 12(d). No testimony was presented on the quantity of the ash, the concentration, or any potential threat of impact to groundwater from ash placed on frozen ground for such a short period. The groundwater data identified by the Board shows no impacts to groundwater by the ash temporarily on the ground for two months.

6. The Board errs in its conclusions regarding the Joliet 29 Station because the Board overlooks facts presented at the hearing. Specifically, the Board makes the following errors of fact:

a. In concluding that the poz-o-pac liners at Joliet 29 were cracked, the Board overlooks facts regarding the actual condition of the poz-o-pac at Joliet 29 and incorrectly relies upon mere assumptions along with evidence from different Stations.

b. The Board incorrectly concludes that the HDPE liners in the ash ponds at the Joliet 29 Station were damaged by relying upon evidence from a different station and overlooking the construction documentation showing that the HDPE liners were installed correctly.

c. The Board errs by making inconsistent conclusions in its findings in relation to antimony, cadmium, lead and boron.

7. The Board erred in its conclusions regarding the Powerton ash ponds because it overlooks facts presented at the hearing. Specifically, the Board makes the following errors of fact:

a. The Board errs in concluding that the poz-o-pac at Powerton is in poor condition because the Board relies solely on assumptions and overlooks witness testimony that the poz-o-pac was in good condition.

b. The Board errs in concluding the liners at Powerton were installed incorrectly because the evidence it relies on concerns a single ash pond and does not relate to actual installation of the liners. The Board overlooks witness testimony and expert opinion that the liners were properly installed and in good condition.

c. The Board errs by overlooking the express terms of a Joint Agreed Stipulation stating that the Powerton Secondary Ash Settling Basin had a Hypalon Liner. (JAS

No. 22). The Board incorrectly finds that the Secondary Ash Settling Basin did not have a liner when this fact was uncontested and stipulated by the parties.

d. The Board errs in concluding that the Former Ash Basin may have had ash placed in between the poz-o-pac and the HDPE liner because the Former Ash Basin is an inactive area with no HDPE liner.

e. The Board errs in concluding that Illinois River water rose 30 feet above the bottom of the Secondary Ash Settling Basin at Powerton. None of the evidence presented showed that the Illinois River had risen to such height, and the U.S. Army Corp of Engineers river gage data shows that the river has never reached 30 feet above the bottom of the Secondary Ash Settling Basin.

f. The Board incorrectly concludes that East Yard Run-off Basin may contain ash because it overlooks evidence that the East Yard Run-off Basin contains stormwater and no ash constituents in the water.

g. The Board incorrectly concludes that the Limestone Run-off Basin "may be" leaking constituents into the groundwater because the Board overlooks the fact that the basin has been empty since 2013.

h. The Board errs by making inconsistent conclusions in its findings concerning antimony, lead, selenium, and thallium.

8. The Board errs in its conclusions regarding the Will County ash ponds because it overlooks facts presented at the hearing. Specifically, the Board makes the following errors of fact:

a. The Board errs in concluding that ash was left between the liner and the poz-o-pac at the Will County ash ponds. The exhibits the Board relies upon did not concern

Will County and the Board overlooks the Will County construction documentation showing that ash was not used as part of the construction of liners in the ash ponds.

b. The Board errs by assuming the poz-o-pac under Ponds 1N and 1S at Will County was cracked because the Board gives no basis for its assumption, and the Board overlooks the evidence that showed that the poz-o-pac was in excellent condition.

9. MWG requests that the Board clarify certain findings so that the parties can have a better understanding of the scope of the damages phase of the case. MWG has identified the following findings that merit clarification:

a. Whether the Board has concluded that pond liners leaked *after* the ponds were relined, including those ponds with new liners where no equipment has entered the pond because no ash has been removed.

b. With regards to the Joliet 29 Station, MWG requests clarification on whether the Board considers monitoring wells 8, 10, and 11 as background wells.

c. MWG also requests that the Board clarify its Interim Order to properly reflect the status of the witnesses, other than John Seymour, as laypersons.

WHEREFORE, MWG respectfully requests that the Board reconsider its Interim Order and Opinion and issue an order correcting the errors in the opinion based on the law and the overlooked facts, and also clarifying the parts of the Interim Order and Opinion to assist in preparation for the damages hearing, as follows:

1) Stating that the GMZs at Joliet 29, Powerton and Will County Stations have not expired pursuant to 35 Ill. Adm. Code 620.250 and 620.450(a), and MWG is not in violation of the Board regulations after the GMZs were in place.
2) If the Board concludes that the corrective action process at each Station has been completed, conducting the evaluation required pursuant to 35 Ill. Adm. Code 620.450(a)(4) and concluding that the exceedances have been minimized to the extent practicable and any threats to public health and the environment have been minimized and MWG is not in violation of the Board regulations.

3) If the Board does not make such a finding, the Board should rescind its opinion regarding the GMZs at the MWG Stations and remand the GMZ issue to the Hearing Officer to allow the parties to present evidence regarding the GMZ issue.

4) Reversing its opinion that the Joliet 29 and Powerton historic fill areas are causing or allowing contamination because there is no evidence in support and the Board improperly shifted the burden to MWG to disprove the allegations;

5) Consider and apply the numerous overlooked facts that lead to erroneous conclusions in law and fact, specifically:

    a. Finding that the poz-o-pac in the three ash ponds at the Joliet 29 Station are in good condition;

    b. Finding that the HDPE liners in the ash ponds at the Joliet 29 Station were installed correctly and not damaged;

    c. Correcting the findings to state that no ash was left between the poz-o-pac and HDPE in the ash ponds at Joliet 29;

    d. Correcting its findings to state that certain constituents at Joliet 29 are not in violation of the Class I standards;

    e. Finding that the poz-o-pac in the ash ponds at the Powerton Station are in good condition;

    f. Finding that the liners in the ash ponds at the Powerton Station were installed correctly and not damaged;

    g. Correcting its finding to state that the Secondary Ash Settling Basin at Powerton Station has had a liner since at least 1999;

    h. Correcting its finding to state that Former Ash Basin at Powerton Station had no ash beneath the liner because it is an inactive basin;

    i. Correcting its finding to delete any reference that river water rose “30-feet above” the bottom of the Powerton Secondary Ash Settling Basin;

    j. Correcting its finding to state that the East Yard Basin and the Limestone Basin do not contain ash and are not currently a source;

    k. Correcting its findings to state that certain constituents at Powerton are not in violation of the Class I standards; and,

    l. Correcting its findings that any ash was left between the poz-o-pac and HDPE liners at the ash ponds at Will County.

6) At the very least, MWG requests that the Board clarify its opinion in preparation for the next phase of this litigation by clarifying:

    a. That certain pond liners are not leaking after the ponds were relined because the ponds contain no ash, or never had any ash removed; and,

    b. That the MWG witnesses, other than John Seymour, are lay witnesses and not “experts.”

c. That Monitoring wells 8, 10, and 11 at Joliet 29 are background wells.

Respectfully submitted,

MIDWEST GENERATION, LLC.

By ____/s/ Jennifer T. Nijman _____
One of Its Attorneys

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RESPONDENT'S MEMORANDUM IN SUPPORT OF ITS MOTION TO RECONSIDER AND CLARIFY THE INTERIM ORDER

The Illinois Pollution and Control Board ("Board") should reconsider certain portions of its Interim Order and Opinion ("Interim Order") because the Board erred in its application of the law, addressed new issues that were not raised in the pleadings or at the hearing, overlooked facts presented at hearing, and made inconsistent findings. The Board made incorrect legal conclusions concerning groundwater management zones ("GMZs") when the expiration of GMZs was not at issue, and improperly shifted the burden of proof to show certain historic ash areas are not a source. Additionally, the Board overlooked facts regarding the ash ponds and areas outside the ash ponds at certain Midwest Generation, LLC ("MWG") stations resulting in errors in the Board's conclusions.

STANDARD OF REVIEW

In a motion for reconsideration, the Board may consider new evidence, a change in the law, or errors in the Board's application of the law. 35 Ill. Adm. Code 101.520, 101.902; *See also Dickerson Petroleum, Inc. v. Illinois EPA*, PCB 09-87, 10-5 (Consolidated) (Sept. 2, 2010), 2010 Ill. ENV LEXIS 390, *18 (Board reconsidered and reversed its opinion because it erred in applying existing law). A motion to reconsider may also specify "facts in the record which were overlooked." *City of Quincy v. Illinois Environmental Protection Agency*, PCB 08-86, 2010 Ill. ENV LEXIS 213, *48 (June 17, 2010), *citing Wei Enterprises v. IEPA,* PCB04-23, slip op. at 3 (Feb. 19, 2004). In particular, the Board has held that "the identification of overlooked facts is a

permissible ground for reconsideration" and if a motion to reconsider is based on claims that facts were overlooked, the motion must specify the facts. *Id*. at 49-50. The Board has discretion to address new issues presented in a motion for reconsideration where there is a reasonable explanation for why the additional issues were not raised at the original hearing. *People of the State of Illinois v. Packaging Personified, Inc.*, PCB04-16, 2012 Ill. ENV LEXIS 103, *31. (March 1, 2012).

ARGUMENT

The most significant error of law in the Interim Order concerns the Board's conclusions regarding GMZs at the Joliet 29 Station, Powerton Station, and Will County Station. The Board's limitations on the applicability of GMZs for this case are against the clear and unambiguous language of the regulations and contrary to Board precedent. In fact, in this case, applicability of the GMZs was not at issue during the hearing. Neither party presented any evidence or argument regarding the application and effect of a GMZ, and neither party had a meaningful opportunity to address the GMZ regulatory framework at the hearing. The potential adverse impact of this incorrect understanding of GMZs on any remediation in the State of Illinois is significant.

The Board's second key error of law is improperly shifting the burden of proof to MWG to somehow show that historic ash areas at the stations were not a source. Finally, the Board overlooks numerous facts and evidence presented in the record which results in multiple errors of fact and a lack of support for the Board's findings. The Board's errors require reconsideration and correction by the Board.

I. THE BOARD MISAPPLIES THE LAW CONCERNING THE EXPIRATION OF GMZs WHEN THE ISSUE WAS NOT BEFORE THE BOARD

The Board should review and reconsider its legal conclusions concerning GMZs because the Board's analysis contains errors in fact and law. Interim Order pp. 80-84. The Board begins its discussion of GMZs by making the statement that a GMZ "expires upon completion of a corrective action as specified in Sections 620.250(a) and 620.450(a)." Interim Order, § V.A.ii., at p. 80. The Board then finds that corrective action at the MWG Stations was completed and Class I groundwater quality standards apply because the record does not establish "ongoing corrective action as specified in Section 620.450(a)." *Id*. By limiting the timeframe of a GMZ to the period of "ongoing" remediation, such that a GMZ automatically expires, the Board misapplies the law and strips GMZs of any value. 35 Ill. Adm. Code 620.250(b), (c), 620.450(a).

First, the issue of whether the GMZs expired after completion of "ongoing corrective action" was not even before the Board. Neither party had proper notice of the issue and neither party presented evidence, caselaw, or history concerning the intended meaning and scope of "corrective action" under the GMZ regulations and how and when a GMZ might expire.

Second, the Board's analysis of GMZs, allowing it to conclude that GMZs expire as soon as a specific corrective action such as relining of an ash pond is completed, misapplies the plain language of the regulations, is against the purpose of GMZs, and ignores Board and Illinois EPA precedent. The Board disregards the clear and unambiguous language of the Board's regulations that state that a GMZ continues for a period of time and only expires when *both* a corrective action is completed *and* applicable groundwater standards are attained. 35 Ill. Adm. Code 620.250(c). The Board misapplies a "timely and appropriate" standard when that provision does not apply to an Agency approved corrective action, such as the corrective actions approved at the MWG Stations. 35 Ill. Adm. Code 620.250(a)(1). The Board then ignores its precedent where it agreed that a GMZ extends over a period of time beyond active corrective action and does not automatically expire.

Third, each of the findings made by the Board to reach its conclusion that GMZs somehow expire contains errors in fact and/or law that should be reconsidered. In particular, the Board finds MWG's corrective actions were completed because the Board confuses the certification statements MWG was required to submit as part of its Compliance Commitment Agreements ("CCAs") with the completion of the corrective action process. In limiting the definition of a "corrective action process" to ongoing "active" remedial actions and hence finding that MWG's corrective actions were completed once it relined the ash ponds, the Board overlooks that MWG's GMZ applications specifically required both a source control action (*i.e.,* the relining action) and an ongoing monitored natural attenuation process. Similarly, the Board's claim that there was no evidence in the record that groundwater quality would return to Class I standards ignores MWG's trend analysis that directly addresses this issue. Finally, even if the Board were to conclude (incorrectly) that MWG's corrective actions are complete, the Board should then apply the regulations that pertain to the period "after the completion of a corrective action." 35 Ill. Adm. Code 620.450(a)(4). Those regulations at 620.450(a)(4) require the Board to consider that the concentrations of constituents within the GMZs at the MWG Stations were minimized to the extent practicable and that there is a minimization of any threat to public health or the environment. *Id*.

A. The Expiration of GMZs was Never Before the Board and Should not Have Been Decided Without Proper Notice and Evidence

The question of whether there are violations of Class I groundwater standards after GMZs are in place *was never at issue* during the hearing. The Board's *sua sponte* determination that the GMZs expired violates due process of law and MWG's fundamental right of notice of the issues to be tried at hearing. "Administrative proceedings are governed by fundamental principles and requirements of due process of law…Due process of law requires that a party be accorded procedural fairness, *i.e.*, given notice and an opportunity to be heard." *Niles Twp. High Sch. Dist. 219 v. Ill. Educ. Labor Rels. Bd.*, 369 Ill. App. 3d 128, 136, 859 N.E. 2d 57, 64 (1st Dist. 2006). Similarly, "…due process requires that both parties know in advance of a proceeding what issues will be tried at that proceeding." *Delarosa v. Approved Auto Sales*, 332 Ill. App. 3d 623, 627, 774 N.E.2d 437, 440 (2nd Dist. 2002).

In *Niles Twp. High Sch. Dist. 219*, the Illinois Appellate Court reversed the *sua sponte* finding of an administrative law judge ("ALJ") because "[b]y its very nature, a *sua sponte* ruling deprives a party of notice and an opportunity to raise objections because the court acts on its own and without any warning. 369 Ill. App. 3d at 137, *quoting Peterson v. Randhava*, 313 Ill. App. 3d 1, 13, 729 N.E.2d 75 (1st Dist. 2000). In that case, the ALJ decided without notice to the parties that the plaintiff's petition was untimely filed. *Id.* at 132. On appeal, the plaintiff argued that it was not given notice of nor an opportunity to defend and argue the issue of the timeliness of its petition. *Id*. at 135. The Court agreed and reversed and remanded the decision. *Id.* at 135-137. The Court found that it was clear that the plaintiff had "no notice that the ALJ was contemplating dismissal of its petition on an untimeliness basis and [the District] had no opportunity to be heard or make arguments as to the issue." *Id* at 136.

Here, the Board decided *sua sponte* that the "corrective action process" was complete and thus the GMZs expired despite the fact that no evidence or legal argument was presented at the hearing on the issue. The parties proceeded with the hearing on the agreement and assumption that once the GMZs were established, and monitoring and natural attenuation were ongoing, the Class I standards did not apply to groundwater within the GMZs.

Both during the hearing and in post-hearing briefs, Complainants agreed and stipulated that once a GMZ is established the Class I groundwater standards would no longer apply. In fact, Complainants stipulated during the hearing that exceedances in a GMZ are not violations, stating:

> "**We all understand that in a groundwater management zone, there are no violations**…We're not trying to call this a violation…. **And I can stipulate on the record…we don't think this is a violation**. We're not calling this a violation. We're not saying these exceedances that have any legal ramification."

10/26/17 Afternoon Tr. p. 87:22-89:4 – (emphasis added). [1]

Consistent with their stipulation, Complainants rephrased their questions regarding "exceedances" of the groundwater standards and did not assert that the GMZs expired. 10/25/17 Tr. p. 87:8-15. *See also*, 10/26/17 Tr. p. 89:19-90:8 (Complainants agreed to modify an exhibit to remove the term "exceedance" on the last page). Complainants' expert specifically stated that once a GMZ is established, the Class I standards in Illinois do not apply within the GMZ. 1/31/18 Tr. p. 15:19-23 ("Q: You're aware that once a GMZ is established, the Class I standards in Illinois do not apply within the GMZ, correct? A: **Correct**."). He repeated during the hearing that the groundwater standards do not apply to groundwater monitoring wells at the MWG Stations that are within the GMZs. 10/27/17 Tr. pp. 234:21-235:8. There was no hint or suggestion that the GMZs at Joliet, Powerton and Will County had "expired" or were no longer in place as determined by the Board in the Interim Order. Based on Complainants' stipulation and agreement that the GMZs continued in effect, the issues before the Board did not include any question of the timeframe of the GMZ after they were established.

The parties' post-hearing briefs similarly included no argument addressing whether the GMZs had expired. MWG simply stated in its Post-Hearing Brief that once the GMZs were established "the Class I groundwater standards were no longer applicable, thus MWG is not in violation of the Board's Regulations." MWG's Post-Hearing Brief, p. 54. MWG did not have reason to devote any argument to the application and interpretation of the GMZ regulations after the GMZs were in place or any discussion as to whether its corrective action was completed or whether the GMZs may have expired.[2] In Complainants' Response Brief, Complainants only argued that the GMZs "have no bearing on liability for violations that occurred *before* they were

[1] A stipulation is an agreement by the parties with regard to an issue before the court. *People v. Woods*, 214 Ill. 2d 455, 468, 293 Ill. Dec. 277, 286, 828 N.E.2d 247, 256 (2005). Courts look with favor upon stipulations because " 'they tend to promote disposition of cases, simplification of issues[,] and the saving of expense to litigants.' " *Id., quoting People v. Coleman*, 301 Ill. App. 3d 37, 48, 704 N.E.2d 690, 235 Ill. Dec. 117 (1998), *and In re Estate of Moss*, 109 Ill. App. 2d 185, 192, 248 N.E.2d 513 (1969); *Dawdy v. Sample*, 178 Ill. App. 3d 118, 127-28, 127 Ill. Dec. 299, 306, 532 N.E.2d 1128, 1135 (4th Dist. 1989) (favoring stipulations that simplify litigation).

[2] In MWG's Response Brief, MWG argued that its GMZs resolved liability for groundwater pollution pursuant to the Act, in answer to Complainants' post-hearing brief. *See* MWG Response Brief, pp. 34-35. Again, no mention was made in the post-hearing briefs of GMZs expiring or the duration of MWG's corrective action process.

implemented," again acknowledging (and certainly not challenging) that the GMZs were still in effect. Response Brief, p 27.[3]

If MWG had been on notice that the terms and expiration of its GMZs were at issue, MWG would have presented evidence to establish that a corrective action process under a GMZ is broadly interpreted to include groundwater monitoring and natural attenuation, and that a GMZ may extend for a long period of time after an "active" corrective action.[4] This understanding of the longevity of GMZs with monitoring is borne out by Illinois EPA with similar GMZs in Illinois. MWG could have called as a witness a manager from Illinois EPA to testify how the Agency applies GMZs, the timing of corrective actions, and when GMZs might expire under the regulations. For instance, at a station owned by Vistra Energy in Hennepin, Illinois, (Hennepin Station East), the corrective action for Ash Pond 2 was a cover, a GMZ, and continued groundwater monitoring.[5] The GMZ at Hennepin is expected to remain in place for approximately 20 years after the cover (*i.e.*, the "active" corrective action) was installed. Hennepin's GMZ application provides that following completion of the cover system, "boron concentrations will meet the groundwater protection standards within 20 years …."*Id*. The Hennepin Station GMZ application is attached to this Motion as Exhibit 1 (*see* Part III, No. 1, 6). Similarly, at Dynegy's Wood River Station, the corrective action was construction of a geomembrane cover system, a GMZ, and groundwater monitoring. The GMZ remained in place long after the cover system was installed. Dynegy's GMZ application provides that concentration reductions of constituents were expected "to begin approximately one year after completion of the cover system." The Dynegy GMZ application is attached to this Motion as Exhibit 2, (*see* Part III., No. 1, 6). Illinois EPA approved the GMZ with the clear understanding that the GMZ would be ongoing for an extended period of time because levels of

[3] MWG does not concede its argument that all groundwater violations were resolved by the CCAs.

[4] In its reconsideration of its GMZ findings, the Board may take notice of "new matters." *People v. Packaging Personified, Inc.*, PCB 04-16, at p. 35 (where respondent was permitted to attach a supplemental expert report to motion to reconsider in response to a new issue in Board's opinion). Here, Illinois EPA's practice of approving extended time periods of a GMZ long after "active" corrective action may be considered by the Board at this time because this is a new matter not addressed at the hearing.

[5] The Vistra Energy, Hennepin East Ash Ponds 2 and 4 corrective action plan includes the GMZ Application and is available on Illinois EPA's website. https://www2.illinois.gov/epa/topics/water-quality/watershed-management/ash-impoundment/Pages/Hennepin-East-Ash-Ponds-2-and-4.aspx (*see* page 1052 et seq of pdf "Closure Plan Final" and page 260 et seq of pdf "Closure Plan Addendum" which adds ash pond 4 to the corrective action). The GMZ applications attached are evidence the Board should consider and evidence MWG would have presented had it been on notice that GMZ expiration periods were at issue.

contaminants would only *begin* to reduce after a year. *See* Illinois EPA GMZ approval, attached as Exhibit 3 to this Motion.

Had MWG been on notice of the Board's decision that MWG's "corrective action process" was completed, MWG would have pointed the Board to the requirements of section 620.450(a)(4)(B), which specifically apply to GMZs *following* corrective action. MWG could have presented additional evidence to show that MWG met the groundwater standards of 620.450(a)(4)(B) through expert testimony that there are no other practical corrective actions available for treatment for the constituents in groundwater at the MWG stations, and that the corrective action processes have minimized the exceedances "to the extent practicable." 35 Ill. Adm. Code 620.450 (a)(4)(B). Finally, MWG would have presented a discussion of the applicable regulations, case law and precedent regarding GMZs in post-hearing briefs. The Board's *sua sponte* ruling improperly deprived MWG of notice and an opportunity to raise evidence and objections on this issue.

The Board should reconsider its opinion regarding the expiration of GMZs because it was not at issue. At the very least, the Board should rescind its opinion regarding the GMZs at the MWG Stations and remand the GMZ issues to the Hearing Officer to allow the parties to present evidence and briefing regarding the GMZ issues before the Board makes a ruling.[6]

B. The Board's Limitation on GMZs Misreads the Plain Language of the Regulations and Ignores Board and Agency Precedent

The Board's conclusions regarding the brief time period and expiration of a GMZ as soon as active work is completed are contrary to the explicit language of the regulations regarding GMZs and against the Board's previous findings. Beginning on page 81 of the Interim Order, the Board, *sua sponte*, addresses the question "whether or not GMZs continue in effect at Joliet 29, Powerton and Will County." Interim Order, p 81, para. 4. The Board's discussion contains a series of missteps, each of which appears to have led the Board to its final, incorrect conclusion that the GMZs expired in just a few short months.

[6] See *People v. Packaging Personified, Inc.*, PCB 04-16, at 43-44 (where the Board found that because neither party had reason to present evidence on the Board's new economic benefit calculation, the Board reconsidered and ordered parties to conduct a supplemental hearing and briefing on the issue that had not been addressed).

1. The Plain Language of Section 620.250 Provides that GMZs do not Expire on Completion of Work

The clear and unambiguous language of the Board's regulations states that a GMZ continues for a period of time and only expires upon confirmation of the attainment of the applicable standards. 35 Ill. Adm. Code 620.250(c). In construing a regulation, the Board is required to read the regulation as a whole, giving "each word, clause, and sentence a reasonable meaning." *Ill. Envtl. Prot. Agency v. Ill. Pollution Control Bd.,* 2018 IL App (4th) 170144, ¶ 30, 2018 Ill. App. LEXIS 805 (4th Dist. 2018). Additionally, "[w]hen the language of the statute is clear and unambiguous, it will be given effect without resort to other tools of construction." *Segers v. Indus. Comm'n,* 191 Ill. 2d 421, 431, 247 Ill. Dec. 433, 439, 732 N.E.2d 488, 494 (2000).[7]

a. The Board mistakenly applies 620.250(a)(2) to an Agency-approved corrective action process under 620.250(a)(1).

The Board reaches the conclusion that a corrective action process must end and GMZs must expire after "active" remediation is complete by misapplying "timely and appropriate" language from a separate subsection of the rules. The Board first notes the definition of "correction action process" as:

> …those procedures and practices that may be imposed by a regulatory agency when a determination has been made that contamination of groundwater has taken place, and are necessary to address a potential or existing violation of the standards set forth in Subpart D.

35 Ill. Adm. Code 620.110. The Board then imposes a "timely and appropriate" standard onto this unambiguous definition, which the Board takes from section 620.250(a)(2), and concludes "a corrective action process under a GMZ must be 'necessary to address a potential or existing violation' of the Part 620 standards *and* must be undertaken in a 'timely and appropriate manner.' Interim Order, p. 83 (*emphasis added*). The Board errs in mistakenly applying section 620.250(a)(2) to the definition of "corrective action process" and failing to consider section 620.250(a)(1).

The GMZ rules unambiguously state that a GMZ will extend from the time of a corrective action process for a period of time consistent with that action, and the rules provide the conditions under which a GMZ will expire. Specifically, section 620.250(b) states:

[7] The rules that govern statutory construction also apply to the construction of administrative regulations. *D&L Landfill, Inc. v. Ill. Pollution Control Bd*., 2017 IL App (5th) 160071, ¶ 23, 415 Ill. Dec. 754, 759, 83 N.E.3d 10, 15, *citing, Kean v. Wal-Mart Stores, Inc.*, 235 Ill. 2d 351, 368, 919 N.E.2d 926, 336 Ill. Dec. 1 (2009). A reviewing court "should not read into the statute exceptions, conditions, or limitations not expressed by the legislature." *People ex rel. Glasgow v. Carlson*, 2016 IL 120544, ¶ 17, 410 Ill. Dec. 954, 72 N.E.3d 340 (2016).

> A groundwater management zone is established upon concurrence by the Agency that the conditions as specified in subsection (a) are met and groundwater management continues *for a period of time consistent with the action described in that subsection*.

35 Ill. Adm. Code 620.250(b) (*emphasis added*).[8] The language in section 620.250(b) specifies that the length of time a GMZ continues must be "consistent with the action described in that subsection," referring to the previously mentioned subsection 620.250(a). It is here that the Board applies the wrong subsection of 620.250(a) to reach its conclusion that the GMZs expired -- a finding that is against the plain language of the rules.

The language of "subsection (a)," as referenced in section 620.250(b) quoted above, contains two distinct subparagraphs, separated by an "OR", such that each subparagraph applies distinctly from the other. 35 Ill. Adm. Code 620.250(a). Section 620.250(a) provides for the creation of a GMZ as an area containing groundwater being managed to mitigate impairment that is *either* **(a)(1)** subject to a "corrective action process" approved by the Agency ***OR*** **(a)(2)** is a "corrective action" performed voluntarily by an owner "in a timely and appropriate manner." 35 Ill. Adm. Code 620.250(a) (parentheses added). In this case, section 620.250**(a)(1)** applies because MWG entered into an approved "corrective action process" with the Illinois EPA as described in the CCAs and the Agency's approval of the GMZs. *See* Hearing Exs. 626, 636, 656 (CCAs); Hearing Exs. 627, 638, 658 (Illinois EPA's GMZ approval letters). Pursuant to the Agency-approved corrective action process of section 620.250**(a)(1)**, the Illinois EPA establishes and oversees the corrective action process, including determining timing for the corrective actions. In its Interim Order, however, the Board incorrectly applies subsection 620.250**(a)(2)** to support its conclusion that the GMZs should quickly expire. Interim Order, p. 82, para 5 to p. 83. The Board quotes the language of 620.250(a)(2) to find that a corrective action should be completed in a "timely and appropriate matter" with a confirmation of completion in a form provided by the Agency. Interim Order, p. 83, para. 4. The Board errs in applying 620.250(a)(2) because it is subsection 620.250(a)(1) that applies because MWG was "subject to a corrective active process **approved by the Agency."** 35 Ill. Adm. Code 620.250(a)(1).

The Board's erroneous imposition of "timely and appropriate" into the definition of "corrective action process" severely limits the broad language provided in the Board's actual definition of that term.

[8] *See also* legislative history of 250(b) *In the Matter of: Groundwater Quality Standards (35 Ill. Adm. Code 620)*, PCB R89-14, Illinois EPA Statement of Reasons, September 21, 1989, pp. 12-13. Illinois EPA described Remedial Groundwater, which later became GMZ, as "groundwater that due to contamination cannot meet the groundwater criteria set forth in Subpart C *for an extended period of time*." *Id.* at 12 (*emphasis added*).

On its own, the definition of a "corrective action process" is broad and includes any procedures and practices imposed by, in this case, the Illinois EPA. 35 Ill. Adm. Code 620.110. The "corrective action process" under a GMZ is not limited to only the period of installing a liner, as the Board concludes, but by its plain language encompasses all of the Agency-approved actions, including ongoing monitoring, natural attenuation and institutional controls that limit exposure to contamination. *Id*. In this case the Agency-approved corrective action process pursuant to 620.250(a)(1) included a series of protective steps such as pond relining, use restrictions, continued monitoring, and monitored natural attenuation to address groundwater, and in each case the monitoring and natural attenuation was a requirement of the GMZs.[9] The regulations vest the Agency with discretion to determine if the proposed corrective action processes will address violations of the standards. Because the regulations vest the Agency with the authority and discretion to approve or disapprove of the corrective action process, the Board must give deference to the Agency's decision and approval of the corrective action process. *See U.S. Steel Corp. v. Ill. Pollution Control Board*, 384 Ill. App. 3d 457, 463-464, 892 N.E.2d 606 (5th Dist., 2008) (Court held Board must give deference to Agency decision to not hold a public hearing because the regulation vested the Agency with the discretion to make the decisions).

b. <u>The Board fails to apply section 620.250(c) to determine when a GMZ might expire</u>

After applying the incorrect subsection, the Board next errs by concluding that GMZs "expire" while ignoring the specific rule that applies to GMZ expiration. Section 620.250(c) specifies when a GMZ expires and states:

> A groundwater management zone expires upon the Agency's receipt of appropriate documentation which confirms the completion of the action taken pursuant to subsection (a) ***<u>and</u>*** which confirms the attainment of applicable standards as set forth in Subpart D. The Agency shall review the on-going adequacy of controls and continued management at the site if concentrations of chemical constituents, as specified in Section 620.450(a)(4)(B), remain in groundwater at the site following completion of such action. The review must take place no less often than every 5 years and the results shall be presented to the Agency in a written report.

35 Ill. Adm. Code 620.250(c) (*emphasis added*). While the Board cites to this section, the Board never applies it, instead going back to the "timely and appropriate" language from the inapplicable

[9] There is no dispute that Illinois EPA imposed and approved the corrective action process in the GMZ applications, including ongoing groundwater monitoring conducted by MWG as part of the remedies of monitored natural attenuation. *See* Hearing Ex. 242, Part III, No. 10, Hearing Ex. 254, Part III, No. 10, Hearing Ex. 276, Part III, No. 10. Part III, No. 10 (GMZ Applications); Hearing Exs. 627, 638, 658, 660 (Illinois EPA GMZ Approvals).

subsection 620.250(a)(2). Interim Order, p. 83, para 3. Section 620.250(c) plainly and unambiguously provides the language for when a GMZ expires. If the Board had been inclined to decide the issue of when a GMZ expires, even though it was not at issue here and no evidence was presented, the Board was required to apply section 620.250(c). In applying the rule, the Board could only find that the GMZs would expire if *both* the Agency-approved "corrective action process" had been completed by MWG, *and* the applicable standards had been attained. While the Board incorrectly attempts to glean that the "corrective action process" was completed by MWG's compliance statements that it had performed its commitments under the CCAs, that analysis is wrong.

c. The Board confuses CCA compliance statements with completion of the corrective action process

In its discussion of MWG's GMZ applications, the Board concludes that all CCA measures were completed by the dates of the respective CCA compliance statements and then mistakenly equates those CCA compliance statements with "completion of the corrective action process." Interim Order, p. 82, para 3. The Board appears to be referring to the language of section 620.250(c) here stating that a GMZ expires "upon the Agency's receipt of appropriate documentation which confirms the completion of the action taken pursuant to subsection (a)," which in this case is the Agency-approved corrective action process. The CCA compliance statements are not the same as the "appropriate documentation" required by section 620.250(c). The CCA compliance statements do not contain the information required by 620.250(c), which demands documentation of both "completion of the action taken pursuant to subsection (a)" *and* "the attainment of applicable standards as set forth in Subpart D." 35 Ill. Adm. Code 620.250(c).[10] In this case, the applicable "standard set forth in Subpart D" refers to the Groundwater Quality Standards in section 620.450(a) of the Board's rules. 35 Ill. Adm. Code 620.450(a), Groundwater Quality Restoration Standards. The CCA compliance statements simply acknowledge that MWG performed each of the actions set out by Illinois EPA in the CCAs. There is no discussion of whether groundwater standards have been attained as required by section 620.250(c).

[10] The Board's reference to the GMZ applications (Att. 2 at Note 1) that "[at] the completion of the corrective process, a final report is to be filed which includes the confirmation statement included in Part IV" does not support the Board's finding because the quoted language is copied directly from the Appendix D form prepared by the Agency and used to create GMZ applications. Compare 35 Ill. Adm. Code 620, Appendix D to Hearing Exs. 242, 254 and 276 (Hearing GMZ Applications).

The CCA compliance statements are not evidence that the GMZs are "completed." The CCAs did not require MWG to "complete" the "corrective action process" within the meaning of the GMZ regulations. The CCAs only required MWG to "*establish* a GMZ pursuant to 35 Ill. Adm. Code Part 620.250 within one year of the effective date of the CCA." *See* Hearing Exs. 626, 636, 656 (CCAs). That is exactly what MWG did – MWG "established" a GMZ at Joliet 29, Will County and Powerton within the required time period. *See* Hearing Exs. 627, 638, 660 (Illinois EPA GMZ Approvals). MWG does not state that the GMZs expired or ended – only that they were established and that the relining of the ponds portion of the corrective action process had been performed. In fact, the groundwater monitoring that is part of the CCAs continues to this date. Hearing Exs. 244M-246M, 257O-260O, 279Q-281Q (Groundwater Monitoring Reports). MWG's CCA compliance statements also do not state that the corrective action process at each of the Stations was complete, only that the actions of the CCAs, including new liners and a groundwater monitoring program, had been put into place. *See* Hearing Exs. 630, 637, 661 (CCA Compliance Statements).

By incorrectly finding that the CCA compliance statements are the same as completion of the corrective action process, the Board admits that the record does not actually indicate whether any final report or confirmation statement was submitted to the Agency. Interim Order, p. 82, para. 3. The Board is correct - there is no such report or statement in the record because no such documents exist. MWG has never taken the position that the GMZs have expired or the corrective action process is complete and thus would not have submitted such documentation. MWG is continuing the corrective action process by monitoring the groundwater at the Stations to assess the process of natural attenuation. Hearing Ex. 242, Part III, No. 4, 6, 10, Ex. 254, Part III, No. 4, 6, 10, Ex. 276, Part III, No. 4, 6, 10 (GMZ Applications); Hearing Exs. 244M-246M, 257O-260O, 279Q-281Q (Groundwater Monitoring Reports). MWG included in the record a trend analysis that shows that the monitored natural attenuation is having the desired effect and groundwater is either improving (Joliet 29) or currently stable (Powerton and Will County). *See* Hearing Exs. 901, pp. 25, 43, 71 (MWG Expert Presentation). The Board should reconsider its decision and apply the plain language of the regulation for when a GMZ expires.

d. <u>The Board errs by concluding that work required for the GMZs was completed by incorrectly finding that groundwater monitoring and</u>

natural attenuation are not part of the Agency-approved corrective action process

The Board recognizes that monitoring and inspections are to continue at the Stations but finds that the monitoring requirement comes from the CCAs and not as a condition to establish the GMZs. Interim Order, p. 82, para 4. As a result, the Board seems to conclude that the corrective action process was completed and only the CCA work remains. The Board then incorrectly states that the CCA actions are intended to "avoid and detect" further contamination rather than remedy any contamination or remove the contamination source. Interim Order, p. 82, para 4. The Board makes incorrect assumptions as to what the CCAs "intended" and fails to recognize that the combined terms of MWG's Agency-approved corrective action process, implemented pursuant to 620.250(a)(1), together form the remedy to create the GMZs and address groundwater impacts. Ultimately, the Board incorrectly concludes that the record does not establish that the continuous monitoring by MWG of the natural attenuation process is a corrective action pursuant to the GMZs. Interim Order, p. 82, para. 4.

The GMZ applications and the continuous groundwater monitoring reports show that ongoing groundwater monitoring for natural attenuation was always an intended part of the corrective action process and required as part of the GMZs. The Board completely overlooks the sections of the GMZ applications which state that groundwater monitoring is a part of the remedy. Interim Order, p. 82, para. 4; *See* Hearing Exs. 242, 254, 276 (GMZ applications). The GMZ applications, approved by Illinois EPA, specifically state that the selected remedies required to implement the GMZs includes all of the terms in the CCA. *See* Hearing Ex. 242, Part III, No. 1, Hearing Ex. 254, Part III, No. 1, Hearing Ex. 276, Part III, No. 1 (GMZ Applications). Thus, the approved remedies for the Stations with GMZs incorporated all of the terms in Item 5 of the CCAs, including installation of HDPE liners and groundwater monitoring. *Id.* As to addressing groundwater impacts, MWG's GMZ applications specifically state that the selected remedies will result in compliance with the applicable groundwater standards due to the pond relining *and attenuation of the residual groundwater impacts through monitored conditions within the established GMZs*. *See*, Hearing Ex. 242, Part III, Nos. 4, 6, Hearing Ex. 254, Part III, Nos. 4, 6, Hearing Ex. 276, Part III, Nos. 4, 6 (GMZ Applications). MWG's GMZ applications further state that MWG will continue to monitor the groundwater monitoring wells on a quarterly basis and the "monitoring data will be reported to IEPA within 30 days of the end of each quarter." *See* Hearing Ex. 242, Part III, No. 10, Hearing Ex. 254, Part III, No. 10, Hearing Ex. 276, Part III, No. 10. Part

III, No. 10 (GMZ Applications). MWG continues to submit the groundwater monitoring results to Illinois EPA and each report states that the samples analyzed were taken from the area of the approved GMZs. *See* Hearing Exs. 244M-246M, 257O-260O, 279Q-281Q (Groundwater Monitoring Results). Neither Illinois EPA nor MWG has reported or even suggested that the GMZs expired or that corrective action is complete.

The Board focuses only on a single section of MWG's GMZ applications (*i.e.*, Part III No. 1) and overlooks the relevant sections concerning continued monitoring, the combined remedy and attaining groundwater standards over time through natural attenuation (*i.e.*, Part III Nos. 4, 6 and 10). The Board should reconsider its decision that GMZs expire and find that the "corrective action process" is ongoing.

e. <u>The Board ignores evidence when it incorrectly concludes that monitored natural attenuation is not an ongoing remedy</u>

The Interim Order states the record does not show that monitoring may be construed as timely or appropriate to remedy groundwater quality or that monitoring will address a potential or existing violation absent some other actions by MWG. Interim Order, p. 83, para 1. The Board continues, stating there is no evidence that groundwater quality will return to Class I standards naturally. *Id*. These statements misrepresent the Agency-approved corrective action process at the Stations and ignore evidence in the record.

The Board completely overlooks the temporal trend analysis conducted by MWG's expert to evaluate whether the constituent levels in groundwater are improving over time. MWG's Post-Hearing Brief, pp. 37-38, Hearing Exs. 901, 906 (Temporal Trend Analysis). MWG's expert used a linear regression analysis to determine temporal trends at the Stations. MWG's Post-Hearing Brief, p. 37, *citing* 2/2/18 Tr. p. 26:3-27:21 (Seymour Test.), Hearing Ex. 906 (Temporal Trend Analysis). Based on the trend analysis, MWG's expert concluded that at Joliet 29, concentrations of coal-related constituents in groundwater are decreasing,[11] and at Powerton and Will County the concentrations are generally stable. 2/2/18 Tr. p. 29:5-16, 44:9-15, 123:4-124:11 (Seymour Test.); Hearing Ex. 906 (Temporal Trend Analysis), Hearing Ex. 901, p. 24-25, 42-43, 70-71 (MWG Expert Presentation). There is no question that natural attenuation can take several years to decades

[11] Complainants' expert agreed that the concentrations in the groundwater at the Joliet 29 Station were decreasing. *See* Hearing Ex. 908 (Joliet 29 Update of Kunkel Slides); 10/27/17 Tr. p. 246:4-250:20, 254:2-6 (Kunkel Test.).

to clean up a site[12] and the corrective actions at the MWG stations are in the early stages of the natural attenuation process. The corrective action process of monitored natural attenuation in MWG's GMZ applications is continuing to work as intended, over time.

The Board incorrectly states that there is no indication that MWG will take any additional actions based on the results of the monitoring or that monitoring will trigger any actions by the Agency. Interim Order, p. 83, para 1. The Board's statement simply ignores the clear language and requirements of section 620.250(c). Section 620.250(c) specifically states that "the Agency shall review the on-going adequacy of controls and continued management at the site", and the "review must take place no less often than every 5 years…" 35 Ill. Adm. Code 620.250(c). MWG continues to submit the groundwater monitoring reports to the Illinois EPA on a quarterly basis, pursuant to the approved GMZ applications. Hearing Ex. 242, Part III, No. 10, Hearing Ex. 254, Part III, No. 10, Hearing Ex. 276, Part III, No. 10. Part III, No. 10 (GMZ Applications); Hearing Exs. 244M-246M, 257O-260O, 279Q-281Q (Groundwater Monitoring Reports). Illinois EPA receives and reviews the groundwater monitoring data to assess the adequacy of the controls and continued management at the MWG Stations. Illinois EPA has not expressed any concern over the GMZs or the corrective action process at the Stations. 2/1/18 Tr. pp. 112:16-18, 140:2-5, 167:7-11 (Gnat Test.). If MWG had known that the Agency's review or the continued applicability of the GMZs was at issue, MWG would have presented Agency testimony on the issue.

2. The Board Fails to Apply the Groundwater Restoration Standards of Section 620.450(a)

As discussed above, the Board initially errs in finding that MWG's corrective action process was completed by misapplying section 620.250(a)(2) and then ignoring the rule for when a GMZ expires under 620.250(c). The Board compounds this error by failing to analyze section 620.450(a), the part of Subpart D of the rules that applies to groundwater quality restoration. To correctly apply section 620.250(c) to determine when a GMZ expires, the Board should have analyzed whether the "applicable standards set forth in Subpart D" had been attained. 35 Ill. Adm. Code 620.250(c). The "applicable standards of Subpart D are the Groundwater Quality Restoration Standards set forth in section 620.450(a). In a proper analysis, the Board would have concluded either that: corrective action had not yet been completed under 620.450**(a)(3)** and Class I standards

[12] *See also* "Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Groundwater at CERCLA Sites" relevant excerpt attached as Ex. 4; "Citizen's Guide to Monitored Natural Attenuation" attached as Ex. 5, p. 1.

do not apply in the GMZs; *or* that corrective action has been completed and 620.450**(a)(4)** applies. The Board does neither. The Board incorrectly concludes that corrective action was completed but then fails to apply section 620.450(a)(4).

a. The failure to apply section 620.450(a)(4) was an error

While incorrectly finding that MWG's Agency-approved "corrective action process" at the Joliet 29, Powerton and Will County Stations was completed in only one to three months, the Board fails to conduct the next step of the analysis that applies when a corrective action is deemed to be complete. Section 620.450(a)(4) is the standard that applies to groundwater "after completion of a correction action…". Subsection 450(a)(4) provides:

> (a)(4) *After completion of a corrective action* as described in Section 620.250(a), the standard for such released chemical constituent is:
>
> A) The standard as set forth in Section 620.410, 620.420, 620.430, or 620.440, if the concentration as determined by groundwater monitoring of such constituent is less than or equal to the standard for the appropriate class set forth in those Sections; or
>
> B) The concentration as determined by groundwater monitoring, if such concentration exceeds the standard for the appropriate class set forth in Section 620.410, 620.420, 620.430, or 620.440 for such constituent, and:
>
> i) To the extent practicable, the exceedence has been minimized and beneficial use, as appropriate for the class of groundwater, has been returned; and
>
> ii) Any threat to public health or the environment has been minimized.

35 Ill. Adm. Code 620.450(a)(4) (*emphasis added*). In the Interim Order, the Board ignores this subsection despite its direct application if as the Board incorrectly concludes, corrective action has been completed. Pursuant to section 620.450(a)(4)(B), given the Board's finding that MWG's corrective action process was completed, the Board was required to consider the practicality of remediating the groundwater and the minimization of any threats to public health or the environment at the Joliet 29, Powerton, and Will County Stations to the extent practicable. The Board not only fails to analyze these requirements, but the Board overlooks evidence in the record showing that MWG met them.

b. The Board overlooks evidence in the record that MWG meets the requirements of 620.450(a)(4)(B)

MWG presented evidence that, to the extent practicable, the extensive measures it took at its Stations were the appropriate remedy. MWG's expert testified that MWG's actions to protect the

groundwater at the Stations were responsible and proactive and the practical way to manage the groundwater and risk at the Stations. 2/2/2018 Tr. p. 47:7-48:6, 79:14-80:3, 115:15-116:6, 125:9-24 (Seymour Test.); *see also*, Hearing Ex. 903, pp. 49-53, 63-69 (MWG Expert Rpt.). Specifically, MWG's expert identified the pond maintenance, methodical pond dredging process, relining of the ponds, removing certain ponds from service, and entering into CCAs with the Illinois EPA as effective methods to reduce and manage the risks to the groundwater. *Id*. The Illinois EPA agreed that the actions taken would bring the MWG Stations into compliance when it entered into the CCAs with MWG. *See* Hearing Exs. 626, 636, 656 (CCAs); 415 ILCS 5/31(a)(7). Pursuant to Section 31(a)(7) of the Act, the Illinois EPA must include terms and conditions in a CCA "that are, in its discretion, necessary to bring the person complained against into compliance with the Act, any rule adopted under the Act…" 415 ILCS 5/31(a)(7). Here, Illinois EPA concluded that corrective actions identified in the CCA, including relining the ash ponds and applying for a GMZ, were actions necessary to attain compliance with the alleged violations of the Act and underlying regulations. Because the Illinois EPA is vested discretion to determine the terms and conditions that are necessary to bring the Site into compliance with the Act and Board regulations, the Board is required to defer to the Illinois EPA's decision. *U.S. Steel v. IPCB*, 382 Ill. App. 3d at 464.

MWG's expert also opined that the alternative corrective action proposed by Complainants' expert (*i.e.*, ash removal) is not practicable. Evidence in the record explains that such an alternative action is not technically nor economically feasible and would cause more harm to the environment and to the communities neighboring the Stations. Hearing Ex. 903, pp. 63-69 (MWG Expert Rpt.). Complainants presented no evidence to the contrary.

The Board also overlooks undisputed evidence that any threats to the public health and groundwater have already been minimized. MWG's expert conducted a risk analysis to confirm that there is no unacceptable risk to public health or the environment from groundwater at the stations. MWG Post-Hearing Brief, pp. 29-30, Hearing Ex. 903 (MWG Exp. Rpt.), pp. 44-45, App. B, and, Hearing Ex. 907 (Updated Risk Analysis). MWG's expert specifically stated that there was "no risk to the surface water environment at each site based on regulatory risk standards and standards of practice for risk assessment," and "surface water receptors were not going to be exposed to anything unacceptable." 2/1/19 Tr. p. 279:21-280:2 (Seymour Test.). Complainants put forth no evidence to dispute this. Complainants' expert also agreed that no potable wells exist downgradient of the Joliet 29, Powerton, and Will County Stations. *Id*., Interim Order, pp. 29, 43;

Hearing Ex. 621 (2009 Hydrogeologic Assessment); 10/27/17 Tr. p. 181:4-13 (Kunkel Test.). MWG also implemented environmental land use controls ("ELUCs") at the MWG Stations which further minimize risk by protecting "against exposure to contaminated groundwater…" *Id*, *quoting*, Hearing Exs. 253, 659 (Powerton and Will County ELUCs). The undisputed risk analysis, the expert opinions, the findings that there are no potable wells downgradient of the Stations, and the ELUCs, all evidence the Board ignored, establish that any threat to the public health and the environment has been minimized such that it is non-existent.

If the Board believes MWG's corrective actions processes were completed, which MWG disputes, the Board at least should reconsider its opinion and conduct the necessary post-corrective action evaluation of groundwater required by section 620.450(a)(4)(B). Upon consideration of the overlooked evidence that the corrective action processes taken at the MWG Stations for the GMZs minimizes the concentrations in the groundwater, to the extent practicable, and there is no threat to public health or the environment, the Board should conclude that pursuant to section 620.450(a)(4)(B) the concentrations of the constituents in the groundwater is the standard and MWG is not in violation of the Class I standards. At the very least, the Board should allow MWG to be heard and present evidence on both the argument that MWG's corrective action process at the Stations has not been completed and that, even if deemed completed, MWG's actions satisfied the requirements of section 620.450(a)(4)(B).

3. The Board Improperly Replaces Regulations with Policy

While failing to apply sections 620.250(c) and 620.450(a)(4), the Board then errs by replacing the Board regulations with policy. Interim Order, pp. 83, para. 4 to 84. The Board writes that the policy of the Illinois Groundwater Protection Act is to reduce risk and to restore, protect and enhance the groundwaters of the State. Interim Order, p. 84. The Board goes on to acknowledge that, when adopting the GMZ regulations the Board itself stated, "in any management zone the goal is remediation, *if practicable*, of the groundwater to the level of the standards applicable to that class of groundwater." *Id*. (*emphasis added*). Illinois's groundwater policy is not disputed and, as acknowledged by the Board, actually forms the basis for the rules that created GMZs. However, the policy does not replace the rules and the Board is required to apply the rules as they are written.

The plain language of the regulations provides that a GMZ expires only pursuant to section 620.250(c), and the applicable groundwater standard in a GMZ is based on 620.450(a)(3) or (a)(4). By

replacing the plain and ordinary meaning of the rules with policy, the Board contravenes the law of statutory construction. The Illinois Supreme Court has stated:

> Under the guise of construction, a court may not supply omissions, remedy defects, annex new provisions, substitute different provisions, add exceptions, limitations, or conditions, or otherwise change the law so as to depart from the plain meaning of language employed in the statute…. If the language of the statute is clear, its plain and ordinary meaning must be given effect without resorting to other aids of construction.

King v. First Capital Fin. Servs. Corp., 215 Ill. 2d 1, 26, 293 Ill. Dec. 657, 671-72, 828 N.E.2d 1155, 1169-70 (2005), *quoting In re Marriage of Beyer*, 324 Ill. App. 3d 305, 309-10, 753 N.E.2d 1032, 257 Ill. Dec. 406 (2001).

Moreover, the Board's opinion thwarts the very policy it attempts to uphold. Under the Board's new scenario where a GMZ expires as soon as an active corrective action remedy (such as a cover, or a new liner) is completed, the GMZ is stripped of any purpose. There is no reason to have a GMZ if there is no time allowed after the active portion of a corrective action remedy to assess whether it will have the appropriate impact on the groundwater and whether natural attenuation is taking place. The Board has agreed that natural attenuation is an appropriate remedy,[13] but now imposes an interpretation that effectively precludes it. The Board's decision prevents any party from resolving allegations of groundwater violations with the Illinois EPA because it provides no protection from violations as soon as the active remedial work is completed. Where, as in this case, the Illinois EPA determines that work to be performed at a site is the appropriate and *practicable* action through a CCA, the Board's Opinion nonetheless finds Illinois EPA's assessment irrelevant. Interim Order, p. 79, para. 2. The Board fails to acknowledge, let alone give any evidentiary weight to, the Illinois EPA's conclusions and actions established in the CCAs. Because the Illinois EPA has the "discretion" to determine the terms and conditions in the CCAs, the Board must give deference to the Illinois EPA's decision. *U.S. Steel v. IEPA*, 384 Ill. App. 3d at 464; 415 ILCS 5/31(a)(7). The Board's disregard of the Illinois EPA's decisions is directly contrary to Illinois precedent and the language cited by the Board requiring that a remedy be "as practicable." If a party cannot rely on Illinois EPA's determination that a site remedy is the "practicable" remedy, that term would have no meaning, contrary to the law of statutory construction.

[13] *Central Illinois Light Co. (Duck Creek Station) v. IEPA*, PCB 99-21 (Dec. 17, 1998), 1998 Ill. ENV LEXIS 634 (Board granted variance for discharges from water quality standards for five years finding that natural attenuation was the feasible and economically reasonable method to achieve compliance).

Illinois EPA has specifically testified before the Board that the GMZ regulatory process gives the Agency needed flexibility in responding to contaminated properties --- to assess a potential remedy and whether the remedy is appropriate and protective of the environment. *In the Matter of: Coal Combustion Waste (CCW) Ash Ponds and Surface Impoundments at Power Generating Facilities: Proposed New 35 Ill. Adm. Code 841*, R14-10; Illinois EPA's Response to Questions Posed by the Board (March 6, 2017), at p. 12. Illinois EPA stated that: "To avoid a continuing groundwater standards violation and daily fines and penalties, it would be advantageous for facilities to obtain a GMZ." *Id.* at 14. Illinois EPA uses the corrective action process, including GMZs, to improve the groundwater quality to the applicable numerical standards, while also recognizing that not every remedy is technically and economically feasible. *Id.* Pre-filed Testimony of Richard P. Cobb, P.G., p. 16 (Jan. 15, 2014). Illinois EPA relies on the GMZ rules to allow for alternative groundwater standards for a period of time where there is no threat to public harm or the environment. *Id*.

There is no question that it takes time, often years, for constituents in groundwater to reduce to the applicable groundwater standards. The United States Environmental Protection Agency ("U.S.EPA") states that it cannot specifically define a "reasonable timeframe" for restoring groundwaters to beneficial use because it depends on the particular circumstances of a site and the restoration method employed. *See* "Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Groundwater at CERCLA Sites" relevant excerpt attached as Ex. 4.[14] U.S.EPA agrees that "[e]ven though restoration to beneficial uses generally is the ultimate objective, a relatively long time period to attain this objective may be appropriate for some sites." *Id.*, *see also* "Citizen's Guide to Monitored Natural Attenuation" (stating that monitored natural attenuation "may take several years to decades to clean up a site," and depends upon factors that vary from site to site), attached as Ex. 5, p. 1. Monitored natural attenuation following source control or removal is an accepted and allowed method to remediate contamination and is not considered a "no action" or "walk-away" approach. *See* "Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites," relevant excerpt attached as Exhibit 6, p. 1. Rather, "source control and long-term performance monitoring will be fundamental components of any [monitored natural attenuation] remedy." *Id*. at 3.

[14] Again, because this issue was not addressed during the hearing, the Board may consider new documents such as publicly available documents attached and discussed herein. *See supra*, FN 4.

In Illinois, the GMZ process allows the applicable groundwater standards to be attained over time, as practicable. Based upon the fundamental understanding that source control and monitored natural attenuation is an accepted method for corrective actions and takes time to implement, MWG proposed, and Illinois EPA accepted, pond re-lining and ongoing monitoring within the GMZs as components of the remedy at the Stations. *See* Hearing Ex. 242, Part III, No. 4 and 6, Hearing Ex. 254, Part III, No. 4 and 6, Hearing Ex. 276, Part III, No. 4 and 6 (GMZ Applications). The Board's decision to limit GMZs to the brief period of installing the new liners fails to properly apply the regulations and impedes the longstanding acceptance of monitoring and natural attenuation as a viable groundwater remedy. The Board made an error in law and should reconsider and reverse its opinion.

4. Board Precedent Supports Finding that GMZs Extend Over a Period of Time and do not Automatically Expire

In a case similar to this one, the Board found that the only issue to be addressed was whether there were groundwater violations *prior* to establishment of a GMZ. *People of the State of Illinois v. Heritage Coal Co. LLC (f/k/a Peabody Coal Company, LLC*), PCB 99-134, Order, p. 18 (September 6, 2012), 2012 Ill. ENV LEXIS 285, *44. In its Interim Order in this case, the Board errs in taking a contrary position to its own precedent without any discussion or basis for the reversal.

In *People v. Heritage Coal*, the People alleged, based upon groundwater sampling data from as early as the 1980s, that the Respondent caused water pollution from coal mining and coal slurry waste. *People v. Heritage Coal*, Complaint (March 25, 1999). In that case, as was the case with MWG here, Illinois EPA approved Respondent's GMZ application as part of a corrective action process. *People v. Heritage Coal*, Order, 2012 Ill ENV LEXIS 285, at *15. The remedy the Illinois EPA approved consisted of a low permeability clay cap, some refuse removal, and extraction wells to maintain the scope of the plume. *See* Peabody Coal Company GMZ Application (Nov. 11, 2006), attached as Ex. 7, at p. 5-6, and Illinois EPA approval of GMZ attached as Ex. 8. Respondent stated that the selected remedy of installing a clay cap would accomplish the maximum practical restoration of the beneficial use by preventing water infiltration into the refuse material. Ex. 7, p. 6. The only remaining work described in the remedial action plan was groundwater monitoring and maintenance of the cap. *Id*, at Attachment F. Following approval of the GMZ, Respondent moved for partial summary judgment arguing, in part, that it was no longer in violation of the Board rules once its GMZ was established in 2006. *Id*. at p. *24. The Illinois Attorney General's Office, acting on behalf of the Illinois EPA, agreed that it was "legally correct"

that once the GMZ was established, the alternative groundwater standards under Section 620.450(a) applied and the Respondent was no longer liable after the effective date of the GMZ. *Id.* at *24.

> HCC [Respondent] asserts: "At all times after December 5, 2006, the alternative GWQS under Section 620.450(a)(3) apply because a groundwater management zone ("GMZ") was established at the Mine in December 6, 2006, pursuant to Section 620.250(a)."
> **The People respond: "This is legally correct." Resp. at 2. The People concede that "respondent's liability for civil penalties does not extend past December 5, 2006."**

Id. at *24 (emphasis added). Based on this finding, the Board, while denying summary judgement based on unrelated fact issues, concluded that the only issue remaining concerning the groundwater allegations was whether groundwater standards were violated during the period *before* a GMZ was established. *Id.* at *44.

> What remains at issue concerning Count III is precisely which standards were violated during the pertinent time frame--from November 25, 1991 (the effective date of the Part 620 standards) until December 6, 2006 (when a groundwater management zone was established) -- and what penalty if any should be applied for that violation.

Id. at *44. Illinois EPA concluded, and the Board agreed, that once the GMZ was in effect in 2006, the respondent was not in violation of the applicable groundwater standards. In that case, as here, the active remedy had been implemented and the only work that remained was groundwater monitoring. Thus, by the time of the Board decision the remedy had long been completed and the GMZ had been in effect for several years. *People v. Heritage Coal*, Order, 2012 Ill ENV LEXIS 285, at *18.

Here, the Board incorrectly limited the applicability of the GMZs to a period of only one to three months stating that the GMZs expired when MWG finished the active work to complete the corrective action process.[15] Interim Order, p 81, para 4. The Board never discusses the *People v. Heritage Coal* case and never explains why the Board now believes that Illinois EPA's determination in that case was not legally correct. The Board's holding in *Heritage Coal*, supports the conclusion that GMZs do not expire once the initial corrective action work is completed. No Board Order or Opinion has held otherwise.

[15] The Board appears to have calculated the time period of the applicability of the GMZs at each Station from the date Illinois EPA approved the GMZ applications to the date MWG submitted the CCA compliance statements. Interim Order, pp. 24, 38, 53, 81.

II. THE BOARD INCORRECTLY PLACES THE BURDEN OF PROOF ON MWG TO PROVE THAT HISTORIC ASH AREAS WERE NOT CONTRIBUTING TO CONTAMINATION

The Board improperly shifts the burden of proof to MWG to show that certain historic "storage" or "fill" areas of coal ash at Joliet 29 and Powerton Stations are *not* contributing to contamination in the groundwater. It is Complainants' burden to prove their case, not MWG's burden to disprove it. MWG Response Brief, pp. 7-9. It is well established in Illinois "that a plaintiff bears the burden of producing evidence sufficient to establish each element of the claim." *Nolan v. Weil-McLain*, 233 Ill. 2d 416, 430, 331 Ill. Dec. 140, 147, 910 N.E.2d 549, 556 (2009); *citing* Thacker, 151 Ill. 2d at 354. The Board's precedent also holds that it is the complainant's burden in an enforcement proceeding to prove the violations of the Act by a preponderance of the evidence. *Rodney v. Kane County*, PCB 94-244, 1996 Ill. ENV LEXIS 509 (July 18, 1996). The Board's opinion in this case is in contravention to Illinois Supreme Court precedent, and even its own.

A. Improper Burden Shifting at Joliet 29

The Board's burden-shifting is most evident in its discussion of the "historic coal ash sites" at Joliet 29. Interim Order, pp. 26-28. The Board first errs by conflating the general concept of unlined areas of coal ash with *historic* ash fill areas in its discussion of risk. The Board asserts that "unlined areas that contain coal ash pose a risk of groundwater contamination due to the water moving through the coal ash…". Interim Order, p. 26, para 3. While generally true, that is not the case for *historic* ash fill areas. The Board overlooks and completely ignores the evidence in the record that historic ash areas pose little or no risk and are not of concern for leaching. The U.S.EPA specifically stated when it promulgated the Federal CCR Rules that it was,

> "…not aware of any damage cases associated with inactive CCR landfills, and as noted, the risks of release from such units are significantly lower than CCR surface impoundments or active landfills. In the absence of this type of evidence, and consistent with the proposal, the Agency has decided not to cover these units in this final rule.

80 Fed. Reg. 21342; 10/27/17 Tr. p. 191:19-193:14, 199:12-200:9. U.S.EPA considers "damage cases" as documented cases in which danger to human health and the environment from surface runoff or leachate has been proved…" 80 Fed. Reg. 21452. Complainants' expert agreed that the Joliet 29 disposal areas would be considered an inactive CCR landfill under the Federal Rule. 10/27/17 Tr. p. 202:18-23 (Kunkel Test.).

The Board next errs by concluding that the historic fill areas at Joliet 29 are contributing to groundwater contamination despite agreeing that there is no evidence to support that conclusion. In

discussing the three historic unlined fill areas at Joliet 29, the Board correctly states that "no monitoring wells are installed around any of these areas." Interim Order, p 26, para 3. Then, for each of the three historic areas, the Board finds that the monitoring wells nearest to the historic fill areas are "unlikely to show conclusive results of any contaminants emanating from this historical area." *See* Interim Order, p. 27 (referring to the Northeast Area); p. 27, para. 1 (referring to the Southwest Area) and p. 28, para. 1 (referring to the Northwest Area). The Board thus agrees that there is *no evidence* in the record that any of these areas are contributing to alleged contamination at the Joliet 29 Station. Nevertheless, the Board still "finds that the evidence establishes that it is more probable than not that these historical coal ash storage and fill areas are contributing to the groundwater contamination." Interim Order, p. 28, para 3. The Board should reconsider this conclusion because it has no basis in the record. The Board cannot simply assume that the historic ash areas are causing contamination of groundwater, and it is against the manifest weight of the evidence to make such an assumption. *See Helber v. Helber*, 180 Ill. App. 3d 507, 512 (5th Dist. 1989) (Court reversed trial court finding based upon an assumption because it was against the evidence produced at trial). *Bd. of Educ. V. Cady*, 369 Ill. App.3d 486, 497 (1st Dist. 2006) (Court reversed Administrative Law Judge ("ALJ") because the ALJ made assumptions that were against the manifest weight of the evidence presenting at hearing, which showed the opposite of her findings).

The Board appears to place some reliance on evidence that MWG did not conduct a detailed investigation of the Joliet 29 historic ash fill areas. The Board points out that for the Northeast Area at the Joliet 29 Station, "[o]ther than visual inspections, MWG did not investigate the area…MWG also never took samples from this area." Interim Order, p 27. For the Southwest Area, the Board states that MWG did not take leach tests and concludes "MWG has not fully evaluated the content of the area and its potential to contaminate the groundwater." Interim Order, p 27, para 1. But simultaneously, the Board notes that MWG did in fact perform leachate testing in the Northwest Area which demonstrated that "most of the evaluated samples showed that the materials met the Act's criteria for beneficial use, had levels of boron, manganese and barium below Class I GQS and leached less metals than allowed by the Act." Interim Order, p.28, para 1. Nevertheless, the Board summarily dismisses the results of the leachate testing based on the fact that one sample location showed elevated levels of metals unrelated to coal ash and the Board could not find evidence that the area was removed. In fact, the record shows that the ash was removed shortly after the material was analyzed. *See* Hearing Ex. 903, p. 47 (MWG's Expert Report) ("Approximately 1,068 tons of fill material containing historical ash was excavated and

disposed off-site at a landfill during the week of November 21, 2005. The excavation was backfilled using surficial materials near the excavation area. Following the excavation, the historic ash in the area met the CCB criteria under 415 ILCS 5/3.135.") *citing* KPRG and Associates Inc. Coal Ash and Slag Removal - Joliet Station #29 Report, December 6, 2005, attached here as Ex. 9.

The Board essentially states that despite having no evidence that the historic fill areas are causing contamination, MWG must prove to the Board that the historic fill areas are *not* causing contamination. Even when MWG provides proof in the form of actual ash and leachate sampling, the Board incorrectly dismisses the results. That result turns the entire burden of proof on its head. The Board is in error to require MWG to disprove allegations of violations that Complainants did not even bother to attempt to prove, and for that reason alone the Board should reverse its decision regarding the Joliet 29 historic ash areas.

B. Improper Burden Shifting at Powerton Station

Similarly, the Board shifts the burden of proof to require MWG to prove that the East Yard Run-off Basin and the Limestone Run-off Basin at Powerton are *not* contributing to contamination in the groundwater. Interim Opinion, p. 40-42. The Board speculates that the East Yard Run-off Basin and the Limestone Run-off Basin at Powerton "may" be leaking into the groundwater. Interim Opinion p.40, para. 3, 4. However, the Board's speculations are rebutted by its own findings based on the evidence presented at the hearing. The Board agrees that the East Yard Basin is used for stormwater run-off, not ash, but speculates that the basin "may contain coal ash that is leaking into the groundwater." Interim Opinion, p. 40, para. 3. The Board appears to suggest that MWG must somehow prove that the East Yard Basin is not leaching ash contaminants even when the evidence shows there is no ash. When MWG provides proof in the form of sample results to show that the East Yard Basin has no ash in it, the Board dismisses or ignores the evidence. *See* Hearing Ex. 711 (Illinois EPA Letter regarding East Yard Basin results) and *infra* Sec. III.B.6 and III.B.7. Because the sampling analysis (Hearing Ex. 711) shows that the basin does not contain coal ash constituents, the Board cannot assume that the East Yard Run-off Basin is leaking without any evidence. Similarly, the Board finds that the Limestone Basin has been empty since 2013. Interim Opinion, p. 40, para. 4. Yet, the Board speculates that the Limestone Basin "may" be leaking into the groundwater. Interim Opinion, p. 41, para. 1. The Board is in error to assume and speculate that these areas "may" be contributing contaminates into the groundwater, particularly when MWG established that both areas do not contain ash. The Board's speculation or

assumption on what "may" be leaking without evidence improperly shifts the burden to require MWG to prove that these areas are not leaking.

The Board also shifts the burden to MWG by finding that ash placed on the ground at Powerton for two months in the winter before the CCAs were signed created a "water pollution hazard" in violation of Section 12(d) of the Act. Interim Opinion, p. 42, 86. To find a violation of Section 12(d) of the Act, the Board must make a finding that the ash was in *sufficient quantity and concentration* to create a water pollution hazard. *Bliss v. IPCB,* 138 Ill.App.3d 699, 704 (5th Dist. 1985)(finding the mere presence of a potential source of water pollutants on the land does not constitute a water pollution hazard). Similarly, the Board must find that there is a threat of a *serious* nature before it can find a water pollution hazard. *Tri-County Landfill v. Illinois EPA,* 41 Ill. App. 3d 249, 258 (2nd Dist. 1976)(where the threat was "pollution of a whole populace's water supply.") In *Bliss*, the Illinois EPA presented evidence that Bliss sprayed oil containing TCE in sufficient quantity to puddle on the ground and 1,200 feet from a river. *Id*. However, because no effort was made to establish the quantity and concentration of TCE that could render the waters harmful, the Court held that there was no water pollution hazard. *Id*. In this case, the Board and the Complainants made no effort to establish the quantity or concentration of ash placed on ground that could impact or even threaten to impact groundwater. Instead, the Board merely assumes that the ash placed in one location at Powerton for two to three months in the winter caused constituents to leak into the groundwater, without identifying any facts to support that assumption. Complainants failed to provide the Board with *any* evidence that ash placed on the ground by a contractor, in winter, was in sufficient quantity or concentration to impact or threaten an impact. There was no testimony about the amount of ash placed on the ground, no testimony connecting the ash on the ground to the groundwater when ground is frozen in winter, and no testimony about the timeframe that would be needed for any of the constituents to possibly leach into groundwater.[16] Similarly, there was no testimony or evidence that the temporary storage of ash in the winter was a serious threat to public health or the environment. In fact, the Board recognizes the absence of evidence, stating that Complainants' post-hearing brief does not address section 12(d). Interim Opinion, p. 86, *citing* only to Complainants' Brief.[17]

[16] Mr. Kelly testified that the ash was temporarily placed on the ground for about two to three months "during the winter time..." 1/31/19 Tr. p. 184:23-185:16.

[17] Again, had MWG been on notice that the Board would *sua sponte* finding that this incident was a violation of 12(d), MWG would have presented expert evidence to the contrary.

The monitoring wells cited by the Board do not support a finding that the brief placement of ash caused any impact or threat to groundwater so as to result in a water pollution hazard. The Board identifies MW-9, 12, 13 and 14 as the "closest wells" to the area where the ash was placed for two-months and states that arsenic sulfate, boron, and TDS are constituents detected above the Class I standard in those wells. Interim Opinion, p. 42. MWG voluntarily began monitoring the groundwater in December 2010, and a comparison of the groundwater monitoring results from December 2010 through December 2012 show no overall change to the groundwater sample results. Hearing Ex. 810, pp. 17, 23, 25, 27. Instead, while there are nominal variations in the concentrations of arsenic, boron, sulfate and TDS, there is no significant increase in any of the constituents at any specific time that could be connected to a short-term placement of ash. Hearing Ex. 810, pp. 17, 23, 25, 27. In fact from December 2010 through December 2012, , the boron concentrations in two of the four wells were below the Class I standards (MW-12, 14), the TDS were below the Class I standards in two of the four wells (MW-9, 12), and the arsenic and sulfate concentrations in one of wells were below the Class I standards (MW-9). *Id*. Moreover, there is certainly no evidence of a threat of a serious nature as required by *Tri-County Landfill.* There are no drinking water wells downgradient of the Powerton Station (Interim Opinion, p. 43, para. 1) and no issue of risk (*see* Ex. 903, App. B, and Ex. 907, MWG's Surface Water Risk Characterization), thus there is no serious threat to public health or the environment. There simply is no basis to conclude there was a "water pollution hazard" as a result of the one-time, short-term event in which there is no evidence that the constituents would be able to migrate from the ash to the groundwater.

The only actual evidence in the record establishes that the historic fill areas are *not* a cause of groundwater impact. MWG conducted sampling of historic fill areas of coal ash at three of its Stations in 2004 (Powerton), 2005 (Joliet 29), and 2015 (Will County). Hearing Ex. 901 (Expert testimony presentation), p. 9, SOF 145. None of the samples showed elevated levels of constituents that the Board identified as indicative of coal ash. *See Id*., Interim Order, p. 20 (U.S. EPA's list of coal ash indicators). The Board agreed that the coal ash at each of the MWG Stations possessed similar constituents. Interim Order, p. 20. Thus, the coal ash in one location would be representative of coal ash in another area. Moreover, the Board found that the only other large fill area of landfilled historic ash, the Former Ash Basin at the Powerton Station, was not a source of contamination at the Station. Interim Order, p. 41. Compared to the absence of any evidence that the Joliet 29 historic areas and Powerton historic areas are actually contributing to groundwater contamination, the evidence that other historic areas are not

causing contamination is sufficient to show that the historic ash areas are not causing contamination of the groundwater.

III. THE BOARD ERRS AND OVERLOOKS FACTS REGARDING THE MWG STATIONS

There is no question that this is a complex case with a voluminous record.[18] Likely due to the voluminous record, the Board overlooks facts in its Interim Order that result in errors in the Board's findings for each of the MWG Stations. The Board should reconsider its opinion and correct the errors identified. *City of Quincy v. Illinois Environmental Protection Agency*, PCB 08-86, 2010 Ill. ENV LEXIS 213, *48 (June 17, 2010), *citing Wei Enterprises v. IEPA,* PCB04-23, slip op. at 3 (Feb. 19, 2004).

A. The Board's Errors Regarding the Joliet 29 Station

The Board overlooks facts concerning whether the ash ponds at the Joliet 29 Station were impacting the groundwater. The Board incorrectly concludes that the poz-o-pac liners and HDPE liners in the ponds were cracked or damaged without supporting evidence, and the Board makes inconsistent findings about specific constituents in the groundwater.

1. The Board Overlooks Evidence Regarding the Condition of the Poz-o-Pac at Joliet 29

There is no basis to support the Board's finding that the poz-o-pac liners at each of the three ash ponds at the Joliet 29 Station were "cracked." Interim Order, p. 26, para. 1. The Board uses its finding of damaged poz-o-pac to incorrectly conclude that all the ponds leached contaminants into the groundwater. Interim Order, p.26, para 1. The Board's conclusion that all three ponds leaked is not supported by evidence in the record and should be reconsidered. The only evidence the Board relies on related to the Joliet 29 Stations is, as the Board describes it, an "assumption" that the poz-o-pac was in poor condition. Board Opinion, p. 25, *see also* SOF 416, 10/27/17 Tr. p. 12:22-13:3. Conclusions based upon assumptions are against the manifest weight of the evidence when evidence produced proves otherwise. *See Helber v. Helber*, 180 Ill. App. 3d 507, 512 (5th Dist. 1989) (Court reversed trial court finding based upon an assumption because it was against the evidence produced at trial). *Bd. of Educ. V. Cady*, 369 Ill. App.3d 486, 497 (1st Dist. 2006) (Court reversed Administrative Law Judge ("ALJ") because the ALJ made

[18] *See* Hearing Officer Order, PCB 13-15, June 21, 2016 at slip op. p. 1, Complainants' Response to MWG's Motion for Extension of Time to Respond to Complainants' Motion for Partial Summary Judgment at p. 6, and MWG's Response to Complainants' Motion for Partial Summary Judgment, at p. 1.

assumptions that were against the manifest weight of the evidence presenting at hearing, which showed the opposite of her findings).

The "assumption" the Board relies on consists only of a memorandum and its updates (Hearing Exs 34, 605 and 606) prepared by a consultant (NRT) MWG hired to perform an initial review of MWG's ponds. MWG retained NRT so that MWG could be proactive and prioritize a relining program for all its coal ash ponds. MWG Post-Hearing Brief, pp. 24-25. In relying on NRT's "assumption", the Board overlooks the facts that NRT did not observe or examine the poz-o-pac in the ponds, but simply assumed what the conditions might be. As stated during the hearing, NRT's review did *not* include an investigation of the condition of the ponds. 10/23/17 Tr. p. 168:10-12 (Race Test.) ("And did that include an investigation of the condition of the pond liners? No."). Ms. Race described NRT's review as "the best results [NRT] could come up with the information they had at hand in 2005." 10/23/17 Tr. p. 168:22-24. NRT did not actually go out to the ponds and inspect the liner ponds or sides. 10/24/17 Tr. at 11:11-14. NRT did not have any knowledge of the conditions of the liners when the NRT memos relied on by the Board were written. 10/24/17 Tr. p. 11:20-12:1. The Board then disregards the fact that when each of the ponds were emptied for the eventual relining, NRT's assumptions *were found to be incorrect*. The only evidence of the actual condition of the poz-o-pac in the three Joliet 29 ash ponds is that the liners were in "good condition" when they the ponds were emptied and the poz-o-pac was observed. 10/24/17 Tr. p. 13:15-14:1. Repeatedly, at each of the Stations, NRT's **assumptions** about the conditions of the ash ponds were eventually proven wrong.[19]

The other evidence the Board relies upon are two exhibits that do not support the conclusion that the Joliet 29 poz-o-pac was "cracked." The Board cites to Hearing Exhibit 303, which is a stormwater construction site report from Will County Station and has nothing to do with Joliet 29 Station. Interim Opinion, p. 25. The Board's citation to Hearing Exhibit 286 is equally lacking. While Hearing Exhibit 286 is a sampling analysis of poz-o-pac conducted to evaluate its condition, the Board ignores the findings of the poz-o-pac analysis. Testimony from the company that oversaw the poz-o-pac testing in Exhibit 286 explains that the test does *not* show any cracks. Richard Gnat of KPRG explained that the only cracks in the poz-o-pac were hair line cracks caused

[19] Complainants agree that NRT's assumptions were not always correct. NRT stated in its 2005 report that the Secondary Settling Basin had "no liner." Ex. 34, MWG13-15_23615. Yet, Complainants agreed in a Joint Agreed Stipulation that the Secondary Settling Basin at the Powerton Station had a Hypalon liner since before 1999. Joint Agreed Stipulation, No. 22.

by pulling the sample core. 10/26/17 Morning Tr. p. 69:4-22 (Gnat Test.). Mr. Gnat continued by explaining that the analysis showed no discoloration through the length of the core, meaning there was no indication of any cracks through the core of the poz-o-pac. *Id*. at 70:15-2. Additionally, Hearing Exhibit 286 shows that the permeability of the poz-o-pac was actually quite low. *See also*, MWG's Post-Hearing Brief, p. 22-23. In other words, Hearing Exhibit 268 shows that there were *no* cracks in the poz-o-pac, and that the concrete-like material was impermeable and not leaking.[20]

Because the Board made an assumption about the condition of the poz-o-pac and overlooked all evidence that proved the assumption to be wrong, the Board should reconsider its conclusion that the poz-o-pac at the three ponds at the Joliet 29 Station was cracked or had become damaged.

2. The Board Overlooks Evidence Regarding the Condition of the HDPE liner at Joliet 29

There is also no basis to support the Board's finding that the HDPE liners at the Joliet 29 Station were cracked or damaged. Interim Opinion, p. 26, para. 1. Again, the Board uses this finding to support its conclusion that the Joliet 29 ash ponds "did leach contaminants into the groundwater." Interim Order, p. 26, para.1. The Board fails to consider the ash ponds individually but makes broad generalizations about the ash ponds for which there is no support. The Board cites to no evidence, because there is none, that the HPDE liners in the ash ponds at the Joliet 29 Station were ever damaged. Instead, the Board relies upon two emails that discuss the liners at an entirely different station. Hearing Exhibit 306, cited by the Board, is an email from Rebecca Maddox, the environmental specialist at the Will County Station, and her email expresses her preliminary concerns over the liners at Will County. Hearing Ex. 306. The Board overlooks Ms. Maddox's direct testimony in which she states she had no basis for her concerns regarding the HDPE liners. 10/24/17 Tr. p. 236:1-4. Rather, as Ms. Maddox explained, she was not an expert on geomembranes and as a layperson, she was posing questions for the experts to provide additional information. 10/24/17 Tr. p. 236:3-11. Ms. Maddox added that she used incorrect language and terminology in her email. 10/24/17 Tr. p. 236:14-18. In fact, Ms. Maddox explained that following that email, her questions and concerns were resolved. 10/24/17 Tr. p. 262:9-19. The fact that

[20] One of the citations the Board relies on is not evidence that may be used in consideration of the Board's finding. The Board's citation to the October 23, 2017 Transcript, on page 16, is the opening statement by MWG's counsel and is not evidence. *Schmidt v. Joseph*, 315 Ill.App.3d 77, 84 (1st Dist. 2000). Accordingly, the Board should delete the citation "10/23/17 Tr. at 16" on page 25 of the Interim Order. In any case, MWG's counsel also stated that the poz-o-pac was not cracked and witnesses would testify that it was in "really good shape." Id at p. 17.

Hearing Exhibit 306 is only about Will County, along with Ms. Maddox's explanations, clearly do not support the Board's conclusion that the HDPE liners at Joliet 29 could be damaged. Similarly, the Board's citation to Hearing Exhibit 307 provides no support to the Board because it too is about Will County ("3S Ash Pond Liner Damage – Will County.") (emphasis added). Hearing Exhibit 307 has nothing to do with the Joliet 29 Station or the HDPE liners in any of the Joliet 29 ash ponds.

After citing to exhibits about a different Station, the Board then overlooks the actual evidence presented regarding the condition of the ash pond liners at Joliet 29. The evidence presented at hearing about the condition of the HDPE liner in Ash Pond 1 is that once the HDPE liner was installed, a leak detection check showed there were no leaks in the liner. Hearing Ex. 610 (Ash Pond 1 & 2 Const. Doc.), 1/29/18 Tr. 238:19-239:2 (Race Test.), MWG SOF 443. The Board entirely overlooks the construction documentation for the Ash Pond 1 relining. In fact, all of the ash in Pond 1 was removed in 2015. Interim Opinion, p. 23, para. 1; JAS No. 12. No evidence was presented at the hearing that any tears occurred when the ash was removed from Ash Pond 1.

Similarly, the evidence presented at hearing about the condition of the HDPE liner in Ash Pond 2 is that during the construction of the Pond 2 HDPE liner, a leak was detected that was repaired. Hearing Ex. 610 (Ash Pond 1 & 2 Const. Doc.), 1/29/18 Tr. p. 238:19-240:12, MWG SOF 444. The Ash Pond 1 & 2 construction documentation noted that the HDPE liner in Pond 2 had two holes that were patched before the pond was placed back into service. Hearing Ex. 610, p. MWG13-15_49493-49494, 1/31/28 Tr. p. 62:15-63:4. No other evidence of any damage to the HDPE liner at Pond 2 was presented at the hearing.

The evidence about the condition of the HDPE liner in Ash Pond 3 is the liner construction documentation, which the Board overlooks. Hearing Ex. 629 (Ash Pond 3 Const. Doc.). The leak location detection system employed after the liner was installed in Pond 3 detected no leaks in the HDPE liner. Hearing Ex. 629, MWG13-15_33867 (Ash Pond 3 Const. Doc.); 1/30/18 Tr. p. 44:12-14; MWG SOF 574. Further, the Board agrees that Ash Pond 3 at Joliet 29 received only a *de minimis* amount of ash and no ash accumulates in the pond. Interim Order, p. 23. Thus, Pond 3 was never dredged, eliminating any risk of damage to the HDPE liner. In fact, the Board finds that it was uncontested that the influent into Ash Pond 3 looked like clear water. *Id.* So, even if there was a leak in Ash Pond 3, and there was no evidence that even occurred, the leak would have only been of water.

It appears that the Board also assumed, without any basis, that MWG placed coal ash below the HDPE liner during construction to support its conclusions that Ash Pond 3 was a source of

contamination. The Board first makes this general finding without reference to any particular pond, stating "when relining ponds in 2007, NRT suggested leaving bottom ash between poz-o-pac and HDPE liner at Joliet 29…" Interim Opinion, p. 25, para. 6, citing Hearing Ex. 22. The Board overlooks the fact that while this was suggested in an email, it never actually occurred. The construction documentation for Ash Ponds 1 & 2, which the Board ignores, specifies the exact material used for each layer and shows that neither of the ponds used bottom ash as a bedding material, but instead use 16-oz non-woven geotextile material as a cushion. Hearing Ex. 610 (Ash Pond 1& 2 Const. Doc.), at MWG13-15_49507. The Board makes the reference again as to Ash Pond 3, stating "there may be coal ash remaining in Ash Pond 3 between its layers…" Interim Order, p. 33, *citing* Ex. 32. The exhibit the Board relies upon is about the Powerton Station and has nothing to do with Ash Pond 3 at the Joliet 29 Station. Exhibit 32 is an email dated July 24, 2008 about installing a rail line at the Powerton Station. Not only is it about a different Station, Exhibit 32 has no relation to ash under a liner. The Board overlooks Ms. Race's explicit testimony that Exhibit 32 was a part of the "work in 2008 we were just talking about and *putting in the rail line*…" 10/23/17 Tr. p. 157:22-24 (*emphasis added*). The topic Ms. Race was "just talking about" was putting in a rail line at the Powerton Station. 10/23/17 Tr. p. 152:5-17 (Discussion regarding Exhibit 31). The Board then cites to Ms. Race's testimony, which is also about installing the rail line at the Powerton Station. 10/23/17 Tr. at 156:18-162:21 (Race Test.). Neither Exhibit 32 nor Ms. Race's testimony cited by the Board support the Board's conclusion that any ash was left below the HDPE liner at Ash Pond 3 at Joliet 29 Station. The Board overlooks the Ash Pond 3 construction documentation that shows the various layers of the liner system at Ash Pond 3 after construction, none of which is a layer of ash. Hearing Exhibit 629 (Ash Pond 3 Const. Doc). The construction documentation shows that the only cushion used was a 16-oz non-woven geotextile per the industry standard. *Id.* at Sheet No. C031, "Details and Sections", MWG13-15_33996. Moreover, the Board overlooks Illinois EPA's review and approval of the construction permit for the HDPE liner, which includes use of a geotextile as a cushion layer, not ash. MWG SOF 569. In the final construction, no ash remained beneath the HDPE at Joliet 29 Pond 3.

The Board should reconsider its opinion regarding the HDPE liners at Joliet 29. In particular, MWG requests that the Board revise its opinion that the HDPE liners at the Joliet 29 Station cracked or caused contamination because no evidence was presented at hearing that such damage occurred, and it cannot be based on a mere assumption. Based upon evidence presented at hearing that the poz-o-pac liners and HDPE liners at Joliet 29 were not cracked or damaged, there

is no support for the Board's final conclusion that the Joliet 29 ash ponds leached ash contaminants to groundwater.

3. The Board Makes Inconsistent Conclusions Regarding Certain Constituents at Joliet 29

The Board makes conflicting findings about certain constituents in the groundwater at Joliet 29 that require reconsideration and revision. The Board first states in its Order that that antimony in the groundwater at Joliet 29 is not from any of the coal ash at Joliet 29. Interim Order, p. 31. Specifically, the Board states "Accordingly, the Board finds that the Environmental Groups have **not** proven that it is more likely than not that the coal ash stored at the site in the ash ponds or outside of the ash ponds is causing or contributing to the exceedances of antimony standard in Joliet 29's downgradient wells MW-02, 03, and 04 during 2010-13." *Id.* Antimony was not detected above the standard in any well after 2013. Interim Opinion, Table 1. Similarly, for cadmium and lead, the Board finds that "the Environmental Groups have not proven that it is more likely than not that the coal ash stored at the site in the ash ponds or outside the ash ponds caused or contributed to the exceedances of cadmium and lead standards in monitoring well MW-11 at Joliet 29." Interim Opinion, p. 32. Consistent with this finding for cadmium and lead, the Board does not include cadmium and lead as violations of Class I groundwater standards. Interim Opinion, p. 81. Despite its same finding for antimony (Interim Order, p. 31), the Board finds that exceedances of antimony are in violation of the Class I groundwater standards. Interim Opinion, p. 81. MWG requests that the Board revise its Opinion by deleting any reference to violations of the Class I standards for antimony at the Joliet 29 Station. Interim Opinion, p. 81.

Similarly, the Board correctly finds that boron detected in 2011 in one monitoring well was not caused by coal ash in the Joliet 29 ash ponds, nor any alleged coal ash stored outside the ash ponds. Interim Opinion, p. 32. Specifically the Board states "Given that the seven-year monitoring results show only two exceedances of the boron standard in one upgradient monitoring well and no exceedances in any of the other wells, the Board finds that the Environmental Groups have not proven that it is more likely than not that the coal ash stored at the site in the ash ponds or outside the ash ponds caused or contributed to the exceedances of the boron standard in the upgradient well at Joliet 29." *Id.* The Board also finds that the boron at Joliet 29 did not exceed the 90th percentile of background, except for an upgradient well, and "the coal ash stored in ash ponds or coal ash deposits outside of the ash ponds at the Joliet 29 site are not the likely sources causing boron exceedances in MW-11." Interim Opinion, p. 35. Based on this finding, the Board, correctly, did not identify boron as one of the exceedances of the

Class I standards at Joliet 29. Interim Opinion, p. 81. And yet later in the Interim Order, the Board ultimately concludes that the statewide 90th percentile levels were exceeded for boron "at all four stations between 2010 and 2017." Interim Opinion, p. 92. MWG requests that the Board revise its Order to state that boron detected at the Joliet 29 Station was not an exceedance of the statewide 90th percentile levels.

B. <u>The Board's Errors Regarding the Powerton Station</u>

The Board makes a series of errors with regards to the ash ponds and historic ash areas at the Powerton Station. The Board's errors are significant and require the Board to reconsider its opinion and reverse its final conclusion for Powerton that it is "more likely than not that the ash ponds did leach contaminants into the groundwater." Interim Order, p. 40, para 1.

1. The Board Overlooks Evidence Regarding the Condition of the Poz-o-Pac at the Powerton Station

Just like the incorrect conclusions regarding the Joliet 29 poz-o-pac, there is no basis for the Board's conclusion that poz-o-pac liners at three of the four ponds at the Powerton Station were in "poor" condition. Interim Order, p. 39, para. 3. Absolutely no evidence was presented that showed that the poz-o-pac liners at the Powerton Station were actually cracked or in poor condition. Again, the only evidence the Board relies upon concerning the Powerton Station is the NRT memo which made an "assumption" about the condition of the poz-o-pac based only on supposition. Interim Order, p. 25, *see also* SOF 416, 10/27/17 Tr. p. 12:22-13:3. The Board overlooks that NRT did not "investigate" the ponds, did not actually observe or examine the poz-o-pac bottom or sides of any of the ponds, and did not have any actual knowledge of the condition of the poz-o-pac. 10/23/17 Tr. p. 168:10-12, 10/24/17 Tr. p. 11:20-12:1. Moreover, as with Joliet 29, NRT's "assumption" turned out to be wrong. The only evidence of the actual condition of the poz-o-pac liners at all of the Powerton ash ponds when they were revealed and observed was testimony from the Powerton Chemical Specialist that he personally observed that the poz-o-pac in the ash ponds was "smooth" and in "good condition." Kelly testimony, 1/31/18 Tr. pp 84:18-20, 105:2-6, 121:20-21. NRT's "assumptions", improperly relied on by the Board as evidence, were directly rebutted and proved incorrect by actual observation. NRT's "assumptions" simply cannot form the basis of any finding.[21]

[21] *Helber v. Helber*, 180 Ill. App. 3d 507, 512 (5th Dist. 1989) (Court reversed trial court finding based upon an assumption because it was against the evidence produced at trial). *Bd. of Educ. V. Cady*, 369 Ill. App.3d 486, 497 (1st

2. No Evidence that the Powerton Liners Were Installed Incorrectly

The Board mistakenly concludes, without support, that the liners at all the ponds at Powerton had "issues" or were installed incorrectly. Interim Order, p. 39, para. 3. The Board relies upon Hearing Exhibits 107, 108 and 109 to support its findings that the liners "had occasional issues", "weren't installed incorrectly" or "may have been damaged", yet the Board ignores the testimony that discusses those exhibits. Interim Order, p. 39. Hearing Exhibits 107, 108, and 109 are three emails that discuss only one of the Powerton Ash ponds, the Secondary Ash Basin, and have nothing to do with any of the other ash ponds at Powerton.[22] For that very reason, the Board is in error to apply broad conclusions about all of the Powerton ash ponds based upon three brief emails regarding only one pond.

In any case, the exhibits the Board relies upon do not support its conclusions that there were issues with the original or new HDPE liners in the ash ponds at the Powerton Station. Hearing Exhibit 107 is an email dated April 9, 2013 at the beginning of the liner construction process. The email consists of a hypothetical discussion about whether the Secondary Ash Basin needed to be cleaned in the future due to concerns about proximity to the Illinois River.[23] Hearing Exhibit 108 is an email dated March 27, 2013, also during the construction of the HDPE liner, and concerns the original liner installed over thirty years prior. In the email, the author speculates that the original Hypalon liner "may" not have been constructed as designed, but "no one can recall a time when the basin liner was damaged or altered." Hearing Ex. 108. While citing to this Exhibit 108, the Board overlooks the direct testimony of the MWG Station Chemist who personally observed the condition of the Hypalon liner when it was empty of water and stated that the liner was "in very good shape." 1/31/18 Tr. p. 131:3 (Kelly Test.). The Board is equally wrong to rely upon Exhibit 109 in support of its conclusions regarding the Powerton liners, because Hearing Exhibit 109 concerns the time period during the HDPE relining, before the pond was placed in service.[24] The Board cites to Hearing Exhibit 109 for the finding that the liners were incorrectly installed by quoting, "several areas of liner to the north of the weir wall pulled the backing strips away and the liner is loose." The Board fails to note that the pond was in the relining process at the time, the

Dist. 2006) (Court reversed Administrative Law Judge ("ALJ") because the ALJ made assumptions that were against the manifest weight of the evidence presenting at hearing, which showed the opposite of her findings).

[22] Notably, the Board found that it was uncontested that the Secondary Ash Basin receives de minimis ash, thus any alleged issues with the liner would have resulted in no release of ash from the basin. Interim Order at 37.

[23] Exhibit 107 was entered over the objections of MWG. The witness, Mr. Lux, stated that he was only "vaguely" familiar with the email chain in Exhibit 107 and he was only copied on the email, but was not an author. 10/24/18 Tr. p. 94:1-6.

[24] Hearing Exhibit 109 was also entered over MWG's objections. The exhibit is incomplete and did not contain photos referenced in the exhibit. 10/24/17 Tr. p. 104-107.

pond was completely empty, and the relining issue was fixed before the pond was placed in service. Mr. Christopher Lux, MWG's Engineering Manager, testified that at the time of the email in Exhibit 109, the "pond was in a relining process …so it was completely empty." 10/24/2017 Tr. p. 149:6-10.

The concerns expressed in Hearing Exhibits 107 and 108 regarding impact to the Secondary Ash Basin from the proximity to the Illinois River were resolved by the underdrain system installed under the Basin's liner, specifically designed to prevent any uplift from the river on the HDPE liner. 10/27/18 Tr. p. 103:3-109:9 (Kunkel Test.); MWG Ex. 710, MWG13-15_34261-34265 (Secondary Ash Basin Const. Doc.). Complainants' expert agreed that the purpose of the underdrain system was to quickly move the groundwater away from the HDPE liner, protected the liner, and was specifically designed to prevent uplift from the Illinois River. 10/27/17 Tr. p. 108:24-109:9 (Kunkel Test.). And, the Board agreed that once the underdrain system was installed in September 2013, there are no issues related to the river water impacting or moving the liner. Interim Order, at p. 39. Hearing Exhibits 107 and 108 give no support to the Board's finding that the HDPE liners were installed incorrectly.

While the Board incorrectly relies upon vague emails about one ash pond, the Board then neglects the detailed construction documentation showing that the HPDE liners were installed correctly and pursuant to industry standards. Hearing Ex. 703, 706, 710 (Powerton Ash Ponds Const. Docs.); 2/1/18 Tr. p. 244:4-6, 258:1-20, 258:1-259:5 (Seymour Test.). Because the Board makes no reference to the Construction Documentation for any of the Powerton relining projects, the Board appears to have overlooked that evidence.[25] Accordingly, the Board should reconsider its opinion regarding the liners at the Powerton Station and conclude that the ponds are not contributing contaminants to groundwater.

3. The Parties Stipulated that the Secondary Settling Basin had a Liner Since Before 1999

The Board overlooks the parties' Joint Agreed Stipulation when it incorrectly states the condition of the Secondary Ash Settling Basin as having "no liner." Interim Order, p. 39, para. 1. All parties agreed in the Joint Agreed Stipulations ("JAS") that "Since before 1999, the Powerton Secondary Ash Settling Basin had a Hypalon liner." JAS No. 22. Again, the Board erroneously relies on assumptions in the NRT memos. *See infra,* Sec. III.A.2 and III.B.1. The Board simply overlooks Joint Agreed Stipulation No. 22 and the explicit testimony of Mr. Kelly who observed the Hypalon liner when the pond was emptied and saw that it was "in very good shape..." 1/31/18 Tr. p. 131:3. The Board

[25] Similarly, the Board cannot rely on Complainants' expert's opinion about the liners because Complainants' expert stated that he had never seen the final construction reports and drawings for the relining projects at the Stations. 10/27/17 Tr. p. 169:1-18 (Kunkel Test.).

should reconsider its opinion regarding the liner status of the Secondary Settling Basin, and correct the statement, as stipulated by the Parties, that the Secondary Settling Basin had a Hypalon liner since before 1999. Interim Order, p. 39.

4. The Former Ash Basin was Inactive

The Board mistakenly finds that "some coal ash might have been left between the layers when relining the Former Ash Basin" as support for the conclusion that the basin may be leaching. Interim Order, p. 39, B.i. The Former Ash Basin is an inactive basin that has been unused since MWG began operating Powerton in 1999. MWG Post-Hearing Brief, p. 17, *citing*, SOF 244-245. Moreover, the Former Ash Basin could not have had ash "between the layers when relining" as the Board asserts because it was unused and not relined. The Board relies on Exhibit 32 and testimony of Maria Race for its finding, both of which are wholly unrelated to liners in the Former Ash Basin. In the testimony relied upon by the Board, Ms. Race testified that Exhibit 32 concerns "putting in the rail line" at the Powerton Station. 10/23/17 Tr. at 157:22-24. The rail line Ms. Race is discussing is identified in Exhibit 31 and concerns geotechnical work in the Former Ash Basin to install a rail loop. 10/23/17 Tr. at 152:5-17. MWG bifurcated the Former Ash Basin by a rail line and used the ash as structural fill. 10/23/17 Tr. at 154:3-6. Ms. Race further explained that to bifurcate the Former Ash Basin with a rail line, the engineers needed to build up the level of the height of the rail line to ensure the rail line was never underwater. 10/23/17 Tr. at 159:24-160:13. At no point did Ms. Race testify that the Former Ash Basin was being relined or that ash would be under a liner. The Board should reconsider its opinion and correct the mistake that the Former Ash Basin had ash beneath a liner.

5. The Board's Finding That Water Rose 30-Feet Above the Bottom of the Secondary Ash Settling Basin is Impossible

The Board's suggestion that river water rose 30 feet above the base of the Secondary Ash Basin is impossible. Interim Order p. 39, para. 4. The Board relies on this statement to support its conclusion that the Secondary Ash Basin may be contributing to groundwater impacts apparently due to flooding. None of the documents that the Board relies upon for this statement state that the water rose 30 feet above the bottom of the Secondary Ash Basin and the Board seems to simply adopt this conclusion from Complainants' Post Hearing Brief without any critical analysis. Complainants' Post Hearing Brief, p. 45 ("Water at an elevation of 470 feet would have been thirty feet above the bottom of the secondary ash settling basin"). The approximate bottom elevation of the Secondary Ash Settling Basin was at 440 feet before construction of the liner and the typical water elevation is 453 feet, although the basin's height is at 460 feet. *See* Hearing Ex. 710, (Secondary Ash Settling Basin Construction Documentation,

at Sheet No. C010), MWG13-15_34262. For the water to rise 30 feet above the base of the Secondary Ash Settling Basin, the water would be 10 feet above the top of the basin. Hearing Ex. 901, p. 32 (MWG Expert Presentation). That is simply impossible. According to basic physics, water finds its level.[26] If the river water were 10-feet above the top of the Secondary Ash Settling Basin, then the water would have flooded the entire Powerton Station.[27] No testimony nor exhibits showed that the Powerton Station ever flooded to any significant extent. Rather, the according U.S. Army Corp. of Engineers, the highest the Illinois River has ever crested at Peoria (the closest river gage) is 29.35 feet on April 23, 2019. *See* U.S. Army Corp. of Engineers River Gage at Peoria attached as Ex. 10.[28] Because the Gage Zero is 428.40 feet, the highest the Illinois River reached at the Peoria gage was 457.75 ft.[29] MWG was relining the Secondary Ash Settling Basin at the same time that the Illinois River reached its highest crest. *See* Ex. 710 (Secondary Ash Settling Basin Const. Doc.). While MWG witnesses testified that there was some limited flooding, no one testified that the flooding reached 10-feet *above* the top of the Secondary Ash Settling Basin. Instead, MWG witness testified that Illinois River reached an all-time high and river water was seeping into the empty Secondary Ash Settling Basin. 1/31/18 Tr. p. 131:20-132:6.

In support of its "30-feet" statement, it appears the Board relies on a speculative remark by Ms. Race made while she was discussing the Application for a Construction Permit to reline the Secondary Ash Settling Basin, identified as Exhibit 33. While looking at a figure of the basin, Ms. Race was asked whether she was familiar with the bottom elevation of the pond, and she testified that she was not. 10/23/17 Tr. at 164:12-14. She then stated that she remembered that the river rose very high during a big flooding and estimated that it was "around 470 probably" but stated that "It wasn't in the plant proper…" 10/23/17 Tr. at 164:18-24. First, Ms. Race stated the *river* rose to "470," not water at the Powerton Station. Second, Ms. Race was purely speculating on the level and it is not at all clear what Ms. Race meant by the "470" reference. None of the other citations the Board relies on state that the flooding at the Powerton Station was severe at the Station. Because the Board is in error to rely upon a speculative remark unsupported by any documentary evidence, MWG requests that the Board

[26] This is based on Pascal's Principle. http://demonstrations.wolfram.com/PascalsPrinciple/

[27] The basin closest to the Powerton Station and with the highest elevation is the Bypass Basin. See Ex. 706, MWG13-15_49227. The top of the Bypass Basin is approximately 469 feet. *Id*. Accordingly, if the water were actually at 470 feet at the Powerton Station, then at least a foot of water would have entered and flooded the Powerton Station.

[28] http://rivergages.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=PIAI2&fid=PIAI2&dt=S. The Board may consider new documents in a motion to reconsider. *See supra* FN 4.

[29] The "Gage Zero" is the reference elevation of a stream gage and the gage zero plus the stage reading gives the approximate elevation of the water surface in a known datum. http://rivergages.mvr.usace.army.mil/WaterControl/glossary2.cfm.

reconsider and modify its Order by striking the incorrect reference to water rising 30 feet above the bottom of the Secondary Ash Settling Basin.

6. Errors Concerning Historic Ash Areas Identified by the Board

In discussing "Historical Coal Ash Sites" at Powerton, the Board identifies three historic coal ash storage areas (Interim Order, p. 40, para. 1) and mistakenly concludes that two of them, the East Yard Runoff Basin and the Lime Stone Runoff Basin, are "causing or contributing to GQS exceedances at the Station." Interim Order, p. 42, para 2. As to the third area, the Former Ash Basin, the Board correctly finds that this area is not shown to be a source of contamination at the Station. Interim Order, p. 41, para. 41. The discussion of the Former Ash Basin as a historic storage area, however, is inconsistent with the Board's earlier discussion of the Former Ash Basin as an "ash pond" that may have had ash beneath a liner. *See* Interim Order, p. 39, para. 3.

a. <u>The East Yard Runoff Basin Contains No Ash</u>

The Board states, without evidence, that the East Yard Runoff Basin "may contain coal ash that is leaking into groundwater." The Board overlooks evidence that shows the East Yard Runoff Basin has no ash constituents in the pond or the water. The Board correctly notes that the East Yard Runoff Basin is not a part of the ash sluicing flow system and does not receive nor store ash. Interim Order, p. 40. Instead, it only receives stormwater. *Id*. However, the Board then states that the record does not "provide information about the content or condition of this basin." *Id*. That is simply not true. Mr. Kelly specifically testified that the East Yard Runoff Basin receives "rain runoff from the east half of the property." 1/31/18 Tr. p. 138:13-14. Mr. Kelly further testified that MWG sampled and analyzed the water in the East Yard Runoff basin for two years on a quarterly basis. 1/31/18 Tr. p. 138:15-139:1. The sampling and analysis was agreed to in the CCA approved by the Illinois EPA and MWG submitted the results to Illinois EPA. Hearing Ex. 636, § III.5.l. (Powerton CCA); Hearing Ex. 711, (Illinois EPA Letter regarding East Yard Run-off Basin Sampling). Following the two years of analysis, the Illinois EPA agreed that there were no elevated concentrations of ash indicator constituents in the sample results, other than chlorides, which the Illinois EPA concluded was due to de-icing agents. *Id*. The Board should reconsider its finding that the East Yard Run-off Basin may be contributing to groundwater impact.

b. <u>The Limestone Basin is Empty, and Cannot Leak Anything into the Ground</u>

The Board's conclusions regarding the Limestone Basin are inconsistent and against the manifest weight of the evidence. Interim Order, p. 40. At first, the Board correctly finds, based upon the

testimony of Mark Kelly, that the Limestone Basin has been empty since 2013. Interim Order, p. 40, para. 4 citing 1/31/18 Tr. 144:7-145:1 (Kelly Test.). The Board then describes that in 2004 there was ash in the basin and references a 2004 report analyzing the sample results of the ash held in the Limestone Basin. *Id*. Based upon the 2004 data, the Board concludes that the ash historically in the Limestone Basin did not meet the Class I groundwater quality standards. Interim Order, p. 40, para 4 through p. 41. Despite agreeing that the Limestone Basin is empty, the Board concludes that "material from this basin *may be* leaking contaminants into the groundwater." *Id.* p. 41, para. 1. That conclusion is incorrect, because – as the Board initially found – the Limestone Basin is empty. Mr. Kelly specifically testified that in 2013, MWG removed all the material in the Limestone Basin, including the Hypalon liner and "just totally cleaned it out." 1/31/18 Tr. 144:7-145:1 (Kelly Test.). Because the Limestone Basin has no material in the basin, nothing could be leaking contaminants into the ground. The Board should reconsider its opinion regarding the Limestone Basin and modify its opinion to reconcile its conclusion that the Limestone Basin is empty and has been empty for six years.

The Board also is in error to assume that the poz-o-pac in the Limestone Basin "easily cracked." Interim Opinion, p. 41, para. 1. The Board cites to no evidence in the record for that statement and there is no evidence in the record that the poz-o-pac in the Limestone Runoff Basin was cracked. Rather, the evidence presented at hearing shows that the poz-o-pac at the Powerton Station was in good condition. The MWG witness who actually observed the poz-o-pac in the ash ponds at the Powerton Station stated that the poz-o-pac he observed in the Metal Cleaning Basin, Ash Surge Basin, and the Bypass Basin was in excellent condition. Kelly Testimony, 1/31/19 Tr. p. 121:20-122:1 (Metal Cleaning Basin), 104:17-105:1, 113:7-14 (Bypass Basin); 84:18-20 (Ash Surge Basin). The Board's unsupported assumptions about the poz-o-pac and its incorrect conclusions about the contents of the Limestone Basin lead it incorrectly assume that the basin is leaching. The Board should reconsider its opinion regarding the Limestone Basin and modify its opinion that because the basin is empty, the basin cannot be leaking ash indicator constituents.

7. The Board Makes Inconsistent Conclusions Regarding Certain Constituents at Powerton

The Board makes conflicting findings about constituents in the groundwater at Powerton that require reconsideration and revision. The Board correctly states in its Interim Order that antimony, lead, selenium, and thallium in the groundwater at Powerton is not from the MWG operations and not from coal ash stored at the site in the ash ponds or outside the ash ponds. Interim Order, pp. 48-49. Yet, later in its opinion, the Board finds that antimony and selenium, but not lead or thallium, were exceedances

in violation of the Class I groundwater standards. Interim Order, p. 81. MWG requests that the Board reconsider and revise its opinion by deleting any reference to violations of the Class I standards for antimony and selenium at the Powerton Station. Interim Order, p. 81.

C. <u>The Board's Errors Regarding the Will County Station</u>

The Board begins its discussion about Will County by carrying forward the same errors it made for the other MWG Stations. The Board relies on the opinion of the Complainant's expert, James Kunkel, to conclude there have been "past and current leaks in the liners of four ash ponds …" Interim Order, p. 54, para B.i. Yet, the Board ignores the fact that Dr. Kunkel *never* saw and *never* reviewed the detailed Construction Documentation for each ash pond. 10/27/17 Tr. p. 169:1-18. As with Joliet 29 and Powerton, the Board overlooks the Construction Documentation showing how the Will County ash ponds were relined, and ash was not used as cushion material. Hearing Exs. 505, 506, 507, 508, and 510 (Will County Ash Pond Construction Documentation). Hearing Exhibit 505, the cross section of the relining for Pond 3S at Will County, shows that the cushion material used was a geotextile cushion, not ash. Hearing Ex. 505. Similarly, Hearing Exhibit 510 shows that MWG employed a geotextile as a cushion layer between the poz-o-pac and the HDPE liner.

The Board next carries over to its Will County discussion the false statement that "both poz-o-pac and HDPE liners are prone to damage." Interim Order, p. 54, para. B.i. Again, the Board relies on an "assumption," which is not permissible. *See infra* at III.A.1. The Board goes on to incorrectly state for Will County ponds 1N and 1S that "cracks in the poz-o-pac liners allow groundwater to seep into the ponds and ash constituents to leak into the groundwater." Interim Order, p. 56, citing 2/2/18 Tr. 149:15-18 (Seymour Test.). The testimony the Board relies upon does not support the Board's conclusion. Mr. Seymour testified that he "would consider that like a hypothetical…" and if there is a crack in a material, "the water can flow through if you put the water head on top of it." 2/2/18 Tr. 149:13-18. Mr. Seymour never testified that the poz-o-pac at Ponds 1N and 1S had cracked, or even that the groundwater was seeping through. Instead, he merely testified that *hypothetically* if there is a water head on top of poz-o-pac, then water could flow through it. *Id.*[30] At Will County Ponds 1N and 1S, however, there is no water head because there is a dewatering system designed to maintain a depth of less than one foot of water. Hearing Ex. 656 (Will County CCA). Thus, there is no water that leaking from Pond 1N and 1S through

[30] A "head" is the pressure by the water in a CCR pond. 2/1/18 Tr. p. 225:13-15 (Seymour Test.).

the poz-o-pac, there is no evidence that the poz-o-pac was cracked and there is no evidence that the groundwater is seeping through the poz-o-pac.

The Board then cites to Hearing Exhibit 302, which concerns the relining of a different pond and does not even mention poz-o-pac. Additionally, the Board ignores the testimony of the witnesses who actually saw the poz-o-pac at Will County and stated that the poz-o-pac was in "excellent shape" and "very good condition." 1/31/18 Tr. p. 248:21-249:3 (Veenbaas Test.); 10/24/17 Tr. p. 304:7-19 (Maddox Test.). The Board also ignores the poz-o-pac core sample taken from Will County which shows that the poz-o-pac was impermeable material and had no cracks through the sample. *See infra*, § II.A.1, Hearing Exhibit 286; 10/26/17 Morning Tr. p. 69:4-70:2 (Gnat Test.).

The Board incorrectly restates that coal ash "may have been left between the poz-o-pac and HDPE liners" but then cites to exhibits that have no relation to Will County and do not support the finding in any way. Interim Opinion, p. 55. Hearing Exhibit 22 cited by the Board is an email discussing the Joliet 29 Ash Pond 2 Liner and has nothing to do with the Will County Station or its impoundments. Hearing Exhibit 32 cited by the Board concerns the Former Ash Basin at Powerton, and has nothing to do with Will County, its impoundments or even a relining of pond. *See infra* III.B.4. The Board also cites to Ms. Race's testimony from October 23, 2017 (Tr. 156:18-162:21). As established above, Ms. Race's testimony from that part of the transcript addressed installing a rail line at the Powerton Station. *See infra* III.B.4.

The Board should reconsider its findings regarding the liners at Will County and revise its opinion that the Will County ash ponds "did leach contaminants into the groundwater" (Interim Order, p. 55) because no evidence was presented at hearing to support that statement.

IV. MWG REQUESTS CLARIFICATION OF THE BOARD'S OPINION

MWG requests that the Board provide clarification on certain conclusions made in its Interim Order. The Board's clarification on these issues will simplify the hearing on the damages.

A. Whether the Board Concludes that Pond Liners are Leaking *After* the Ponds Were Relined, When the Ponds Contain No Ash or Where no Ash has Been Removed

In the Interim Order, the Board generally concludes that all the lined ash ponds are leaking but makes no distinction between the ponds for which all of the ash has been removed or never had ash in the first place. Moreover, the Board does not distinguish the ponds in which no ash has ever been removed such that there was no likelihood of damage to liners.

The Board finds the three ash ponds at Joliet 29 "did leach contaminants into the groundwater." Interim Order, p. 26, para. 1. However, the Board also finds that Ash Pond 1 did not contain ash since it was emptied in 2015. Interim Order, p. 23, para. 1. Additionally, the Board finds that Ash Pond 3 received only a *de minimis* amount of ash and was emptied when it was relined in 2013. Interim Order, p. 23, para. 2. Given that Ash Pond 1 no longer has ash in it and Ash Pond 3 has *de minimis* amount of ash, there is no ash leaking any constituents from the ponds. Accordingly, in preparation for the proposed damages trial, MWG requests that the Board clarify that the now empty ponds and the ponds with no ash are not currently leaching constituents to groundwater.

Similarly, the Board generally concludes that the four ash ponds at Powerton "did leach contaminants into the groundwater." Interim Order, p. 40, para. 1. However, the Board also finds that MWG removes the ash in the Ash Surge Basin only every six to eight years, and that "MGW last removed coal ash from the Ash Surge Basin in 2013 before relining Interim Opinion, p. 37, para. 1. The Board agrees that the Ash Surge Basin has not been dredged or emptied since it was relined with HDPE liner in 2013, and thus no damage could have occurred to the liner. MWG requests that the Board clarify its finding and revise it to acknowledge that the Ash Surge Basin is not currently leaching to groundwater.

B. Witnesses are not "Experts"

The Board mistakenly describes all MWG's witnesses that testified at trial as "experts." MWG requests that the Board clarify its Interim Order to properly reflect the status of the witnesses, other than John Seymour, as laypersons. *See* Interim Order, pp. 6, 18, 20, 26, 28, 33, 66 and 68.

C. Whether the Board Considers Monitoring Wells 8, 10, and 11 at Joliet 29 as Background Wells

MWG seeks clarification on background wells at Joliet 29. The Board concludes that neither party could establish background values at Jolie 29 from the upgradient groundwater monitoring wells MW-8, 10, and 11. Interim Order, p. 35, para. 1.[31] However, earlier in the Interim Order, the Board finds that MW-8, 10, and 11 are "located upgradient (north) of the ash ponds with respect to direction of groundwater flow, and thusly are considered "upgradient" or

[31] There is a typographical error on page 35. The Board identifies "MW-8, 9 and 11" as the upgradient wells. The actual upgradient wells are MW-8, 10, and 11. *See* Interim Order, p. 29, para. 1 *citing* MWG Ex. 901 at 19 and 2/1/18 tr. at 19 (Gnat Test.).

"background" wells. Interim Order, p. 29, para. 1. Additionally, the Board finds that MW-8, 10, and 11 "indicate potential chemicals that might migrate with the groundwater from outside of MWG's property." *Id*. The Board concludes that the remaining monitoring wells are located downgradient of the ponds and "measure the impact of the ash ponds on the groundwater quality." *Id*. Additionally, the Board concludes that because the long-term groundwater elevation measurements at Joliet 29 do not indicate a reversal of groundwater flow, "the record does not support consideration of the upgradient monitoring wells as downgradient wells, and vice versa, when interpreting the groundwater monitoring results." Interim Opinion, p. 29, para. 3. Given the Board's findings that MW-8, 10, and 11 are the background wells that indicate the potential chemicals that may migrate from outside MWG's property, and that the record does not establish any reversals of groundwater flow, those same wells must establish background values on a site-specific basis. MWG requests that the Board clarify why it concludes that the background wells, MW-8, 10, and 11 are not available for background values at the Joliet 29 Station.

CONCLUSION

Midwest Generation, LLC, respectfully requests that the Board reconsider its Interim Opinion and issue an order as follows:

1) Stating that the GMZs at Joliet 29, Powerton and Will County Stations have not expired pursuant to 35 Ill. Adm. Code 620.250 and 620.450(a), and MWG is not in violation of the Board regulations after the GMZs were in place.
2) If the Board concludes that the corrective action process at each Station has been completed, conducting the evaluation required pursuant to 35 Ill. Adm. Code 620.450(a)(4) and concluding that the exceedances have been minimized to the extent practicable and any threats to public health and the environment have been minimized.
3) If the Board does not make a finding that the GMZs remain in place, the Board should rescind its opinion regarding the GMZs at the MWG Stations and remand the GMZ issue to the Hearing Officer to allow the parties to present evidence regarding the GMZ issues.
4) Reversing its opinion that the Joliet 29 and Powerton historic fill areas are causing or allowing contamination because there is no evidence in support and the Board improperly shifted the burden to MWG to disprove the allegations;
5) Consider and apply the numerous overlooked facts that lead to erroneous conclusions in law and fact, specifically:
    a. Finding that the poz-o-pac in the three ash ponds at the Joliet 29 Station are in good condition;
    b. Finding that the HDPE liners in the ash ponds at the Joliet 29 Station were installed correctly and not damaged;

c. Correcting the findings to state that no ash was left between the poz-o-pac and HDPE in the ash ponds at Joliet 29;

d. Correcting its findings to state that certain constituents at Joliet 29 are not in violation of the Class I standards;

e. Finding that the poz-o-pac in the ash ponds at the Powerton Station are in good condition;

f. Finding that the liners in the ash ponds at the Powerton Station were installed correctly and not damaged;

g. Correcting its finding to state that the Secondary Ash Settling Basin at Powerton Station has had a liner since at least 1999;

h. Correcting its finding to state that Former Ash Basin at Powerton Station had no ash beneath the liner because it is an inactive basin;

i. Correcting its finding to delete any reference that river water rose "30-feet above" the bottom of the Powerton Secondary Ash Settling Basin;

j. Correcting its finding to state that the East Yard Basin and the Limestone Basin do not contain ash and are not currently a source;

k. Correcting its findings to state that certain constituents at Powerton are not in violation of the Class I standards; and,

l. Correcting its findings that any ash was left between the poz-o-pac and HDPE liners at the ash ponds at Will County.

6) At the very least, MWG requests that the Board clarify its opinion in preparation for the next phase of this litigation by clarifying:

a. That certain pond liners are not leaking after the ponds were relined because the ponds contain no ash, or never had any ash removed; and,

b. That the MWG witnesses, other than John Seymour, are lay witnesses and not "experts."

c. That Monitoring wells 8, 10, and 11 at Joliet 29 are background wells.

Respectfully submitted,

MIDWEST GENERATION, LLC.

By ____/s/ Jennifer T. Nijman_____
One of Its Attorneys

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Chicago, IL 60603
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EXHIBIT 1

OBG

Groundwater Management Zone Application

Hennepin East Ash Pond No. 2

Hennepin, Illinois

Dynegy Midwest Generation, LLC

FINAL

December 20, 2017

Natural Resource Technology

AN OBG COMPANY

DECEMBER 20, 2017 | FINAL | PROJECT #2414

Groundwater Management Zone Application

Hennepin East Ash Pond No. 2
Hennepin, Illinois

Prepared for:

Dynegy Midwest Generation, LLC
1500 Eastport Plaza Drive
Collinsville, IL 62234

STUART J. CRAVENS, PG
Principal Hydrogeologist

ROBERT J KARNAUSKAS, PG, PH
Principal Hydrogeologist

TITLE 35, ILLINOIS ADMIN. CODE, PART 620 – APPENDIX D
CONFIRMATION OF AN ADEQUATE CORRECTIVE ACTION PURSUANT TO 35 ILL. ADM. CODE 620.250(A)(2)

Pursuant to 35 Ill. Adm. Code 620.250(a) if an owner or operator provides a written confirmation to the Agency that an adequate corrective action, equivalent to a corrective action process approved by the Agency, is being undertaken in a timely and appropriate manner, then a groundwater management zone may be established as a three-dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants from a site. This document provides the form in which the written confirmation is to be submitted to the Agency.

Note 1. Parts I and II are to be submitted to IEPA at the time that the facility claims the alternative groundwater standards. Part III is to be submitted at the completion of the site investigation. At the completion of the corrective process, a final report is to be filed which includes the confirmation statement included in Part IV.

Note 2. The issuance of a permit by IEPA's Division of Air Pollution Control or Water Pollution Control for a treatment system does not imply that the Agency has approved the corrective action process.

Note 3. If the facility is conducting a cleanup of a unit which is subject to the requirements of the Resource Conservation and Recovery Act (RCRA) or the 35 Ill. Adm. Code 731 regulations for Underground Storage Tanks, this confirmation process is not applicable and cannot be used.

Note 4. If the answers to any of these questions require explanation or clarification, provide such in an attachment to this document.

Information provided in the following technical documents is referenced within this form:

- Civil & Environmental Consultants, Inc.(CEC), 2017. Revised 30% Closure Design Package for East Ash Pond No. 2, Dynegy Midwest Generation, LLC, Hennepin Power Station, Hennepin, IL.
- Natural Resource Technology, Inc.(NRT), 2017a. Hydrogeologic Characterization Report, East Ash Pond No. 2, Dynegy Midwest Generation, LLC, Hennepin Power Station, Hennepin, IL.
- Natural Resource Technology, Inc., 2017b. Groundwater Monitoring Plan, East Ash Pond No. 2, Dynegy Midwest Generation, LLC, Hennepin Power Station, Hennepin, IL.
- Natural Resource Technology, Inc., 2017c. Groundwater Model Report, East Ash Pond No. 2, Dynegy Midwest Generation, LLC, Hennepin Power Station, Hennepin, IL.
- Natural Resource Technology, Inc., 2017d. 2016 East Ash Pond and Coal Combustion Waste Landfill Annual Report, Dynegy Midwest Generation, LLC, Hennepin Power Station, Hennepin, IL.

A legal description and map of the proposed GMZ is provided in Appendix A of this GMZ Application. The GMZ will extend vertically through all water-bearing strata to the top of the shale bedrock that underlies the unlithified glacial and alluvial deposits at the site.

PART I. FACILITY INFORMATION

Facility Name: Hennepin Power Station

Facility Address: 1 Power Plant Road, Hennepin, IL 61327

County: Putnam

Standard Industrial Code (SIC): 4911

1. Provide a general description of the type of industry, products manufactured, raw materials used, location and size of the facility. ***Electric power generation and coal combustion residual (CCR) disposal. Ash Pond No. 2 encompasses approximately 18 acres within the Hennepin Power Station property.***

2. What specific units (operating or closed) are present at the facility which are or were used to manage waste, hazardous waste, hazardous substances or petroleum?

	YES	NO
Landfill	X	
Surface Impoundment	X	
Land Treatment		X
Spray Irrigation		X
Waste Pile		X
Incinerator		X
Storage Tank (above ground)	X	
Storage Tank (underground)	X	
Container Storage Area	X	
Injection Well		X
Water Treatment Units	X	
Septic Tanks	X	
French Drains	X	
Transfer Station		X
Other Units (please describe)		

3. Provide an extract from a USGS topographic or county map showing the location of the site and a more detailed scaled map of the facility with each waste management unit identified in Question 2 or known/suspected source clearly identified. Map scale must be specified and the location of the facility must be provided with respect to Township, Range and Section. ***Ash Pond No. 2 is located in the northeast quarter of Section 26, Township 33 North, Range 2 West, Putnam County, Illinois and approximately 3 miles north-northeast of the Village of Hennepin. Figure 1 shows the facility location on a USGS topographic map (7½ minute).***

4. Has the facility ever conducted operations which involved the generation, manufacture, processing, transportation, treatment, storage or handling of "hazardous substances" as defined by the Illinois Environmental Protection Act? Yes ☒ No ☐
   If the answer to this question is "yes" generally describe these operations. ***Storage and handling of anhydrous ammonia, sulfuric acid, 50% sodium hydroxide, chlorine gas and sodium hypochlorite.***

5. Has the facility generated, stored or treated hazardous waste as defined by the Resource Conservation and Recovery Act? Yes ☒ No ☐
   If the answer to this question is "yes" generally describe these operations. ***Small quantity generator.***

6. Has the facility conducted operations which involved the processing, storage or handling of petroleum? Yes ☒ No ☐ If the answer to this question is "yes" generally describe these operations. ***Store, load, and unload diesel fuel, kerosene, transformers, turbine oil and other oil containing equipment.***

7. Has the facility ever held any of the following permits?

   a. Permits for any waste storage, waste treatment or waste disposal operation. Yes ☐ No ☒
      If the answer to this question is "yes", identify the IEPA permit numbers. # IL0000701

   b. Interim Status under the Resources Conservation and Recovery Act (filing of a RCRA Part A application). Yes ☐ No ☒
      If the answer to this question is "yes", attach a copy of the last approved Part A application.

   c. RCRA Part B Permits. Yes ☐ No ☒
      If the answer to this question is "yes", identify the permit log number.

8. Has the facility ever conducted the closure of a RCRA hazardous waste management unit? Yes ☐ No ☒

9. Have any of the following State or federal government actions taken place for a release at the facility?

   a. Written notification regarding known, suspected or alleged contamination on or emanating from the property (e.g., a Notice pursuant to Section 4(q) of the Environment Protection Act)? Yes ☐ No ☒
      If the to this question is "yes", identify the caption and date of issuance.

   b. Consent Decree or Order under RCRA, CERCLA, EPAct Section 22.2 (State Superfund), or EPAct Section 21(f) (State RCRA). Yes ☒ No ☐

      Consent Decree 89-CH-5 (dated March 2, 1989) required closure of the Hennepin East Ash Pond System and the Order Modifying Consent Decree (dated January 3, 1996) allowed for the establishment of the current Groundwater Management Zone.

   c. If either of Items a. or b. were answered by checking "yes", is the notice, order or decree still in effect? Yes ☒ No ☐

10. What groundwater classification will the facility be subject to at the completion of the remediation?

    Class I ☒ Class II ☐ Class III ☐ Class IV ☐

    If more than one Class applies, please explain.

11. Describe the circumstances which the release to groundwater was identified. ***Groundwater sampling at Ash Pond No. 2 was initiated in 1994. Parameters that are attributable to Ash Pond No. 2 exceeding Class I Potable Resource Groundwater standards in monitoring wells during the most recent 2016 annual report (NRT, 2017d) included boron and selenium at well 18S.***

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true and accurate.

Hennepin Power Station	
Facility Name	Signature of Owner/Operator
1 Power Plant Road, Hennepin, IL 61327	**Dynegy Midwest Generation, LLC**
Location of Facility	Name of Owner/Operator
170000137769	
Illinois EPA Identification Number	Date

PART II: RELEASE INFORMATION

1. Identify the chemical constituents release to the groundwater. Attach additional documents as necessary.

   A narrative summary of the results of groundwater monitoring is discussed in the Hydrogeologic Characterization Report Section 4: Groundwater Quality (NRT, 2017a). Chemical constituents released to the groundwater attributed to CCR and Ash Pond No. 2 include the following:

Chemical Description	Chemical Abstract No.
Boron	***7440-42-8***
Selenium	***7782-49-2***

2. Describe how the site will be investigated to determine the source or sources of the release.
   Ash Pond No. 2 has been investigated as described in the Hydrogeologic Characterization Report (Natural Resource Technology, Inc. [NRT], 2017a

3. Describe how groundwater will be monitored to determine the rate and extent of the release.
   The monitoring network to monitor the rate and extent of the release is described in the Groundwater Monitoring Plan (NRT, 2017b).

4. Has the release been contained on-site at the facility? ***The release is contained within the facility boundary and floodplain to the north. Migration of CCR constituents is limited by the Illinois River which is the groundwater discharge area and acts as a hydraulic barrier.***

5. Describe the groundwater monitoring network and groundwater and soil sampling protocols in place at the facility. ***The groundwater monitoring network and sampling protocols are described in the Groundwater Monitoring Plan (NRT, 2017b).***

6. Provide the schedule for investigation and monitoring. ***The site investigation is complete and groundwater monitoring will continue for the required/permitted frequency and monitoring period as described in the Groundwater Monitoring Plan Section 4.2: Sampling Schedule (NRT, 2017b).***

7. Describe the laboratory quality assurance program utilized for the investigation. ***Laboratory quality assurance is described in the Groundwater Monitoring Plan Sections 4.4: Laboratory Analysis and 4.5: Quality Assurance (NRT, 2017b). The quality assurance/quality control procedures described in the Groundwater Monitoring Plan will be supplemented by the selected Illinois EPA-approved laboratory's QA Manual.***

8. Provide a summary of the results of available soil testing and groundwater monitoring associated with the release at the facility. The summary or results should provide the following information: dates of sampling; types of samples taken (soil or water); locations and depths of samples; sampling and analytical methods; analytical laboratories used; chemical constituents for which analyses were performed; analytical detection limits; and concentrations of chemical constituents in ppm (levels below detection should be identified as "ND"). ***A narrative summary of the results of groundwater monitoring is discussed in the Hydrogeologic Characterization Report Section 4: Groundwater Quality (NRT, 2017a). Analytical data summary tables are available in the Hydrogeologic Characterization Report Appendix H: Groundwater Quality Monitoring Data (NRT, 2017a). Analytical laboratory reports for all monitoring events have previously been submitted to the Agency.***

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of knowledge and belief, true and accurate and confirm that the actions identified herein will be undertaken in accordance with the schedule set forth herein.

Hennepin Power Station	
Facility Name	Signature of Owner/Operator
1 Power Plant Road, Hennepin, IL 61327	**Dynegy Midwest Generation, LLC**
Location of Facility	Name of Owner/Operator
170000137769	
Illinois EPA Identification Number	Date

PART III: REMEDY SELECTION INFORMATION

1. Describe the selected remedy. ***The remedy includes ash dewatering, relocating/reshaping the CCR within Ash Pond No. 2 to achieve acceptable grades and construction of a cover system comprised of (from bottom to top) 18-inch protective compacted soil barrier with a hydraulic conductivity of 1X10-5 cm/s and 6-inch top cover system of topsoil and vegetative cover to minimize long-term erosion (CEC, 2017).***

2. Describe other remedies which were considered and why they were rejected. ***Previous experience at similar sites developing and evaluating remedial alternatives and costs indicate capping is often the most cost effective and cost-efficient. Therefore, dewatering and capping were initially evaluated. Based on the results of the evaluation and modeling, the selected remedy successfully mitigates groundwater impacts. If the selected remedy is not shown successful through collection of data and comparison to predictive values, then other remedial options will be evaluated.***

3. Will waste, contaminated soil or contaminated groundwater be removed from the site in the course of this remediation? Yes ☐ No ☒
   If the answer to this question is "yes", where will the contaminated material be taken?

4. Describe how the selected remedy will accomplish the maximum practical restoration of beneficial use of groundwater. ***The dewatering and installation of a cover system will control water infiltration into the closed CCR unit and will allow drainage of surface water off the cover system. These actions will reduce leachate generation and migration and groundwater quality will improve over time, as described in the Groundwater Model Report (NRT, 2017c).***

5. Describe how the selected remedy will minimize any threat to public health or the environment. ***The currently defined extent of the release does not threaten public health. As discussed in the Hydrogeologic Characterization Report Section 3.5 (NRT, 2017a), there are currently no impairments to groundwater usage on the Hennepin Power Station property or surrounding properties associated with Ash Pond No. 2. No impairments to groundwater usage resulting from establishment of the proposed GMZ are anticipated. CCR dewatering and the cover system will reduce leachate generation and migration from Ash Pond No. 2 and minimize CCR constituents entering the environment, as described in the Groundwater Model Report (NRT, 2017c).***

6. Describe how the selected remedy will result in compliance with the applicable groundwater standards. ***The in-place closure of Ash Pond No. 2, as proposed, will result in a reduction of leachate production, decreasing CCR constituent concentrations and contraction of the groundwater plume. A Groundwater Model Report (NRT, 2017c), included in Appendix D of CEC, 2017, suggests that the cover system will control recharge and subsequent leachate generation within the limits of the Site and boron concentrations will meet the groundwater protection standards within 20 years upon cap completion (Year 2038).***

7. Provide a schedule for design, construction and operation of the remedy, including dates for the start and completion. ***A schedule for implementing the remedies is included in Section 1.3 in CEC, 2017.***

8. Describe how the remedy will be operated and maintained. ***The operation and maintenance of the remedy is described in Section 3: Post-Closure Care Plan (CEC, 2017).***

9. Have any of the following permits been issued for the remediation?

   a. Construction or Operating permit from the Division of Water Pollution Control. Yes ☐ No ☒

   b. Land treatment permit from the Division of Water Pollution Control. Yes ☐ No ☒
      If the answer to this question is "yes", identify the permit number.

   c. Construction or Operating permit from the Division of Air Pollution Control. Yes ☐ No ☒

If the answer to this question is "yes", identify the permit number.

10. How will groundwater at the facility be monitored following completion of the remedy to ensure that the groundwater standards have been attained? ***Groundwater monitoring procedures are described in Section 4 of the Groundwater Monitoring Plan (NRT, 2017b).***

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true and accurate and confirm that the actions identified herein will be undertaken in accordance with the schedule set forth herein.

Hennepin Power Station	
Facility Name	Signature of Owner/Operator
1 Power Plant Road, Hennepin, IL 61327	**Dynegy Midwest Generation, LLC**
Location of Facility	Name of Owner/Operator
170000137769	
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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
CCR	coal combustion residual
CEC	Civil & Environmental Consultants, Inc.
CFR	Code of Federal Regulations
cm/s	centimeters per second
CWS	Community Water Supply
DBCP	1,2-Dibromo-3-Chloropropane
DMG	Dynegy Midwest Generation, Inc.
EDB	Ethyl Dibromide
ft	feet
ft MSL	feet above Mean Sea Level
GMZ	Groundwater Management Zone
IAC	Illinois Administrative Code
IDNR	Illinois Department of Natural Resources
IEPA	Illinois Environmental Protection Agency
ISGS	Illinois State Geological Survey
ISWS	Illinois State Water Survey
mg/L	milligram per liter
NRT	Natural Resource Technology, an OBG Company
PCB	Polychlorinated Biphenyl
PWS	Public Water Supply
TDS	total dissolved solids
USGS	United States Geological Survey
WHPA	Well Head Protection Area

1 INTRODUCTION

1.1 OVERVIEW

This Groundwater Management Zone Application was prepared by Natural Resource Technology, Inc. (NRT) in support of the Closure Plan for East Ash Pond No. 2 located at the Hennepin Power Station (HPS, Site) which is owned by Dynegy Midwest Generation, LLC (DMG). This application is submitted pursuant to Illinois Administrative Code (IAC) Title 35, Part 620: Groundwater Quality (35 IAC Part 620).

DMG requests establishment of a Groundwater Management Zone (GMZ) pursuant to 35 IAC 620.250(a)(2) as a three-dimensional region containing groundwater being managed to mitigate a potential release of Coal Combustion Residuals (CCR) constituents from Ash Pond No. 2.

A legal description and map of the proposed GMZ is provided in Appendix A. The GMZ will extend vertically through all water-bearing strata to the top of the shale bedrock that underlies the unlithified glacial and alluvial deposits at the site.

1.2 TECHNICAL SUPPORT DOCUMENTS

Technical documents prepared in support of the Hennepin East Ash Pond No. 2 closure include, but are not limited to, the following:

- ***Hydrogeologic Study, Existing Ash Ponds, Hennepin Power Plant, Illinois Power Company, Hennepin, Illinois. John Mathes & Associates, Inc.; April 19, 1983.*** Six monitoring wells were installed, currently designated as wells 02 through 06. Well 01 was abandoned during construction of the East Ash Pond, Monitoring wells 03 through 06 are downgradient of Ash Pond No. 2 and well 02 is an upgradient well located south of the impoundment. Grain size analyses were performed on soil samples.
- ***Investigation of Site Closure Options at Illinois Power Company's Hennepin East Ash Impoundment. Report No. STMI/135/96-02. Science & Technology Management, Inc., June 1996.*** A supplemental hydrogeologic characterization was conducted to further characterize the Hennepin East Ash Pond System, develop a groundwater flow and transport model and evaluate four alternative closure options using the model. Eight new monitoring wells (wells 10 through 17) were installed around the east ash impoundment system to augment the existing network. Six new wells were located along the intermediate berm that separates Ash Pond No. 2 from the East Ash Pond, and two wells were located up gradient of the East Ash Pond. Field permeability tests were conducted on eight wells.
- ***Field Implementation Plan, New East Ash Landfill, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; February 2, 2009.*** Described the data collection and analysis to be performed to satisfy the requirements of the hydrogeologic investigation as well as complete the groundwater impact assessment and groundwater monitoring plan.
- ***Water Well Survey, Dynegy Midwest Generation, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; June 3, 2009.*** A water well survey was performed in accordance with the "Right to Know" Potable Water Well Survey procedures of 35 Illinois Administrative Code 1600.210(b)(1) and 1600.210(b)(2). The purpose of this survey was to identify water wells located within 2,500 feet of DMG's Hennepin Power Station property boundary.
- ***Prediction of Groundwater Transport: Pond 2 East, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; July 8, 2009.*** Groundwater transport modeling was completed to evaluate liner alternatives proposed for Pond 2E by simulating the effects of a release on groundwater quality.
- ***Assessment of Potential for Groundwater Impact on Identified Water Wells, Dynegy Midwest Generation, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; August 26, 2009.*** An assessment of the potential for impact of the ash impoundment on water quality of potable water wells identified in the water well survey.

- ***New Coal Combustion Waste (CCW) Landfill, Initial Facility Report, Hydrogeologic Studies and Evaluations, Section 25 Hydrogeological Investigation, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; December 19, 2010.*** Provided the foundation on which the monitoring system, groundwater impact assessment, and groundwater quality standards are to be developed for inclusion with the Initial Facility Report for the New CCW Landfill. Forty-one borings (B-1 through B-41) were advanced near and within the footprint of the Site during February and March 2009 for Site engineering studies. Four new monitoring wells (18S, 18D, 19S and 19D) were installed along the north perimeter, downgradient of the Site. One new well (08D) was located to the south adjacent to existing well 08.
- ***New Coal Combustion Waste Landfill, Initial Facility Report, Hydrogeologic Studies and Evaluations, Section 27 Groundwater Impact Assessment, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; December 19, 2010.*** Three-dimensional numerical flow and transport modeling was used to estimate the effect of leachate seepage from the landfill on groundwater concentrations at the downgradient edge of the zone of attenuation.
- ***New Coal Combustion Waste Landfill, Initial Facility Report, Hydrogeologic Studies and Evaluations, Section 28 Groundwater Monitoring Program, Hennepin Power Station, Hennepin, Illinois. Natural Resource Technology and Kelron Environmental; December 19, 2010.*** Describes the groundwater monitoring program to identify discharges from all waste disposal units (Phases) within Ash Pond No. 2 and the leachate collection system associated with the new CCW Landfill.
- ***30% Design Data Report for Dynegy Hennepin Power Station; West Polishing Pond, West Ash Pond, East Ash Pond and Ash Pond No. 2 CCR Units. AECOM, January 12, 2016.*** The data package included summary tables, geotechnical laboratory data and exploratory logs for 32 auger borings, 38 CPT soundings and 7 standpipe piezometers.
- ***2016 East Ash Pond and Coal Combustion Waste Landfill Annual Report, Hennepin Power Station, Dynegy Operating Company, Hennepin, Illinois. Natural Resource Technology, Inc., March 13, 2017.*** Annual report assessing groundwater quality data, statistical trend analysis and a waste management summary for the CCW Landfill.

Groundwater flow and transport models were also developed to evaluate the effect of the ash pond closure on groundwater quality and to predict the fate and transport of CCR leachate components (NRT, 2017c). Additional groundwater modeling has been conducted to enable estimation of the time required for hydrostatic equilibrium of groundwater beneath the unit and is being submitted under separate cover (NRT, 2017d).

1.3 SITE LOCATION AND BACKGROUND

Hennepin East Ash Pond No. 2 is located in the northeast quarter of Section 26, Township 33 North, Range 2 West, Putnam County, Illinois and approximately 3 miles north-northeast of the Village of Hennepin (Figure1). The impoundment is situated less than 200 feet south of the Illinois River and approximately one mile east of the Big Bend, where the river shifts course from predominantly west to predominantly south. The Hennepin Power Station had two coal-fired units constructed in 1953 and 1959. Surrounding areas include industrial properties to the east and south of the impoundments, agricultural land to the southwest and the Hennepin Power Station to the west.

East Ash Pond No. 2 (Ash Pond No. 2) is classified as an inactive, unlined CCR surface impoundment (Figure 2). The pond is surrounded by a perimeter road and is bounded to the north by the Illinois River, to the east by the CCR Landfill, to the southeast by the East Ash Pond, to the southwest by Ash Pond No. 4 (by definition, a non-CCR Unit, capped or otherwise maintained) and a gravel pit (non-CCR Unit).

Ash Pond No. 2 was used to store and dispose fly ash, bottom ash, and other non-CCR waste streams including coal pile runoff. The pond is unlined with a variable but lowermost bottom elevation of 451 feet. The approximate dates of construction of each successive stage of Ash Pond No. 2 are summarized below.

Date	Event
1958	Construction of Ash Pond No. 2
1978	Embankment raise of Ash Pond No. 2
1985	Embankment raise of Ash Pond No. 2 to elevation 484 feet
1989	Embankment raise of Ash Pond No. 2 to elevation 494 feet
1996	Pond was removed from service and completely unwatered
2009 to 2010	Eastern portion of Ash Pond No. 2 was removed to facilitate construction of the Leachate Pond.
2010 / 2011	Landfill Phase I cell was constructed in 2010 over placed CCR in Ash Pond No. 2, adjacent to the Leachate Pond. In February 2011, 7,500 cubic yards of bottom ash was placed into the Phase I cell as a post-construction freeze-protection measure to protect the leachate collection system and geomembrane liner. No other material (fly ash or bottom ash) has been placed in the landfill since then.
2014	North Embankment tree removal, grading, and vegetation re-establishment of Ash Pond No. 2

A notice of intent to close the remaining uncapped portion of Ash Pond No. 2, encompassing approximately 25.5 acres, was submitted in November 2015. The cap system, as designed by Civil & Environmental Consultants, Inc. (CEC), is proposed to be implemented on the remaining areas of Ash Pond No. 2 (Landfill Phases II, III and IV, and bottom ash pond, that will not be completed). References to Ash Pond No. 2 refer only to the current uncovered area of ash located west of Landfill Phase I that is proposed for capping. The closure activities for Ash Pond No. 2 include ash dewatering, relocating/reshaping the CCR to achieve acceptable grades and construction of a cover system comprised of (from bottom to top) 18-inch protective compacted soil barrier and 6-inch top cover system of topsoil and vegetative cover to minimize long-term erosion (CEC, 2017).

Other impoundments within the East Ash Pond System include the following:

- East Ash Pond (Primary Pond): Used to store and dispose bottom ash, fly ash, and other non-CCR waste and to clarify process water prior to discharge in accordance with the station's NPDES permit. The 510 acre-foot pond was constructed in 1995. In 2003, the sidewall liners were raised an additional 12 feet, and the total water depth was raised to approximately 30 feet.
- Polishing Pond (Secondary Pond): Constructed in 1995 with a 48-inch thick compacted clay liner having a vertical hydraulic conductivity of 1×10^{-7} centimeters per second (cm/sec).
- Leachate Pond (Pond 2 East): A 25.5 acre-foot pond constructed with a composite liner consisting of 60-mil HDPE overlying two feet of compacted clay with a vertical hydraulic conductivity of 1×10^{-7} cm/sec. Construction was completed December 2010.
- Ash Pond No. 4 (Pond 4): A former unlined dry impoundment, classified as a non-CCR pond (capped or otherwise maintained).

These impoundments are not included in the scope of the Ash Pond No. 2 closure or the groundwater monitoring plan discussed herein.

1.4 GEOLOGIC AND HYDROGEOLOGIC SUMMARIES

1.4.1 Geology

The geology has been extensively evaluated during previous hydrogeologic investigations, groundwater quality assessments, and modeling since the first borings and monitoring wells were installed. Ash Pond No. 2 is located over the original narrow lower terrace between the Illinois River and the uplands. The original lower terrace is approximately 10 to 20 feet above normal river level of 441 feet. The East Ash Pond and Polishing Pond and Ash Pond No. 4 were constructed on the upper terrace at an elevation of approximately 500 to 505 feet, or 60 to 65 feet above normal river level.

Three hydrogeologic units are present at the site:

- Fill Unit, the uppermost unit, is comprised of CCRs – fly ash, bottom ash and minor slag. In some areas, such as constructed berms, the Fill Unit is CCR mixed with sand, silt, and clay.
- Uppermost Aquifer is comprised of mixed alluvial deposits (clay, silt, and sand) which overlie coarser grained outwash sand and gravel deposits (Henry Formation). This unit is the primary groundwater transport pathway.
- The Pennsylvanian-age bedrock consists of interbedded layers of shale with thin limestone, sandstone, and coal beds. The shale bedrock unit has low hydraulic conductivity and defines the lower boundary of the uppermost aquifer.

The highly permeable Henry Formation makes up the upper and lower terraces, and fill the valley beneath the alluvium. These glacial outwash deposits consist of a heterogeneous mixture of silty-sandy gravel, with cobble zones and with boulders up to several feet in diameter. The Henry formation is more than 100 feet thick in the river valley and at least 130 feet thick on the upper terrace.

1.4.2 Hydrogeology

The Illinois River is located directly adjacent to and downgradient from the East Ash Pond System. The Illinois River is the regional groundwater discharge area and localized groundwater flow under East Ash Pond No. 2 occurs in a general northerly orientation.

Ash Pond No. 2 is not subject to 100-year flooding at the base flood elevation of 462 feet. Flood events typically occur in March, April, May, and sometimes June, while lesser flooding occasionally occurs during autumn. During high precipitation and/or flood events, the river stage may rise above adjacent groundwater elevations and the river recharges the aquifer, temporarily reversing the direction of groundwater flow to the south.

High precipitation and/or flood events that recharge the aquifer may result in temporary groundwater elevation increases above the base grade as low as 451 feet within Ash Pond No. 2. These events appear to be short in duration but occur on an almost annual basis.

The Henry Formation sands and gravels at the site are highly permeable with measured hydraulic conductivity ranging from 3 x 100 cm/s to 1 x 10^{-4} cm/s with a geometric mean of 5.6 x 10^{-2} cm/s. These values are consistent with pump test data from area high capacity wells screened in the unlithified deposits which ranged from 5 x 10^{-2} to 3 x 10^{-1} cm/s. Per 35 IAC 620.210, groundwater within the Uppermost Aquifer at Ash Pond No. 2 meets the definition of Class I, Potable Resource Groundwater.

1.5 GROUNDWATER MONITORING ACTIVITIES

1.5.1 Illinois EPA Closure Work Plan Monitoring – East Ash Pond System

The monitoring program performed in compliance with the current Illinois EPA-approved Closure Plan (Dynegy, 2016) for the East Ash Pond System consists of collecting samples from 6 background wells and 12 downgradient wells (Figure 2). Groundwater monitoring for Ash Pond No. 2 includes three upgradient/background wells (07, 08, 08D) and four downgradient wells (03R, 06, 18, 18D) as shown on Figure 3. All wells are screened in the sand units underlying and near the East Ash Pond System. Samples are collected quarterly to assess compliance with the IAC 35 Part 620 Section 410 Groundwater Quality Standards for Class I: Potable Resource Groundwater. Groundwater samples are analyzed for the following parameters:

Field Parameters	
Ph	Temperature
Specific Conductivity	Groundwater Elevation

Laboratory Parameters		
General Inorganics		
Boron	Fluoride	Nitrate-N
Chloride	Iron	Sulfate

Cyanide	Manganese	Total Dissolved Solids (TDS)	
Metals			
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium	Mercury	Thallium
Barium	Cobalt	Nickel	Zinc
Beryllium	Copper	Selenium	
Organic Compounds			
Volatile Organic Compounds	Polychlorinated Biphenyls (PCBs)		
Semi-Volatile Organic Compounds	Specialized Organic Parameters: Endohall, Ethyl Dibromide (EDB) and 1,2-Dibromo-3-Chloropropane (DBCP)		
Chlorinated Pesticides			
Chlorinated Herbicides			

Groundwater monitoring results are reported to the Illinois EPA annually in accordance with the approved Closure Work Plan. The most recent data and analysis were submitted in '2016 Closure Work Plan Annual Report' (NRT, March 13, 2017e).

1.5.2 40 CFR PART 257 MONITORING – ASH POND NO. 2

Monitoring commenced in December 2015 to comply with the CCR Rule for Ash Pond No. 2 and consists of quarterly groundwater elevation measurements and water quality samples collected at background wells 07, 08, 08D and downgradient monitoring wells 03R, 18S, 18D and 45S as shown on Figure 3. The groundwater is analyzed for Appendix III and Appendix IV parameters (see below). All existing groundwater monitoring wells are measured for groundwater elevation.

40 CFR Part 257 Monitoring			
Field Parameters			
Dissolved Oxygen	Oxidation/Reduction Potential	Temperature	pH
Groundwater Elevation	Specific Conductivity	Turbidity	
Appendix III Parameters (Total, except TDS)			
Boron	Chloride	Sulfate	
Calcium	Fluoride	Total Dissolved Solids (TDS)	
Appendix IV Parameters (Total)			
Antimony	Cadmium	Lead	Selenium
Arsenic	Chromium	Lithium	Thallium
Barium	Cobalt	Mercury	Radium 226/228
Beryllium	Fluoride	Molybdenum	

Following the completion of eight quarterly sampling events, the monitoring program will be modified so that the analytical parameters and sampling frequency are appropriate to the objectives and requirements of the CCR Rule.

2 GROUNDWATER IMPAIRMENTS AND CONTROL OPTIONS

2.1 EXTENT OF GROUNDWATER IMPAIRMENTS ASSOCIATED WITH ASH POND NO. 2

Well locations associated with the parameter concentrations that exceeded Class I Potable Resource Groundwater standards during the 2016 Illinois EPA Closure Work Plan annual monitoring included the following:

Monitoring WellsExceeding Class I Groundwater Quality Standards							
Well Number	**Location**	**Boron**	**Chloride**	**Nitrate**	**TDS**	**Selenium**	**Manganese**
		2.0	200	10	1,200	0.05	0.15
03R	Downgradient						
06	Downgradient						
18S	Downgradient	X				X	
18D	Downgradient						X
45S	Downgradient			NA			NA
07	Background			X			
08	Background			X	X		
08D	Background		X	X	X		

NA – Not Analyzed

Boron is a key indicator parameter of the presence of CCR constituents in groundwater downgradient of Ash Pond No. 2. Boron concentrations have significantly decreased in wells 03/03R and 06 since Ash Pond No. 2 was removed from service and unwatered in 1996. Concentrations in 18D have also decreased and remain below the Class 1 groundwater standard since March 2015.

High precipitation/flood events and localized saturation of the ash coincide with increases in boron concentrations at well 18S. Boron concentrations appear to typically fall in the range of 1.5 mg/L to 3 mg/L during normal river elevations. Boron concentrations rise above 3 mg/L following events when the river elevation rises above 451 feet (green line). Further, it also appears that the concentration rise is related to the magnitude and duration of the precipitation/flood event above the 451-foot river elevation. The elevation of boron concentrations is also likely attributed to the increased precipitation percolating through Ash Pond No. 2 that occurs with these events. Selenium concentrations appear to mimic the recent increases in boron concentrations and may also be related to ash saturation during high precipitation/flood events.

Exceedances of groundwater standards for nitrate were distributed across the site and have historically occurred sporadically in all monitoring wells, indicating that the concentrations reflect background variability in groundwater from upgradient sources.

Chloride sporadically exceeded groundwater quality standards only in upgradient wells 08 and 08D. Chloride was significantly lower in upgradient well 07, typically less than 40 mg/L, compared to 08 and 08D. Chloride is a major component of TDS which exhibited similar trends but fewer Class I exceedances. Elevated concentrations of chloride and TDS are attributed to road salting off-site to the south of wells 08 and 08D.

Exceedances of groundwater standards for manganese were associated with downgradient well 18D, suggesting differences in groundwater chemistry occur at depth rather than from Ash Pond No. 2 leachate. Detailed discussions of the manganese geochemistry in wells at the Hennepin Power Station are provided in the EPRI manganese research report submitted to the IEPA on November 6, 2002 (EPRI, 2002).

A groundwater flow and transport model (NRT, 2017c) was calibrated to match groundwater elevation data and approximate boron concentration trends since unwatering of Ash Pond No. 2 in 1996. The calibrated model was then used to evaluate a baseline (no action) scenario and a closure capping configuration consisting of a 6-inch surface layer and an 18-inch compact soil barrier with a hydraulic conductivity of 1 x 10^{-5} cm/s. The prediction

model was extended 20 years following the cap completion (assumes the cap is completed in 2018 and run until 2038) to evaluate boron concentrations in groundwater under a baseline (no action) scenario and the closure configuration. The results of the modeling are as follows:

- When no action is taken, boron concentrations exceeding the Class I Groundwater Quality Standard will not be contained within the property. Boron concentrations become asymptotic in 20 years (Year 2038) and no further reduction is expected with time.
- Under the proposed closure scenario, the prediction model indicated boron concentrations in all calibrated monitoring wells are predicted to decrease. Boron concentrations are expected to meet the groundwater protection standards within 20 years upon cap completion (Year 2038).

These model results suggest that the compact soil cover system will control recharge and subsequent leachate generation within the limits of Ash Pond No. 2 and sufficiently reduce concentrations of boron below Class I standards within a reasonable timeframe. Concentration reductions should begin approximately one year after completion of the cover system.

2.2 IMPAIRMENTS TO GROUNDWATER USAGE

A comprehensive water well survey was conducted by NRT and Kelron (2009a) for a 2,500-foot radius around the entire Hennepin Power Station property boundary, inclusive of the East Ash Pond System (Appendix G). Based on State of Illinois records obtained from the Illinois EPA, Illinois State Geological Survey (ISGS), and Illinois State Water Survey (ISWS) there are nine wells located outside of the Hennepin Power Station property boundary within 2,500 feet of the East Ash Pond System. These included six industrial-commercial wells, two farm/domestic wells, and one Non-Community Water Supply (non-CWS) on property identified as Exolon (now known as Washington Mills). The Exolon non-CWS well has a 1,000 foot well head protection area (WHPA). The Exolon non-CWS WHPA is located south of and does not intersect the Hennepin Power Station property boundary. Each of the nine identified offsite water walls are upgradient of the Hennepin Power Station property or not in the prevailing direction of groundwater flow.

Within the plant property boundary, there are four wells owned by DMG, all of which are non-potable and non-contact industrial wells. One well is used exclusively for irrigation of the coal pile.

Kelron/Natural Resource Technology (2009b) performed an assessment of the potential for impact to water supply wells identified in the water well survey within 2,500 of the Hennepin Power Station property boundary. The assessment concluded there are no existing off-site water wells, potable or non-potable, that are likely to be impacted by groundwater from the HPS property.

2.3 CLOSURE OF ASH POND NO. 2

The Closure Plan and Post-Closure Care Plan for Ash Pond No. 2 are being submitted under separate cover (CEC, 2017). Because the pond is inactive, the CCR Rule (40 CFR Part 257) deadline for completing closure of this pond is November 2020.

The Closure Plan includes the following corrective action elements, with the capped area shown on Figure 4:

- CCR will not be removed from Ash Pond No. 2. The geometry of the final cover will provide a series of mounded surfaces for storm water runoff control. The final cover will be graded to convey storm water runoff to drainage channels.
- The overall footprint and configuration of Ash Pond No. 2 will remain unchanged.
- The proposed soil cover system design will meet the requirements of the CCR Rule such that the permeability shall be less than or equal to the permeability of the existing subsoils present below the CCR material, or a permeability no greater than 1 x 10^{-5} cm/sec, whichever is less. The soil cover system will be constructed in direct contact with the graded CCR and will consist of, from bottom to top, a minimum 18-inch protective

cover soil layer and an erosion layer consisting of 6-inches of earthen material capable of sustaining native plant growth.

- The design elements, including cover permeability, final cover slope and drainage channel slopes, will control the post-closure infiltration into the CCR material left in-place and preclude the probability of future impoundment of water.

The proposed corrective action will decrease migration of CCR constituents to groundwater and reduced their current aerial extent.

3 APPLICATION FOR GROUNDWATER MANAGEMENT ZONE

3.1 ENVIRONMENTAL IMPACT OF PROPOSED GROUNDWATER MANAGEMENT ZONE

Establishment of this GMZ will have a positive environmental impact. The fate and transport modeling (NRT, 2017c) predicted boron concentrations will eventually decrease to levels lower than the Class I standard at Ash Pond No. 2 downgradient monitoring wells screened in the uppermost aquifer, inside of the proposed GMZ boundary, within approximately 20 years following completion of closure activities. Under the baseline scenario of no cap on Ash Pond No. 2 which begins in 2018, the boron concentrations are predicted to become asymptotic in 20 years (Year 2038) and no further reduction is expected with time. Capping Ash Pond No. 2 will significantly reduce the extent of boron impacts compared to the baseline transport model scenario.

3.2 PROPOSED GROUNDWATER MANAGEMENT ZONE

The proposed GMZ incorporates the area currently exhibiting constituents in groundwater that are attributable to Ash Pond No. 2 and associated areas of the East Ash Pond System, as measured in the on-site groundwater monitoring well network, as well as the area within the Hennepin Power Station property boundary that has model-predicted boron concentrations above the Class I groundwater standard. The approximate boundary of the proposed GMZ is depicted on Figures 3 and 4. A legal description and map depicting the proposed groundwater management zone is provided in Appendix A. The GMZ will extend vertically through all water-bearing strata to the top of the shale bedrock that underlies the unlithified glacial and alluvial deposits at the site. The GMZ does not extend beyond the Hennepin Power Station property boundaries.

3.3 COMPLIANCE WITH APPLICABLE ON-SITE GROUNDWATER QUALITY STANDARDS

In accordance with IAC 620 Section 620.240, the compliance boundary is a lateral distance of 25 feet outward from the outermost edge of Ash Pond No. 2 berms. Following completion of the corrective action, the groundwater standard at the compliance boundary will be in accordance with IAC 620 Section 450(a)(4) for groundwater quality restoration such that the standard for each released chemical constituent will be the higher of either the Class I groundwater standard or the concentration determined by groundwater monitoring at the compliance boundary.

Compliance with on-site groundwater quality standards, as measured at the proposed monitoring well network, will be achieved when there are no statistically significant increasing trends that are attributed to Ash Pond No. 2 for parameters detected at the compliance boundary after a minimum 30 years of post-closure groundwater monitoring has been completed.

Evaluation of groundwater quality data under USEPA (2015) will be consistent with 40 CFR Part 257.93 and 257.94.

4 PROPOSED GROUNDWATER MONITORING PLAN

Groundwater monitoring will be performed in accordance with the groundwater monitoring plan, incorporated by reference, in the accompanying report:

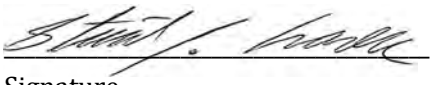
- Natural Resource Technology, Inc., 2017b. Groundwater Monitoring Plan. Ash Pond No. 2, Dynegy Midwest Generation, LLC, Hennepin Power Station, Hennepin, IL.

The elements of the groundwater monitoring plan include:

- Groundwater monitoring system with designation of background and compliance monitoring wells along with monitoring well depths and construction.
- Groundwater monitoring parameters.
- Groundwater monitoring frequency and sampling schedule, along with statistical basis for reduction of monitoring frequency.
- Groundwater sample collection protocol with standard operating procedures.
- Laboratory analysis by a state-certified laboratory and listing of methods and reporting limits.
- Quality Assurance Program for field collection of samples and laboratory analysis of samples.
- Groundwater monitoring system maintenance, including schedule of inspections and methods for inspection of monitoring wells.
- Data reporting schedule and content of reports.
- Demonstration of compliance. Statistical methods for evaluating groundwater quality data.
- A notification schedule with actions to be taken in cases of non-compliance.

5 LICENSED PROFESSIONAL ACKNOWLEDGEMENT

The geological work product contained in this document has been prepared under my personal supervision and has been prepared and administered in accordance with the standards of reasonable professional skill and diligence.

Stuart J. Cravens, PG Principal Hydrogeologist Natural Resource Technology, an OBG Company 2422 E. Washington Street, Suite 104 Bloomington, Illinois 61704 217-390-1503 Registration No. 196000108	Seal:  Expires: 03/31/2019
 Signature	12/20/2017 Date

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Natural Resource Technology, Inc. and Kelron Environmental, June 3, 2009. Water Well Survey, Dynegy Midwest Generation, Hennepin Power Station, Hennepin, Illinois.

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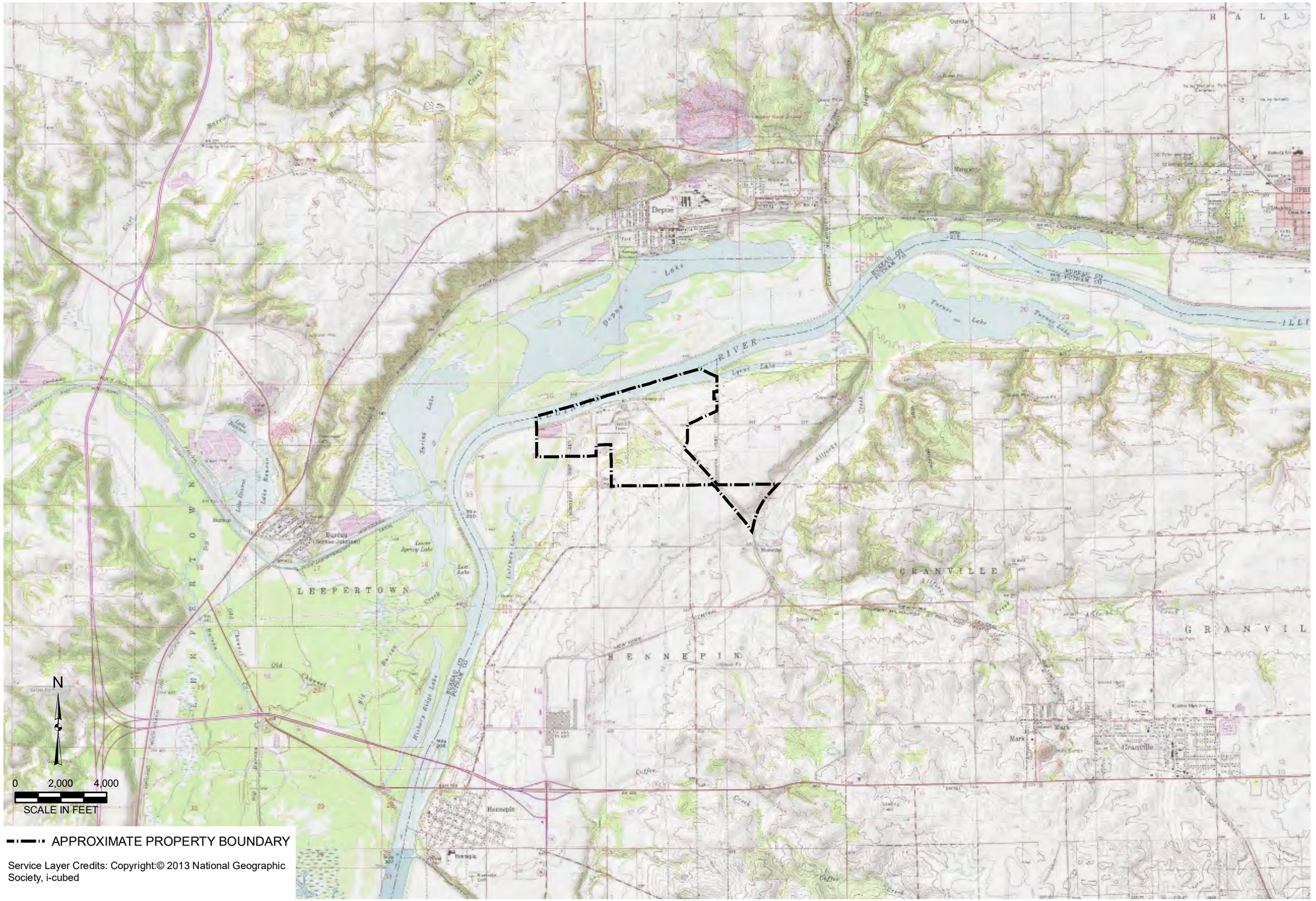
Figures



APPROXIMATE PROPERTY BOUNDARY

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

DRAWN BY/DATE:
TDC 9/5/17
REVIEWED BY/DATE:
RJK 9/5/17
APPROVED BY/DATE:
SJC 9/6/17

SITE LOCATION MAP

GROUNDWATER MANAGEMENT ZONE APPLICATION
EAST ASH POND NO. 2
DYNEGY MIDWEST GENERATION, LLC
HENNEPIN POWER STATION, HENNEPIN, ILLINOIS

PROJECT NO: 2414

FIGURE NO: 1

Natural Resource Technology
AN OBG COMPANY

Y:\Mapping\Projects\2412414\MXD\GMZ_application\Figure 1_Site Location Map.mxd Author: stolzsd Date/Time: 12/29/2017, 4:32:27 PM

DRAWN BY/DATE: TDC 9/5/17
REVIEWED BY/DATE: RJK 9/5/17
APPROVED BY/DATE: SJC 9/6/17

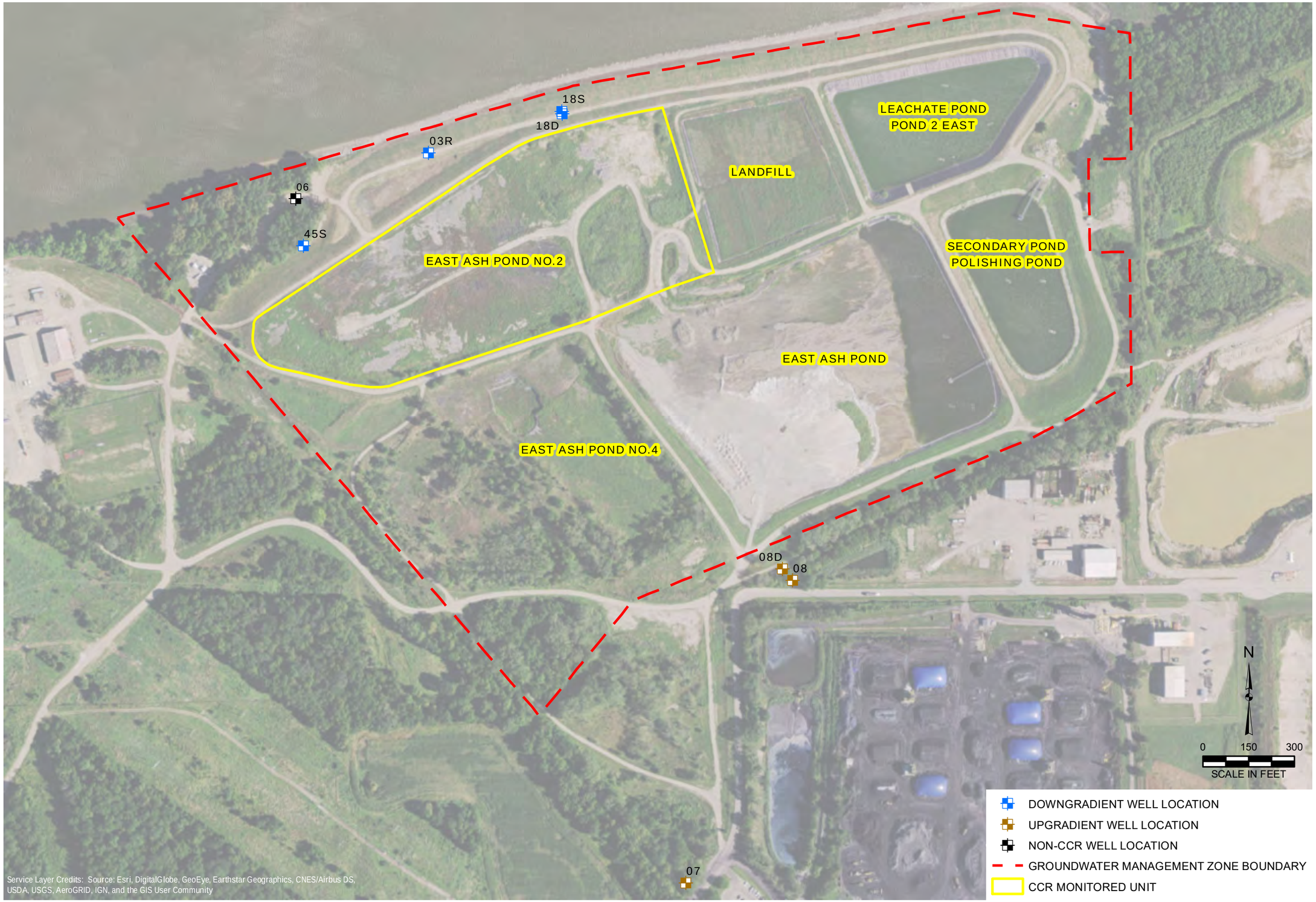
EAST ASH POND SYSTEM MONITORING WELL NETWORK

GROUNDWATER MANAGEMENT ZONE APPLICATION
EAST ASH POND NO. 2
DYNEGY MIDWEST GENERATION, LLC
HENNEPIN POWER STATION, HENNEPIN, ILLINOIS

PROJECT NO: 2414

FIGURE NO: 2

Natural Resource Technology
AN OBG COMPANY



DRAWN BY/DATE: TDC 9/5/17
REVIEWED BY/DATE: RJK 9/5/17
APPROVED BY/DATE: SJC 9/6/17

PROPOSED EAST ASH POND NO. 2 MONITORING WELL NETWORK AND GROUNDWATER MANAGEMENT ZONE BOUNDARY

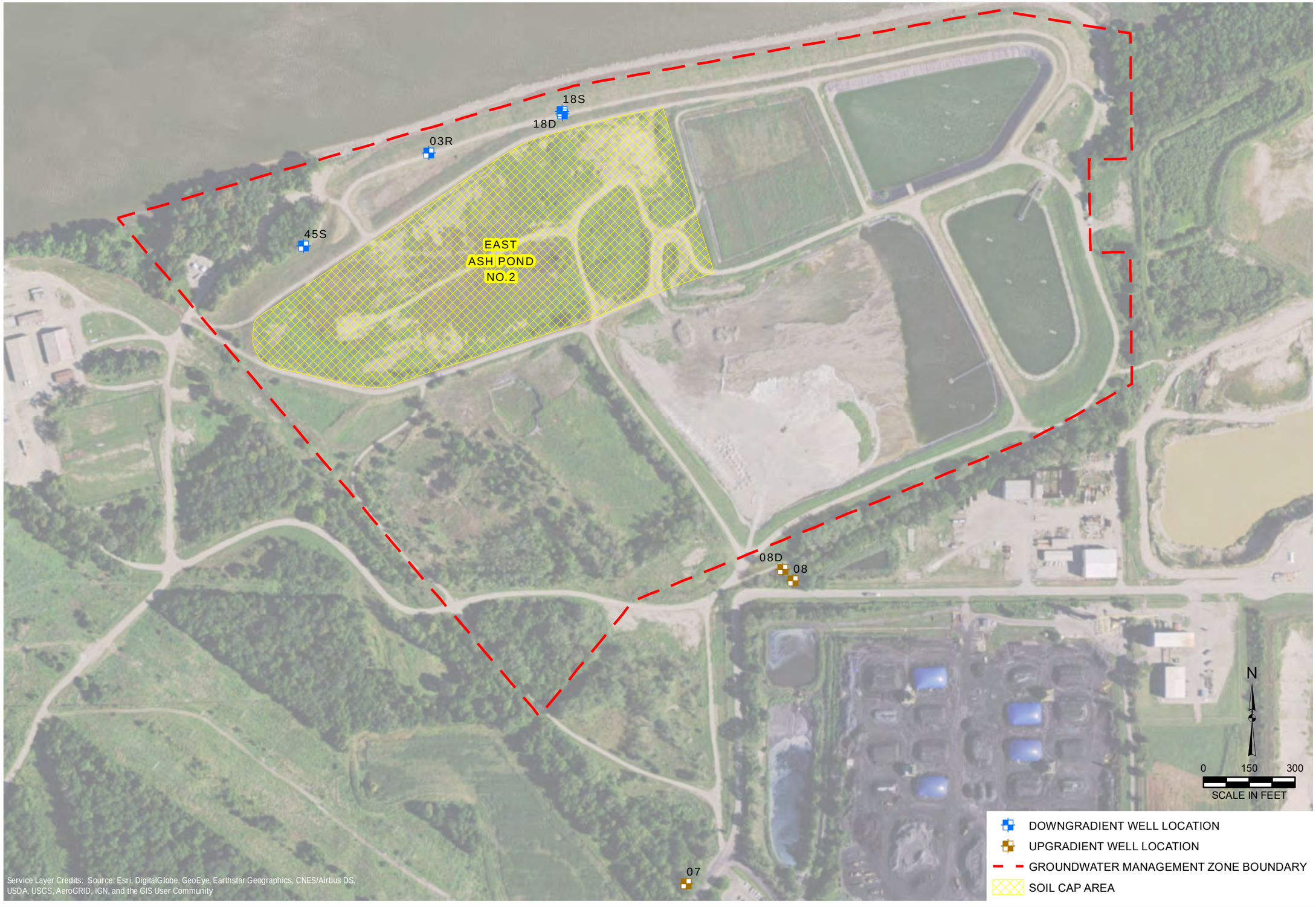
GROUNDWATER MANAGEMENT ZONE APPLICATION
EAST ASH POND NO. 2
DYNEGY MIDWEST GENERATION, LLC
HENNEPIN POWER STATION, HENNEPIN, ILLINOIS

PROJECT NO: 2414

FIGURE NO: 3

Natural Resource Technology
AN OBG COMPANY

Y:\Mapping\Projects\2414\MXD\GMZ_application\Figure 3_Proposed Ash Pond 2 Well Network and GMZ Boundary.mxd Author: stolzsd Date/Time: 12/29/2017, 4:31:24 PM



Y:\Mapping\Projects\2412414\MXD\GMZ_application\Figure 4_Ash Pond 2 Site Closure Plan.mxd Author: stolzsd; Date/Time: 12/29/2017, 4:31:49 PM

DRAWN BY/DATE: TDC 9/5/17
REVIEWED BY/DATE: RJK 9/5/17
APPROVED BY/DATE: SJC 9/6/17

EAST ASH POND NO. 2 SITE CLOSURE PLAN

GROUNDWATER MANAGEMENT ZONE APPLICATION
EAST ASH POND NO. 2
DYNEGY MIDWEST GENERATION, LLC
HENNEPIN POWER STATION, HENNEPIN, ILLINOIS

PROJECT NO: 2414

FIGURE NO: 4

Natural Resource Technology
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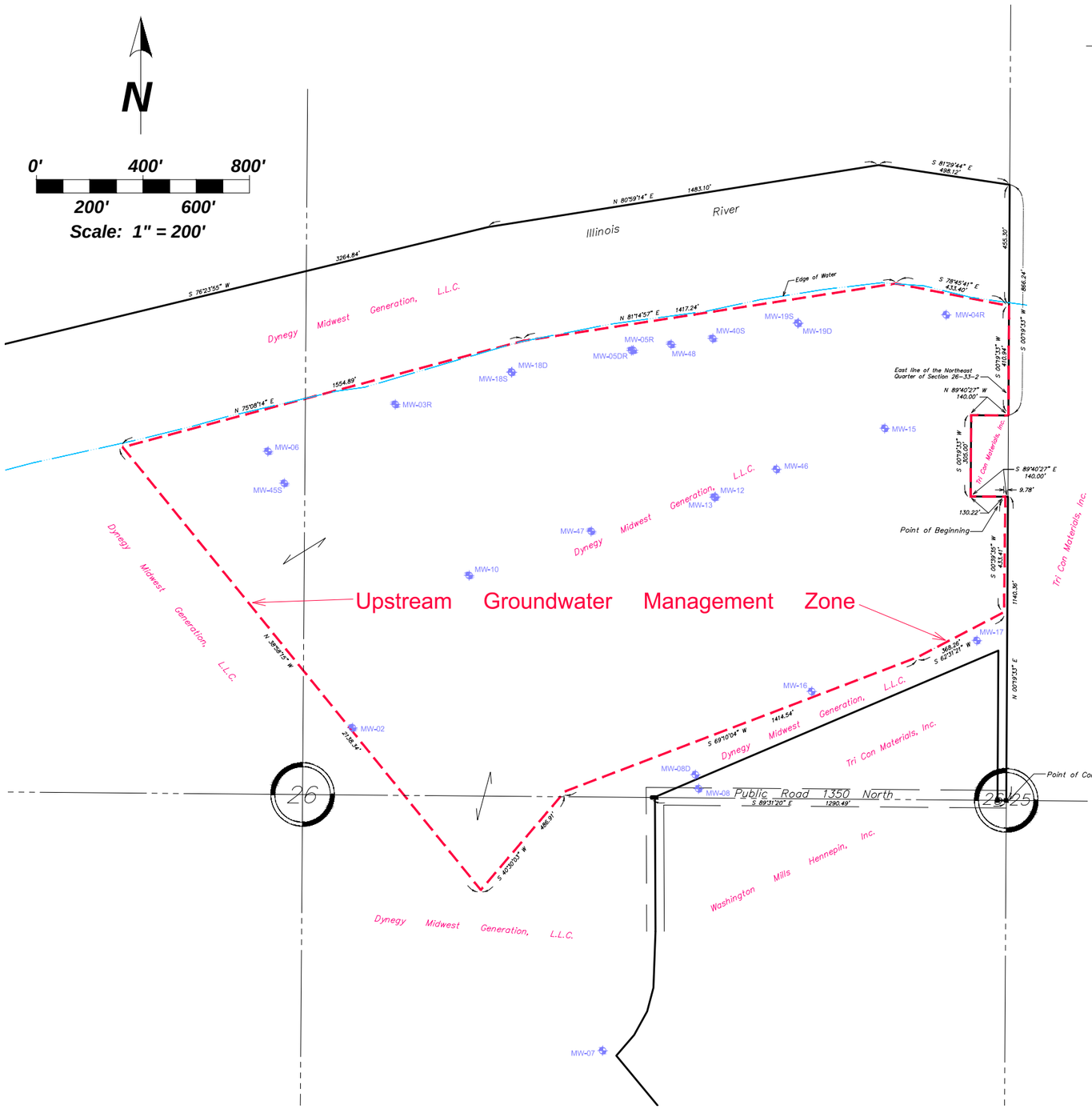
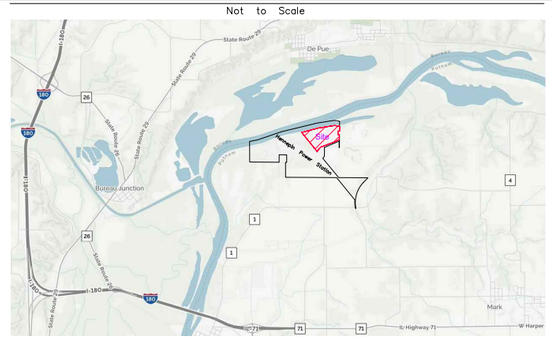
Appendix A

Groundwater Management Zone Map and Legal Description



Location Map

Not to Scale



Upstream Groundwater Management Zone

A Parcel of Land located in part of Section 26, Township 33 North, Range 2 West of the Third Principal Meridian in Putnam County, Illinois described as follows:

Commencing at a found mag nail at the East Quarter Corner of Section 26, Township 33 North, Range 2 West of the Third Principal Meridian as per an ALTA Survey by The Orin Group, L.L.C., revised January 24, 2012; thence on assumed bearings North 00 degrees 19 minutes 33 seconds East along the East Line of the Northeast Quarter of said Section 26, a distance of 1140.36 feet; thence North 89 degrees 40 minutes 27 seconds West, a distance of 9.78 feet to the Point of Beginning; thence South 00 degrees 39 minutes 35 seconds West, a distance of 433.41 feet; thence South 62 degrees 31 minutes 21 seconds West, a distance of 368.26 feet; thence South 69 degrees 10 minutes 04 seconds West, a distance of 1414.54 feet; thence South 40 degrees 30 minutes 03 seconds West, a distance of 486.91 feet; thence North 38 degrees 58 minutes 15 seconds West, a distance of 2138.34 feet; thence North 75 degrees 08 minutes 14 seconds East, a distance of 1554.89 feet; thence North 81 degrees 14 minutes 57 seconds East, a distance of 1417.24 feet; thence South 78 degrees 45 minutes 41 seconds East, a distance of 433.40 feet to the East Line of said Northeast Quarter; thence South 00 degrees 19 minutes 33 seconds West along the East Line of said Northeast Quarter, a distance of 410.94 feet; thence North 89 degrees 40 minutes 27 seconds West, a distance of 140.00 feet; thence South 00 degrees 19 minutes 33 seconds West parallel with the East Line of said Northeast Quarter, a distance of 305.00 feet; thence South 89 degrees 40 minutes 27 seconds East, a distance of 130.22 feet to the Point of Beginning and containing 101.104 acres more or less.

LEGEND

- BOUNDARY OF DYNEGY PROPERTY
- SECTION LINE
- GROUNDWATER MANAGEMENT ZONE
- EDGE OF WATER
- ROAD RIGHT-OF-WAY LINE
- FOUND STONE
- FOUND RAILROAD SPIKE
- FOUND MONUMENT
- FOUND MAG NAIL

IngenAE
514 Earth City Plaza
Earth City, MO 63045
www.ingenae.com

PROFESSIONAL LAND SURVEYOR
MARK T. ZIES
035-003103
COLLINSVILLE, ILLINOIS

Submissions / Revisions:	Date:
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

DYNEGY

Project Name & Location:

Hennepin Power Station
Upstream Groundwater Management Zone

Drawing Name:

Hennepin Upstream GMZ Exhibit

Date:	Project No.
8-07-17	
Type: x	Drawing No. 1
Drawn By: MTZ	
Approved By: x	OF 2
Scale: 1"=200'	

IngenAE

Upstream Groundwater Management Zone

A Parcel of Land located in part of Section 26, Township 33 North, Range 2 West of the Third Principal Meridian in Putnam County, Illinois described as follows:

Commencing at a found mag nail at the East Quarter Corner of Section 26, Township 33 North, Range 2 West of the Third Principal Meridian as per an ALTA Survey by The Orin Group, L.L.C., revised January 24, 2012; thence on assumed bearings North 00 degrees 19 minutes 33 seconds East along the East Line of the Northeast Quarter of said Section 26, a distance of 1140.36 feet; thence North 89 degrees 40 minutes 27 seconds West, a distance of 9.78 feet to the Point of Beginning; thence South 00 degrees 39 minutes 35 seconds West, a distance of 433.41 feet; thence South 62 degrees 31 minutes 21 seconds West, a distance of 368.26 feet; thence South 69 degrees 10 minutes 04 seconds West, a distance of 1414.54 feet; thence South 40 degrees 30 minutes 03 seconds West, a distance of 486.91 feet; thence North 38 degrees 58 minutes 15 seconds West, a distance of 2138.34 feet; thence North 75 degrees 08 minutes 14 seconds East, a distance of 1554.89 feet; thence North 81 degrees 14 minutes 57 seconds East, a distance of 1417.24 feet; thence South 78 degrees 45 minutes 41 seconds East, a distance of 433.40 feet to the East Line of said Northeast Quarter; thence South 00 degrees 19 minutes 33 seconds West along the East Line of said Northeast Quarter, a distance of 410.94 feet; thence North 89 degrees 40 minutes 27 seconds West, a distance of 140.00 feet; thence South 00 degrees 19 minutes 33 seconds West parallel with the East Line of said Northeast Quarter, a distance of 305.00 feet; thence South 89 degrees 40 minutes 27 seconds East, a distance of 130.22 feet to the Point of Beginning and containing 101.104 acres more or less.

OBG

THERE'S A WAY

Natural Resource Technology
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EXHIBIT 2

SMARTER SOLUTIONS

EXCEPTIONAL SERVICE

VALUE

GROUNDWATER MANAGEMENT ZONE APPLICATION

West Ash Pond Complex
Wood River Power Station
Alton, Illinois

FINAL

October 19, 2016

NATURAL RESOURCE TECHNOLOGY

ENVIRONMENTAL CONSULTANTS

NATURAL RESOURCE TECHNOLOGY
ENVIRONMENTAL CONSULTANTS

234 W. FLORIDA STREET, FIFTH FLOOR
MILWAUKEE, WISCONSIN 53204
(P) 414.837.3607
(F) 414.837.3608

GROUNDWATER MANAGEMENT ZONE APPLICATION

WEST ASH POND COMPLEX
WOOD RIVER POWER STATION
ALTON, ILLINOIS

Project No. 2376

Prepared For:

Dynegy Operating Company
1500 Eastport Plaza Drive
Collinsville, IL 62234

Prepared By:

Natural Resource Technology, Inc.
234 W. Florida Street, Fifth Floor
Milwaukee, Wisconsin 53204

FINAL
October 19, 2016

Stuart J. Cravens, PG
Principal Hydrogeologist

Nathaniel R. Keller, PG
Hydrogeologist

Title 35, Illinois Admin. Code, Part 620 – APPENDIX D
Confirmation of an Adequate Corrective Action Pursuant to 35 Ill. Adm. Code 620.250(a)(2)

Pursuant to 35 Ill. Adm. Code 620.250(a) if an owner or operator provides a written confirmation to the Agency that an adequate corrective action, equivalent to a corrective action process approved by the Agency, is being undertaken in a timely and appropriate manner, then a groundwater management zone may be established as a three-dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants from a site. This document provides the form in which the written confirmation is to be submitted to the Agency.

Note 1. Parts I and II are to be submitted to IEPA at the time that the facility claims the alternative groundwater standards. Part III is to be submitted at the completion of the site investigation. At the completion of the corrective process, a final report is to be filed which includes the confirmation statement included in Part IV.

Note 2. The issuance of a permit by IEPA's Division of Air Pollution Control or Water Pollution Control for a treatment system does not imply that the Agency has approved the corrective action process.

Note 3. If the facility is conducting a cleanup of a unit which is subject to the requirements of the Resource Conservation and Recovery Act (RCRA) or the 35 Ill. Adm. Code 731 regulations for Underground Storage Tanks, this confirmation process is not applicable and cannot be used.

Note 4. If the answers to any of these questions require explanation or clarification, provide such in an attachment to this document.

Information provided in the following technical documents is referenced within this form:

- AECOM, 2016. Closure and Post-Closure Care Plan for Wood River West Ash Pond Complex at Dynegy Midwest Generation, LLC, Wood River Power Station, #1 Chessen Lane, Alton, IL 62002.
- NRT, 2016a. Groundwater Management Zone Application, West Ash Pond Complex, Wood River Power Station, Alton, Illinois.
- NRT, 2016b. Groundwater Monitoring Plan, West Ash Pond Complex, Wood River Power Station, Alton, Illinois.
- NRT, 2016c. Hydrogeologic Site Characterization Report, West Ash Pond Complex, Wood River Power Station, Alton, Illinois.

Part I. Facility Information

Facility Name: Wood River Power Station

Facility Address: 1 Chessen Ln, Alton, IL 62002

County: Madison

Standard Industrial Code (SIC): 4911

1. Provide a general description of the type of industry, products manufactured, raw materials used, location and size of the facility. ***Electric power generation and coal combustion residual (CCR) disposal. The Wood River Power Station ceased electrical generation in June 2016 and the station has been retired from service. The power generating station and the West Ash Pond Complex are situated on the left descending bank of the Mississippi River at river mile 200. The Wood River Power Station encompasses approximately 390 acres within which the West Ash Pond Complex (52.5 acres) is located.***

2. What specific units (operating or closed) are present at the facility which are or were used to manage waste, hazardous waste, hazardous substances or petroleum?

	YES	NO
Landfill		X
Surface Impoundment	X	
Land Treatment		X
Spray Irrigation		X
Waste Pile		X
Incinerator		X
Storage Tank (above ground)		X
Storage Tank (underground)		X
Container Storage Area	X	
Injection Well		X
Water Treatment Units		X
Septic Tanks		X
French Drains		X
Transfer Station		X
Other Units (please describe)		

3. Provide an extract from a USGS topographic or county map showing the location of the site and a more detailed scaled map of the facility with each waste management unit identified in Question 2 or known/suspected source clearly identified. Map scale must be specified and the location of the facility must be provided with respect to Township, Range and Section. ***The West Ash Pond Complex is located within Section 19 Township 5 North and Range 9 West. Figure 1 in NRT, 2016a (attached) shows the Wood River Power Station boundary on a USGS topographic map. Figure 2 in NRT, 2016a (attached) shows the West Ash Pond Complex on an aerial photograph.***

4. Has the facility ever conducted operations which involved the generation, manufacture, processing, transportation, treatment, storage or handling of "hazardous substances" as defined by the Illinois Environmental Protection Act? Yes ☒ No ☐
If the answer to this question is "yes" generally describe these operations. ***Storage and handling of sodium hydroxide, sulfuric acid, gasoline, and hydrazine.***

5. Has the facility generated, stored or treated hazardous waste as defined by the Resource Conservation and Recovery Act? Yes ☒ No ☐
   If the answer to this question is "yes" generally describe these operations. ***Generation and/or storage of sodium hydroxide, sulfuric acid, and hydrazine.***

6. Has the facility conducted operations which involved the processing, storage or handling of petroleum? Yes ☒ No ☐ If the answer to this question is "yes" generally describe these operations. ***Storage and handling of diesel fuel, gasoline, and lubricating oils.***

7. Has the facility ever held any of the following permits?
   a. Permits for any waste storage, waste treatment or waste disposal operation. Yes ☐ No ☒
      If the answer to this question is "yes", identify the IEPA permit numbers.
   b. Interim Status under the Resources Conservation and Recovery Act (filing of a RCRA Part A application). Yes ☐ No ☒
      If the answer to this question is "yes", attach a copy of the last approved Part A application.
   c. RCRA Part B Permits. Yes ☐ No ☒
      If the answer to this question is "yes", identify the permit log number.

8. Has the facility ever conducted the closure of a RCRA hazardous waste management unit? Yes ☐ No ☒

9. Have any of the following State or federal government actions taken place for a release at the facility?
   a. Written notification regarding known, suspected or alleged contamination on or emanating from the property (e.g., a Notice pursuant to Section 4(q) of the Environment Protection Act)? Yes ☐ No ☒
      If the to this question is "yes", identify the caption and date of issuance.
   b. Consent Decree or Order under RCRA, CERCLA, EPAct Section 22.2 (State Superfund), or EPAct Section 21(f) (State RCRA). Yes ☐ No ☒
   c. If either of Items a. or b. were answered by checking "yes", is the notice, order or decree still in effect? Yes ☐ No ☐

10. What groundwater classification will the facility be subject to at the completion of the remediation?

    Class I ☒ Class II ☐ Class III ☐ Class IV ☐
    If more than one Class applies, please explain.

11. Describe the circumstances which the release to groundwater was identified. ***Groundwater sampling at the West Ash Pond Complex was initiated in 1984; however, consistent data collection began in 1996. Exceedances of Class I groundwater quality standards associated with releases from the West Ash Pond Complex in monitoring wells include the parameters boron, manganese, and total dissolved solids.***

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true and accurate.

Wood River Power Station	
Facility Name	Signature of Owner/Operator
1 Chessen Ln, Alton, IL 62002	**Dynegy Midwest Generation, LLC**
Location of Facility	Name of Owner/Operator
1190205002	10-19-2016
Illinois EPA Identification Number	Date

PART II: Release Information

1. Identify the chemical constituents release to the groundwater. Attach additional documents as necessary.

Chemical Description	Chemical Abstract No.
Boron	***7440-42-8***
Manganese	***7439-96-5***
Total Dissolved Solids	***10052***

2. Describe how the site will be investigated to determine the source or sources of the release. ***The West Ash Pond Complex has been investigated as described in Section 1.2 (Technical Support Documents) in NRT, 2016a.***

3. Describe how groundwater will be monitored to determine the rate and extent of the release. ***The monitoring network to monitor the extent of the release is described in Section 4 (Groundwater Monitoring Plan) in NRT, 2016b.***

4. Has the release been contained on-site at the facility? ***The current horizontal extent of the parameters of concern related to CCR leachate (boron) that exceed Class I groundwater standards is within the Wood River Power Station's property with the exception of a narrow strip along the Mississippi River (Great River Road/Route 143) that is not owned by Dynegy Midwest Generation, LLC.***

5. Describe the groundwater monitoring network and groundwater and soil sampling protocols in place at the facility. ***The groundwater monitoring network and sampling protocols are described in Section 4 (Groundwater Monitoring Plan) in NRT, 2016b.***

6. Provide the schedule for investigation and monitoring. ***The site investigation is complete and groundwater monitoring will continue on a quarterly basis for the required/permitted monitoring period as described in Section 4.2 (Sampling Schedule) in NRT, 2016b.***

7. Describe the laboratory quality assurance program utilized for the investigation. ***Laboratory quality assurance is described in Sections 4.4 (Laboratory Analysis) and 4.5 (Quality Assurance) in NRT, 2016b. The quality assurance/quality control procedures described in the Groundwater Monitoring Plan will be supplemented by the selected Illinois EPA-approved laboratory's QA Manual.***

8. Provide a summary of the results of available soil testing and groundwater monitoring associated with the release at the facility. The summary or results should provide the following information: dates of sampling; types of samples taken (soil or water); locations and depths of samples; sampling and analytical methods; analytical laboratories used; chemical constituents for which analyses were performed; analytical detection limits; and concentrations of chemical constituents in ppm (levels below detection should be identified as "ND"). ***A narrative summary of the results of groundwater monitoring is discussed in Section 3 (Groundwater Quality) in NRT, 2016c. Analytical data summary tables are available in Appendix E (Groundwater Quality Data) in NRT, 2016c. Analytical data for all monitoring events have been previously submitted to Illinois EPA.***

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of knowledge and belief, true and accurate and confirm that the actions identified herein will be undertaken in accordance with the schedule set forth herein.

Wood River Power Station	
Facility Name	Signature of Owner/Operator
1 Chessen Ln, Alton, IL 62002	**Dynegy Midwest Generation, LLC**
Location of Facility	Name of Owner/Operator
1190205002	10-19-2016
Illinois EPA Identification Number	Date

Part III: Remedy Selection Information

1. Describe the selected remedy. ***The remedy includes ash dewatering, relocating/reshaping existing CCR within the West Ash Pond Complex to achieve acceptable grades, construction of a geomembrane cover system and establishing a vegetative cover to minimize long-term erosion (AECOM, 2016).***

2. Describe other remedies which were considered and why they were rejected. ***Further mitigation of CCR constituents is not deemed practicable or cost-effective.***

3. Will waste, contaminated soil or contaminated groundwater be removed from the site in the course of this remediation? Yes ☐ No ☒
   If the answer to this question is "yes", where will the contaminated material be taken?

4. Describe how the selected remedy will accomplish the maximum practical restoration of beneficial use of groundwater. ***The dewatering and installation of a geomembrane cover system will control the potential for water infiltration into the closed CCR unit and will allow drainage of surface water off of the cover system. These actions will reduce leachate generation and migration and groundwater quality will improve over time.***

5. Describe how the selected remedy will minimize any threat to public health or the environment. ***The currently defined extent of releases does not threaten public health. As discussed in Section 2.2 in NRT, 2016a, there are currently no impairments to groundwater usage on the Wood River Power Station property or surrounding properties caused by the West Ash Pond Complex. No impairments to groundwater usage resulting from establishment of the proposed GMZ are anticipated. CCR dewatering and the geomembrane cover system will reduce leachate generation and migration from the West Ash Pond Complex and minimize CCR constituents entering the environment.***

6. Describe how the selected remedy will result in compliance with the applicable groundwater standards. ***Closure in place of the Wood River West Ash Pond Complex, as proposed, will result in a reduction of leachate production, decreasing CCR constituent concentrations and contraction of the groundwater plume. A Groundwater Model Report, included in Appendix D of AECOM 2016, suggests that the geosynthetic cover system will control recharge and subsequent leachate generation within the limits of the Site and reduce concentrations of boron below Class I standards. Concentration reductions are expected to begin approximately one year after completion of the cover system.***

7. Provide a schedule for design, construction and operation of the remedy, including dates for the start and completion. ***A schedule for implementing the remedies is included in Section 1.3 in AECOM, 2016.***

8. Describe how the remedy will be operated and maintained. ***The operation and maintenance of the remedy is descried in Section 3 (Post-Closure Care Plan) in (AECOM, 2016).***

9. Have any of the following permits been issued for the remediation?

   a. Construction or Operating permit from the Division of Water Pollution Control. Yes ☐ No ☒

   b. Land treatment permit from the Division of Water Pollution Control. Yes ☐ No ☒
      If the answer to this question is "yes", identify the permit number.

   c. Construction or Operating permit from the Division of Air Pollution Control. Yes ☐ No ☒
      If the answer to this question is "yes", identify the permit number.

10. How will groundwater at the facility be monitored following completion of the remedy to ensure that the groundwater standards have been attained? ***Groundwater monitoring procedures are described in Section 4 (Groundwater Monitoring Plan) in NRT, 2016b.***

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true and accurate and confirm that the actions identified herein will be undertaken in accordance with the schedule set forth herein.

Wood River Power Station	
Facility Name	Signature of Owner/Operator
1 Chessen Ln, Alton, IL 62002	**Dynegy Midwest Generation, LLC**
Location of Facility	Name of Owner/Operator
1190205002	10-19-2016
Illinois EPA Identification Number	Date

PART IV: Completion Certification

This certification must accompany documentation which includes soil and groundwater monitoring data demonstrating successful completion of the corrective process described in Parts I-III.

Facility Name _____

Facility Address _____

_____

County _____

Standard Industrial Code (SIC) _____

Date _____

Based on my inquiry of those persons directly responsible for gathering the information, I certify that an adequate corrective action, equivalent to a corrective action process approved by the Agency, has been undertaken and that the following restoration concentrations are being met:

Chemical Name	Chemical Abstract No.	Concentration (mg/L)

Wood River Power Station
Facility Name

1 Chessen Ln, Alton, IL 62002
Location of Facility

1190205002
Illinois EPA Identification Number

Signature of Owner/Operator

Dynegy Midwest Generation, LLC
Name of Owner/Operator

Date

TABLE OF CONTENTS

FIGURES

APPENDICES

1 INTRODUCTION

1.1 Overview

This Groundwater Management Zone Application was prepared by Natural Resource Technology, Inc. (NRT) in support of the Closure Plan for the West Ash Pond Complex (AECOM, 2016) located at the Wood River Power Station (WRPS), which is owned by Dynegy Midwest Generation, LLC (DMG). The West Ash Pond Complex includes West Ash Pond 1, West Ash Pond 2E, and West Ash Pond 2W. This application is submitted pursuant to Illinois Administrative Code Title 35, Part 620: Groundwater Quality (35 IAC Part 620).

DMG requests establishment of a Groundwater Management Zone (GMZ) pursuant to 35 IAC 620.250(a)(2) as a three-dimensional region containing groundwater being managed to mitigate a potential release of Coal Combustion Residuals (CCR) constituents from the West Ash Pond Complex, which is inclusive of the following three surface impoundments as listed below:

- West Ash Pond 1
- West Ash Pond 2E
- West Ash Pond 2W

The boundary of the GMZ is approximated in map view on Figure 1. The boundary generally extends from the northern edge of the ash ponds south to the property line located within Section 19 Township 5 North and Range 9 West. The area of the GMZ includes the entire West Ash Pond Complex.

A legal description and map of the proposed GMZ is provided in Appendix A. The GMZ will extend vertically through all water-bearing strata to the top of bedrock at an estimated elevation of approximately 300 ft MSL.

1.2 Technical Support Documents

Technical documents in support of the Closure Plan for the Wood River West Ash Complex, include, but are not limited to, the following:

- ***AECOM December 31, 2015, 30% Design Data Package for Dynegy Wood River Energy Complex West Ash Pond and East Pond CCR Units.*** A geotechnical program consisting of installation of auger borings, CPT soundings and piezometers to obtain information for compliance with requirements of the federal CCR rule.

- ***Kelron/NRT, August 26, 2009, Assessment of Potential for Groundwater Impact on Identified Water Wells, Dynegy Midwest Generation, Inc., Wood River Power Station, East Alton, Illinois.*** An assessment of the potential for impact to water quality in water wells within 2,500 feet of the WRPS property boundary, identified in the June 3, 2009 Water Well Survey report.

- ***Kelron/NRT, June 3, 2009, Water Well Survey, Dynegy Midwest Generation, Inc., Wood River Power Station, East Alton, Illinois.*** A survey to identify wells located within 2,500 feet of the WRPS property boundary.

- ***NRT, May 3, 2006, Transport Model Investigation for the New East Ash Pond, Dynegy Midwest Generation, Inc., Wood River Power Station, Alton, Illinois.*** Calibration of a groundwater flow and transport model to match conditions observed at the New East Ash Pond and utilization of the model to predict the effects of the New East Ash Pond on groundwater quality in the future.

- ***Kelron, December 17, 2004, Hydrogeologic Investigation for the Proposed New East Ash Pond, Dynegy Midwest Generation, Inc., Wood River Power Station, Illinois.*** An investigation to characterize the hydrogeology and groundwater quality at the location of the New East Ash Pond and former Old East Ash Pond and to collect input data for groundwater flow and transport modelling.

- ***NRT, August 2000, Investigation of Closure Options for the West Ash Impoundment, Dynegy Midwest Generation, Inc., Wood River Power Station, Madison County, Illinois.*** An investigation to characterize hydrogeology and groundwater quality at the West Ash Impoundment and evaluate the effectiveness of closure alternatives for protecting groundwater quality.

- ***Kelron, November 29, 1995, Groundwater Investigation Report, Wood River Ash Pond Expansion, Illinois Power Company.*** An investigation to characterize hydrogeology and groundwater quality near a proposed ash pond expansion near the existing West Ash Pond Complex including analysis of the groundwater monitoring network designed and installed for the ash pond expansion.

- ***Illinois State Water Survey (ISWS), May 1984, Groundwater Monitoring at the Wood River Power Station's Ash Disposal Ponds and Renovated Ash Disposal Area, Illinois Power Company.*** An investigation to design and implement a groundwater monitoring program for determining the impact of ash disposal practices on the local groundwater system. This report includes results from both the West and East Ash Pond Complexes.

Groundwater flow and transport models were also developed to evaluate the effect of various ash pond closure scenarios on groundwater quality and to predict the fate and transport of CCR leachate components (NRT, 2016e). Additional groundwater modeling has been conducted to enable estimation of the time required for hydrostatic equilibrium of groundwater beneath the unit and is being submitted under separate cover (NRT, 2016d).

1.3 Site Location and Background

The West Ash Pond Complex is comprised of West Ash Pond 1, West Ash Pond 2E and West Ash Pond 2W at the WRPS, located in Alton in Madison County, Illinois. WRPS and the West and East Ash Pond Complexes are situated on the east bank of the Mississippi River, about six river miles upstream

from the confluence of the Mississippi and Missouri Rivers. . The Wood River, a perennial stream that discharges into the Mississippi River, lies on eastern edge of the WRPS property.

The West Ash Pond Complex is located within Section 19 Township 5 North and Range 9 West. The cities of Alton, East Alton, and Wood River are within 2 miles of the impoundments. The WRPS is located in an area of heavy industrial activity. Metal refining, vinegar production, cardboard manufacturing, and sewage treatment occur within ½ mile of the plant. The site location is shown on Figure 1. The WRPS property is bordered on the south by the State Route 143 and the Mississippi River, the east by the Wood River, the north by vacant/abandoned industrial property and railroad tracks, and the west by vacant land/ water retention ponds of the Mississippi River levee system operated by the Army Corps of Engineers.

Electrical generation at WRPS was shut down In June 2016, and the plant is closing its ash impoundments. This report includes closure of the West Ash Pond Complex which consists of 3 inactive impoundments (Figure 2):

- West Ash Pond 1 (22 acres, inactive)
- West Ash Pond 2W (19 acres, inactive)
- West Ash Pond 2E (11.5 acres, inactive)

Pond 3 is also shown on the Figure 2 and was used as a polishing pond when the complex was used for ash handling prior to 2006. It is not part of the West Ash Complex. West Ash Pond 2E was constructed with a geomembrane liner system and West Ash Ponds 1 and 2W are unlined. The West Ash Pond Complex will be closed by leaving CCR in place and using a combination of a conventional earth soil cover system and an alternative geomembrane cover system. West Ash Ponds 1 and 2W final cover system soils will be compacted to a permeability less than the subsoils underlying the CCR. This design will control the potential for water infiltration into the closed CCR unit and will allow drainage of surface water off of the cover system (AECOM, 2016).

1.4 Geologic and Hydrogeologic Summaries

1.4.1 Geology

The geology has been extensively evaluated during previous hydrogeologic investigations, groundwater quality assessments, and modeling since the first borings and monitoring wells were installed in 1982. The geology at WRPS consists of the following units (beginning at the ground surface):

- Fill (consisting of clay, sand, and silt mixtures) and coal ash: primarily occurs within the impoundments, impoundment berms and the Wood River and Mississippi River levees

- Upper silty clay unit: Clay and silty clay alluvial deposits of the Mississippi River and Wood River
- Inter-sand unit: a thin (generally 5 feet or less) silty sand/ sand unit above the lower silty clay unit that is continuous across most of the site and may intersect the primary sand unit in the northern portion of the site
- Lower silty clay unit: Clay and silty clay alluvial deposits of the Mississippi River and Wood River
- Primary sand unit: Sand and gravel deposits that are highly variable, well to poorly sorted, with intermittent layers of clay and silt. This unit is the uppermost aquifer unit
- Silt and sandy silt, and silty clay diamicton only observed at depth near the east side of the New (Primary) East Ash Pond (NEAP)

The ash fill lies on top of the silty clay unit, or the inter-sand unit in places where the upper silty clay was either not deposited, or removed during construction of the ash ponds. With the exception of the southeast portion of the NEAP, the ash fill is underlain by silty clay of variable thickness. The primary sand is encountered below the silty clay and is the uppermost aquifer in the area. The primary sand thickness is estimated to be approximately 120 – 140 feet. Bedrock has not been encountered in monitoring wells but regional information indicates that the West Ash Pond Complex is underlain by Mississippian age limestone.

1.4.2 Hydrogeology

Groundwater is present at depth in the primary sand unit and, during periods of high river stage, it is also present in the inter-sand layer. Water levels are elevated within the impoundments relative to groundwater elevations measured both outside and below the impoundment in the primary sand unit.

Groundwater flow directions are variable and significantly influenced by the Mississippi River stage. During base stage or low river levels, groundwater flow occurs in both a southwesterly direction toward the Mississippi River and southeasterly toward the Wood River. During spring flooding and high Mississippi River stages, groundwater flow is northerly, with either an easterly or westerly component. The flooding and high river stages only occur periodically and the dominant flow direction during any given year is toward the rivers.

Field hydraulic conductivity tests performed on the primary sand were presented in the Hydrogeologic Characterization Report (NRT, 2016c). Results indicate high horizontal hydraulic conductivities of 10^{-1} to 10^{-3} cm/sec (NRT, 2000 & Kelron, 2004); the geometric mean of all wells tested is 5.7×10^{-2} cm/sec (Kelron, 2004).

1.5 Groundwater Monitoring Activities

1.5.1 IEPA Monitoring

The current monitoring program performed in compliance with the IEPA-approved Closure Plan (NRT, 2000) includes 12 wells that are sampled semi-annually for dissolved boron and manganese, total sulfate, total dissolved solids (TDS), pH, and groundwater elevation. These monitoring wells include Wells 02, 04, 12, 20, 21, 22, 23, 25, 28, 31, 34, and 36. Additional groundwater elevation measurements are collected at Wells 29, 30, 32R, and 33. Wells 03 and 35R are present on-site but are not monitored. All wells are screened in the primary sand unit near the West Ash Pond Complex.

1.5.2 CCR Monitoring

CCR monitoring which commenced in November 2015 consists of quarterly groundwater elevation measurements and water quality samples collected at background Monitoring Wells 25, 31, 36, and downgradient Wells 02, 04, 32R, and 34. The groundwater is analyzed for Appendix III and Appendix IV parameters including: antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chloride, chromium, cobalt fluoride, lead, lithium, mercury, molybdenum, radium (total 226/228), selenium, sulfate, total dissolved solids, and thallium, and field measurements of pH. Piezometers (P008, P015, P016, P020, P021, P024, P025, and P026) are measured monthly for groundwater elevation.

Exceedances of Class I groundwater quality standards are present in monitoring wells at various locations around the West Ash Pond Complex for boron, manganese, and total dissolved solids. Measurements of pH collected from groundwater wells located immediately north of the West and East Ash Pond Complexes are also frequently below the Class I lower limit (6.5 S.U.) The exceedances of Class I groundwater quality standards for manganese, TDS and pH are attributable to either naturally occurring geochemical variability, or non-CCR sources and are not associated with the West Ash Pond Complex. Boron is the primary indicator parameter for CCR leachate at the West Ash Pond Complex. Class I groundwater quality standard exceedances of boron occur in Wells 2, 12, and 34.

2 GROUNDWATER IMPAIRMENTS AND CONTROL OPTIONS

2.1 Extent of Groundwater Impairments Associated with Ash Impoundments

Concentrations of boron, manganese, TDS, and pH exceeded Class I groundwater quality standards during the January 2010 through November 2015 monitoring period at the following locations (Figure 3):

Monitoring wells exceeding Class I groundwater quality standards [1]					
Well Number	pH (SU)	Total Dissolved Solids (mg/L)	Manganese, dissolved (mg/L)	Boron dissolved (mg/L)	Sulfate, total (mg/L)
02			X	X	
04			X		
12			X	X	
20	X low				
23	X low				
25		X			
28			X		
31		X			
34			X	X	
36			X		

[1] Exceeded the Class I standards in more than half of the sampling events

Using the Class I standard exceedances of CCR indicator parameter boron, the extent of CCR leachate migration appears limited to the primary sand downgradient of the site. Exceedances in upgradient wells are attributable to another source, and are not indicative of impacts from the West Ash Pond Complex.

A groundwater flow and transport model (NRT, 2016e) was calibrated to match hydraulic head and boron concentrations observed at the WRPS in November 2014 and November 2015, respectively. The calibrated model was then used to evaluate a baseline (no action) scenario and a capping scenario of Ponds 1, 2E, and 2W over a future time frame of 500 years. The capping scenario assumed cap construction with a geosynthetic barrier layer that complies with 40 CFR Part 257, Subpart D (CCR Rule). The results of the modeling indicated:

- The baseline (no action) scenario prediction model indicated boron concentrations at downgradient monitoring wells that currently exceed the Class I standard would slowly increase for a period of about 300 years before reaching an equilibrium concentration above the standard. There was no indication within the 500 year model run that boron concentrations would significantly decrease.

- The capping scenario prediction model indicated boron concentrations in all calibrated monitoring wells are predicted to start decreasing one year following cap construction. Predicted concentration distributions demonstrated reduced contaminant plumes relative to the calibrated transport model. The capping scenario model predicted all calibrated monitoring well concentrations to be below the Class I standard of 2 mg/L for boron within 53.5 years following cap construction. Similarly, the capping scenario model predicted two of the three calibrated monitoring well concentrations downgradient of the Site (wells 02 and 34) would decrease below the Class I standard for boron within 33 years following cap construction.

These model results suggest that the geosynthetic cover system will control recharge and subsequent leachate generation within the limits of the West Ash Pond Complex and sufficiently reduce concentrations of boron below Class I standards within a reasonable timeframe. Concentration reductions should begin approximately one year after completion of the cover system.

2.2 Impairments to Groundwater Usage

There are currently no impairments to groundwater usage on the WRPS property or surrounding properties caused by the West Ash Complex. No impairments to groundwater usage resulting from establishment of the proposed GMZ are anticipated.

According to database records of the ISGS, ISWS, and Illinois Environmental Protection Agency (Illinois EPA), there are 42 water wells within a 2,500 feet radius of the WRPS property boundary. Ten wells are designated as industrial/commercial wells used for dewatering or pressure relief of levees. The operational status of these wells is unknown, although information on the well logs suggests some may have been plugged. Five wells are community water supply wells operated by East Alton and the remaining 27 wells are industrial/commercial wells of unknown operational status. (NRT, 2009)

In addition to the above sources of water well information provided by State agencies, information was obtained from DMG personnel and the Olin Corporation. DMG does not own or operate any water wells on the WRPS property. Olin Corporation owns and operates wells on its property east of the Wood River.

The results of the water well survey, combined with the information contained within the annual groundwater monitoring reports, indicate that there are no water wells, potable or non-potable, that are likely to be impacted by groundwater from the West Ash Pond Complex with the exception of non-potable wells located directly south of the WRPS. All other water wells, located to the northwest, north, northeast, east, and southeast, are either upgradient during most the year (i.e. are not downgradient of the prevailing southerly direction of groundwater flow), and/or are located beyond a groundwater to surface

water discharge zone (i.e., Wood River). The potential for groundwater emanating from the West Ash Pond Complex to affect wells located anywhere but directly south of the WRPS is very low.

Based on existing monitoring well data, there are no known groundwater quality impacts on water wells directly to the south of WRPS along the Mississippi River. These water wells, some of which may no longer exist, are utilized for either dewatering for construction activities or pressure relief for the adjacent levee. . All of these water wells are for non-potable, non-contact use only. Although groundwater in the vicinity of these water wells may be impacted by inorganic parameter concentrations of boron and manganese, there is no known exposure pathway for human ingestion or contact of groundwater at these well locations.

2.3 Closure of the West Ash Pond Complex

The Closure Plan for the West Ash Pond Complex is being submitted under separate cover (AECOM, 2016). In November 2015, in accordance with 40 CFR Part 257, Subpart D, DMG submitted to the Illinois Environmental Protection Agency (IEPA) a notice of intent to close the inactive West Ash Pond 2W. The notice of intent to close the West Ash Pond 2E and West Ash Pond 1 will be submitted by May 17, 2017. Because the ponds are inactive, the CCR Rule deadline for completing closure of these two ponds is November 2020.

The three ponds comprising the West Ash Pond Complex are inactive surface impoundments separated by splitter dikes. West Ash Pond 2E contains a geomembrane liner system and West Ash Ponds 1 and 2W are unlined. The Closure Plan includes the following corrective action elements, with the capped area shown on Figure 4:

- CCR will not be removed from the West Ash Pond Complex but will be redistributed and reshaped to fill in low areas and establish a subgrade; surface water will be removed as necessary
- Portions of the dike around West Ash Pond 1 will be lowered and the excess soils used as capping material in West Ash Ponds 1 and 2W
- West Ash Ponds 1, 2E, and 2W will have an alternative geomembrane cover system that has a permeability less than the subsoils and complies with the CCR Rule
- The design will control the potential for water infiltration into the closed CCR units and will allow drainage of storm water off of the cover system to interior drainage channels routed through culvert pipes to the existing non-CCR West Ash Pond 3.

The proposed corrective action elements will provide hydraulic control of surface water on the cover system and surrounding the West Ash Pond Complex, will lower leachate levels and establish hydrostatic equilibrium within the ponds, and will decrease transport off-site both spatially and temporally.

3 APPLICATION FOR GROUNDWATER MANAGEMENT ZONE

3.1 Environmental Impact of Proposed Groundwater Management Zone

Establishment of this GMZ will have a positive environmental impact. The fate and transport modeling predicted boron concentrations will eventually decrease to levels lower than the Class I standard at all monitoring wells inside of the proposed GMZ boundary within approximately 54 years following completion of closure activities. Under the baseline scenario of no cap on any of the ash ponds in the West Ash Pond Complex, which is a worst-case scenario, the boron concentrations are predicted to reach peaks (equal to or greater than 2 mg/L) in approximately 300 years before starting to decrease. Capping the West Ash Pond Complex will significantly reduce the extent of boron impacts compared to the baseline transport model scenario. The current horizontal extent of the parameters of concern related to CCR leachate (boron) that exceed Class I groundwater standards is near the south and southeast property boundary and within the model-predicted plume extents (NRT, 2016e).

3.2 Proposed Groundwater Management Zone

The proposed GMZ incorporates the area currently exhibiting constituents in groundwater that are attributable to the West Ash Pond Complex, as measured in the on-site groundwater monitoring well network, and also includes the area within the WRPS property boundary that has model-predicted boron concentrations above the Class I groundwater standard. A legal description and map depicting the proposed groundwater management zone is provided in Appendix A. The approximate boundary of the proposed GMZ is depicted in Figure 2. The GMZ will extend vertically through the unlithified deposits to an approximate elevation of 300 ft NGVD within the boundaries of the West Ash Pond Complex. This elevation (300 ft NGVD) is approximately 75 to 110 feet below the top of the primary sand measured in borings for the existing monitoring well network. The GMZ does not extend beyond the WRPS property boundaries; however, it does not include a narrow corridor contiguous with Great River Road (i.e. Highway 143) that is not owned by DMG.

3.3 Compliance with Applicable On-Site Groundwater Quality Standards

In accordance with IAC 620 Section 620.240, the compliance boundary is a lateral distance of 25 feet outward from the outermost edge of the West Ash Pond Complex berms. Following completion of the

corrective action, the groundwater standard at the compliance boundary will be in accordance with IAC 620 Section 450(a)(4) for groundwater quality restoration such that the standard for each released chemical constituent will be the higher of either the Class I groundwater standard or the concentration determined by groundwater monitoring at the compliance boundary.

Compliance with on-site groundwater quality standards, as measured at the proposed monitoring well network, will be achieved when there are no statistically significant increasing trends that are attributed to the West Ash Pond Complex for parameters detected at the compliance boundary after a minimum 30 years of post-closure groundwater monitoring has been completed.

Evaluation of groundwater quality data under USEPA (2015) will be consistent with 40 CFR Part 257.93 and 257.94.

4 PROPOSED GROUNDWATER MONITORING PLAN

Groundwater monitoring will be performed according to the groundwater monitoring plan, incorporated by reference, in the accompanying report:

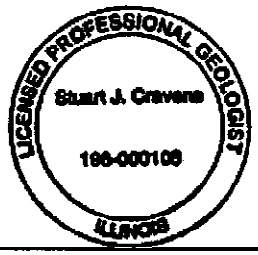
- Groundwater Monitoring Plan, West Ash Pond Complex. Wood River Power Station. East Alton, IL. (NRT, 2016b).

The elements of the groundwater monitoring plan include:

- Groundwater monitoring system with designation of background and compliance monitoring wells along with monitoring well depths and construction.
- Groundwater monitoring parameters.
- Groundwater monitoring frequency and sampling schedule, along with statistical basis for reduction of monitoring frequency.
- Groundwater sample collection protocol with standard operating procedures.
- Laboratory analysis by a state-certified laboratory and listing of methods and reporting limits.
- Quality Assurance Program for field collection of samples and laboratory analysis of samples.
- Groundwater monitoring system maintenance, including schedule of inspections and methods for inspection of monitoring wells.
- Data reporting schedule and content of reports.
- Demonstration of compliance. Statistical methods for evaluating groundwater quality data.
- A notification schedule with actions to be taken in cases of non-compliance.

5 LICENSED PROFESSIONAL ACKNOWLEDGEMENT

The geological work product contained in this document has been prepared under my personal supervision and has been prepared and administered in accordance with the standards of reasonable professional skill and diligence.

Stuart J. Cravens, PG Principal Hydrogeologist Natural Resource Technology 2422 E. Washington Street, Suite 104 Bloomington, Illinois 61704 (217) 390-1503 Registration No. 196000108	Seal:  Expires: 03/31/2017
Signature	10/19/16 Date

6 REFERENCES

AECOM, 2016. Closure and Post Closure Care Plan for the Wood River West Ash Complex.

Kelron Environmental. 2004. Hydrogeologic Investigation for the Proposed New East Ash Pond, Wood River Power Station, Illinois.

NRT, 2000. *Investigation of Closure Options for the West Ash Impoundment*, Wood River Power Station, Illinois.

NRT and Kelron, 2009. Assessment of Potential for Groundwater Impact on Identified Water Wells. Wood River Power Station. East Alton, Illinois.

NRT, 2016a. Groundwater Management Zone Application. West Ash Pond Complex, Wood River Power Station, Alton, Illinois.

NRT, 2016b. Groundwater Monitoring Plan. West Ash Pond Complex, Wood River Power Station, Alton, Illinois.

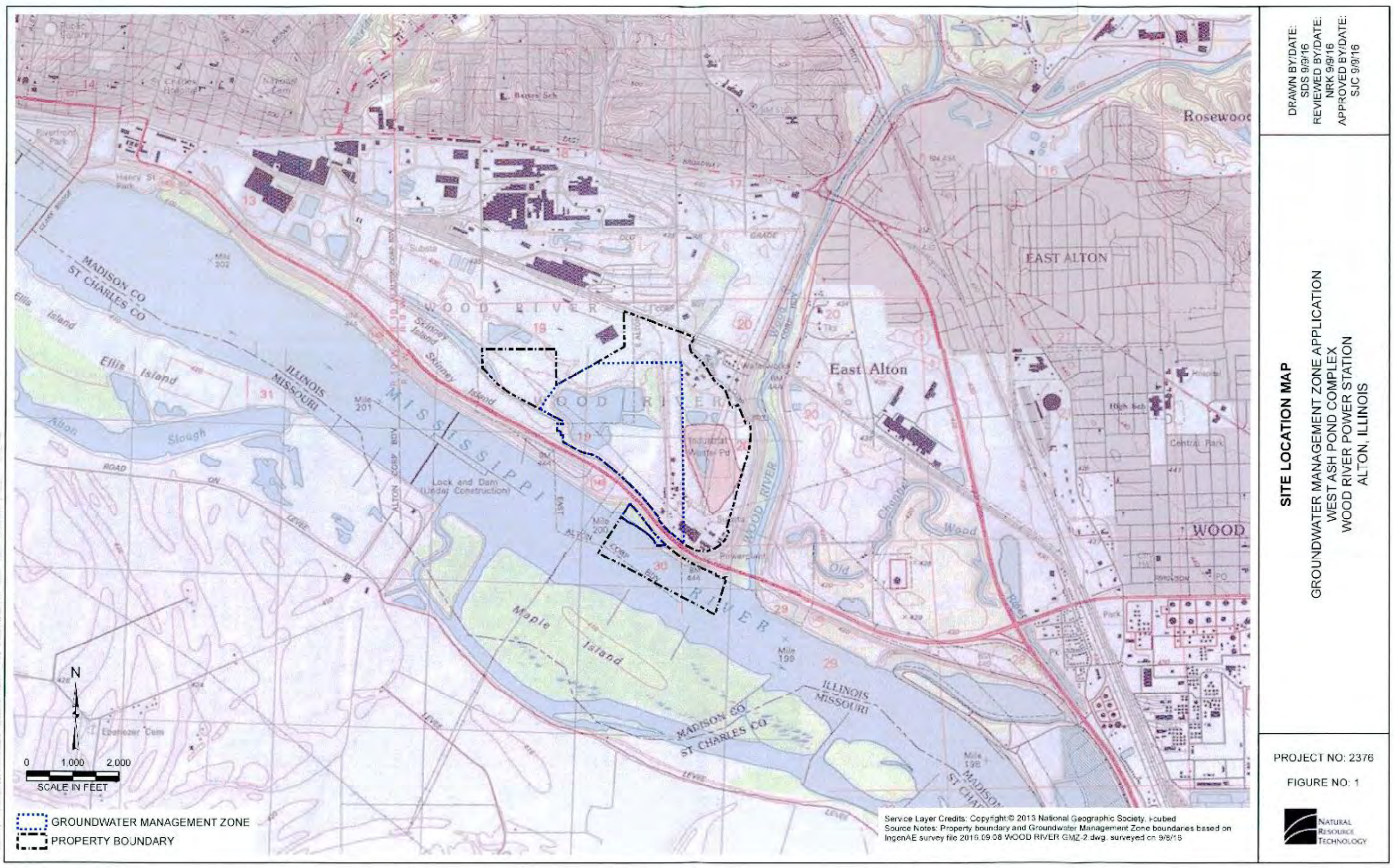
NRT, 2016c. Hydrogeologic Characterization Report. West Ash Pond Complex, Wood River Power Station, Alton, Illinois.

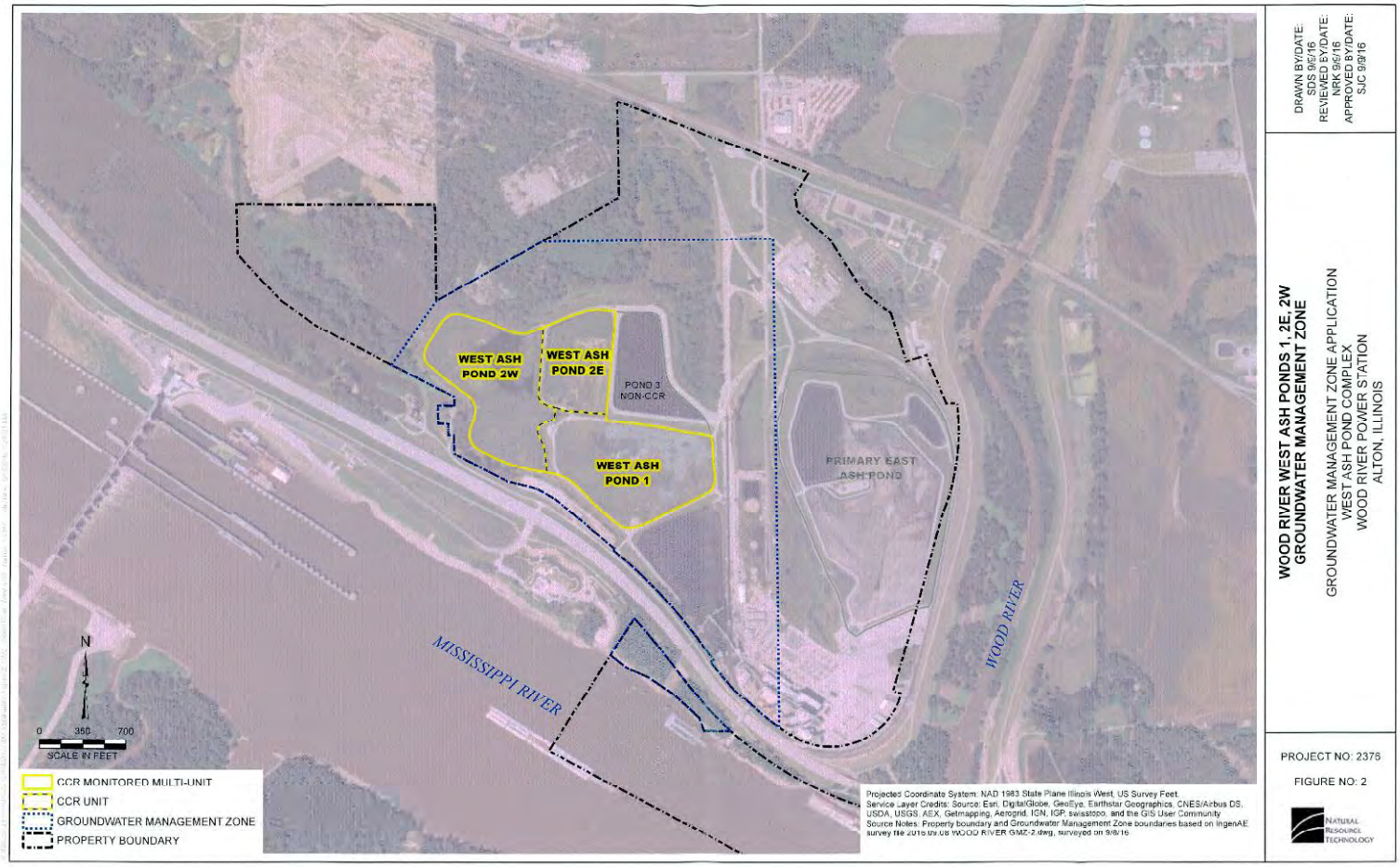
NRT, 2016d. Hydrostatic Modeling Report. West Ash Pond Complex, Wood River Power Station, Alton, Illinois.

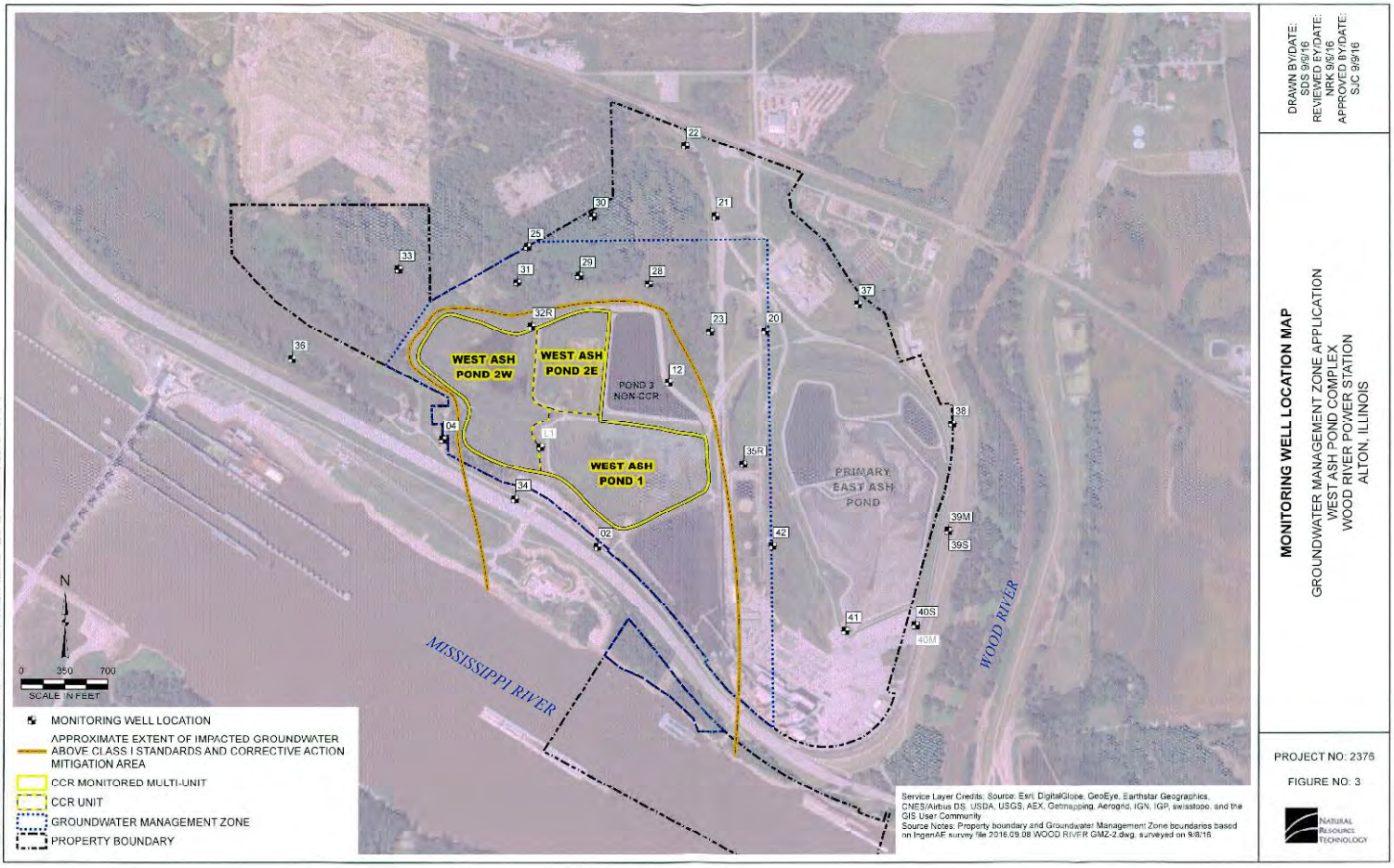
NRT, 2016e. Groundwater Model Report. West Ash Pond Complex, Wood River Power Station, Alton, Illinois.

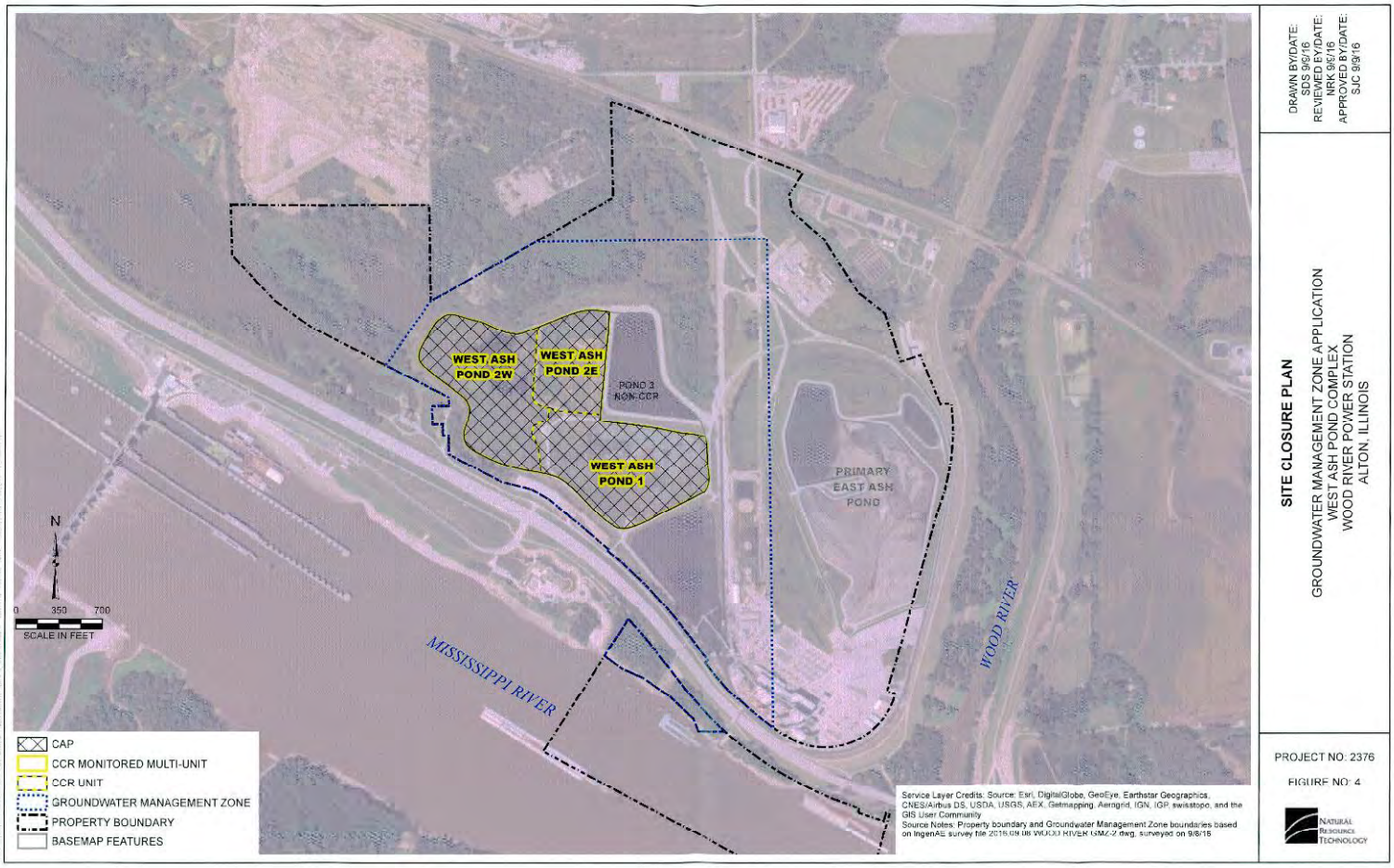
USEPA, April 17, 2015. 40 CFR Parts 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule

FIGURES


MADISON CO
ST CHARLES CO
ILLINOIS
MISSOURI
MISSISSIPPI
RIVER
WOOD RIVER
EAST ALTON
East Alton
Maple Island
Ellis Island
Alton Slough
Lock and Dam (Under Construction)
Industrial Waste Pd
Powerplant
N
0
1,000
2,000
SCALE IN FEET
GROUNDWATER MANAGEMENT ZONE
PROPERTY BOUNDARY
Service Layer Credits: Copyright© 2013 National Geographic Society, i-cubed
Source Notes: Property boundary and Groundwater Management Zone boundaries based on IngenAE survey file 2016.09.08 WOOD RIVER GMZ-2.dwg. surveyed on 9/8/16
DRAWN BY/DATE: SDS 9/9/16
REVIEWED BY/DATE: NRK 9/9/16
APPROVED BY/DATE: SJC 9/9/16
SITE LOCATION MAP
GROUNDWATER MANAGEMENT ZONE APPLICATION
WEST ASH POND COMPLEX
WOOD RIVER POWER STATION
ALTON, ILLINOIS
PROJECT NO: 2376
FIGURE NO: 1
NATURAL RESOURCE TECHNOLOGY

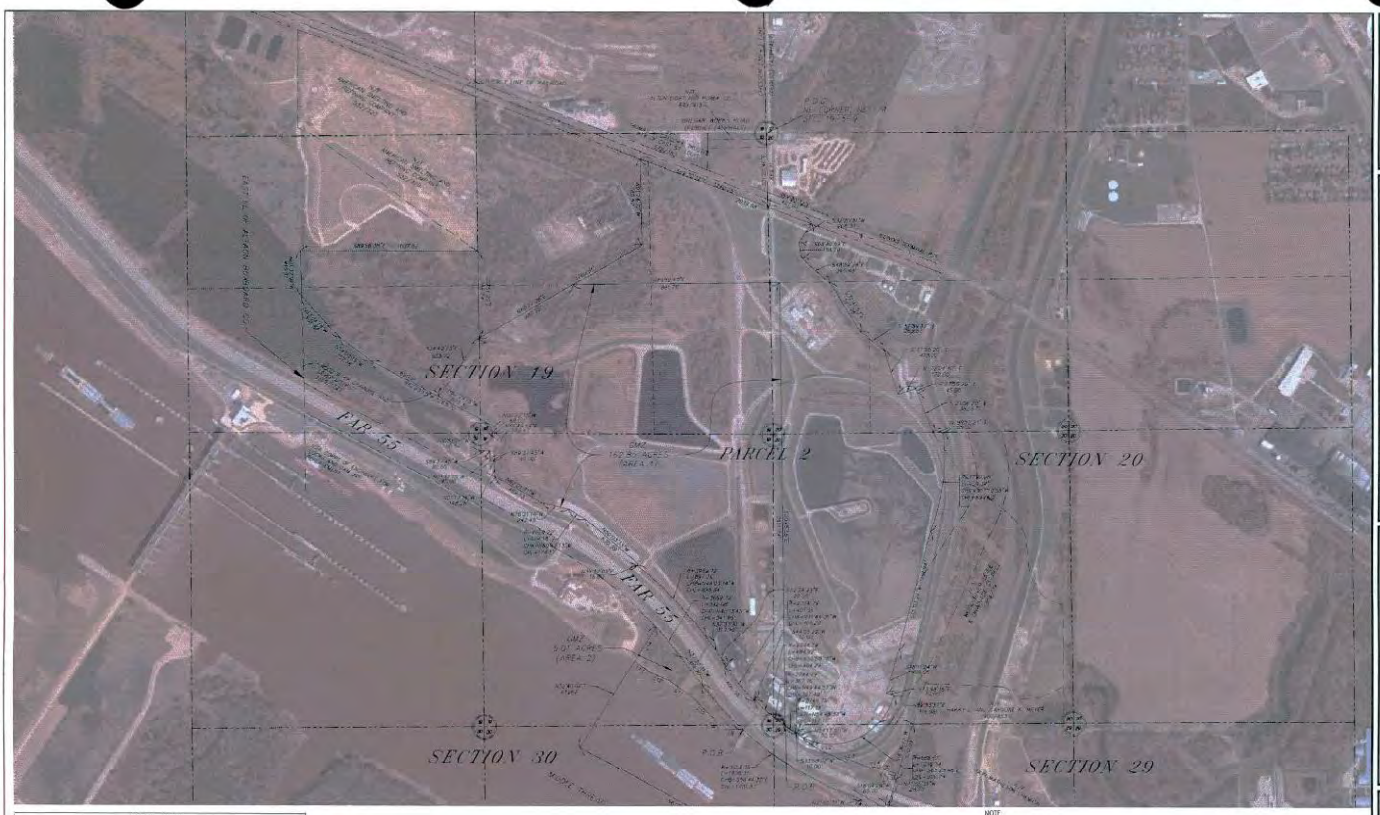

WEST ASH POND 2W
WEST ASH POND 2E
POND 3 NON-CCR
WEST ASH POND 1
PRIMARY EAST ASH POND
MISSISSIPPI RIVER
WOOD RIVER
N
0 350 700
SCALE IN FEET
CCR MONITORED MULTI-UNIT
CCR UNIT
GROUNDWATER MANAGEMENT ZONE
PROPERTY BOUNDARY
Projected Coordinate System: NAD 1983 State Plane Illinois West, US Survey Feet.
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Source Notes: Property boundary and Groundwater Management Zone boundaries based on IngenAE survey file 2015 05 08 WOOD RIVER GMZ-2.dwg, surveyed on 9/8/16
DRAWN BY/DATE: SDS 9/6/16
REVIEWED BY/DATE: NRK 9/6/16
APPROVED BY/DATE: SJC 9/9/16
WOOD RIVER WEST ASH PONDS 1, 2E, 2W
GROUNDWATER MANAGEMENT ZONE
GROUNDWATER MANAGEMENT ZONE APPLICATION
WEST ASH POND COMPLEX
WOOD RIVER POWER STATION
ALTON, ILLINOIS
PROJECT NO: 2375
FIGURE NO: 2
NATURAL RESOURCE TECHNOLOGY


WEST ASH POND 2W
WEST ASH POND 2E
POND 3 NON-CCR
WEST ASH POND 1
PRIMARY EAST ASH POND
MISSISSIPPI RIVER
WOOD RIVER
N
0 350 700
SCALE IN FEET
MONITORING WELL LOCATION
APPROXIMATE EXTENT OF IMPACTED GROUNDWATER ABOVE CLASS I STANDARDS AND CORRECTIVE ACTION MITIGATION AREA
CCR MONITORED MULTI-UNIT
CCR UNIT
GROUNDWATER MANAGEMENT ZONE
PROPERTY BOUNDARY
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Source Notes: Property boundary and Groundwater Management Zone boundaries based on IngenAE survey file 2016.09.08 WOOD RIVER GMZ-2.dwg, surveyed on 9/8/16
DRAWN BY/DATE: SDS 9/9/16
REVIEWED BY/DATE: NRK 9/9/16
APPROVED BY/DATE: SJC 9/9/16
MONITORING WELL LOCATION MAP
GROUNDWATER MANAGEMENT ZONE APPLICATION
WEST ASH POND COMPLEX
WOOD RIVER POWER STATION
ALTON, ILLINOIS
PROJECT NO: 2375
FIGURE NO: 3
NATURAL RESOURCE TECHNOLOGY


WEST ASH POND 2W
WEST ASH POND 2E
POND 3 NON-CCR
WEST ASH POND 1
PRIMARY EAST ASH POND
MISSISSIPPI RIVER
WOOD RIVER
N
0 350 700
SCALE IN FEET
CAP
CCR MONITORED MULTI-UNIT
CCR UNIT
GROUNDWATER MANAGEMENT ZONE
PROPERTY BOUNDARY
BASEMAP FEATURES
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Source Notes: Property boundary and Groundwater Management Zone boundaries based on IngenAE survey file 2016.09.08 WOOD RIVER GMZ-2.dwg, surveyed on 9/8/16
DRAWN BY/DATE: SDS 9/9/16
REVIEWED BY/DATE: MRK 9/9/16
APPROVED BY/DATE: SJC 9/9/16
SITE CLOSURE PLAN
GROUNDWATER MANAGEMENT ZONE APPLICATION
WEST ASH POND COMPLEX
WOOD RIVER POWER STATION
ALTON, ILLINOIS
PROJECT NO: 2376
FIGURE NO: 4
NATURAL RESOURCE TECHNOLOGY

APPENDIX A

GROUNDWATER MANAGEMENT ZONE LEGAL DESCRIPTION



CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	2744.79	220.42	110.27	220.36	S84°37'17"E	4°36'04"
C2	2714.79	241.63	120.59	240.95	S86°27'25"E	5°05'13"
C3	3014.79	1259.32	638.98	1250.19	N59°57'32"W	23°56'00"
C4	3014.79	548.69	275.26	548.23	N42°48'32"W	10°25'01"

LINE TABLE

LINE	LENGTH	BEARING
L1	232.08	S54°18'07"E
L2	18.00	S27°04'41"E
L3	26.00	N23°04'41"E
L4	20.00	N18°04'28"E
L5	213.74	S71°55'32"E
L6	56.00	S18°04'28"W
L7	17.98	S71°55'31"E
L8	213.35	S89°20'03"E
L9	112.42	S21°48'13"E
L10	272.11	S48°18'32"E
L11	257.78	S55°23'25"E
L12	192.29	S66°13'06"E
L13	169.72	S52°54'23"E
L14	357.27	S32°40'07"W

NOTE:
THIS PLAT AND ALL THE INFORMATION SHOWN HEREON WAS BASED ON AN ALTA SURVEY DONE BY THE ORIN GROUP LLC DATED LAST REVISED 7-20-12 AS FURNISHED BY THE OWNERS (DYNEGY) AND THIS PLAT WAS PRODUCED SOLELY TO DELINEATE THE PROPOSED GROUNDWATER MANAGEMENT ZONE AS SHOWN HEREON.

STATE OF ILLINOIS)
) SS
COUNTY OF MADISON)

I, MICHAEL J. GRAMINSKI, A PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THIS DRAWING HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION FOR THE CREATION OF A GMZ LIMITS LEGAL DESCRIPTION. ALL DIMENSIONS ARE IN FEET AND DECIMAL PARTS THEREOF.
DATED THIS 8TH DAY OF SEPTEMBER, 2016.

ILLINOIS LICENSED LAND SURVEYOR
MICHAEL J. GRAMINSKI
35-2901

ILLS LICENSE NUMBER 035 002901, EXPIRES 11/30/2016
PROFESSIONAL DESIGN FIRM LICENSE NUMBER 184.004626, EXPIRES 4/30/2017
THIS SURVEY DOES NOT CONFORM TO THE CURRENT ILLINOIS STANDARD FOR A BOUNDARY SURVEY.

IngenAE
514 Earth City Plaza
Earth City, MO 63045
www.ingenae.com

Submissions / Revisions: Date:
1
2
3
4
5
6
7
8
9
10
11
12
13

PREPARED FOR
DYNEGY

Project Name & Location:
DYNEGY
WOOD RIVER
POWER PLANT
ALTON, ILLINOIS

DO NOT SCALE PLANS

Drawing Name:
GROUNDWATER
MANAGEMENT ZONE (GMZ)
PARCEL DESCRIPTION EXHIBIT

Date: 9/1/16
Project No:
Type: SITE
Drawing No: 1 OF 1
Drawn By: CMB
Approved By: EAS
Scale: AS NOTED

EXHIBIT 3

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR ALEC MESSINA, DIRECTOR

May 25, 2017

Mr. Rick Diericx, Managing Director-Environmental
Dynegy Midwest Generation, LLC
1500 Eastport Plaza Drive
Collinsville, Illinois 62234-6135

Dear Mr. Diericx;

This transmittal responds to the Dynegy Midwest Generation, LLC (Dynegy) submissions regarding the closure and post-closure care plan for the Wood River West Ash Complex. The Illinois Environmental Protection Agency ("Agency") has reviewed Dynegy's Closure and Post-Closure Care Plan for the Wood River West Ash Complex, Parts I and II (Plan) dated November 28, 2016, Addenda to the Plan dated April 28, 2017 and the Revision to the Addenda dated May 18, 2017.

The Agency has reviewed the three documents referenced above as a whole, with later documents amending or clarifying only those specific parts addressed in those documents. The Agency approves the Plan as presented in these documents. The Agency also finds the closure and post-closure plan presented by Dynegy to be an adequate corrective action. Therefore, the groundwater management zone (GMZ) application presented in this Plan is approved pursuant to 35 Ill. Adm. Code 620.250. The Plan and GMZ described in the documents referenced above supersede and replace work plans and the GMZ previously approved by the Agency for the Wood River West Ash Complex.

Thank you for your attention to these matters. If you have any questions or concerns, please contact Lynn Dunaway of my staff or me at the letterhead address or 217/785-4787.

Sincerely,

William E. Buscher, P.G.
Supervisor, Hydogeology and Compliance Unit
Groundwater Section
Division of Public Water Supplies
Bureau of Water

CC: Lynn Dunaway
Darin LeCrone
Records

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2125 S. First St., Champaign, IL 61820 (217)278-5800
2009 Mall St., Collinsville, IL 62234 (618)346-5120
9511 Harrison St., Des Plaines, IL 60016 (847)294-4000
412 SW Washington St., Suite D, Peoria, IL 61602 (309)671-3022
2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601

EXHIBIT 4

Directive 9283.1-12
EPA 540/R-96/023
PB96-963508
October 1996

PRESUMPTIVE RESPONSE STRATEGY AND EX-SITU TREATMENT TECHNOLOGIES FOR CONTAMINATED GROUND WATER AT CERCLA SITES

FINAL GUIDANCE

Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency
Washington, DC 20460

NOTICE

This document provides guidance to EPA staff. It also provides guidance to the public and to the regulated community on how EPA intends to exercise its discretion in implementing the National Contingency Plan. The guidance is designed to implement national policy on these issues. The document does not, however, substitute for EPA's statutes or regulations, nor is it a regulation itself. Thus, it cannot impose legally-binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA may change this guidance in the future, as appropriate.

otherwise have been determined by EPA -- when such determinations are:

- Developed as part of an CSGWPP that is endorsed by EPA, and
- Based on CSGWPP provisions that can be applied at specific sites (EPA, 1996a).

This provision of the directive, when final, is intended to supersede previous guidance contained in the Preamble to the NCP (Federal Register, 1990a; at 8733). Refer to EPA, 1996a for additional information concerning the role of CSGWPPs in the selection of ground-water remedies. When information concerning beneficial uses is not available from a CSGWPP, ground-water classifications defined in EPA, 1986 (i.e., EPA Classes I, II or III) or "more stringent" state ground-water classifications (or similar state designations) should generally be used to determine the potential future use, in accordance with the NCP Preamble (Federal Register, 1990a; at 8732-8733). **Regardless of the ground-water use determination, remedies selected under CERCLA authority must protect human health and the environment and meet ARARs (or invoke an ARAR waiver).**

Many states have **antidegradation** or similar regulations or requirements that may be potential ARARs. Such requirements typically focus on 1) prohibiting certain discharges, 2) maintaining ground-water quality consistent with its beneficial uses, or 3) maintaining naturally occurring (background) ground-water quality. Regulations of the third type do not involve determination of future ground-water use, and often result in cleanup levels that are more stringent than the drinking water standard for a particular chemical. Such requirements are potential ARARs if they are directive in nature and intent and established through a promulgated statute or regulation that is legally enforceable (see Federal Register, 1990a; Preamble at 8746). For further information concerning issues related to state ground-water antidegradation requirements, refer to EPA, 1990a.

2.6.2 Remediation Timeframe. "Remediation timeframes will be developed based on the specific site conditions" (Federal Register, 1990a; Preamble at 8732). Even though restoration to beneficial uses generally is the ultimate objective, a relatively long time period to attain this objective may be appropriate for some sites. For example, an extended remediation timeframe generally is appropriate where contaminated ground waters are not expected to be used in the near term, and where alternative sources are available. In contrast, a more aggressive remedy with a correspondingly shorter remediation timeframe should generally be used for contaminated ground waters that are currently used as sources of drinking water or are expected to be utilized for this purpose in the near future (Federal Register, 1990a; at 8732). A state's CSGWPP may include information helpful in determining whether an extended remediation timeframe is appropriate for a given site, such as the expected timeframe of use, or the relative priority or value of ground-water resources in different geographic areas.

A **reasonable timeframe** for restoring ground waters to beneficial uses depends on the particular circumstances of the site and the restoration method employed. The most appropriate timeframe must be determined through an analysis of alternatives (Federal Register, 1990a; Preamble at 8732). The NCP also specifies that:

> "For ground-water response actions, the lead agency shall develop a limited number of remedial alternatives that attain site-specific remediation levels within different restoration time periods utilizing one or more different technologies." (Federal Register, 1990a; §300.430(e)(4).)

Thus, a comparison of restoration alternatives from most aggressive to passive (i.e., natural attenuation) will provide information concerning the approximate range of time periods needed to attain ground-water cleanup levels. An excessively long restoration timeframe, even with

the most aggressive restoration methods, may indicate that ground-water restoration is technically impracticable from an engineering perspective (see Section 2.6.3). Where restoration is feasible using both aggressive and passive methods, the longer restoration timeframe required by a passive alternative may be reasonable in comparison with the timeframe needed for more aggressive restoration alternatives. The most appropriate remedial option should be determined based on the nine remedy selection factors defined in the NCP (Federal Register, 1990a; §300.430 (e)(9)(iii)). Although restoration timeframe is an important consideration in evaluating whether restoration of ground water is technically impracticable, no single time period can be specified which would be considered excessively long for all site conditions (EPA, 1993b). For example, a restoration timeframe of 100 years may be reasonable for some sites and excessively long for others.

2.6.3 Technical Impracticability. Where restoration of ground water to its beneficial uses is not practicable from an engineering perspective, one or more ARARs may be waived by EPA (or the lead agency) under the provisions defined in CERCLA §121(d)(4)(C)). The types of data used to make such a determination are discussed in *Guidance for Evaluating the Technical Impracticability of Ground-Water Restoration* (EPA, 1993b). Alternative remedial strategies, to be considered when restoration ARARs are waived, are also discussed in EPA, 1993b. A finding of technical impracticability may be made in the Record of Decision (ROD) prior to remedy implementation, or in a subsequent decision document after implementation and monitoring of remedy performance.

2.6.4 Point of Compliance. The area over which ARAR or risk-based cleanup levels are to be attained is defined in the NCP as follows:

> "For ground water, remediation levels should generally be attained throughout the contaminated plume, or at and beyond the edge of the waste management area when waste is left in place" (Federal Register, 1990a; Preamble at 8713).

Thus, the edge of the waste management area can be considered as the point of compliance, because ARAR or risk-based cleanup levels are not expected to be attained in ground water within the waste management area. In general, the term “waste left in place” is used in the NCP to refer to landfill wastes that, at the completion of the remedy, will be contained or otherwise controlled within a waste management area.

For the purposes of ARAR compliance, EPA generally does not consider DNAPLs as “waste left in place.” DNAPLs are typically not located in a waste management area, as envisioned in the NCP. This is because the full extent of DNAPL contamination is often not known, DNAPLs can continue to migrate in the subsurface, and measures for controlling their migration are either unavailable or have uncertain long-term reliability. Also, as discussed in Section 2.5.3, restoration of the aquifer to ARAR or risk-based cleanup levels generally will not be attainable in a reasonable timeframe unless the DNAPLs are removed. **For these reasons, EPA generally prefers to utilize ARAR waivers rather than an alternate point of compliance over portions of sites where non-recoverable DNAPLs are present in the subsurface** (EPA, 1995c).

The NCP Preamble also acknowledges that “an alternative point of compliance may also be protective of public health and the environment under site-specific circumstances” (Federal Register, 1990a; at 8753). For example, where the contamination plume is “caused by releases from several distinct sources that are in close geographical proximity...the most feasible and effective cleanup strategy may be to address the problem as a whole, rather than source by source, and to draw the point of compliance to encompass the sources of release” (Federal Register, 1990a; at 8753). The NCP Preamble goes on to say that "...where there would be little likelihood of exposure due to the remoteness of the site,

EXHIBIT 5

A Citizen's Guide to Monitored Natural Attenuation

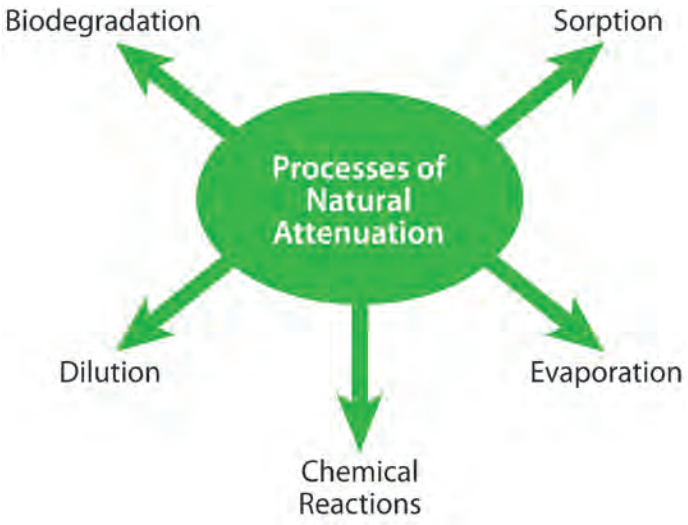
What Is Monitored Natural Attenuation?

Natural attenuation relies on natural processes to decrease or "attenuate" concentrations of contaminants in soil and groundwater. Scientists monitor these conditions to make sure natural attenuation is working. Monitoring typically involves collecting soil and groundwater samples to analyze them for the presence of contaminants and other site characteristics. The entire process is called "monitored natural attenuation" or "MNA." Natural attenuation occurs at most contaminated sites. However, the right conditions must exist underground to clean sites properly and quickly enough. Regular monitoring must be conducted to ensure that MNA continues to work.

How Does It Work?

When the environment is contaminated with harmful chemicals, nature may work in five ways to clean it up:

- *Biodegradation* occurs when very small organisms, known as "microbes," eat contaminants and change them into small amounts of water and gases during digestion. Microbes live in soil and groundwater and some microbes use contaminants for food and energy. (*A Citizen's Guide to Bioremediation* [EPA 542-F-12-003] describes how microbes work.)



- *Sorption* causes contaminants to stick to soil particles. Sorption does not destroy the contaminants, but it keeps them from moving deeper underground or from leaving the site with groundwater flow.
- *Dilution* decreases the concentrations of contaminants as they move through and mix with clean groundwater.
- *Evaporation* causes some contaminants, like gasoline and industrial solvents, to change from liquids to gases within the soil. If these gases escape to the air at the ground surface, air will dilute them and sunlight may destroy them.
- *Chemical reactions* with natural substances underground may convert contaminants into less harmful forms. For example, in low-oxygen environments underground, the highly toxic "chromium 6" can be converted to a much less toxic and mobile form called "chromium 3" when it reacts with naturally occurring iron and water.

MNA works best where the source of contamination has been removed. For instance, any waste buried underground must be dug up and disposed of properly, or removed using other available cleanup methods. When the source is no longer present, natural processes may be able to remove the remaining, smaller amount of contaminants in the soil or groundwater. The site is monitored regularly to make sure that contaminants attenuate fast enough to meet site cleanup objectives and that contaminants are not spreading.

How Long Will It Take?

MNA may take several years to decades to clean up a site. The actual cleanup time will depend on several factors. For example, cleanup will take longer when:

- Contaminant concentrations are higher.
- The contaminated area is large.
- Site conditions (such as temperature, groundwater flow, soil type) provide a less favorable environment for biodegradation, sorption or dilution.

These factors vary from site to site.

Is It Safe?

MNA does not pose a threat to the community or to site workers. MNA does not involve excavating soil or pumping groundwater to the surface for above ground treatment, so the potential to contact contaminants is limited. Long-term, regular monitoring is conducted to make sure contamination does not leave the site and that it is being attenuated at a rate that's consistent with cleanup goals for the site. This ensures that people and the environment are protected during the cleanup process.

How Might It Affect Me?

Generally, MNA does not cause much disruption to the surrounding community since no heavy machinery or other equipment is required during the MNA process. Residents and businesses near the site may initially see and hear drilling rigs when wells to monitor groundwater quality are installed. Once installed, workers will need to visit the site to collect samples of groundwater, soil or sediment to ensure MNA is working properly and is protective of human health and the environment. At those times, residents may hear the pumps and generators often used to collect groundwater samples from the wells.

Why Use Monitored Natural Attenuation?

MNA is selected when any contaminant source has been removed and only low concentrations of contaminants remain in soil or groundwater. The anticipated cleanup time for MNA must be reasonable compared to that of other more active cleanup methods. MNA requires less equipment and labor than most methods, which decreases cleanup costs. However, the cost of many years of monitoring can be high. MNA has been selected or is being used at over 100 Superfund sites across the country.

Monitoring natural attenuation at the site by collecting a groundwater sample.

Example

MNA is being used to complete groundwater cleanup at a former landfill on the Kings Bay Naval Submarine Base, Georgia. From 1993 to 2001, other cleanup methods were used to contain and treat the source of solvents in the groundwater. The goal was to reduce solvent concentrations to a level at which MNA would ensure safe concentrations at the property boundary, and unsafe levels of solvents would no longer flow beneath nearby housing. MNA was considered an efficient final treatment because of the right conditions for bioremediation to occur.

Monitoring for natural attenuation has been occurring monthly since 1998. Groundwater is being sampled for solvents and other conditions that indicate MNA is working. The long-term objective is to reduce contaminant concentrations across the site to below Maximum Contaminant Levels (MCLs). Concentrations have decreased at most wells, but the groundwater in the former source area is still expected to take decades to reach MCLs.

For More Information

For more information about this and other technologies in the Citizen's Guide Series, visit:

www.cluin.org/remediation
www.cluin.org/products/citguide
www.cluin.org/products/MNA

NOTE: This fact sheet is intended solely as general information to the public. It is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States, or to endorse the use of products or services provided by specific vendors. The Agency also reserves the right to change this fact sheet at any time without public notice.

United States
Environmental Protection
Agency

Office of Solid Waste and
Emergency Response
(5102G)

EPA 542-F-12-014
September 2012
www.epa.gov/superfund/sites
www.cluin.org

EXHIBIT 6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 21 1999

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: Final OSWER Directive "Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites" (OSWER Directive Number 9200.4-17P)

FROM: Elizabeth Cotsworth, Acting Director
Office of Solid Waste

Walter W. Kovalick, Jr., Director
Technology Innovation Office

Stephen D. Luftig, Director
Office of Emergency and Remedial Response

Sammy Ng, Acting Director
Office of Underground Storage Tanks

James E. Woolford, Director
Federal Facilities Restoration and Reuse Office

TO: Addressees

Purpose

This memorandum accompanies a copy of the Final OSWER Directive regarding the use of monitored natural attenuation for the remediation of contaminated soil and groundwater at sites regulated under all Office of Solid Waste and Emergency Response (OSWER) programs. A draft Interim Final version of this Directive was released on December 1, 1997 for use, and for general public review and comment. In response to comments received on that draft, EPA has incorporated several changes in this final version dealing with topics such as contaminants of concern, cross-media transfer, plume migration, and remediation time frame.

Implementation

This Directive is being issued in Final form and should be used immediately as guidance for proposing, evaluating, and approving Monitored Natural Attenuation remedies. This Final Directive will be available from the Superfund, RCRA, and OUST dockets and through the RCRA, Superfund & EPCRA Hotline (800-424-9346 or 703-412-9810). The directive will also be available in electronic format from EPA's home page on the Internet (the address is http://www.epa.gov/swerust1/directiv/d9200417.htm).

Questions/Comments

If you need more information about the Directive please feel free to contact any of the appropriate EPA staff listed on the attachment.

Addressees: Federal Facility Forum
Federal Facilities Leadership Council
Other Federal Facility Contacts
OSWER Natural Attenuation Workgroup
RCRA Corrective Action EPA Regional and State Program Managers
State LUST Fund Administrators
State LUST Program Managers
UST/LUST Regional Program Managers
UST/LUST Regional Branch Chiefs
State Superfund Program Managers
Superfund Regional Policy Managers

attachment

USE OF MONITORED NATURAL ATTENUATION AT SUPERFUND, RCRA CORRECTIVE ACTION, AND UNDERGROUND STORAGE TANK SITES

U.S. Environmental Protection Agency
Office of Solid Waste and Emergency Response
Directive 9200.4-17P

April 1999

USE OF MONITORED NATURAL ATTENUATION AT SUPERFUND, RCRA CORRECTIVE ACTION, AND UNDERGROUND STORAGE TANK SITES

Contents

NOTICE: This document provides guidance to EPA and state staff. It also provides guidance to the public and to the regulated community on how EPA intends to exercise its discretion in implementing its regulations. The guidance is designed to implement national policy on these issues. The document does not, however, substitute for EPA's statutes or regulations, nor is it a regulation itself. Thus, it does not impose legally-binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA may change this guidance in the future, as appropriate.

PURPOSE AND OVERVIEW

The purpose of this Directive is to clarify EPA's policy regarding the use of monitored natural attenuation (MNA) for the cleanup of contaminated soil and groundwater[1] in the Superfund, RCRA Corrective Action, and Underground Storage Tank programs. These programs are administered by EPA's Office of Solid Waste and Emergency Response (OSWER) which include the Office of Emergency and Remedial Response (OERR), Office of Solid Waste (OSW), Office of Underground Storage Tanks (OUST), and the Federal Facilities Restoration and Reuse Office (FFRRO). Statutory authority for these remediation programs is provided under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA).

EPA remains fully committed to its goals of protecting human health and the environment by remediating contaminated soils, restoring contaminated groundwaters to their beneficial uses, preventing migration of contaminant plumes[2], and protecting groundwaters and other environmental resources[3]. EPA advocates using the most appropriate technology for a given site. EPA does not consider MNA to be a "presumptive" or "default" remedy—it is merely one option that should be evaluated with other applicable remedies. EPA does not view MNA to be a "no action[4]" or "walk-away" approach, but rather

[1] Although this Directive does not address remediation of contaminated sediments, many of the same principles would be applicable. Fundamental issues such as having source control, developing lines of evidence, monitoring and contingency plans are also appropriate for sediments. However, the Agency is developing the policy and technical aspects for sediments, specifically.

[2] The outer limits of contaminant plumes are typically defined for each contaminant of concern based on chemical concentrations above which the overseeing regulatory authority has determined represent an actual or potential threat to human health or the environment.

[3] Environmental resources to be protected include groundwater, drinking water supplies, surface waters, ecosystems and other media (air, soil and sediments) that could be impacted by site contamination.

[4] For the Superfund program, Section 300.430(e)(6) of the National Contingency Plan (NCP) directs that a "no action alternative" (or no further action) "shall be developed" for all feasibility studies (USEPA, 1990a, p. 8849). The "no action" alternative can include monitoring but generally not other remedial actions, where such actions are defined in Section 300.5 of the NCP. In general, the "no action" alternative is selected when there is no current or potential threat to human health or the environment or when CERCLA exclusions preclude taking an action (USEPA, 1991a). As explained in this Directive, a remedial alternative that relies on monitored natural attenuation to attain site-specific remediation objectives is **not** the same as the "no action" alternative.

considers it to be an alternative means of achieving remediation objectives[5] that may be appropriate for specific, well-documented site circumstances where its use meets the applicable statutory and regulatory requirements. As there is often a variety of methods available for achieving remediation objectives at any given site, MNA may be evaluated and compared to other viable remediation methods (including innovative technologies) during the study phases leading to the selection of a remedy. As with any other remedial alternative, MNA should be selected only where it meets all relevant remedy selection criteria, and where it will meet site remediation objectives within a timeframe that is reasonable compared to that offered by other methods. In the majority of cases where MNA is proposed as a remedy, its use may be appropriate as one component of the total remedy, that is, either in conjunction with active remediation or as a follow-up measure. MNA should be used very cautiously as the sole remedy at contaminated sites. Furthermore, the availability of MNA as a potential remediation tool does not imply any lessening of EPA's longstanding commitment to pollution prevention. Waste minimization, pollution prevention programs, and minimal technical requirements to prevent and detect releases remain fundamental parts of EPA waste management and remediation programs.

Use of MNA does not signify a change in OSWER's remediation objectives. These objectives (discussed in greater detail under the heading "Implementation") include control of source materials[6], prevention of plume migration, and restoration of contaminated groundwaters, where appropriate. Thus, EPA expects that source control measures (see section on "Remediation of Sources") will be evaluated for all sites under consideration for any proposed remedy. As with other remediation methods, selection of MNA as a remediation method should be supported by detailed site-specific information that demonstrates the efficacy of this remediation approach. In addition, the progress of MNA toward a site's remediation objectives should be carefully monitored and compared with expectations. Where MNA's ability to meet these expectations is uncertain and based predominantly on predictive analyses, decision makers should incorporate contingency measures into the remedy.

The scientific understanding of natural attenuation processes continues to evolve. EPA recognizes that significant advances have been made in recent years, but there is still a great deal to be learned regarding the mechanisms governing natural attenuation processes and their ability to address different types of contamination problems. Therefore, while EPA believes MNA may

[5] In this Directive, remediation objectives are the overall objectives that remedial actions are intended to accomplish and are not the same as chemical-specific cleanup levels. Remediation objectives could include preventing exposure to contaminants, preventing further migration of contaminants from source areas, preventing further migration of the groundwater contaminant plume, reducing contamination in soil or groundwater to specified cleanup levels appropriate for current or potential future uses, or other objectives. The term "remediation" as used in this Directive is not limited to "remedial actions" defined in CERCLA §101(24), and includes CERCLA "removal actions", for example.

[6] **"Source material** is defined as material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir [either stationary or mobile] for migration of contamination to the ground water, to surface water, to air, [or other environmental media,] or acts as a source for direct exposure. Contaminated ground water generally is not considered to be a source material although non-aqueous phase liquids (NAPLS [occurring either as residual- or free-phase]) may be viewed as source materials." (USEPA, 1991b).

be used where circumstances are appropriate, it should be used with caution commensurate with the uncertainties associated with the particular application. Furthermore, largely due to the uncertainty associated with the potential effectiveness of MNA to meet remediation objectives that are protective of human health and the environment, EPA expects that **source control and long-term performance monitoring will be fundamental components of any MNA remedy**.

This Directive is a policy document and as such is not intended to provide detailed technical guidance on evaluating MNA remedies. EPA recognizes that at present there are relatively few EPA guidance documents concerning appropriate implementation of MNA remedies. Chapter IX of OUST's alternative cleanup technologies manual (USEPA, 1995a) addresses the use of natural attenuation at leaking UST sites. The Office of Research and Development (ORD) has recently published a protocol for evaluating MNA at chlorinated solvent sites (USEPA, 1998a). Additional technical resource documents for evaluating MNA in groundwater, soils, and sediments are being developed by ORD. Supporting technical information regarding the evaluation of MNA as a remediation alternative is available from a variety of other sources, including those listed at the end of this Directive. "References Cited" lists those EPA documents that were specifically cited within this Directive. The list of "Additional References" includes documents produced by EPA as well as non-EPA entities. Finally, "Other Sources of Information" lists sites on the World Wide Web (Internet) where additional information can be obtained. Non-EPA documents may provide regional and state site managers, as well as the regulated community, with useful technical information. However, these non-EPA guidances are not officially endorsed by EPA, EPA does not necessarily agree with all their conclusions, and all parties involved should clearly understand that such guidances do not in any way replace current EPA or OSWER guidances or policies addressing the remedy selection process in the Superfund, RCRA, or UST programs.

BACKGROUND

The term "monitored natural attenuation", as used in this Directive, refers to the reliance on natural attenuation processes (within the context of a carefully controlled and monitored site cleanup approach) to achieve site-specific remediation objectives within a time frame that is reasonable compared to that offered by other more active methods. The "natural attenuation processes" that are at work in such a remediation approach include a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater. These *in-situ* processes include biodegradation; dispersion; dilution; sorption; volatilization; radioactive decay; and chemical or biological stabilization, transformation, or destruction of contaminants. When relying on natural attenuation processes for site remediation, EPA prefers those processes that degrade or destroy contaminants. Also, EPA generally expects that MNA will only be appropriate for sites that have a low potential for contaminant migration. Additional discussion of criteria for "Sites Where Monitored Natural Attenuation May Be Appropriate" may be found later in this Directive. Other terms associated with natural attenuation in the literature include "intrinsic remediation", "intrinsic bioremediation", "passive bioremediation", "natural

EXHIBIT 7

By submitting this document, Peabody Coal Company (PCC) does not admit that there are or have been any exceedances of any applicable groundwater standard at or in the vicinity of its Eagle #2 Mine, that there have been any violations of any applicable law with respect to groundwater quality at or in the vicinity of the Eagle #2 Mine, or that any allegation made by the Complainant in Case No. PCB No. 99-134 before the Illinois Pollution Control Board is true; nor does PCC waive any defense it has or might have to any of the Complainant's allegations or Counts asserted in that case.

PEABODY COAL COMPANY
APPLICATION FOR ESTABLISHMENT OF
GROUNDWATER MANAGEMENT ZONE

Peabody Coal Company (PCC) hereby applies to the Illinois Environmental Protection Agency (IEPA) pursuant to 35 Ill. Adm. 620.250(a) for the establishment of a groundwater management zone (GMZ) at and in the vicinity of PCC's Eagle #2 Mine (Mine) located in Gallatin County, Illinois. The location of the Mine is shown in Attachment A at Map 1. The proposed GMZ area and associated monitoring well locations are shown on Map 2 of Attachment A. A Site History for the Mine is set forth in Attachment B..

Part I. Facility Information

Facility Name *Eagle # 2 Mine*

Facility Address *1 mile West of Shawneetown, IL. on RT. 13*
Shawneetown, IL 62984

County *Gallatin*

Standard Industrial Code (SIC) *1220*

1. Provide a general description of the type of industry, products manufactured, raw materials used, location and size of the facility.

Previous coal mining refuse (primarily shale, sandstone, and coal) placement facility. No longer active. See above for location. Approximately 450 acres are contained within the facility SMCRA permit boundary.

2. What specific units (operating or closed) are present at the facility which are or were used to manage waste, hazardous waste, hazardous substances or petroleum?

	YES	NO
Landfill		X
Surface Impoundment	X	
Land Treatment		X

Spray Irrigation		X
Waste Pile	X	
Incinerator		X
Storage Tank (above ground)	X	
Storage Tank (underground)		X
Container Storage Area		X
Injection Well		X
Water Treatment Units		X
Septic Tanks		X
French Drains		X
Transfer Station		X
Other Units (Please describe)		

3. Provide an extract from a USGS topographic or county map showing the location of the site and a more detailed scaled map of the facility with each waste management unit identified in Question 2 or known/suspected source clearly identified. Map scale must be specified and the location of the facility must be provided with respect to Township, Range and Section.

See Attachment A, Map 1.

4. Has the facility ever conducted operations which involved the generation, manufacture, processing, transportation, treatment, storage or handling of "hazardous substances" as defined by the Illinois Environmental Protection Act? Yes ___No _X__ If the answer to this question is "yes" generally describe these operations.

5. Has the facility generated, stored or treated hazardous waste as defined by the Resource Conservation and Recovery Act? Yes____ No _X__If the answer to this question is "yes" generally describe these operations.

6. Has the facility conducted operations which involved the processing, storage or handling of petroleum? Yes __X_No ____If the answer to this question is "yes" generally describe these operation.

Minor above ground storage tanks are present for vehicle fueling.

7. Has the facility ever held any of the following permits?

a. Permits for any waste storage, waste treatment or waste disposal operation. Yes _X_ No ___ If the answer to this question is "yes", identify the IEPA permit numbers.

RCRA Number ILD981530249

b. Interim Status under the Resources Conservation and Recovery Act (filing of a RCRA Part A application). Yes ___ No _X_ If the answer to this question is "yes", attach a copy of the last approved Part A application.

c. RCRA Part B Permits. Yes ___ No _X_ If the answer to this question is "yes", identify the permit log number.

8. Has the facility ever conducted the closure of a RCRA hazardous waste management unit? Yes ___ No _X_

9. Have any of the following State or federal government actions taken place for a release at the facility?

a. Written notification regarding known, suspected or alleged contamination on or emanating from the property (e.g., a Notice pursuant to Section 4(q) of the Environment Protection Act)? Yes _X_ No ___ If the to this question is "yes", identify the caption and date of issuance.

IEPA Violation Notices of Violation M-1997-00010 and M-1997-00133. It must be noted that no health issues have been identified at this site.

b. Consent Decree or Order under RCRA, CERCLA, EPAct Section 22.2 (State Superfund), or EPAct Section 21(f) (State RCRA). Yes ___ No _X_

c. If either of Items a or b were answered by checking "yes", is the notice, order or decree still in effect? Yes _X_ No ___

10. What groundwater classification will the facility be subject to at the completion of the remediation?

Class I _X_ Class II ___ Class III ____ Class IV _X_ If more than one Class applies, please explain.

The groundwater located within the permit boundary is Class IV due to date of refuse placement. Areas outside of the permit, where unconsolidated sand is present, the groundwater would be considered Class I. PCC acknowledges that IEPA disagrees that all groundwater within the permit boundary is Class IV.

11. Describe the circumstances which the release to groundwater was identified.

The presence of constituents of interest in groundwater at the Eagle #2 Mine was noted in connection with the groundwater sampling program at the mine.

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true and accurate.

Facility Name

Eagle #2 Mine

Signature of Owner/Operator

Thomas W. [signature]

Location of Facility

1 mile West of Shawneetown, IL. on RT. 13
Shawneetown, IL 62984

Name of Owner/Operator

EPA Identification Number

ILD981530249

Date

11/15/06

PART II: Release Information

1. Identify the chemical constituents release to the groundwater. Attach additional documents as necessary.

Chemical Description	Chemical Abstract No.
Sulfate	014808-79-8
Chloride	16887-00-6
Total Dissolved Solids	C-010
Iron	007439-89-6
Manganese (potential)	007439-96-5

2. Describe how the site will be investigated to determine the source or sources of the release.

N/A

3. Describe how groundwater will be monitored to determine the rate and extent of the release.

Multiple wells are monitored on a quarterly basis.

4. Has the release been contained on-site at the facility?

No. There are minor exceptions.

5. Describe the groundwater monitoring network and groundwater and soil sampling protocols in place at the facility.

22 wells located within the site and in a downgradient position will be monitored on a quarterly basis for a minimum of two years. Industry standard protocols will be used for both the sampling methods and analysis.

6. Provide the schedule for investigation and monitoring.

See above. Data will be reported to IEPA on a quarterly basis and will be summarized on an annual basis.

7. Describe the laboratory quality assurance program utilized for the investigation.

Standard Industry QA/QC at an accredited lab.

8. Provide a summary of the results of available soil testing and groundwater monitoring associated with the release at the facility. The summary or results should provide the following information: dates of sampling; types of samples taken (soil or water); locations and depths of samples; sampling and analytical methods; analytical laboratories used; chemical constituents for which analyses were performed; analytical detection limits; and concentrations of chemical constituents in ppm (levels below detection should be identified as "ND").

See Attachment C.

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of knowledge and belief, true and accurate and confirm that the actions identified herein will be undertaken in accordance with the schedule set forth herein.

Facility Name

Eagle #2 Mine

Signature of Owner/Operator

Thomas W. Clodfelter

Location of Facility

1 mile West of Shawneetown, IL. on RT. 13
Shawneetown, IL 62984

Name of Owner/Operator

EPA Identification Number

ILD981530249

Date

11/15/06

Part III: Remedy Selection Information

1. Describe the selected remedy.

Extraction wells have been operated to capture the sulfate plume. Some refuse has been removed from the site. Low permeability clay caps were installed in three (3) areas.

2. Describe other remedies which were considered and why they were rejected.

Source removal and installation of a synthetic cap were considered and rejected as not practical.

3. Will waste, contaminated soil or contaminated groundwater be removed from the site in the course of this remediation? Yes ___ No _X__ If the answer to this question is "yes", where will the contaminated material be taken?

4. Describe how the selected remedy will accomplish the maximum practical restoration of beneficial use of groundwater.

The clay caps prevent water infiltration into the refuse materials.

5. Describe how the selected remedy will minimize any threat to public health or the environment.

See above.

6. Describe how the selected remedy will result in compliance with the applicable groundwater standards.

See above.

7. Provide a schedule for design, construction and operation of the remedy, including dates for the start and completion.

Construction is complete.

8. Describe how the remedy will be operated and maintained.

The area will be mowed and erosion will be controlled.

9. Have any of the following permits been issued for the remediation?

a. Construction or Operating permit from the Division of Water Pollution Control. Yes __ No _X__

b. Land treatment permit from the Division of Water Pollution Control. Yes ___ No _X__ If the answer to this question is "yes", identify the permit number.

c. Construction or Operating permit from the Division of Air Pollution Control. Yes ___ No _X__ If the answer to this question is "yes", identify the permit number.

10. How will groundwater at the facility be monitored following completion of the remedy to ensure that the groundwater standards have been attained?

See Attachment F.

11. Provide any additional relevant information.

See Attachments D and E.

Based on my inquiry of those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true and accurate and

confirm that the actions identified herein will be undertaken in accordance with the schedule set forth herein.

Facility Name

Eagle #2 Mine

Signature of Owner/Operator

Location of Facility

1 mile West of Shawneetown, IL. on RT. 13
Shawneetown, IL 62984

Name of Owner/Operator

EPA Identification Number

ILD981530249

Date

11/15/06

ATTACHMENT F

REMEDIAL ACTION PLAN

ATTACHMENT F

REMEDIAL ACTION PLAN

Groundwater Quality Monitoring

The following wells will be monitored for groundwater quality:
SMW1
SMW2
SMW3
SMW5
MW5
SW2D
SW2S
SW3S
SW3SA
SW3SB
SW3SC
New well to be located between WA0009 and WA0007 (WA0009A) (See Attachment A, Map 2)
New well to be located near WA0029 (WA0029A) (See Attachment A, Map 2)
SMW4A
SMW4B
WA0002
WA0003
WA0007
WA0009
WA0010
WA0011
WA0017

These wells will be sampled on a quarterly basis for a minimum of two (2) years beyond the cessation of pumping. At the end of two (2) years monitoring will be re-evaluated and PCC may request to reduce monitoring if warranted. Parameters sampled will be water level elevation, pH, temp, SO4, Cl, TDS, Fe, and Mn. Other available monitoring wells will be left in place during the monitoring period as reasonable circumstances allow.

PCC has secured permission to access and sample all wells on property not owned by PCC for thirty years.

Water levels will be measured in the following wells:

1. SCW2
2. SCW4
3. WA0006
4. WA0020
5. WA0026
6. WA0027
7. SW1S
8. GW0025

Water levels will be measured on a quarterly basis for two (2) years after the pumping wells have been turned off in order to determine flow directions absent pumping. At the end of two (2) years, water level measurements taken at these wells will be re-evaluated and PCC may request to reduce water level measurements.

PCC has secured permission to access and measure water levels in all wells on property not owned by PCC for thirty years.

Sampled data will be submitted quarterly and an annual report will be provided to summarize the data. An Excel spread sheet containing a summary of monitoring data will be provided electronically with the annual report.

Corrective Actions

If there is a clear indication that pollutants are moving from the permitted site and threaten or have the potential to move beyond the GMZ at concentrations above the 35 Ill. Adm. Code 620.410 Class I: Potable Resource Groundwater sulfate standard at locations at which such standard is applicable, actions determined to be appropriate at that time will be taken to address the issue. These actions could include, but are not limited to, available remedial or regulatory options. Remedial options may include but are not limited to pumping recovery wells, constructing slurry walls to impede flow, constructing a low permeability cover on a disposal area as needed or additional wells to characterize the plume. Regulatory options may include but are not limited to such options as alternate standards or variances.

Monitoring well SW3SA will act as a sentry well. If the average of four consecutive quarters of sulfate concentrations exceed the applicable sulfate standard for Class I groundwater, appropriate actions will be taken. Appropriate actions may include those described above.

PCC will construct monitoring well WA0029A to further evaluate groundwater quality in the area of the proposed well. If the average of four consecutive quarters of sulfate concentrations exceed the applicable Class I groundwater standard for sulfate in WA0029A, PCC shall assess the extent of contamination in this area and assess the need for implementing further corrective action measures in this area as described above.

PCC will construct monitoring well WA0009A near the Slurry No. 5 area to further evaluate groundwater quality in this area. If the average of four consecutive quarters of sulfate concentrations exceed the applicable Class I groundwater standard for sulfate in WA0009A, PCC shall assess the extent of contamination in this area and assess the need for implementing further corrective action measures in this area as described above.

PCC will monitor the performance of the corrective action measures taken at Eagle No.2 Mine to protect potable resource groundwater. PCC will address groundwater contamination issues as they are identified within the GMZ boundary to preclude contamination from reaching the boundary of the GMZ. This has been facilitated by establishing a large GMZ boundary, which provides PCC the flexibility to best manage the contaminants at the Eagle No.2 Mine.

Operation and Maintenance

The onsite engineered clay caps will be mowed and any significant erosion will be repaired. Designated monitoring wells will be maintained in working condition or replaced as needed and where reasonably possible.

Deed Restrictions

Deed restrictions that prohibit the installation of future water supply wells for human or livestock consumption within the permitted area will be added to property titles. Additionally, excavation will be prohibited in areas overlying the engineered caps. Exhibit 1 to this Attachment F is the form of the restrictive covenant to be executed in this regard.

PCC has secured restrictions prohibiting the installation of new pumping or extraction walls on certain off-site areas covered by the proposed GMZ, in addition to placement and access to certain monitoring wells. The term of this agreement is 15 years with an option for an additional 15 years

where possible. Exhibit 2 to this Attachment F is the form of the restrictive covenant PCC has obtained in this regard.

EXHIBIT 8

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 – (217) 782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 – (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

December, 6 2006

Mr. Eric P. Fry
Black Beauty Coal Company
414 South Fares
P.O. Box 312
Evansville, IN 47702

Dear Mr. Fry:

This letter is in response to Peabody Coal Company's (PCC) application for the establishment of a Groundwater Management Zone (GMZ) prepared by Blackwell Sanders Peper Martin LLP, dated November 17, 2006 for the PCC Eagle # 2 Mine, located near Shawneetown, Gallatin County. Pursuant to the provisions of Title 35, Environmental Protection; Subtitle F, Public Water Supplies; Section 620.250, Groundwater Management Zone of Chapter 1, the Rules and Regulations of the Illinois Pollution Control Board, PCC is seeking to establish a GMZ at and in the vicinity the Eagle # 2 property. The proposed GMZ includes more then 700 acres in area and extends from ground surface to the base of the sand and gravel of the Henry Formation. The specific dimensions and operation of the GMZ are as described in the GMZ application submitted by PCC on November 20, 2006. In accordance with 35 Ill. Adm. Code 620.250, the GMZ application is hereby approved, and a GMZ is established at the Eagle # 2 Mine, as described in the in the PCC application.

I trust this responds to your needs. If you have further questions contact me at 217/785-4787.

Sincerely,

William E. Buscher

William E. Buscher, P.G.
Supervisor, Hydrogeology and Compliance Unit
Groundwater Section
Division of Public Water Supplies
Bureau of Water

CC: Doug Scott, Director
Marcia Willhite, Bureau Chief
Joey Logan-Wilkey, DLC
Larry Crislip, Marion Region
Mike Garretson, CAS
Rick Cobb, Groundwater
Carl Kamp, Groundwater

EXHIBIT 9

COAL ASH AND SLAG REMOVAL SUMMARY

December 6, 2005

Ms. Elsie Briette
Midwest Generation, LLC
Joliet Station #29
1800 Channahon Road
Joliet, IL 60436

Re: Coal Ash and Slag Removal – Joliet Station #29

VIA FEDERAL EXPRESS

KPRG Project No. 20705

Dear Ms. Briette:

In June, 2005, KPRG and Associates, Inc. (KPRG) performed a grid sampling of an area formerly used for the placement of coal combustion ash/slag. The purpose of the sampling was to determine whether the material may be classified as coal combustion by-product (CCB) to facilitate the potential beneficial reuse of the material in construction of a wind break along the existing coal storage piles. Although most of the material was statistically determined to meet the established criteria for classification as CCB, one area in the vicinity of geoprobe boring GP-14A (see Figure 1 in Summary Report dated August 18, 2005) indicated outlier concentrations of lead and copper based on the neutral leach testing utilizing test method ASTM D3987-85. KPRG was subsequently contracted to perform additional sampling and analysis in the vicinity of geoprobe boring GP-14A to better delineate the area of outlier concentrations and remove the subject ash and slag material for proper off-site disposal. This letter report provides a summary of the additional sampling performed and documents the ash/slag removal activities. Each is discussed separately below.

ADDITIONAL SAMPLING/DELINEATION

KPRG performed eight additional geoprobe borings and one test pit to collect ash/slag samples from around former boring GP-14A (see Figure 1). The borings and test pit extended to a depth of approximately 8 to 9 feet below ground surface (bgs) at which depth the top of bedrock was encountered. One composite sample was collected from each boring or test pit from the entire vertical profile of ash/slag material overlying the bedrock. This effort yielded a total of nine composite soil samples. The samples were stored on ice and transported under a completed chain-of-custody to Severn Trent Laboratories (STL) located in University Park, Illinois. The samples were analyzed for neutral leach lead and copper using test method ASTM D3987-85. The analytical results are summarized in Table 1 along with the established

standards which the neutral leach concentration must meet and the statistical average from the surrounding ash/slag material from the previously noted June 2005 grid sampling event. Complete analytical reporting packages are provided in Attachment 1. It is noted that the sample GP14A-45N was only analyzed for neutral leach lead since samples GP14A-25N and GP-14A-40N both passed for the established neutral leach copper criteria. The additional neutral leach lead sample was collected due sample GP14A-40N failing for the neutral leach lead criteria.

Based on a review of the data in Table 1 and the areal distribution of the test results illustrated on Figure 1, the excavation area around geoprobe location GP-14A was delineated for removal activities as noted on the figure.

DOCUMENTATION OF EXCAVATION AND DISPOSAL ACTIVITIES

This section provided a summary of the waste profiling, excavation, transport, disposal and backfilling activities. Photo documentation of the resulting removal activities is provided in Attachment 2.

Waste Profiling

KPRG collected a composite ash/slag sample from location GP-14A utilizing the geoprobe sampling method. The sample was analyzed for Toxic Compound Leaching Procedure (TCLP) metals, TCLP volatile organic compounds (VOCs), TCLP semi-VOCs, pH, paint filter, reactive cyanide, reactive sulfide, flash point, phenols and EOX (an indicator scan for chlorinated compounds). A review of the analytical data indicated that the soil pile material was non-hazardous and would be classified as a non-hazardous special waste for disposal purposes. Based on the analytical results, ash/slag material was profiled for acceptance into the Allied Waste Company Environtech Landfill facility in Morris, Illinois. The Waste Profile package was accepted and issued a Waste Profile Number of 369Y515283. A copy of the profile acceptance along with the analytical profile data is provided in Attachment 3.

Excavation, Transport and Disposal

KPRG contracted Alessio & Sons Company (Allesio) to provide the excavation, loading and transport services. The excavation and removal activities were performed during the week of November 21, 2005. The ash/slag material was loaded directly into the trucks and transported as Special Waste under landfill Profile # 369Y515283. Each haul truck was presented with a Special Waste Manifest Disposal Ticket upon loading (one ticket per truck per day). Each manifest included the trucking company, generator (Midwest Generation), waste description, profile number, and customer signature. Each driver signed and presented the manifest to the landfill representative. The landfill maintained an inventory of each manifested truck load and corresponding weight. Copies of the landfill manifests and a summary of loads/weights are included in Attachment 3. A total of 52 loads of ash/slag, weighing 1,062.88 tons, were

excavated and hauled off-site for proper disposal. It is noted that several large concrete boulders were encountered during the excavation. These were left in place as part of backfilling (see photo 3 in Attachment 2).

Backfilling

Once the excavation was completed, a bulldozer was used to scrape and push surficial materials from the areas surrounding the excavation for use as backfill. The material was placed into the excavation and mechanically compacted with the track of the machine. Mr. Rick Wachtor of Midwest Generation was contacted to inspect the backfilled excavation prior to demobilizing from the site. Mr. Wachtor approved the backfilling and all equipment was demobilized on November 23, 2005.

This letter and associated attachments complete the documentation for the ash/slag removal in the vicinity of geoprobe boring GP-14A. 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.

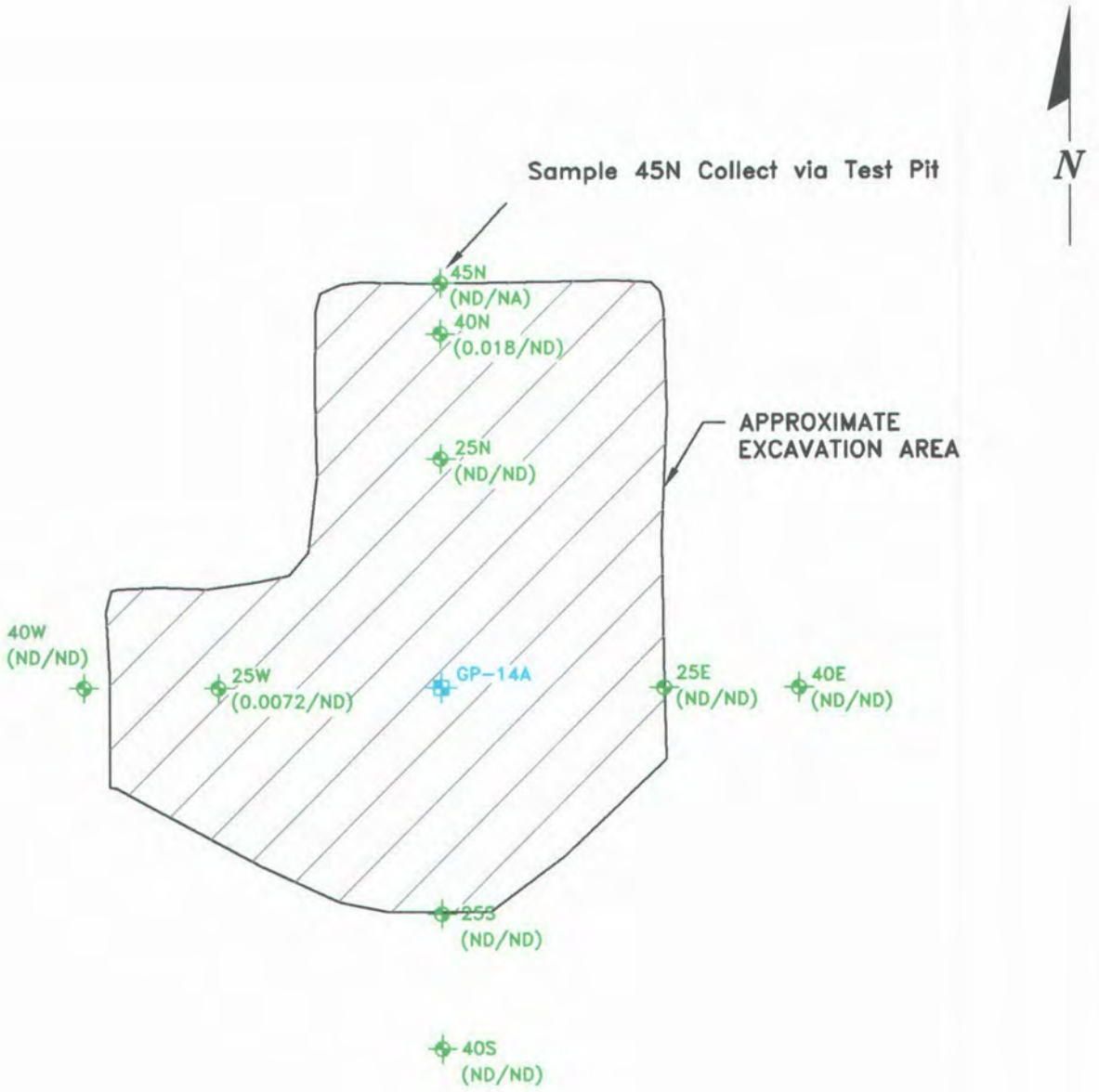
Sincerely,
KPRG and Associates, Inc.

Richard R. Gnat

Richard R. Gnat, P.G.
Principal

cc: Maria L. Race, Midwest Generation EME, LLC

FIGURE



LEGEND

GP-14A — ORIGINAL GEOPROBE LOCATION FROM JUNE, 2005

40N (0.018/ND) — NOVEMBER 2005 GEOPROBE SAMPLE LOCATION. VALUES IN PARENTHESES ARE NEUTRAL LEACH LEAD AND COPPER VALUES, RESPECTIVELY. CONCENTRATION IN mg/L.

0 20
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 29 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478
414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1583

EXCAVATION AREA MAP

MIDWEST GENERATION
JOLIET STATION #29

Scale: SEE BARSCALE | Date: December 5, 2005

KPRG Project No. 20705 | FIGURE 1

TABLE

Table 1. Summary of Additional Ash/Slag Neutral Leach Analyses in Vicinity of GP-14A.

Sample No.	GW Standard Class 1	June 2005 Sampling Mean Concentration	GP14A-25N	GP14A-40N	GP14A-45N	GP14A-25W	GP14A-40W
Collection Date			11/4/2005	11/4/2005	11/18/2005	11/4/2005	11/4/2005
Neutral Leach Lead	0.0075	0.0033	ND	**0.018**	ND	*0.0072*	ND
Neutral Leach Copper	0.65	0.0133	ND	ND	NA	ND	ND

Sample No.	GW Standard Class 1	June 2005 Sampling Mean Concentration	GP14A-25S	GP14A-40S	GP14A-25E	GP14A-40E
Collection Date			11/4/2005	11/4/2005	11/4/2005	11/4/2005
Neutral Leach Lead	0.0075	0.0033	ND	ND	ND	ND
Neutral Leach Copper	0.65	0.0133	ND	ND	ND	ND

ND - Not Detected
NA - Not Analyzed
Bold - Denotes value above GW Class 1 criteria which neutral leach must meet for Coal Combustion By-Product classification.
Italics - Denotes value above calculated mean for surrounding ash/slag mass from June, 2005 sampling.
All Values in mg/l

ATTACHMENT 1
Analytical Data Packages

SEVERN TRENT STL®

STL Chicago
2417 Bond Street
University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211
www.stl-inc.com

SEVERN TRENT LABORATORIES ANALYTICAL REPORT

JOB NUMBER: 242180

Prepared For:

KPRG & Associates, Inc.
14665 West Lisbon Road
Suite 2B
Brookfield, WI 53005

Project: Midwest Generation

Attention: Richard Gnat

Date: 11/22/2005

Mary S. McDonald for
Signature

11/22/05
Date

Name: Linda S. Mackley

Title: Project Manager

E-Mail: lmackley@stl-inc.com

STL Chicago
2417 Bond Street
University Park, IL 60466

PHONE: (708) 534-5200
FAX..: (708) 534-5211

This Report Contains (12) Pages

STL Chicago is part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION
Date: 11/22/2005

Job Number.: 242180
Customer...: KPRG & Associates, Inc.
Attn.....: Richard Gnat

Project Number.....: 20006022
Customer Project ID....: MIDWEST GENERATION
Project Description....: Midwest Generation

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
242180-1	GP14A-45N	Soil	11/18/2005	12:00	11/18/2005	15:05
242180-2	GP14A-50N	Soil	11/18/2005	12:15	11/18/2005	15:05

STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS

Job Number: 242180

Date:11/22/2005

CUSTOMER: KPRG & Associates, Inc.

PROJECT: MIDWEST GENERATION

ATTN: Richard Gnat

Customer Sample ID: GP14A-45N
Date Sampled.....: 11/18/2005
Time Sampled.....: 12:00
Sample Matrix.....: Soil

Laboratory Sample ID: 242180-1
Date Received.....: 11/18/2005
Time Received.....: 15:05

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP) Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	166359		11/22/05 1004	tds

* In Description = Dry Wgt.

STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY CHRONICLE

Job Number: 242180 Date: 11/22/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: MIDWEST GENERATION ATTN: Richard Gnat

Lab ID: 242180-1 Client ID: GP14A-45N Date Recvd: 11/18/2005 Sample Date: 11/18/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	166313	166248	11/21/2005 1830	
6010B	Leachable, Metals Analysis (ICAP)	1	166359	166313-166248	11/22/2005 1004	
D3987	Neutral Leachate Extraction	1	166248			

Lab ID: 242180-2 Client ID: GP14A-50N Date Recvd: 11/18/2005 Sample Date: 11/18/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	166313	166248	11/21/2005 1830	
6010B	Leachable, Metals Analysis (ICAP)	1	166359	166313-166248	11/22/2005 1025	
D3987	Neutral Leachate Extraction	1	166248			

QUALITY CONTROL RESULTS

Job Number.: 242180

Report Date.: 11/22/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: MIDWEST GENERATION ATTN: Richard Gnat

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB3	DI Blank	166313	166313-001		11/22/2005	0955

Test Method.....: 6010B
Method Description.: Leachable, Metals Analysis (ICAP)

Equipment Code....: ICP5
Batch.....: 166359

Analyst...: tds

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Lead, Neutral Leach	mg/L	0.00500 U							

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 242180

Report Date.: 11/22/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: MIDWEST GENERATION ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	M05JSPK001	166313-002		11/22/2005	1000

Test Method.....: 6010B
Method Description.: Leachable, Metals Analysis (ICAP)

Equipment Code....: ICP5
Batch.....: 166359

Analyst...: tds

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Lead, Neutral Leach	mg/L	0.10379		0.10000	0.00500 U	104	%	80-120	

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 242180

Report Date.: 11/22/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: MIDWEST GENERATION ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		242180-1		11/22/2005	1013

Test Method.....: 6010B
Method Description.: Leachable, Metals Analysis (ICAP)

Equipment Code....: ICP5
Batch.....: 166359

Analyst...: tds

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Lead, Neutral Leach	mg/L	0.00500 U			0.00500 U	0.00002	A	0.05000	

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 242180

Report Date.: 11/22/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: MIDWEST GENERATION ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	M05ESPK001	242180-1		11/22/2005	1018

Test Method.....: 6010B
Method Description.: Leachable, Metals Analysis (ICAP)

Equipment Code....: ICP5
Batch.....: 166359

Analyst...: tds

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Lead, Neutral Leach	mg/L	4.73762		5.00000	0.00500 U	95	%	50-150	

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 242180 Report Date.: 11/22/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: MIDWEST GENERATION ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		242180-1		11/22/2005	1009

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 166359

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Lead, Neutral Leach	mg/L	0.00500 U			0.00500 U				

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/22/2005

REPORT COMMENTS

1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

U	Analyte was not detected at or above the stated limit.
<	Not detected at or above the reporting limit.
J	Result is less than the RL, but greater than or equal to the method detection limit.
B	Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
S	Result was determined by the Method of Standard Additions.
F	AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

^	ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
*	LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
+	MSA correlation coefficient is less than 0.995.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	SD: Serial dilution exceeds the control limits.
H	MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
N	MS, MSD: Spike recovery exceeds the upper or lower control limits.
W	AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

U	Analyte was not detected at or above the stated limit.
ND	Compound not detected.
J	Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
Q	Result was qualitatively confirmed, but not quantified.
C	Pesticide identification was confirmed by GC/MS.
Y	The chromatographic response resembles a typical fuel pattern.
Z	The chromatographic response does not resemble a typical fuel pattern.
E	Result exceeded calibration range, secondary dilution required.
F	AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

B	MB: Batch QC is greater than reporting limit.
*	LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
^	EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
A	Concentration exceeds the instrument calibration range
a	Concentration is below the method Reporting Limit (RL)
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
H	Alternate peak selection upon analytical review
I	Indicates the presence of an interfence, recovery is not calculated.
M	Manually integrated compound.
P	The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/22/2005

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calilbration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group
	Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/22/2005

RTW	Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number
SCB	Seeded Control Blank
SD	Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)
UCB	Unseeded Control Blank
SSV	Second Source Verification Standard
SLCS	Solid Laboratory Control Standard(LCS)
PHC	pH Calibration Check LCSP pH Laboratory Control Sample
LCDP	pH Laboratory Control Sample Duplicate
MDPH	pH Sample Duplicate
MDFP	Flashpoint Sample Duplicate
LCFP	Flashpoint LCS
G1	Gelex Check Standard Range 0-1
G2	Gelex Check Standard Range 1-10
G3	Gelex Check Standard Range 10-100
G4	Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

SEVERN TRENT **STL**

STL Chicago
2417 Bond Street
University Park, IL 60466
Phone: 708-534-5200
Fax: 708-534-5211

Report To:
Contact: RICH GNAT
Company: KPRG & ASSOCIATES, INC
Address: 14665 W. LISBON RD, STE. 2B
BROOKFIELD, WI
Phone: 262-781-0475
Fax: 262-781-0478
E-Mail: RICHARDG@KPRGINC.COM

Bill To:
Contact:
Company: SAME
Address:
Phone:
Fax:
PO#: Quote:

Lab Lot# 242180

Package Sealed	Samples Sealed
Yes (No)	Yes (No)
Received on Ice	**Samples Intact**
(Yes) No	(Yes) No

Temperature °C of Cooler 4.8

Within Hold Time	Preserv. Indicated
(Yes) No	(Yes) No NA
pH Check OK	**Res Cl_2 Check OK**
Yes No (NA)	Yes No (NA)

Sample Labels and COC Agree
(Yes) No COC not present

Sampler Name: DAVID PYLES
Signature: D. Pyles
Project Name: JOLIET STATION 29
Project Number: 21205
Project Location: JOLIET, IL
Date Required
Hard Copy: ___/___/___
Fax: 11/21/05
Lab PM: LYNN MACKEY

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Refrg #	# / Cont.	Volume	Preserv	Neutral Leach Lead	Additional Analyses / Remarks
1		GP14A-45N	11-18-05	1200	S	C					X	RUN + CELL RESULT IN B/4 12
2		GP14A-50N	11-18-05	1215	S	C					X	EXTRACT & HOLD - SEE COMMENT

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
[signature]	KPRG, INC	11-18-05		[signature]	STL	11-19-05	1505
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME

Matrix Key
WW = Wastewater, W = Water, S = Soil, SL = Sludge, MS = Miscellaneous, OL = Oil, A = Air, SE = Sediment, SO = Solid, DS = Drum Solid, DL = Drum Liquid, L = Leachate, WI = Wipe, O = _____

Container Key
1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other _____

Preservative Key
1. HCl, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None

COMMENTS
TEST 14A-45 SAMPLE 1 TE and CALL IN RESULT TO R. GNAT. Pending result will determine if 14A-50N is RUN.

Date Received 11/18/05
Courier: STL Hand Delivered [X]
Bill of Lading

MWG13-15_18844

SEVERN TRENT STL®

STL Chicago
2417 Bond Street
University Park, IL 60466

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www.stl-inc.com

SEVERN TRENT LABORATORIES ANALYTICAL REPORT

JOB NUMBER: 241757

Prepared For:

KPRG & Associates, Inc.
14665 West Lisbon Road
Suite 2B
Brookfield, WI 53005

Project: Midwest Generation

Attention: Richard Gnat

Date: 11/11/2005

Linda S Mackley
Signature

11-11-05
Date

Name: Linda S. Mackley

Title: Project Manager

E-Mail: lmackley@stl-inc.com

STL Chicago
2417 Bond Street
University Park, IL 60466

PHONE: (708) 534-5200
FAX..: (708) 534-5211

This Report Contains (19) Pages

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SAMPLE INFORMATION
Date: 11/11/2005

Job Number.: 241757
Customer...: KPRG & Associates, Inc.
Attn.....: Richard Gnat

Project Number.....: 20006022
Customer Project ID....: JOLIET STATION 29
Project Description....: Midwest Generation

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
241757-1	GP14A-25N	Soil	11/04/2005	09:35	11/04/2005	15:00
241757-2	GP14A-40N	Soil	11/04/2005	10:00	11/04/2005	15:00
241757-3	GP14A-25W	Soil	11/04/2005	10:15	11/04/2005	15:00
241757-4	GP14A-40W	Soil	11/04/2005	10:35	11/04/2005	15:00
241757-5	GP14A-25S	Soil	11/04/2005	10:45	11/04/2005	15:00
241757-6	GP14A-40S	Soil	11/04/2005	11:10	11/04/2005	15:00
241757-7	GP14A-25E	Soil	11/04/2005	11:35	11/04/2005	15:00
241757-8	GP14A-40E	Soil	11/04/2005	11:55	11/04/2005	15:00

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LABORATORY TEST RESULTS

Job Number: 241757

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc.

PROJECT: JOLIET STATION 29

ATTN: Richard Gnat

Customer Sample ID: GP14A-25N
Date Sampled.....: 11/04/2005
Time Sampled.....: 09:35
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-1
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1159	tds
	Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	165354		11/11/05 1159	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-40N
Date Sampled.....: 11/04/2005
Time Sampled.....: 10:00
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-2
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1217	tds
	Lead, Neutral Leach	0.018			0.0050	0.0075	1	mg/L	165354		11/11/05 1217	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-25W
Date Sampled.....: 11/04/2005
Time Sampled.....: 10:15
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-3
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1221	tds
	Lead, Neutral Leach	0.0072	B		0.0050	0.0075	1	mg/L	165354		11/11/05 1221	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757 Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-40W
Date Sampled.....: 11/04/2005
Time Sampled.....: 10:35
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-4
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1226	tds
	Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	165354		11/11/05 1226	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-25S
Date Sampled.....: 11/04/2005
Time Sampled.....: 10:45
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-5
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1231	tds
	Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	165354		11/11/05 1231	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-40S
Date Sampled.....: 11/04/2005
Time Sampled.....: 11:10
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-6
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1253	tds
	Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	165354		11/11/05 1253	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc.

PROJECT: JOLIET STATION 29

ATTN: Richard Gnat

Customer Sample ID: GP14A-25E
Date Sampled.....: 11/04/2005
Time Sampled.....: 11:35
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-7
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1258	tds
	Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	165354		11/11/05 1258	tds

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241757 Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-40E
Date Sampled.....: 11/04/2005
Time Sampled.....: 11:55
Sample Matrix.....: Soil

Laboratory Sample ID: 241757-8
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
6010B	Leachable, Metals Analysis (ICAP)											
	Copper, Neutral Leach	ND	U		0.010	0.050	1	mg/L	165354		11/11/05 1302	tds
	Lead, Neutral Leach	ND	U		0.0050	0.0075	1	mg/L	165354		11/11/05 1302	tds

* In Description = Dry Wgt.

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LABORATORY CHRONICLE

Job Number: 241757 Date: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Lab ID: 241757-1 Client ID: GP14A-25N Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1159	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-2 Client ID: GP14A-40N Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1217	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-3 Client ID: GP14A-25W Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1221	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-4 Client ID: GP14A-40W Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1226	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-5 Client ID: GP14A-25S Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1231	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-6 Client ID: GP14A-40S Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1253	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-7 Client ID: GP14A-25E Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1258	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

Lab ID: 241757-8 Client ID: GP14A-40E Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
3010A	Acid Dig. Leachates (ICAP)	1	165175	165064	11/10/2005 1125	
6010B	Leachable, Metals Analysis (ICAP)	1	165354	165175-165064	11/11/2005 1302	
D3987	Neutral Leachate Extraction	1	165064		11/09/2005 1400	

QUALITY CONTROL RESULTS

Job Number.: 241757 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB3	DI Blank	165175	165175-001		11/11/2005	1150

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165354

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Copper, Neutral Leach	mg/L	0.01000 U							
Lead, Neutral Leach	mg/L	0.00500 U							

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241757 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	M05JSPK001	165175-002		11/11/2005	1154

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165354

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Copper, Neutral Leach	mg/L	0.24968		0.25000	0.01000 U	100	%	80-120	
Lead, Neutral Leach	mg/L	0.09864		0.10000	0.00500 U	99	%	80-120	

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241757 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		241757-1		11/11/2005	1208

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165354

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Copper, Neutral Leach	mg/L	0.02058 B			0.01000 U	0.01148	A	0.05000	
Lead, Neutral Leach	mg/L	0.00500 U			0.00500 U	0.00125	A	0.05000	

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241757 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	M05ESPK001	241757-1		11/11/2005	1212

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165354

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Copper, Neutral Leach	mg/L	0.24368		0.25000	0.01000 U	97	%	50-150	
Lead, Neutral Leach	mg/L	4.67271		5.00000	0.00500 U	93	%	50-150	

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241757 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		241757-1		11/11/2005	1203

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165354

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Copper, Neutral Leach	mg/L	0.01000 U			0.01000 U				
Lead, Neutral Leach	mg/L	0.00500 U			0.00500 U				

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/11/2005

REPORT COMMENTS

1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

U	Analyte was not detected at or above the stated limit.
<	Not detected at or above the reporting limit.
J	Result is less than the RL, but greater than or equal to the method detection limit.
B	Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
S	Result was determined by the Method of Standard Additions.
F	AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

^	ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
*	LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
+	MSA correlation coefficient is less than 0.995.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	SD: Serial dilution exceeds the control limits.
H	MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
N	MS, MSD: Spike recovery exceeds the upper or lower control limits.
W	AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

U	Analyte was not detected at or above the stated limit.
ND	Compound not detected.
J	Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
Q	Result was qualitatively confirmed, but not quantified.
C	Pesticide identification was confirmed by GC/MS.
Y	The chromatographic response resembles a typical fuel pattern.
Z	The chromatographic response does not resemble a typical fuel pattern.
E	Result exceeded calibration range, secondary dilution required.
F	AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

B	MB: Batch QC is greater than reporting limit.
*	LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
^	EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
A	Concentration exceeds the instrument calibration range
a	Concentration is below the method Reporting Limit (RL)
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
H	Alternate peak selection upon analytical review
I	Indicates the presence of an interfence, recovery is not calculated.
M	Manually integrated compound.
P	The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/11/2005

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calilbration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group
	Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/11/2005

RTW	Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number
SCB	Seeded Control Blank
SD	Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)
UCB	Unseeded Control Blank
SSV	Second Source Verification Standard
SLCS	Solid Laboratory Control Standard(LCS)
PHC	pH Calibration Check LCSP pH Laboratory Control Sample
LCDP	pH Laboratory Control Sample Duplicate
MDPH	pH Sample Duplicate
MDFP	Flashpoint Sample Duplicate
LCFP	Flashpoint LCS
G1	Gelex Check Standard Range 0-1
G2	Gelex Check Standard Range 1-10
G3	Gelex Check Standard Range 10-100
G4	Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

SEVERN TRENT **STL**

STL Chicago
2417 Bond Street
University Park, IL 60466
Phone: 708-534-5200
Fax: 708-534-5211

Report To:
Contact: RICH GNAT
Company: KPRG AND ASSOCIATES, INC
Address: 14665 W. LISBON RD, STE 2B
BROOKFIELD, WI
Phone: 262-781-0475
Fax: 262-781-0478
E-Mail: RICHARDG@KPRGINC.COM

Bill To:
Contact: SAME
Company:
Address:
Phone:
Fax:
PO#: Quote:

Shaded Areas For Internal Use Only 1 of 1

Lab Lot# 24765 / 24692

Package Sealed (Yes) No | Samples Sealed Yes (No)
Received on Ice (Yes) No | Samples Intact (Yes) No
Temperature °C of Cooler: 3.2

Sampler Name: PATRICK ALLENSTEIN
Signature:
Project Name: JOLIET STATION S29
Project Number:
Project Location: S529
Lab PM:
Date Required
Hard Copy: ___/___/___
Fax: ___/___/___

Preserv #													
# Cont.	16	16	16	16									
Volume	8	8	16	16									
Preserv	3	3	2	3									

Within Hold Time (Yes) No | Preserv. Indicator Yes No NA
pH Check OK Yes No (NA) | Res Cl_2 Check OK Yes No NA
Sample Labels and COC Agree (Yes) No | COC not present

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	NEUTRAL LEACH METALS	TCLP, PCB, pH PAINT FILTER	CN, SULFIDE, FP, PHENOLS	EDX	Additional Analyses / Remarks
1		GP14A - PROFILE	11/4/05	9:20	S	C	X	X	X	X	
2		GP14A - 25N		9:35			X				
3		GP14A - 40N		10:00							
4		GP14A - 25W		10:15							
5		GP14A - 40W		10:35							
6		GP14A - 25S		10:45							
7		GP14A - 40S		11:10							
8		GP14A - 25E		11:35							
9		GP14A - 40E		11:55							

RELINQUISHED BY		COMPANY KPRG	DATE 11/4/05	TIME	RECEIVED BY	COMPANY STL	DATE 11/4/05 TIME 12:15
RELINQUISHED BY		COMPANY	DATE	TIME	RECEIVED BY	COMPANY STL	DATE 11/4/05 TIME 1500

Matrix Key
WW = Wastewater, W = Water, S = Soil, SL = Sludge, MS = Miscellaneous, OL = Oil, A = Air, SE = Sediment, SO = Solid, DS = Drum Solid, DL = Drum Liquid, L = Leachate, WI = Wipe, O = _____

Container Key.
1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other _____

Preservative Key
1. HCl, Cool to 4°
2. H_2SO_4, Cool to 4°
3. HNO_3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None

COMMENTS

Date Received / /
Courier: STL Hand Delivered
Bill of Lading

MWG13-15_18864

ATTACHMENT 2
Photo Documentation

1) Looking west. Before excavating.

2) Looking east. Excavator loading haul truck.

3) Looking northwest. Excavation with boulder left in place.

4) Looking north. Excavation.

5) Looking northwest. Excavation.

6) Looking northwest. Beginning backfill activities.

7) Looking north. Backfilling activities.

8) Looking north. Backfilling.

9) Looking south. Loading last load at south end of excavation.

10) Looking south. Completed backfilling.

ATTACHMENT 3
Waste Profiling and Disposal Documentation

ALLIED WASTE

GENERATOR WASTE PROFILE SHEET

Requested Disposal Facility: Environtech
an Allied Waste Company

Waste Profile #: 369Y515283
402

I. Generator Information

Date: 11-4-05

Generator Name: Midwest Generation, LLC Joliet Station			
Generator Site Address: 1800 Channahon Road			
City: Joliet	County: Will	State: IL	Zip: 60436
Generator State ID Number: 1970455041		SIC Code Number: 4911	
Generator Mailing Address (if different): Same as above.			
City:	County:	State:	Zip:
Generator Contact Name: Elsie Briette			
Phone Number: 815-741-9000		Fax Number: 815-773-2900	

II. Transporter Information

Transporter Name: Alessio & Sons Company			
Transporter Address: 800 Moen Ave.			
City: Rockdale	County: Will	State: IL	Zip: 60436
Transporter Contact Name: James N. Alessio			
Phone Number: 815-725-5513		Fax Number: 815-725-8742	
State Transportation Number: 1761			

III. Waste Stream Information

Name of Waste: Bottom Ash/Slag – Soil contaminated with the ash/slag (RC) per Elsie Briette							
Process Generating Waste: Coal combustion material from power generation plant							
Type of Waste:	☐ INDUSTRIAL PROCESS WASTE	or	☒ POLLUTION CONTROL WASTE				
Physical State:	☒ SOLID	☐ SEMI-SOLID	☐ POWDER	☐ LIQUID	☐ OTHER:		
Method of Shipment:	☒ BULK	☐ DRUM	☐ BAGGED	☐ OTHER:			
Estimated Annual Volume:	☐ CUBIC YARDS:		☒ TONS: 1,125	☐ OTHER:			
Frequency:	☒ ONE TIME	☒ DAILY	☐ WEEKLY	☐ MONTHLY	☒ OTHER: 3-5 days		
Special Handling Instructions:							

IV. Representative Sample Certification

☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules? ☒ YES or ☐ NO

Sample Date: 11 – 4 – 05 | Type of Sample: ☒ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sampler's Employer: KPRG and Associates, Inc.

Sampler's Name (printed): Patrick Allenstein Signature:

ALLIED WASTE

GENERATOR WASTE PROFILE SHEET (continued)

Waste Profile # 369 / 5 15283

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Bottom Ash/slag from coal combustion	~~100%~~ 95 - 97% (EB) per Elsie Briette
2. Soil contaminated with above	3 - 5% (EB)
3.	

Color:	Odor (describe):	Free Liquids:	% Solids:	pH:	Flash Point:	Phenol
Black to tan	None	☐ YES or ☒ NO Content ___ %	100	7.4	>200 °F	0.28 ppm

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ YES or ☒ NO
Does this waste or generating process cause it to exceed OSHA exposure limits from high levels of Hydrogen Sulfide or Hydrogen Cyanide as defined in 40 CFR 261.23?	☐ YES or ☒ NO
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ YES or ☒ NO
Does this waste contain regulated concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ YES or ☒ NO
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?	☐ YES or ☒ NO
Is this a regulated Toxic Material as defined by Federal and/or State regulations?	☐ YES or ☒ NO
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ YES or ☒ NO
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ YES or ☒ NO
Is this waste generated at a Federal Superfund Clean Up Site?	☐ YES or ☒ NO

VI. Generator Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I further certify that the company has not altered the form or content of this profile sheet as provided by Allied Waste Industries, Inc.

ELSIE BRIETTE
AUTHORIZED REPRESENTATIVE NAME AND TITLE (Printed)

Midwest Generation, LLC
COMPANY NAME

[signature]
AUTHORIZED REPRESENTATIVE SIGNATURE

11/04/05
DATE

VII. Allied Waste Decision

☒ Approved ☐ Rejected Expiration: 2/28/06

Conditions:

Mark Phillips, Special Waste Analyst
Name, Title

[signature]
Signature

11/15/05
Date

SEVERN TRENT STL

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University Park, IL 60466

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SEVERN TRENT LABORATORIES
ANALYTICAL REPORT

JOB NUMBER: 241692

Prepared For:

KPRG & Associates, Inc.
14665 West Lisbon Road
Suite 2B
Brookfield, WI 53005

Project: Midwest Generation

Attention: Richard Gnat

Date: 11/11/2005

Linda S Mackley
Signature

11-11-05
Date

Name: Linda S. Mackley

Title: Project Manager

E-Mail: lmackley@stl-inc.com

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This Report Contains (53) Pages

SEVERN TRENT STL

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ANALYTICAL REPORT

PROJECT NO. 241692

241692 MIDWEST GENERATION

Lot #: A5K070146

Linda Mackley

STL Chicago
2417 Bond Street
University Park, IL 60466

SEVERN TRENT LABORATORIES, INC.

Lois D. Ezzo
Project Manager

November 11, 2005

CASE NARRATIVE

A5K070146

The following report contains the analytical results for one solid sample submitted to STL North Canton by STL Chicago from the 241692 Midwest Generation Site, project number 241692. The sample was received November 05, 2005, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The sample presented in this report was analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Lois D. Ezzo, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 20.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 1.2°C.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive of mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the reprepparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence Participating Lab Status Award (#82)

EXECUTIVE SUMMARY - Detection Highlights

A5K070146

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GP14A-PROFILE 11/04/05 09:20 001				
Percent Solids	82.3	10.0	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

A5K070146

PARAMETER	ANALYTICAL METHOD
Extractable Organic Halides	SW846 9023
Total Residue as Percent Solids	MCAWW 160.3 MOD

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A5K070146

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HPJFV	001	GP14A-PROFILE	11/04/05	09:2(

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
  All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

STL CHICAGO

Client Sample ID: GP14A-PROFILE

General Chemistry

Lot-Sample #...: A5K070146-001 **Work Order #...:** HPJFV **Matrix.....:** SO
Date Sampled...: 11/04/05 09:20 **Date Received..:** 11/05/05
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**82.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**11/07-11/08/05**	**5311373**
	Dilution Factor: 1					
Total Extractable Organic Halogens	ND	200	mg/kg	SW846 9023	11/09/05	5314059
	Dilution Factor: 1					

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A5K070146 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #: HPJL91AA		MB Lot-Sample #:	A5K070000-373	
	ND	10.0	%	MCAWW 160.3 MOD	11/07-11/08/05	5311373
		Dilution Factor: 1				
Total Extractable Organic Halogens		Work Order #: HPR8J1AA		MB Lot-Sample #:	A5K100000-059	
	41.4 B	200	mg/kg	SW846 9023	11/09/05	5314059
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A5K070146 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Extractable Organic Halogens		Work Order #: HPR8J1AC	LCS Lot Sample#: A5K100000-059		
	111	(75 - 125)	SW846 9023	11/09/05	5314059
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5K070146 Work Order #...: HPEX4-SMP HPEX4-DUP Matrix.....: SOLID

Date Sampled...: 11/01/05 13:30 Date Received..: 11/04/05

% Moisture.....: 8.5

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5K040262-001		
	91.5	91.0	%	0.49	(0-20)	MCAWW 160.3 MOD	11/07-11/08/05	5311373

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5K070146 **Work Order #...:** HPJEQ-SMP HPJEQ-DUP **Matrix.....:** SOLID

Date Sampled...: 11/03/05 11:05 **Date Received...:** 11/04/05

% Moisture.....: 2.3

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5K070141-001		
	97.7	97.6	%	0.094	(0-20)	MCAWW 160.3 MOD	11/07-11/08/05	5311373

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5K070146 **Work Order #...:** HPJFV-SMP HPJFV-DUP **Matrix.....:** SO

Date Sampled...: 11/04/05 09:20 **Date Received..:** 11/05/05

% Moisture.....: 18

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Extractable Organic Halogens						SD Lot-Sample #: A5K070146-001		
	ND	ND	mg/kg	66	(0-20)	SW846 9023	11/09/05	5314059
		Dilution Factor: 1						

SEVERN TRENT **STL**

Chicago
Bond Street
ersity Park, IL 60466
ne: 708-534-5200
708-534-5211

Report To:
Contact: RICH GNAT
Company: KPRG AND ASSOCIATES, INC
Address: 14665 W. LISBON RD, STE 2B
BROOKFIELD, WI
Phone: 262-781-0475
Fax: 262-781-0478
E-Mail: RICHARDG@KPRGINC.COM

Bill To:
Contact: SAME
Company:
Address:
Phone:
Fax:
PO#: Quote:

Lab Lot# 241692

Package Sealed: (Yes) No — Samples Sealed: Yes (No)
Received on Ice: (Yes) No — Samples Intact: (Yes) No
Temperature °C of Cooler: 3
Within Hold Time: (Yes) No — Preserv. Indicated: Yes No NA
pH Check OK: Yes No (NA) — Res Cl2 Check OK: Yes No NA
Sample Labels and COC Agree: (Yes) No — COC not present

Sampler Name: PATRICK ALLENSTEIN
Signature: [signature]
Project Name: JOLIET STATION 29
Project Number:
Project Location: JS29
Date Required: Hard Copy: / / Fax: / /
PM:

Laboratory ID	MS/MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	NEUTRAL LEACH METALS	TCLP, PCB, pH PAINT FILTER	CN, SULFIDE, FP, PHENOLS	EOX	Additional Analyses / Remarks
1		GP14A - PROFILE	11/4/05	9:20	S	C	x	x	x	x	
2		GP14A - 25N	↓	9:35	↓	↓	x				
3		GP14A - 40N	↓	10:00	↓	↓	↓				
4		GP14A - 25W	↓	10:15	↓	↓	↓				
5		GP14A - 40W	↓	10:35	↓	↓	↓				
6		GP14A - 25S	↓	10:45	↓	↓	↓				
7		GP14A - 40S	↓	11:10	↓	↓	↓				
8		GP14A - 25E	↓	11:35	↓	↓	↓				
9		GP14A - 40E	↓	11:55	↓	↓	↓				

Bottle #: … # Cont: 16 16 16 16 … Volume: … Preserv: …

RELINQUISHED BY [signature] COMPANY KPRG DATE 11-4-05 TIME
RECEIVED BY [signature] COMPANY STL DATE 11/4/05 TIME 12:45
RELINQUISHED BY COMPANY DATE TIME
RECEIVED BY [signature] COMPANY STL DATE 11/4/05 TIME 1500

COMMENTS
Received by: [signature]
Company: STL 11/5/05 0915

Date Received / /
Courier: STL
Hand Delivered
Bill of Lading

Matrix Key
W = Wastewater
= Water
= Soil
= Sludge
= Miscellaneous
= Oil
= Air
SE = Sediment
SO = Solid
DS = Drum Solid
DL = Drum Liquid
L = Leachate
WI = Wipe
O =

Container Key.
1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other

Preservative Key
1. HCl, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None

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STL-8208 (0

MWG13-15_18890

SEVERN TRENT **STL**

STL Work Sharing Agreement

Import Lab Information	
STL Lab Name	North Canton
PM Contact Name	Lois Ezzo
Backup Contact Name	
Pricing Information	
QA/QC (i.e. MS/MSD) Billable?	No
Raw Data Surcharge	%
EDD Surcharge	%
TAT Surcharges	%
Penalty Terms	None
Other Charges Not In Unit Price? (i.e. canisters, regulators, shipping, bottles)	None

STL Exporting Lab	Chicago
Project Name	Midwest Generation
Export Lab Information	
PM Contact Name	Linda Mackley
Backup Contact Name	Bonnie Stadelmann
Agreement Date	11/2/2005
Project Information	
Client Company Name	KPRG
Date First Samples to Arrive	11/5/2005
Est. Duration of Sampling Event	1 day
Quote or Contract Reference ID	

Project Details	
Non-Standard Work Product	No
Quality Assurance Plan	No
Certifications	
Analyte/Cmpd. List with RLs Attached	Yes-See Attached
Results Dry-Weight Corrected	
Special Method Holding Times	None
Internal Chain of Custody Required	No
Known Hazards/High Analyte Level	No
Saturday/Special Delivery Options	None
Special Instructions	None
Reporting Limit Convention	Report to MDL with "J" Values

Deliverable Requirements		Transmittal medium	Format Column	TAT
Preliminary Report:	No			
Final Report:	Yes	Email	C	11/11/2005
EDD:	No		See Attached	
mySTL:	No	NA	NA	
Custom Forms:	No	NA	See Attached	

Import and Export Lab Agreement

Import lab must acknowledge receipt of Agreement and samples via E-Mail

Analysis	Method	Matrix	# of Samples	Import Lab's Unit Price	Unit Price w/Surcharges	Extended Price
EOX	9023	Soil	1	$ 125.00	$ 125.00	$ 125.00
Please note that a signed report is required by 11/11/05					$ -	$ -
					$ -	$ -
					$ -	$ -
					$ -	$ -
					$ -	$ -
					$ -	$ -
					$ -	$ -
					$ -	$ -
					$ -	$ -
				Approximate Total Project Value		$ 125.00

Work Instruction No.: WI-STL-008/S-C-001

STL Cooler Receipt Form/Narrative **Lot Number:** A5K070146

North Canton Facility

Client: KPRG Project: Toilet Quote#:

Cooler Received on: 11/5/05 Opened on: 11/5/05 by: (Signature)

Fedx [X] Client Drop Off [ ] UPS [ ] DHL [ ] FAS [ ] STL Courier [ ]

Stetson [ ] US Cargo [ ] Other:

STL Cooler No# Foam Box [ ] Client Cooler [X] Other

1. Were custody seals on the outside of the cooler? Yes [ ] No [X] Intact? Yes [ ] No [ ] NA [X]
   If YES, Quantity
   Were the custody seals signed and dated? Yes [ ] No [ ] NA [X]
2. Shipper's packing slip attached to this form? Yes [X] No [ ] NA [ ]
3. Did custody papers accompany the samples? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Did you sign the custody papers in the appropriate place? Yes [ ] No [ ]
5. Packing material used: Bubble Wrap [X] Foam [ ] None [ ] Other :
6. Cooler temperature upon receipt 1.2 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial [ ] Coolant & Sample [ ] Against Bottles [ ] IR [X] ICE/H_2O Slurry [ ]

COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]

7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels and/or tags be reconciled with the COC? Yes [X] No [ ]
9. Were samples at the correct pH? (record below/on back) Yes [ ] No [ ] NA [X]
10. Were correct bottles used for the tests indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [ ] No [ ] NA [X]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]
13. Was a Trip Blank present in the cooler? Yes [ ] No [X] Were VOAs on the COC? Yes [ ] No [X]
14. Does the trip blank number match the cooler number in which it was received? Yes [ ] No [ ] NA [X]

Contacted PM Date: by: via Voice Mail [ ] Verbal [ ] Other [ ]

Concerning:

√		

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot # 091305-HNO3; Sulfuric Acid Lot # 041305-H2SO4; Sodium Hydroxide Lot # -041305 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 071604-CH3COO2ZN/NaOH*

Sample(s) were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials

MWG13-15_18892

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

SEVERN TRENT STL

END OF REPORT

STL Chicago
PCB Case Narrative

KPRG & Associates, Inc.
Midwest Generation
Joliet Station 29
Job #: 241692-1
PCBs

1. STL Chicago used the following Gas Chromatographic systems for the analysis of PCBs:

ID#	INSTRUMENT	COLUMN TYPE	DETECTOR
32	HP 6890	Rtx-Clp2 (primary)	Electron Capture
31	HP 6890	Rtx-5 (confirmation)	Electron Capture

2. This soil sample was extracted based on SW846 method 3541. The extracts were analyzed for PCBs based on SW846 method 8082. All extracts received a sulfuric acid cleanup and a GPC cleanup in order to reduce matrix interference.

3. All required holding times were met for the extraction and analysis.

4. The method blank was below the reporting limits for all Aroclors.

5. The surrogate compounds used for this analysis were Decachlorobiphenyl (DCB) and Tetrachloro-m-xylene (TCX). All surrogate recoveries were within statistical control limits except sample had DCB with 69% recovery (limit 70%). No further action was taken.

6. All blank spike recoveries were within statistical control limits except Aroclor 1016, which had 108% recovery. A solution containing Aroclor 1016 and Aroclor 1260 was used for spiking.

7. A matrix spike and a matrix spike duplicate were not performed on this sample.

8. All initial and continuing standard calibrations associated with this sample were in control on both columns. The SSV recoveries were within limits of 85%-115%.

9. Target compounds were confirmed using a second column. All results were reported from the primary column.

Patti Gibson
Organics Section Manager

11-10-05
Date

Severn Trent Laboratories - Chicago
GC/MS BNA Case Narrative

KPRG & Associates, Inc./Midwest Generation
Job Number: 241692
BNA DATA: TCLP

1. All extractions and analyses were performed within recommended hold times.
2. The MB (Method Blank) and the EB (TCLP blank) sample had all analytes undetected.
3. The LCS (Laboratory Control Sample) had all spike recoveries within the QC limits.
4. A MS (Matrix Spike) was not performed.
5. All samples had surrogate recoveries within in-house generated QC limits.
6. All analyses were performed following USEPA SW846 method 8270C protocol. The EB1 had the last internal standard area below the acceptance limits. No compounds quantitate off of the last internal standard; therefore, no corrective action was required. All other samples had all internal standard areas and retention times within acceptance limits as compared to the corresponding continuing calibration verification.
7. The samples and the TCLP Blank were extracted using 100-mL of the TCLP leachate. The MB and the LCS were extracted using 1000-mL of deionized water. The results and reporting limits were adjusted for the extraction volumes.

Gary Rynkar
GC/MS Section Manager

11/11/5
Date

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SAMPLE INFORMATION
Date: 11/11/2005

Job Number.: 241692
Customer...: KPRG & Associates, Inc.
Attn.....: Richard Gnat

Project Number.....: 20006022
Customer Project ID....: JOLIET STATION 29
Project Description....: Midwest Generation

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
241692-1	GP14A-PROFILE	Soil	11/04/2005	09:20	11/04/2005	15:00

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LABORATORY TEST RESULTS

Job Number: 241692

Date: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-PROFILE
Date Sampled.....: 11/04/2005
Time Sampled.....: 09:20
Sample Matrix.....: Soil

Laboratory Sample ID: 241692-1
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME
8082	PCB Analysis										
	Aroclor 1016, 3541 Solid	ND	U	*	5.5	16	1.00000	ug/Kg	165172		11/09/05 2116
	Aroclor 1221, 3541 Solid	ND	U		4.5	16	1.00000	ug/Kg	165172		11/09/05 2116
	Aroclor 1232, 3541 Solid	ND	U		4.4	16	1.00000	ug/Kg	165172		11/09/05 2116
	Aroclor 1242, 3541 Solid	ND	U		4.8	16	1.00000	ug/Kg	165172		11/09/05 2116
	Aroclor 1248, 3541 Solid	ND	U		3.5	16	1.00000	ug/Kg	165172		11/09/05 2116
	Aroclor 1254, 3541 Solid	ND	U		3.6	16	1.00000	ug/Kg	165172		11/09/05 2116
	Aroclor 1260, 3541 Solid	18			3.2	16	1.00000	ug/Kg	165172		11/09/05 2116
9023	Halide, Total Organic as Cl(EOX)										
	Halide, Extractable Organic as Cl (EOX), Solid	Complete				4.0	1	ug/g	165378		
9014/9010B	Cyanide (Colorimetric)										
	Cyanide, Total, Solid	0.09	B		0.07	0.41	1	mg/Kg	165097		11/09/05 1410
D92	Ignitability (Cleveland Open-Cup)										
	Ignitability (Flashpoint Open-Cup), Solid	>200					1	degrees F	165278		11/11/05 0605
9095A	Paint Filter Test										
	Paint Filter, Solid	pass					1	* Text	165282		11/11/05 0700
9066	Phenolics, Total Recoverable										
	Phenolics, Total Recoverable, Solid	0.28	B		0.28	0.46	1	mg/Kg	165334		11/11/05 0901
9045C	pH (Soil)										
	pH, Solid	7.4			0.2	0.2	1	pH Units	164948		11/08/05 1429
7.3.4.2/9034	Reactivity, Sulfide										
	Reactivity, Sulfide, Solid	ND	U		8.7	49	1	mg/Kg	165340		11/11/05 0907

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241692

Date: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-PROFILE
Date Sampled.....: 11/04/2005
Time Sampled.....: 09:20
Sample Matrix.....: Soil

Laboratory Sample ID: 241692-1
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME
7470A	Leachable, Mercury (CVAA)										
	Mercury, TCLP Leach	ND	U		2.0	2.0	1	ug/L	165321		11/10/05 1311
6010B	Leachable, Metals Analysis (ICAP)										
	Arsenic, TCLP Leach	ND	U		0.010	0.10	1	mg/L	165335		11/11/05 1048
	Barium, TCLP Leach	1.5			0.010	1.0	1	mg/L	165335		11/11/05 1048
	Cadmium, TCLP Leach	ND	U		0.002	0.050	1	mg/L	165335		11/11/05 1048
	Chromium, TCLP Leach	ND	U		0.010	0.050	1	mg/L	165335		11/11/05 1048
	Lead, TCLP Leach	ND	U		0.0050	0.050	1	mg/L	165335		11/11/05 1048
	Selenium, TCLP Leach	ND	U		0.010	0.10	1	mg/L	165335		11/11/05 1048
	Silver, TCLP Leach	ND	U		0.005	0.050	1	mg/L	165335		11/11/05 1048
8270C	Semivolatile Organics										
	Pyridine, TCLP Leach	ND	U		5.5	200	1.00000	ug/L	165290		11/10/05 1719
	1,4-Dichlorobenzene, TCLP Leach	ND	U		5.0	100	1.00000	ug/L	165290		11/10/05 1719
	2-Methylphenol (o-cresol), TCLP Leach	ND	U		4.1	100	1.00000	ug/L	165290		11/10/05 1719
	Hexachloroethane, TCLP Leach	ND	U		5.2	100	1.00000	ug/L	165290		11/10/05 1719
	4-Methylphenol (m/p-cresol), TCLP Leach	ND	U		7.6	100	1.00000	ug/L	165290		11/10/05 1719
	Nitrobenzene, TCLP Leach	ND	U		4.9	100	1.00000	ug/L	165290		11/10/05 1719
	Hexachlorobutadiene, TCLP Leach	ND	U		5.1	100	1.00000	ug/L	165290		11/10/05 1719
	2,4,6-Trichlorophenol, TCLP Leach	ND	U		2.9	100	1.00000	ug/L	165290		11/10/05 1719
	2,4,5-Trichlorophenol, TCLP Leach	ND	U		2.7	500	1.00000	ug/L	165290		11/10/05 1719
	2,4-Dinitrotoluene, TCLP Leach	ND	U		2.5	100	1.00000	ug/L	165290		11/10/05 1719
	Hexachlorobenzene, TCLP Leach	ND	U		4.4	100	1.00000	ug/L	165290		11/10/05 1719
	Pentachlorophenol, TCLP Leach	ND	U		3.0	500	1.00000	ug/L	165290		11/10/05 1719
8260B	Volatile Organics										
	Vinyl chloride, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	1,1-Dichloroethene, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS

Job Number: 241692

Date:11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Customer Sample ID: GP14A-PROFILE
Date Sampled.....: 11/04/2005
Time Sampled.....: 09:20
Sample Matrix.....: Soil

Laboratory Sample ID: 241692-1
Date Received.....: 11/04/2005
Time Received.....: 15:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME
	2-Butanone (MEK), TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	Chloroform, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	Carbon tetrachloride, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	Benzene, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	1,2-Dichloroethane, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	Trichloroethene, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	Tetrachloroethene, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904
	Chlorobenzene, TCLP Leach	ND	U		25	100	1.0000	ug/L	165280		11/10/05 1904

* In Description = Dry Wgt.

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LABORATORY CHRONICLE

Job Number: 241692 Date: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Lab ID: 241692-1 Client ID: GP14A-PROFILE Date Recvd: 11/04/2005 Sample Date: 11/04/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
5030B	5030CP TCLP/SPLP Prep	1	165273	164842	11/10/2005	1904	
3010A	Acid Dig. Leachates (ICAP)	1	165178	164841	11/10/2005	1135	
9014/9010B	Cyanide (Colorimetric)	1	165097	165097	11/09/2005	1410	
3541	Extraction Soxhlet (PCBs)	1	164762		11/07/2005	0700	
3510C	Extraction for TCLP (SVOC)	1	165108	164841	11/09/2005	1800	
9023	Halide, Total Organic as Cl(EOX)	1	165378				
D92	Ignitability (Cleveland Open-Cup)	1	165278	165278	11/11/2005	0605	
7470A	Leachable, Mercury (CVAA)	1	165321	165320-164841	11/10/2005	1311	
6010B	Leachable, Metals Analysis (ICAP)	1	165335	165178-164841	11/11/2005	1048	
8082	PCB Analysis	1	165172	164762	11/09/2005	2116	1.00000
9095A	Paint Filter Test	1	165282		11/11/2005	0700	
9066	Phenolics, Total Recoverable	1	165334	165334	11/11/2005	0901	
PM Charges	Project Management Services/Charges	1					
7.3.4.2/9034	Reactivity, Sulfide	1	165340	165340	11/11/2005	0907	
7470	SW846 Dig. Leachates (Hg)	1	165320		11/10/2005	0900	
8270C	Semivolatile Organics	1	165290	165108-164841	11/10/2005	1719	1.00000
1311	TCLP Extraction	1	164841		11/07/2005	1400	
1311	TCLP Zero Headspace Extraction	1	164842		11/07/2005	1400	
8260B	Volatile Organics	1	165280	165273-164842	11/10/2005	1904	1.0000
9045C	pH (Soil)	1	164948	164948	11/08/2005	1429	

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SURROGATE RECOVERIES REPORT

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Method.....: PCB Analysis
Method Code...: 8082

Test Matrix...: 3541 Solid
Batch(s).....: 165172

Prep Batch..: 164762

Lab ID	DT	Sample ID	Date	DCB	TCX
LCS			11/09/2005	119	108
MB			11/09/2005	122	93
241692- 1		GP14A-PROFILE	11/09/2005	69*	86

Test	Test Description	Limits
DCB	Decachlorobiphenyl (surr)	70 - 125
TCX	Tetrachloro-m-xylene (surr)	44 - 135

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SURROGATE RECOVERIES REPORT

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Method.....: Volatile Organics
Method Code...: 8260B

Test Matrix...: TCLP Leach
Batch(s).....: 165280

Prep Batch..: 165273

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
LCD			11/11/2005	104	99	102	102
LCS			11/10/2005	102	101	96	101
MB			11/10/2005	105	97	95	97
241692--21	EB1		11/10/2005	106	96	99	99
241692- 1		GP14A-PROFILE	11/10/2005	104	98	97	99
241736--21	EB1		11/10/2005	105	97	99	100
241759--21	EB1		11/10/2005	106	97	96	96
241836--21	EB1		11/10/2005	107	98	100	101

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4 (surr)	62 - 127
BRFLBE	4-Bromofluorobenzene (surr)	67 - 132
DBRFLM	Dibromofluoromethane (surr)	77 - 119
TOLD8	Toluene-d8 (surr)	81 - 126

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SURROGATE RECOVERIES REPORT

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: 483648 PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Method.....: Semivolatile Organics
Method Code...: 8270

Test Matrix...: TCLP Leach
Batch(s).....: 165290

Prep Batch..: 165108

Lab ID	DT	Sample ID	Date	246TBP	2FLUBP	2FLUPH	NITRD5	PHEND5	TERD14
EB1			11/10/2005	83	77	56	81	34	100
LCS			11/10/2005	89	91	70	90	49	99
MB			11/10/2005	84	77	64	88	43	89
241692- 1		GP14A-PROFILE	11/10/2005	81	73	60	84	35	92

Test	Test Description	Limits
246TBP	2,4,6-Tribromophenol (surr)	29 - 126
2FLUBP	2-Fluorobiphenyl (surr)	34 - 112
2FLUPH	2-Fluorophenol (surr)	21 - 100
NITRD5	Nitrobenzene-d5 (surr)	38 - 113
PHEND5	Phenol-d5 (surr)	18 - 100
TERD14	Terphenyl-d14 (surr)	10 - 119

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	05JWLPCBA	164762-002		11/09/2005	1709

Test Method.....: 8082
Method Description.: PCB Analysis

Equipment Code....: INST3132
Batch.....: 165172

Analyst...: bjt

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Aroclor 1016, 3541 Solid	ug/Kg	180.063		166.700	5.600 U	108	%	52-105
Aroclor 1260, 3541 Solid	ug/Kg	202.146		167.000	3.300 U	121	%	63-122

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		164762-001		11/09/2005	1644

Test Method.....: 8082
Method Description.: PCB Analysis

Equipment Code....: INST3132
Batch.....: 165172

Analyst...: bjt

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Aroclor 1016, 3541 Solid	ug/Kg	5.600 U						
Aroclor 1221, 3541 Solid	ug/Kg	4.600 U						
Aroclor 1232, 3541 Solid	ug/Kg	4.500 U						
Aroclor 1242, 3541 Solid	ug/Kg	4.900 U						
Aroclor 1248, 3541 Solid	ug/Kg	3.600 U						
Aroclor 1254, 3541 Solid	ug/Kg	3.700 U						
Aroclor 1260, 3541 Solid	ug/Kg	3.300 U						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB1	Extraction Blank 1		165108-004		11/10/2005	1630

Test Method.....: 8270C
Method Description.: Semivolatile Organics

Equipment Code....: GCL1
Batch.....: 165290

Analyst...: da

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Pyridine, TCLP Leach	ug/L	5.500	U					
1,4-Dichlorobenzene, TCLP Leach	ug/L	5.000	U					
2-Methylphenol (o-cresol), TCLP Leach	ug/L	4.100	U					
Hexachloroethane, TCLP Leach	ug/L	5.200	U					
4-Methylphenol (m/p-cresol), TCLP Leac	ug/L	7.600	U					
Nitrobenzene, TCLP Leach	ug/L	4.900	U					
Hexachlorobutadiene, TCLP Leach	ug/L	5.100	U					
2,4,6-Trichlorophenol, TCLP Leach	ug/L	2.900	U					
2,4,5-Trichlorophenol, TCLP Leach	ug/L	2.700	U					
2,4-Dinitrotoluene, TCLP Leach	ug/L	2.500	U					
Hexachlorobenzene, TCLP Leach	ug/L	4.400	U					
Pentachlorophenol, TCLP Leach	ug/L	3.000	U					

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	05JWLMPCA	165108-002		11/10/2005	1540

Test Method.....: 8270C
Method Description.: Semivolatile Organics

Equipment Code....: GCL1
Batch.....: 165290

Analyst...: da

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Pyridine, TCLP Leach	ug/L	55.858		100.000	0.550 U	56	%	16-100
1,4-Dichlorobenzene, TCLP Leach	ug/L	78.533		100.000	0.500 U	79	%	38-100
2-Methylphenol (o-cresol), TCLP Leach	ug/L	88.024		100.000	0.410 U	88	%	37-100
Hexachloroethane, TCLP Leach	ug/L	74.549		100.000	0.520 U	75	%	34-100
4-Methylphenol (m/p-cresol), TCLP Leac	ug/L	78.577		100.000	0.760 U	79	%	35-106
Nitrobenzene, TCLP Leach	ug/L	85.685		100.000	0.490 U	86	%	41-105
Hexachlorobutadiene, TCLP Leach	ug/L	76.204		100.000	0.510 U	76	%	41-100
2,4,6-Trichlorophenol, TCLP Leach	ug/L	96.967		100.000	0.290 U	97	%	51-101
2,4,5-Trichlorophenol, TCLP Leach	ug/L	100.544		100.000	0.270 U	101	%	54-107
2,4-Dinitrotoluene, TCLP Leach	ug/L	95.870		100.000	0.250 U	96	%	56-115
Hexachlorobenzene, TCLP Leach	ug/L	90.914		100.000	0.440 U	91	%	50-113
Pentachlorophenol, TCLP Leach	ug/L	90.815		100.000	0.300 U	91	%	50-112

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		165108-001		11/10/2005	1106

Test Method.....: 8270C
Method Description.: Semivolatile Organics

Equipment Code....: GCL1
Batch.....: 165290

Analyst...: da

Parameter/Test Description	Units	QC Result		QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Pyridine, TCLP Leach	ug/L	0.550	U						
1,4-Dichlorobenzene, TCLP Leach	ug/L	0.500	U						
2-Methylphenol (o-cresol), TCLP Leach	ug/L	0.410	U						
Hexachloroethane, TCLP Leach	ug/L	0.520	U						
4-Methylphenol (m/p-cresol), TCLP Leac	ug/L	0.760	U						
Nitrobenzene, TCLP Leach	ug/L	0.490	U						
Hexachlorobutadiene, TCLP Leach	ug/L	0.510	U						
2,4,6-Trichlorophenol, TCLP Leach	ug/L	0.290	U						
2,4,5-Trichlorophenol, TCLP Leach	ug/L	0.270	U						
2,4-Dinitrotoluene, TCLP Leach	ug/L	0.250	U						
Hexachlorobenzene, TCLP Leach	ug/L	0.440	U						
Pentachlorophenol, TCLP Leach	ug/L	0.300	U						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB1	Extraction Blank 1	1692	165273-011		11/10/2005	1842

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result		True Value	Orig. Value	QC Calc.	*	Limits
Vinyl chloride, TCLP Leach	ug/L	25.000	U					
1,1-Dichloroethene, TCLP Leach	ug/L	25.000	U					
2-Butanone (MEK), TCLP Leach	ug/L	25.000	U					
Chloroform, TCLP Leach	ug/L	25.000	U					
Carbon tetrachloride, TCLP Leach	ug/L	25.000	U					
Benzene, TCLP Leach	ug/L	25.000	U					
1,2-Dichloroethane, TCLP Leach	ug/L	25.000	U					
Trichloroethene, TCLP Leach	ug/L	25.000	U					
Tetrachloroethene, TCLP Leach	ug/L	25.000	U					
Chlorobenzene, TCLP Leach	ug/L	25.000	U					

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB1	Extraction Blank 1	1759	165273-014		11/10/2005	1927

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Vinyl chloride, TCLP Leach	ug/L	25.000	U					
1,1-Dichloroethene, TCLP Leach	ug/L	25.000	U					
2-Butanone (MEK), TCLP Leach	ug/L	25.000	U					
Chloroform, TCLP Leach	ug/L	25.000	U					
Carbon tetrachloride, TCLP Leach	ug/L	25.000	U					
Benzene, TCLP Leach	ug/L	25.000	U					
1,2-Dichloroethane, TCLP Leach	ug/L	25.000	U					
Trichloroethene, TCLP Leach	ug/L	25.000	U					
Tetrachloroethene, TCLP Leach	ug/L	25.000	U					
Chlorobenzene, TCLP Leach	ug/L	25.000	U					

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB1	Extraction Blank 1	1736	165273-012		11/10/2005	2012

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Vinyl chloride, TCLP Leach	ug/L	25.000	U					
1,1-Dichloroethene, TCLP Leach	ug/L	25.000	U					
2-Butanone (MEK), TCLP Leach	ug/L	25.000	U					
Chloroform, TCLP Leach	ug/L	25.000	U					
Carbon tetrachloride, TCLP Leach	ug/L	25.000	U					
Benzene, TCLP Leach	ug/L	25.000	U					
1,2-Dichloroethane, TCLP Leach	ug/L	25.000	U					
Trichloroethene, TCLP Leach	ug/L	25.000	U					
Tetrachloroethene, TCLP Leach	ug/L	25.000	U					
Chlorobenzene, TCLP Leach	ug/L	25.000	U					

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB1	Extraction Blank 1	1836	165273-013		11/10/2005	2251

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result		QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Vinyl chloride, TCLP Leach	ug/L	25.000	U						
1,1-Dichloroethene, TCLP Leach	ug/L	25.000	U						
2-Butanone (MEK), TCLP Leach	ug/L	25.000	U						
Chloroform, TCLP Leach	ug/L	25.000	U						
Carbon tetrachloride, TCLP Leach	ug/L	25.000	U						
Benzene, TCLP Leach	ug/L	25.000	U						
1,2-Dichlorbethane, TCLP Leach	ug/L	25.000	U						
Trichloroethene, TCLP Leach	ug/L	25.000	U						
Tetrachloroethene, TCLP Leach	ug/L	25.000	U						
Chlorobenzene, TCLP Leach	ug/L	25.000	U						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCD	Laboratory Control Sample Duplicate	V05K10DSA	165273-010		11/11/2005	0412

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits
Vinyl chloride, TCLP Leach	ug/L	418.340	404.682	500.000	25.000 U	84 3	% R 52-134 20
1,1-Dichloroethene, TCLP Leach	ug/L	573.802	534.784	500.000	25.000 U	115 7	% R 51-136 20
2-Butanone (MEK), TCLP Leach	ug/L	555.720	560.438	500.000	25.000 U	111 1	% R 29-139 20
Chloroform, TCLP Leach	ug/L	566.612	511.106	500.000	25.000 U	113 10	% R 75-122 20
Carbon tetrachloride, TCLP Leach	ug/L	476.708	483.704	500.000	25.000 U	95 1	% R 64-132 20
Benzene, TCLP Leach	ug/L	535.004	509.748	500.000	25.000 U	107 5	% R 75-122 20
1,2-Dichloroethane, TCLP Leach	ug/L	551.542	514.638	500.000	25.000 U	110 7	% R 67-120 20
Trichloroethene, TCLP Leach	ug/L	510.214	506.634	500.000	25.000 U	102 1	% R 75-124 20
Tetrachloroethene, TCLP Leach	ug/L	490.684	503.038	500.000	25.000 U	98 2	% R 70-125 20
Chlorobenzene, TCLP Leach	ug/L	515.478	503.300	500.000	25.000 U	103 2	% R 76-116 20

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	V05K10DSA	165275-009		11/10/2005	1743

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Vinyl chloride, TCLP Leach	ug/L	404.682		500.000	25.000 U	81	%	52-134
1,1-Dichloroethene, TCLP Leach	ug/L	534.784		500.000	25.000 U	107	%	51-136
2-Butanone (MEK), TCLP Leach	ug/L	560.438		500.000	25.000 U	112	%	29-139
Chloroform, TCLP Leach	ug/L	511.106		500.000	25.000 U	102	%	75-122
Carbon tetrachloride, TCLP Leach	ug/L	483.704		500.000	25.000 U	97	%	64-132
Benzene, TCLP Leach	ug/L	509.748		500.000	25.000 U	102	%	75-122
1,2-Dichloroethane, TCLP Leach	ug/L	514.638		500.000	25.000 U	103	%	67-120
Trichloroethene, TCLP Leach	ug/L	506.634		500.000	25.000 U	101	%	75-124
Tetrachloroethene, TCLP Leach	ug/L	503.038		500.000	25.000 U	101	%	70-125
Chlorobenzene, TCLP Leach	ug/L	503.300		500.000	25.000 U	101	%	76-116

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		165273-008		11/10/2005	1720

Test Method.....: 8260B
Method Description.: Volatile Organics

Equipment Code....: GCL16
Batch.....: 165280

Analyst...: jdn

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits
Vinyl chloride, TCLP Leach	ug/L	25.000 U					
1,1-Dichloroethene, TCLP Leach	ug/L	25.000 U					
2-Butanone (MEK), TCLP Leach	ug/L	25.000 U					
Chloroform, TCLP Leach	ug/L	25.000 U					
Carbon tetrachloride, TCLP Leach	ug/L	25.000 U					
Benzene, TCLP Leach	ug/L	25.000 U					
1,2-Dichloroethane, TCLP Leach	ug/L	25.000 U					
Trichloroethene, TCLP Leach	ug/L	25.000 U					
Tetrachloroethene, TCLP Leach	ug/L	25.000 U					
Chlorobenzene, TCLP Leach	ug/L	25.000 U					

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB1	Extraction Blank 1	165178	165178-001		11/11/2005	1023

Test Method.....: 6010B
Method Description.: Leachable, Metals Analysis (ICAP)
Equipment Code....: ICP5
Batch.....: 165335
Analyst...: tds

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Arsenic, TCLP Leach	mg/L	0.01000 U						
Barium, TCLP Leach	mg/L	0.01000 U						
Cadmium, TCLP Leach	mg/L	0.00200 U						
Chromium, TCLP Leach	mg/L	0.01000 U						
Lead, TCLP Leach	mg/L	0.00500 U						
Selenium, TCLP Leach	mg/L	0.01000 U						
Silver, TCLP Leach	mg/L	0.00500 U						

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	M05JSPK001	165178-002		11/11/2005	1028

Test Method.....: 6010B
Method Description.: Leachable, Metals Analysis (ICAP)

Equipment Code....: ICP5
Batch.....: 165335

Analyst...: tds

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Arsenic, TCLP Leach	mg/L	0.09616 B		0.10000	0.01000 U	96	%	80-120
Barium, TCLP Leach	mg/L	1.84339		2.00000	0.01000 U	92	%	80-120
Cadmium, TCLP Leach	mg/L	0.04806 B		0.05000	0.00200 U	96	%	80-120
Chromium, TCLP Leach	mg/L	0.19283		0.20000	0.01000 U	96	%	80-120
Lead, TCLP Leach	mg/L	0.09922		0.10000	0.00500 U	99	%	80-120
Selenium, TCLP Leach	mg/L	0.09423 B		0.10000	0.01000 U	94	%	80-120
Silver, TCLP Leach	mg/L	0.04781 B		0.05000	0.00500 U	96	%	80-120

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		241692-1		11/11/2005	1057

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165335

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Arsenic, TCLP Leach	mg/L	0.01000 U			0.01000 U	0.00299	A	0.10000
Barium, TCLP Leach	mg/L	1.51174			1.50836	0.00338	A	1.00000
Cadmium, TCLP Leach	mg/L	0.00200 U			0.00200 U	0.00022	A	0.05000
Chromium, TCLP Leach	mg/L	0.01000 U			0.01000 U	0.00011	A	0.05000
Lead, TCLP Leach	mg/L	0.00500 U			0.00500 U	0.00024	A	0.05000
Selenium, TCLP Leach	mg/L	0.01000 U			0.01000 U	0.00060	A	0.10000
Silver, TCLP Leach	mg/L	0.00500 U			0.00500 U	0.00103	A	0.05000

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692 — Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. — PROJECT: JOLIET STATION 29 — ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: 6010B — Equipment Code....: ICP5 — Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) — Batch.....: 165335

MS	Matrix Spike	M05ESPK001	241692-1		11/11/2005	1102

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Arsenic, TCLP Leach	mg/L	5.03569		5.00000	0.01000 U	101	%	50-150
Cadmium, TCLP Leach	mg/L	0.91779		1.00000	0.00200 U	92	%	50-150
Chromium, TCLP Leach	mg/L	4.65542		5.00000	0.01000 U	93	%	50-150
Lead, TCLP Leach	mg/L	4.54318		5.00000	0.00500 U	91	%	50-150
Selenium, TCLP Leach	mg/L	0.99763		1.00000	0.01000 U	100	%	50-150
Silver, TCLP Leach	mg/L	1.05540		1.00000	0.00500 U	106	%	50-150

MS	Matrix Spike	M05ESPK001	241692-1	10	11/11/2005	1109

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Barium, TCLP Leach	mg/L	101.42940		1000.00000	1.50836	100	%	50-150

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		241692-1		11/11/2005	1055

Test Method.....: 6010B Equipment Code....: ICP5 Analyst...: tds
Method Description.: Leachable, Metals Analysis (ICAP) Batch.....: 165335

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Arsenic, TCLP Leach	mg/L	0.01000 U			0.01000 U			
Barium, TCLP Leach	mg/L	0.32311 B			1.50836	7.1	D	10.0
Cadmium, TCLP Leach	mg/L	0.00200 U			0.00200 U			
Chromium, TCLP Leach	mg/L	0.01000 U			0.01000 U			
Lead, TCLP Leach	mg/L	0.00500 U			0.00500 U			
Selenium, TCLP Leach	mg/L	0.01000 U			0.01000 U			
Silver, TCLP Leach	mg/L	0.00500 U			0.00500 U			

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 241692 Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Test Method.....: 9014/9010B Batch.....: 165097 Analyst...: mtb
Method Description.: Cyanide (Colorimetric) Equipment Code....: SPEC4 Test Code.: CN
Parameter.....: Cyanide, Total

QC	Lab ID	Reagent	Units	QC Result		QC Result		True Value	Orig. Value		QC Calc.	F	*	Limits	Date	Ti
MB	165097-005		mg/L	0.00180	U										11/09/2005	13
LCS	165097-006	I05HSTCN2A	mg/L	0.08830				0.10000	0.00180	U	88		%	80-120	11/09/2005	13
MS	241692-1	I05HSTCN2A	mg/Kg	1.54				1.61	0.09	B	95		%	75-125	11/09/2005	14
MSD	241692-1	I05HSTCN2A	mg/Kg	1.50		1.54		1.57	0.09	B	96		%	75-125	11/09/2005	14
											1.0		R	20		

Test Method.....: 9066 Batch.....: 165334 Analyst...: jmk
Method Description.: Phenolics, Total Recoverable Equipment Code....: AQ2 Test Code.: PHENTR
Parameter.....: Phenolics, Total Recoverable

QC	Lab ID	Reagent	Units	QC Result		QC Result		True Value	Orig. Value		QC Calc.	F	*	Limits	Date	Ti
MB	165334-004		mg/L	0.00300	U										11/11/2005	08
LCS	165334-005	I05FSTPE2	mg/L	0.10020				0.10000	0.00300	U	100		%	80-120	11/11/2005	08
MS	241692-1	I05FSTPE2	mg/Kg	6.56				6.67	0.28	B	98		%	75-125	11/11/2005	09
MSD	241692-1	I05FSTPE2	mg/Kg	5.24		6.56		5.46	0.28		91		%	75-125	11/11/2005	09
											7.4		R	20		

Test Method.....: 9045C Batch.....: 164948 Analyst...: pmf
Method Description.: pH (Soil) Equipment Code....: Test Code.: PH
Parameter.....: pH

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	F	*	Limits	Date	Ti
LCSP	164948-002	I05JPH7B	pH Units	7.04000		7.01000		0.03000		A	0.20000	11/08/2005	13
LCDP	164948-003	I05JPH7B	pH Units	7.02000		7.01000		0.01000		A	0.20000	11/08/2005	13
MDPH	241692-1		pH Units	7.44000			7.44000	0.00		A	0.20000	11/08/2005	14

Test Method.....: 7.3.4.2/9034 Batch.....: 165340 Analyst...: mtb
Method Description.: Reactivity, Sulfide Equipment Code....: Test Code.: REACS
Parameter.....: Reactivity, Sulfide

QC	Lab ID	Reagent	Units	QC Result		QC Result		True Value	Orig. Value		QC Calc.	F	*	Limits	Date	Ti
MB	165340-001		mg/Kg	8.80	U										11/11/2005	09
LCS	165340-002	I05HSTSF1A	mg/Kg	183.05				195.20	8.80	U	94		%	25-116	11/11/2005	09
MS	241692-1	I05HSTSF1A	mg/Kg	44.34	B			191.90	8.65	U	23	N	%	25-116	11/11/2005	09
MSD	241692-1	I05HSTSF1A	mg/Kg	24.50	B	44.34	B	191.70	8.64	U	13	N	%	25-116	11/11/2005	09
											56	*	R	50		

Test Method.....: 7470A Batch.....: 165321 Analyst...: gak
Method Description.: Leachable, Mercury (CVAA) Equipment Code....: HG4 Test Code.: HG
Parameter.....: Mercury

QC	Lab ID	Reagent	Units	QC Result		QC Result		True Value	Orig. Value		QC Calc.	F	*	Limits	Date	Ti
MB	165320-007		ug/L	0.20	U										11/10/2005	13
LCS	165320-008	M04LSTK010	ug/L	2.13				2.00	0.20	U	106		%	80-120	11/10/2005	13
EB1	165320-009	034	ug/L	2.00	U										11/10/2005	13

QUALITY CONTROL RESULTS

Job Number.: 241692

Report Date.: 11/11/2005

CUSTOMER: KPRG & Associates, Inc. PROJECT: JOLIET STATION 29 ATTN: Richard Gnat

Test Method.....: 7470A
Method Description.: Leachable, Mercury (CVAA)
Parameter.....: Mercury

Batch.....: 165321
Equipment Code....: HG4

Analyst...: gok
Test Code.: HG

QC	Lab ID	Reagent	Units	QC Result		QC Result	True Value	Orig. Value		QC Calc.	F	*	Limits	Date	Tim
MD	241692-1		ug/L	2.00	U			2.00	U	0		A	2.00	11/10/2005	131
MS	241692-1	MO4KSTK001	ug/L	9.47			10.00	2.00	U	95		%	50-150	11/10/2005	131

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/11/2005

REPORT COMMENTS

1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

U	Analyte was not detected at or above the stated limit.
<	Not detected at or above the reporting limit.
J	Result is less than the RL, but greater than or equal to the method detection limit.
B	Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
S	Result was determined by the Method of Standard Additions.
F	AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

^	ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
*	LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
+	MSA correlation coefficient is less than 0.995.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	SD: Serial dilution exceeds the control limits.
H	MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
N	MS, MSD: Spike recovery exceeds the upper or lower control limits.
W	AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

U	Analyte was not detected at or above the stated limit.
ND	Compound not detected.
J	Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
Q	Result was qualitatively confirmed, but not quantified.
C	Pesticide identification was confirmed by GC/MS.
Y	The chromatographic response resembles a typical fuel pattern.
Z	The chromatographic response does not resemble a typical fuel pattern.
E	Result exceeded calibration range, secondary dilution required.
F	AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

B	MB: Batch QC is greater than reporting limit.
*	LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
^	EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
A	Concentration exceeds the instrument calibration range
a	Concentration is below the method Reporting Limit (RL)
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
H	Alternate peak selection upon analytical review
I	Indicates the presence of an interfence, recovery is not calculated.
M	Manually integrated compound.
P	The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/11/2005

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calilbration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/11/2005

RTW	Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number
SCB	Seeded Control Blank
SD	Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)
UCB	Unseeded Control Blank
SSV	Second Source Verification Standard
SLCS	Solid Laboratory Control Standard(LCS)
PHC	pH Calibration Check LCSP pH Laboratory Control Sample
LCDP	pH Laboratory Control Sample Duplicate
MDPH	pH Sample Duplicate
MDFP	Flashpoint Sample Duplicate
LCFP	Flashpoint LCS
G1	Gelex Check Standard Range 0-1
G2	Gelex Check Standard Range 1-10
G3	Gelex Check Standard Range 10-100
G4	Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

SEVERN TRENT **STL**

STL Chicago
2417 Bond Street
University Park, IL 60466
Phone: 708-534-5200
Fax: 708-534-5211

Contact: RICHARD GNIAT
Company: KPRG AND ASSOCIATES, INC
Address: 14665 W. LISBON RD, STE 2B
BROOKFIELD, WI
Phone: 262-781-0475
Fax: 262-781-0478
E-Mail: RICHARDG@KPRGINC.COM

Contact:
Company:
Address:
Phone:
Fax:
PO#: Quote:

Lab Lot# 241692

Package Sealed (Yes) No	Samples Sea Yes (No
Received on Ice (Yes) No	Samples Int (Yes) No
Temperature °C of Cooler: 3.2	
Within Hold Time (Yes) No	Preserv. Indic Yes No
pH Check OK (Yes) No N/A	Res Cl2 Check Yes No
Sample Labels and COC Agree (Yes) No	COC not pres

Sampler Name: PATRICK ALLGEIER
Signature:
Project Name: JOLIET STATION 529
Project Number:
Project Location: 1529
Lab PM:
Date Required
Hard Copy: ___/___/___
Fax: ___/___/___

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	NEUTRAL LEACH METALS	TCLP, PCB, pH PAINT FILTER	CN, SULFIDE, FP, AMENDS	EDX
1		GP14A - PROFILE	11/4/05	9:20	S	C	X	X	X	X
2		GP14A - 25N		9:35			X			
3		GP14A - 40N		10:00						
4		GP14A - 25W		10:15						
5		GP14A - 40W		10:35						
6		GP14A - 25S		10:45						
7		GP14A - 40S		11:10						
8		GP14A - 25E		11:35						
9		GP14A - 40E		11:55						

Additional Analyses / Remarks

RELINQUISHED BY	COMPANY KPRG	DATE 11-4-05	TIME
RELINQUISHED BY	COMPANY	DATE	TIME
RECEIVED BY	COMPANY STL	DATE 11/4/05	TIME 12:1
RECEIVED BY	COMPANY STL	DATE 11/4/05	TIME 1500

Matrix Key
WW = Wastewater, W = Water, S = Soil, SL = Sludge, MS = Miscellaneous, OL = Oil, A = Air, SE = Sediment, SO = Solid, DS = Drum Solid, DL = Drum Liquid, L = Leachate, WI = Wipe, O = _____

Container Key
1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other _____

Preservative Key
1. HCl, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None

COMMENTS

Date Received ___/___/___
Courier: STL Hand Delivered
Bill of Lading

STL Chicago is a part of Severn Trent Laboratories, Inc.

STL-8208

MWG13-15_18927

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6760

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. / Manifest Document No.	2. Page 1 of
Information in the shaded areas is not required by Federal law, but is required by Illinois law.		

3. Generator's Name and Mailing Address — Location if Different
Midwest Generation
1800 Channahon Rd Joliet Il. 60436

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc #21 — 6. US EPA ID Number

7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address — 10. US EPA ID Number
Environtech Landfill
1800 Ashley Rd. Morris Il. 60450

A. Illinois Manifest Document Number IL11817932 FEE PAID IF APPLICABLE
B. Generator's IL ID Number 1970455041
C. Transporter's ID Number 1961
D. Transporter's Phone (815-726-0250
E. Transporter's ID Number
F. Transporter's Phone ( )
G. Facility's IL ID Number 0638140002
H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
Allied Waste Approval #369Y50151 L369Y57#213
311360 311378 311435 311452 311477 311570
LD1 2159 LD2 21.71 LD3 22.90 LD4 24.32 LD5 2168 LD6 21.11

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
311383

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month Day Year
Elbie Burnie	[signature]	1 1 2 1 0 5

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
[illegible]	[signature]	1 1 2 1 0 5

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date Month Day Year
[signature]	[signature]	11 2 105

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA HAZARDOUS AND PCB WASTES ONLY)

MWG13-15_18928

ENVIRONTECH LAND* ILL
1200 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, FYLES, HYSIENICZ & ASSOCIATES
ATTN. DAVID FYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3e*7*15203

SITE	TICKET	GRID
01	311510	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	2:29 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI021	

REFERENCE	ORIGIN
11817932	EXE ILL

Inbound -

Gross Weight* 74,560.00 LB
Stored Tare Weight 32,340.00 LB
Net Weight* 42,220.00 LB 21.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.11	TN	0% CONTAMINATED SOIL				
15.00	YD	3" RECOVER YARDS				
1.00	LS	1 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE Echuck

MWG13-15_18929

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36?Y 05283

SITE	TICKET	GRID
01	311477	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	1:13 pm

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI021	

REFERENCE	ORIGIN
11817932	EXE ILL

Gross Weight 58,000.00 LB Inbound -
Tared Tare 30,040.00 LB
Net Weight 27,960.00 LB 27.68 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
27.68	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LS	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18930

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
BRAUN, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #06PYS5203

SITE	TICKET	GRID
01	311452	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	11:53 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI021	

REFERENCE	ORIGIN
11817932	EXE ILL

Inbound -

Gross Weight 51,280.00 LB
Stored Tare Weight 32,240.00 LB
Net Weight 48,640.00 LB 24.32 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.32	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LS	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18931

ENVIRONTECH LANDFILL
300 ASHLEY ROAD
MORRIS IL

00505
MIKAU, PYLES, WYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
14 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PV5H253

SITE	TICKET	GRID
01	311425	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	10:39 am

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI021	

REFERENCE	ORIGIN
11817932	EXE ILL

Gross Weight 78,440.00 LB
Stored Tare Weight 32,640.00 LB
Net Weight 45,800.00 LB 22.90 TN
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.90	TN	12 CONTAMINATED SOIL				
17.00	YD	27 RECORD YARDS				
1.00	LD	17 ENVIRONMENTAL FEE				

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE Chuck

MWG13-15_18932

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
FRIKAU, FYLES, K'SIEWICZ & ASSOCIATES
ATTN. DAVID FYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #[illegible]

SITE	TICKET	GRID
01	311398	

WEIGHMASTER: JF00069

DATE IN: 21 November 2005 — TIME IN: 9:28 am

DATE OUT: — TIME OUT:

VEHICLE: ALESSI021 — ROLL OFF:

REFERENCE: 11817932 — ORIGIN: EXE ILL

00 Gross Weight 76,460.00 LB — Inbound –
Stored Tare Weight 32,640.00 LB
Net Weight 43,820.00 LB 21.91 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.91	TN	02 CONTAMINATED SOIL				
15.00	YD	67 RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

SAFETY MEMOS:

Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE [signature]

MWG13-15_18933

ENVIRONTECH LAND ILL
1300 ASHLEY ROAD
MORRIS IL

000505
RINAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
419 PLAZA DRIVE SUITE 106
WESTMONT, IL 6055[illegible]
Contract: #06PYS15283

SITE	TICKET	GRID
01	311383	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	8:47 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI021	

REFERENCE	ORIGIN
11817932	TAX ILL

Gross Weight 75,820.00 LB Inbound -
Stored Tare Weight 32,640.00 LB
Net Weight 43,180.00 LB 21.59 TN

QTY.	UNIT		DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.59	TN	02	CONTAMINATED SOIL				
15.00	YD	2[illegible]	RECORD YARDS				
1.00	LD	0[illegible]	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18934

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6760

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. — Manifest Document No.
2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address — Location if Different
Midwest Generation
1800 Channahon Rd Joliet Il 60436

A. Illinois Manifest Document Number IL11817933 FEE PAID IF APPLICABLE
B. Generator's IL ID Number 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc — 6. US EPA ID Number

C. Transporter's ID Number 1961
D. Transporter's Phone (815 725-0356

7. Transporter 2 Company Name — 8. US EPA ID Number

E. Transporter's ID Number
F. Transporter's Phone (

9. Designated Facility Name and Site Address — 10. US EPA ID Number
Environtech Landfill
1800 Ashley Rd. Morris Il. 60450

G. Facility's IL ID Number 0638140002
H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above 369Y50151 P3
Allied Waste Approval #369Y50151
311460 311431 311460 311457 311518
LD1 19.98 LD2 16.37 LD3 19.49 LD4 17.86 LD5 20.61 LD6 17.16

K. Handling Codes for Wastes Listed Above In Item #14.

15. Special Handling Instructions and Additional Information
311520

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] — Signature: [signature] — Date Month Day Year 1 2 05

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] Yasko — Signature: [signature] — Date Month Day Year 1 2 05

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [illegible] — Signature: [signature] — Date Month Day Year 11 2 05

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA HAZARDOUS AND PCB WASTES ONLY)

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

060505
*PIKAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PY15283

SITE	TICKET	GRID
01	311518	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	3:05 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11917933	EXE ILL

Gross Weight 68,480.00 LB
Shared Tare Weight 34,160.00 LB
Net Weight 34,320.00 LB 17.16 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.16	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18936

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3&7Y515283

SITE	TICKET	GRID
01	311487	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	1:43 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11817933	EXE ILL

Gross Weight 75,500.00 LB Inbound -
Stored Tare Weight 34,160.00 LB
Net Weight 41,340.00 LB 20.67 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.67	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE _____

ENVIRONTECH LANDFILL
1900 ASHLEY ROAD
MORRIS IL

600505
BIRKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PY15283

SITE	TICKET	GRID
01	311460	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	12:20 pm

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11817933	EXE ILL

Gross Weight 64,880.00 LB
Stored Tare Weight 29,160.00 LB
Net Weight 35,720.00 LB 17.86 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.86	TN	06 CONTAMINATED SOIL				
15.00	YD	87 RECORD YARDS				
1.00	LD	99 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18938

ENVIRONTECH LANDF ILL
1300 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYBIENICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3699[illegible]5233

SITE	TICKET	GRID
01	311431	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	10:55 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11817933	EXE ILL

Gross Weight 73,140.00 LB Inbound -
Stored Tare Weight 34,160.00 LB
Net Weight 38,980.00 LB 19.49 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.49	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	2" REUSED YARDS				
1.00	LS	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18939

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYGIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #369YS15232

SITE	TICKET	GRID
01	311400	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	9:43 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11817933	EXE ILL

Inbound -

Gross Weight 68,900.00 LB
Stored Tare Weight 34,160.00 LB
Net Weight 34,740.00 LB 16.37 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.37	TN	02 CONTAMINATED SOIL				
15.00	YD	07 RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18940

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

SITE	TICKET	GRID
01	311382	

WEIGHMASTER
JF00069

DATE IN	TIME IN
21 November 2005	8:46 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11817933	TAX ILL

000505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3679515283

Gross Weight 72,920.00 LB
Stored Tare Weight 24,160.00 LB
Net Weight 39,760.00 LB 19.88 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.88	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	1 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times. SIGNATURE ____________________

MWG13-15_18941

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
State Form LPC 62 8/81 IL532-0610
EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: Midwest Generation, 1800 Channahon Rd Joliet Il. 60436 — Location if Different

A. Illinois Manifest Document Number: IL 11817935 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc MD1409 — 6. US EPA ID Number

C. Transporter's ID Number: 1961

D. Transporter's Phone (815) 725-0356

7. Transporter 2 Company Name — 8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: Environtech Landfill, 1800 Ashley Rd. Morris Il. 60450 — 10. US EPA ID Number

G. Facility's IL ID Number: 0638140002

H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Vulcan Ash/Slag 651 4/4/19 7:16 390 Henry	001	DT	18		EPA HW Number
b. Midwest Generation — Allied Waste Company			3:30		EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

Handwritten in margin: 6:30 / 7:30

J. Additional Description for Materials Listed Above: Allied Waste Approval ~~#369X59151~~ 3471/513.283
3115T 311404 311435 311165 311511
LD1 17.30 LD2 17.56 LD3 16.66 LD4 15.60 LD5 11.51 LD6

K. Handling Codes for Wastes Listed Above In Item #14: (5)

15. Special Handling Instructions and Additional Information: 311383

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Elsie Brown — Signature — Date Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name — Signature — Date Month Day Year

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA (RCRA HAZARDOUS AND PCB WASTES ONLY)

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

[illegible]0505
[illegible]FILAU, PYLES, [illegible]SIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #[illegible] 15260

SITE	TICKET	GRID
01	311511	

WEIGHMASTER	
JF00069	

DATE IN	TIME IN
21 November 2005	2:39 pm
DATE OUT	**TIME OUT**
VEHICLE	**ROLL OFF**
MDI409	
REFERENCE	**ORIGIN**
11817935	EXE ILL

Gross Weight 69,560.00 LB
Stored Tare Weight 30,980.00 LB
Net Weight 38,580.00 LB 19.29 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.29	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE Terry Bates

MWG13-15_18943

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
PIKAU, PYLES, PAVLENICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PYC15283

SITE	TICKET	GRID
01	311465	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	12:29 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI409	

REFERENCE	ORIGIN
11817935	EXE ILL

Gross Weight 62,180.00 LB
Stored Tare Weight 30,980.00 LB
Net Weight 31,200.00 LB 15.60 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
15.60	TN	04 CONTAMINATED SOIL				
13.00	YD	2 RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18944

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, FYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID FYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3629219203

SITE	TICKET	GRID
01	311435	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	11:09 am

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI409	

REFERENCE	ORIGIN
11817935	EXE ILL

00 Gross Weight 64,300.00 LB
Stored Tare Weight 30,780.00 LB
Net Weight 33,220.00 LB 16.66 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.66	TN	06 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	1 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18945

ENVIRONTECH LANDFILL
6300 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYBIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 6[illegible]
Contract: #3[illegible]

SITE	TICKET	GRID
01	311404	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	9:52 am
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI409	

REFERENCE	ORIGIN
11817935	EXE ILL

Gross Weight 60,100.00 LB Inbound -
Stored Tare Weight 30,980.00 LB
Net Weight 29,120.00 LB 17.56 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.56	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18946

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36?Y?15283

SITE	TICKET	GRID
01	311385	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	8:50 am
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI409	

REFERENCE	ORIGIN
11817935	EXE ILL

Gross Weight 45,980.00 LB Inbound -
Stored Tare Weight 20,?80.00 LB
Net Weight* 25,000.00 LB 17.50 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.50	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times. SIGNATURE _____

MWG13-15_18947

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address — Location If Different
Midwest Generation
1800 Channahon Rd Joliet Il 60436

A. Illinois Manifest Document Number IL 11817936 FEE PAID IF APPLICABLE

B. Generator's IL ID Number 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc MD#68
6. US EPA ID Number

C. Transporter's ID Number 1961

D. Transporter's Phone ( ) 815-725-0358

7. Transporter 2 Company Name
8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
Environtech Landfill
1800 Ashley Rd. Morris Il. 60450
10. US EPA ID Number

G. Facility's IL ID Number 0638140002

H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
Allied Waste Approval ~~#260Y60161~~ 369Y 515 ... 3
~~3453~~ 311408 311491 311470 311502
LD1 19.11 LD2 21.73 LD3 20.65 LD4 20.32 LD5 20.47 LD6 311524 19.05

K. Handling Codes for Wastes Listed Above in Item #14
6

15. Special Handling Instructions and Additional Information
311386

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month Day Year
Elsa Brown	[signature]	11 21 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
Sean St. Clair	[signature]	11 21 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date Month Day Year
C. Fleming	[signature]	[illegible]

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA (RCRA HAZARDOUS AND PCB WASTES ONLY)

MWG13-15_18948

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, WYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36[illegible]15283

SITE	TICKET	GRID
01	311386	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	8:50 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ER68	

REFERENCE	ORIGIN
11817936	EXE ILL

Gross Weight 62,220.00 LB Inbound -
Stored Tare Weight 38,000.00 LB
Net Weight 24,220.00 LB 17.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.11	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE _____

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #369Y515283

SITE	TICKET	GRID
01	311406	

WEIGHMASTER: JF00067

DATE IN	TIME IN
21 November 2007	10:01 am
DATE OUT	TIME OUT
VEHICLE	ROLL OFF
ER68	
REFERENCE	ORIGIN
1181773e	EXE IL

Gross Weight 71,860.00 LB
Stored Tare Weight 28,000.00 LB
Net Weight 43,860.00 LB 21.93 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.93	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	03 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18950

ENVIRONTECH LANDFILL
1900 ASHLEY ROAD
MORRIS IL

[illegible]
ORIKAU, PYLES, WYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #[illegible]5283

SITE	TICKET	GRID
01	311439	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	11:21 am
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ER68	

REFERENCE	ORIGIN
11817936	EXE ILL

Inbound -

Gross Weight [illegible] LB
Stored Tare Weight 20,000.00 LB
Net Weight [illegible] LB 20.65 TN

QTY.	UNIT		DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.65	TN	[illegible]	CONTAMINATED SOIL				
15.00	YD	[illegible]	RECORD YARDS				
1.00	LS	[illegible]	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18951

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #[illegible]5200

SITE	TICKET	GRID
01	311470	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	12:47 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ER68	

REFERENCE	ORIGIN
11817936	EXE ILL

Gross Weight 66,640.00 LB Inbound -
Stored Tare Weight 26,000.00 LB
Net Weight 40,640.00 LB 20.32 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.32	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LS	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18952

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #32PY 15283

SITE	TICKET	GRID
01	311502	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	2:09 pm
DATE OUT	**TIME OUT**
VEHICLE	**ROLL OFF**
ER68	
REFERENCE	**ORIGIN**
11817936	EXE ILL

Gross Weight 66,940.00 LB Inbound -
Stored Tare Weight 26,000.00 LB
Net Weight 40,940.00 LB 20.47 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.47	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18953

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
[illegible]
[illegible]
[illegible]
[illegible]
Contract: [illegible]

SITE	TICKET	GRID
01	311524	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	3:29 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ER68	

REFERENCE	ORIGIN
11817936	EXE ILL

Gross Weight 64,100.00 LB
Stored Tare Weight 28,000.00 LB
Net Weight 36,100.00 LB 19.05 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.05	TN	CONTAMINATED SOIL				
[illegible]	YD	RECORD YARDS				
1.00	LP	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18954

STATE OF ILLINOIS — ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
P.O. BOX 19274 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6760

UNIFORM HAZARDOUS WASTE MANIFEST

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) State Form LPC 62 8/81 IL532-0610 EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law, but is required by Illinois law.

GENERATOR

3. Generator's Name and Mailing Address: Midwest Generation, 1800 Channahon Rd Joliet Il. 60436 — Location if Different

A. Illinois Manifest Document Number: IL11817934 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc #19 — 6. US EPA ID Number

C. Transporter's ID Number: 1961

D. Transporter's Phone (815) 725-0358

7. Transporter 2 Company Name — 8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: Environtech Landfill, 1800 Ashley Rd. Morris Il. 60450 — 10. US EPA ID Number

G. Facility's IL ID Number: 0638140002

H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above: Allied Waste Approval #3607501S1 3611515 3 — 24750 LD1 24.45 LD2 30.32 LD3 21.16 LD4 30.03 LD5 23.16 LD6 20.52 — 3114018 3114033 3114061 3114121 3115221

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information: 3113141

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled; and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month Day Year
Eric Brent		11 21 05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
Duane C Brandt		11 21 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date Month Day Year
		11 21 05

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA HAZARDOUS AND PCB WASTES ONLY)

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

MWG13-15_18955

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
KRUKAU, PYLES, RYDIEWICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 104
WESTMONT, IL 60559
Contract: #06[illegible]5283

SITE	TICKET	GRID
01	311521	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	3:15 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSIO19	

REFERENCE	ORIGIN
11817734	EXE ILL

Gross Weight [illegible] LB
Stored Tare Weight 32,140.00 LB
Net Weight [illegible] LB 20.52 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
[illegible]	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LO	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18956

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
PIKAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLE
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #38[illegible]E303

SITE	TICKET	GRID
01	311490	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	1:47 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI019	

REFERENCE	ORIGIN
11317934	EXE ILL

Gross Weight [illegible] LB
Stored Tare Weight [illegible] LB
Net Weight [illegible] LB 23.16 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.16	TN	01 CONTAMINATED SOIL				
15.00	YD	27 RECORP YARDS				
1.00	LD	03 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:

Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18957

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, [illegible] & ASSOCIATES
ATTN. DAVID P[illegible]
414 PLAZA DRIVE SUITE [illegible]
WESTMONT, IL [illegible]
Contract: #[illegible]

SITE	TICKET	GRID
01	311461	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	12:23 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI019	

REFERENCE	ORIGIN
11817934	EXE ILL

Gross Weight [illegible] LB Inbound -
Stored Tare Weight [illegible].140.00 LB
Net Weight [illegible].060.00 LB 20.03 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.03	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE [signature]

MWG13-15_18958

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, PYLES, WISNIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
410 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #[illegible]5283

SITE	TICKET	GRID
01	311433	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	10:59 am
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI017	

REFERENCE	ORIGIN
11817934	EXE ILL

Gross Weight 74,460.00 LB Inbound -
Stored Tare Weight 32,140.00 LB
Net Weight 42,320.00 LB 21.16 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.16	TN	@ CONTAMINATED SOIL				
15.00	YD	@ RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18959

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

SITE	TICKET	GRID
01	311401	

WEIGHMASTER	
JF00069	

DATE IN	TIME IN
21 November 2005	9:46 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI019	

REFERENCE	ORIGIN
11817934	EXE ILL

000505
FRIKAU, FYLES, SYSIEWICZ & ASSOCIATES
ATTN. DAVID FYLLS
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36[illegible]19280

Gross Weight 72,780.00 LB
Stored Tare Weight 32,140.00 LB
Net Weight 40,640.00 LB 20.32 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.32	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE (signed)

MWG13-15_18960

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #367515293

SITE	TICKET	GRID
01	311384	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	8:48 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI019	

REFERENCE	ORIGIN
11817934	EXE ILL

00 Gross Weight 91,100.00 LB Inbound -
Stored Tare Weight 22,140.00 LB
Net Weight 48,960.00 LB 24.48 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.48	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LO	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18961

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
State Form LPC 62 8/81 IL532-0610
FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: Midwest Generation, 1800 Channahon Rd Joliet Il. 60436 — Location if Different

A. Illinois Manifest Document Number: IL 11817931 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc — 6. US EPA ID Number

C. Transporter's ID Number: 1981

D. Transporter's Phone (815-725-0360)

7. Transporter 2 Company Name — 8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: Environtech Landfill, 1800 Ashley Rd Morris Il. 60450 — 10. US EPA ID Number

G. Facility's IL ID Number: 0638140002

H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
Allied Waste Approval #369Y5015T 369Y5152PS
3457 311396 211424 211449 11495 31127
LD1 31.11 LD2 19.97 LD3 [illegible] LD4 1981 LD5 [illegible] LD6 16.80

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
311381

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible signature name] — Signature: [signature] — Date Month Day Year: [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date Month Day Year: 1 10 [illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name — Signature — Date Month Day Year: [illegible] 95

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA (RCRA HAZARDOUS AND PCB WASTES ONLY)

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, WYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36975 LS203

SITE	TICKET	GRID
01	311509	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	2:22 pm

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI069	

REFERENCE	ORIGIN
11817931	EXE ILL

Gross Weight 66,520.00 LB
Stored Tare Weight 32,720.00 LB
Net Weight 33,600.00 LB 16.80 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.80	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LO	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18963

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ARIKAU, PYLES, RYBIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #289Y515283

SITE	TICKET	GRID
01	311475	

WEIGHMASTER	
JF00069	

DATE IN	TIME IN
21 November 2005	1:07 pm
DATE OUT	TIME OUT
VEHICLE	ROLL OFF
ALESSI069	
REFERENCE	ORIGIN
11817931	EXE ILL

Gross Weight 83,560.00 LB
Stored Tare Weight 32,920.00 LB
Net Weight 50,640.00 LB 25.32 TN

Inbound -

QTY.	UNIT	DESCRIPTION		RATE	EXTENSION	TAX	TOTAL
25.32	TN	9L	CONTAMINATED SOIL				
15.00	YD	27	RECORD YARDS				
1.00	LD	[illegible]	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE ____________

MWG13-15_18964

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU. PYLES. RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 104
WESTMONT. IL 6[illegible]
Contract: #36[illegible] 12280

SITE	TICKET	GRID
01	311449	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	11:49 am
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI069	

REFERENCE	ORIGIN
11817931	EXE ILL

Gross Weight 72,[illegible]40.00 LB
Stored Tare Weight 32,920.00 LB
Net Weight 3[illegible],620.00 LB 19.81 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.81	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LS	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18965

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, PYLES, P/SIEWICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 105
WESTMONT, IL [illegible]
Contract: #03[illegible]5283

SITE	TICKET	GRID
01	311424	

WEIGHMASTER
JF00069

DATE IN	TIME IN
21 November 2005	10:36 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI069	

REFERENCE	ORIGIN
11817931	EXE ILL

Gross Weight [illegible] LB Inbound -
Stored Tare Weight [illegible] LB
Net Weight [illegible] LB 20.90 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.90	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LS	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18966

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
ERIKAU. PYLES. PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT. IL 6[illegible]
Contract: #36PY[illegible]

SITE	TICKET	GRID
01	311396	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	9:24 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI069	

REFERENCE	ORIGIN
11817931	EXE ILL

Gross Weight [illegible] LB Inbound -
Stored Tare Weight [illegible] LB
Net Weight [illegible] LB 19.97 TN

QTY.	UNIT		DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.97	TN	02	CONTAMINATED SOIL				
15.00	YD	27	RECORD YARDS				
1.00	LD	13	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE [signature]

MWG13-15_18967

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

SITE	TICKET	GRID
01	311381	

WEIGHMASTER
JF00069

DATE IN	TIME IN
21 November 2005	8:46 am
DATE OUT	TIME OUT
VEHICLE	ROLL OFF
ALESSI069	

REFERENCE	ORIGIN
11817931	~~TAX ILL~~ *Exempt*

[illegible]0505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 6055[illegible]
Contract: #[illegible]

Gross Weight 75,140.00 LB
Stored Tare Weight 32,920.00 LB
Net Weight 42,220.00 LB 21.11 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.11	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	[illegible] RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times. SIGNATURE ____________________

MWG13-15_18968

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761
FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE
State Form LPC 62 8/81 IL532-0610
PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. Manifest Document No.
2. Page 1 of
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

GENERATOR

3. Generator's Name and Mailing Address — Location If Different
Midwest Generation
1800 Channahon Rd Joliet Il. 60436

A. Illinois Manifest Document Number IL 11817937 FEE PAID IF APPLICABLE
B. Generator's IL ID Number 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc
6. US EPA ID Number: DDI 9131
C. Transporter's ID Number 1961
D. Transporter's Phone (815-725-0355

7. Transporter 2 Company Name
8. US EPA ID Number
E. Transporter's ID Number
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
Environtech Landfill
1800 Ashley Rd Morris Il. 60450
10. US EPA ID Number
G. Facility's IL ID Number 0638140002
H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above 3614 5 [illegible]
Allied Waste Approval #30SY50151
311595 311414 311444 311494 311607 311539
LD1 22.31 LD2 13.74 LD3 16.01 LD4 21.48 LD5 11.2 LD6 16.94

K. Handling Codes for Wastes Listed Above In Item #14. 6

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Elsie Brown | Signature: [signature] | Date Month Day Year: 11 21 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature: [signature] | Date Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature: [signature] | Date Month Day Year: 11 21 95

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: [illegible] | Signature: [signature] | Date Month Day Year: 11 21 95

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA (RCRA HAZARDOUS AND PCB WASTES ONLY)

MWG13-15_18969

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, WYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #3[illegible] [illegible]

SITE	TICKET	GRID
01	311392	

WEIGHMASTER	
JF00069	

DATE IN	TIME IN
21 November 2005	8:56 am
DATE OUT	**TIME OUT**
VEHICLE	**ROLL OFF**
MDI931	
REFERENCE	**ORIGIN**
11017737	EXE ILL

00 Gross Weight 78,420.00 LB
Tare Weight 33,640.00 LB
Net Weight 44,780.00 LB 22.39 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.39	TN	04 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LB	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18970

ENVIRONTECH LANDFILL
1600 ASHLEY ROAD
MORRIS IL

000505
ERIKAU, PYLES, RYBIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #[illegible] 15282

SITE	TICKET	GRID
01	311414	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	10:21 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
MDI931	

REFERENCE	ORIGIN
11817937	EXE ILL

Gross Weight [illegible] LB
Stored Tare Weight [illegible] LB
Net Weight 37,480.00 LB 18.74 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.74	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE [signature] #931

MWG13-15_18971

ENVIRONTECH LAND ILL
1300 ASHLEY ROAD
MORRIS IL

100505
[illegible]IKAU, PYLES, [illegible]YSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3[illegible]15283

SITE	TICKET	GRID
01	311444	

WEIGHMASTER	
JF00069	

DATE IN	TIME IN
21 November 2005	11:36 am

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI931	

REFERENCE	ORIGIN
11817937	EXE ILL

[illegible] Gross Weight [illegible].260.00 LB Inbound -
Stored Tare Weight 30.640.00 LB
Net Weight 32.620.00 LB 16.81 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.81	TN	[illegible] CONTAMINATED SOIL				
15.00	YD	2[illegible] RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE [signature] #931

MWG13-15_18972

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
BIKAU, PYLES, RYBIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
114 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PYE15263

SITE	TICKET	GRID
01	311474	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	12:55 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
MDI931	

REFERENCE	ORIGIN
11817937	EXE ILL

Gross Weight 76,440.00 LB Inbound -
Stored Tare Weight 33,540.00 LB
Net Weight 42,900.00 LB 21.40 TN

QTY.	UNIT		DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.40	TN	02	CONTAMINATED SOIL				
15.00	YD	27	RECORD YARDS				
1.00	LD	03	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE #931

MWG13-15_18973

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
NIKAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #03****13283

SITE	TICKET	GRID
01	311507	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	2:14 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI931	

REFERENCE	ORIGIN
11817937	EXE ILL

Gross Weight 41,680.00 LB Inbound -
Stored Tare Weight 22,640.00 LB
Net Weight 38,040.00 LB 19.02 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.02	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE #931

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
OAKLAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PY15289

SITE	TICKET	GRID
01	311529	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	3:37 pm

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
MDI931	

REFERENCE	ORIGIN
11817937	EXE ILL

Gross Weight 66,520.00 LB
Stored Tare Weight 33,640.00 LB
Net Weight 32,880.00 LB 16.44 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.44	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE #931

MWG13-15_18975

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address — Location if Different
Midwest Generation
1800 Channahon Rd Joliet Il. 60436

A. Illinois Manifest Document Number IL 11817938 FEE PAID IF APPLICABLE

B. Generator's IL ID Number 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc Ek16 — 6. US EPA ID Number

C. Transporter's ID Number 1961

D. Transporter's Phone (815-725-0550

7. Transporter 2 Company Name — 8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address — 10. US EPA ID Number
Environtech Landfill
1800 Ashley Rd. Morris Il. 60450

G. Facility's IL ID Number 0638140002

H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
Allied Waste Approval ~~#369Y50151~~ 369Y515283
LD1 311397 2242 LD2 311428 2166 LD3 311455 2104 LD4 311465 2360 LD5 311515 1821 LD6

K. Handling Codes for Wastes Listed Above In Item #14: 5

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Elsa Barnes | Signature: [signature] | Date Month Day Year: 1 12 05

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Frank VenTimiglia | Signature: [signature] | Date Month Day Year: 1 12 05

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Date Month Day Year: 1 12 05

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA HAZARDOUS AND PCB WASTES ONLY)

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

200505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36PYS15280

SITE	TICKET	GRID
01	311397	

WEIGHMASTER
JF00069

DATE IN	TIME IN
21 November 2005	9:05 am

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ER16	

REFERENCE	ORIGIN
11817938	EXE ILL

00 Gross Weight 72,460.00 LB
Tare Weight 28,420.00 LB
Net Weight 44,040.00 LB 22.42 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.42	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	7 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE [signature]

MWG13-15_18977

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
FRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36[illegible]18280

SITE	TICKET	GRID
01	311428	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	10:47 am
DATE OUT	**TIME OUT**
VEHICLE	**ROLL OFF**
ER16	
REFERENCE	**ORIGIN**
11817938	EXE ILL

Gross Weight 71,940.00 LB
Stored Tare Weight 28,620.00 LB
Net Weight 43,320.00 LB 21.66 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.66	TN	52 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18978

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

000505
KRIEAU, FYLES, PYSTEWICZ & ASSOCIATES
ATTN. DAVID FYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3aPY13203

SITE	TICKET	GRID
01	311458	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	12:13 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ER16	

REFERENCE	ORIGIN
11817738	EXE ILL

Inbound -

Gross Weight [illegible] LB
Stored Tare Weight [illegible] LB
Net Weight [illegible] LB 21.04 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.04	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LS	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18979

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
PRIBAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3679615283

SITE	TICKET	GRID
01	311485	

WEIGHMASTER: JF00069

DATE IN	TIME IN
21 November 2005	1:33 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ER16	

REFERENCE	ORIGIN
11817938	EXE ILL

00 Gross Weight 74,620.00 LB Inbound -
Stored Tare Weight 38,620.00 LB
Net Weight 46,000.00 LB 23.00 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.00	TN	00 CONTAMINATED SOIL				
15.00	YD	2 RECORD YARDS				
1.00	LS	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE Frank

MWG13-15_18980

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

000505
[illegible]RIKAU, PYLES, [illegible]YSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #3[illegible]

SITE	TICKET	GRID
01	311515	

WEIGHMASTER
JF00069

DATE IN	TIME IN
21 November 2005	2:56 pm

DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ER16	

REFERENCE	ORIGIN
11817938	EXE ILL

Gross Weight 66,240.00 LB
Stored Tare Weight 28,620.00 LB
Net Weight 37,620.00 LB 18.81 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.81	TN	0[illegible] CONTAMINATED SOIL				
15.00	YD	2[illegible] RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE ____________

MWG13-15_18981

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL
P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address — Midwest Generation, 1800 Channahon Rd Joliet Il. 60436 — Location if Different

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc #19 — 6. US EPA ID Number

7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address: Environtech Landfill, 1800 Ashley Rd. Morris Il. 60450 — 10. US EPA ID Number

A. Illinois Manifest Document Number: IL11817940 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 1970455041

C. Transporter's ID Number: 1961

D. Transporter's Phone (815-723-0356)

E. Transporter's ID Number

F. Transporter's Phone ( )

G. Facility's IL ID Number: 0638140002

H. Facility's Phone 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
Allied Waste Approval #369Y50151 → 369Y515283
LD1 311643 10.81 LD2 311681 23.27 LD3 LD4 LD5 LD6

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Elsie Brant | Signature: [signature] | Date Month Day Year: 1 12 2015

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Duane C. Brant | Signature: [signature] | Date Month Day Year: 1 12 2015

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [signature] | Signature: [signature] | Date Month Day Year: 1 12 2015

This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

COPY 5. GENERATOR MAIL TO IEPA (RCRA HAZARDOUS AND PCB WASTES ONLY)

ENVIRONTECH LAND ILL
1300 ASHLEY ROAD
MORRIS IL

000505
PRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #3APYS13293

SITE	TICKET	GRID
01	311684	

WEIGHMASTER: JF00069

DATE IN	TIME IN
22 November 2005	1:57 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI019	

REFERENCE	ORIGIN
11817940	EXE ILL

00 Gross Weight 79,680.00 LB Inbound -
Stored Tare Weight 35,140.00 LB
Net Weight 44,540.00 LB 23.27 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.27	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LS	5 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18983

ENVIRONTECH LANDFILL
1500 ASHLEY ROAD
MORRIS IL

00505
ERIKAU. PYLES. RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT. IL 60559
Contract: #36PYS15283

SITE	TICKET	GRID
01	311643	

WEIGHMASTER: JF00069

DATE IN	TIME IN
22 November 2005	12:37 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSI019	

REFERENCE	ORIGIN
11817940	EXE ILL

Gross Weight 72,760.00 LB
Stored Tare Weight 52,140.00 LB
Net Weight 41,620.00 LB 20.81 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.81	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LD	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18984

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address — Location if Different
Midwest Generation
1800 Channahon Rd Joliet IL 60436

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

A. Illinois Manifest Document Number: IL11817939 FEE PAID IF APPLICABLE
B. Generator's IL ID Number: 1970455041
C. Transporter's ID Number: 1961
D. Transporter's Phone ( ) 815-725-0350
E. Transporter's ID Number
F. Transporter's Phone ( )
G. Facility's IL ID Number: 0638140002
H. Facility's Phone 815 942 1800

5. Transporter 1 Company Name: Alessio & Sons Inc — 6. US EPA ID Number

7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address: Environtech Landfill, 1800 Ashley Rd. Morris IL 60450 — 10. US EPA ID Number

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No. (EPA HW Number)
a. Bottom Ash/Slag	001	DT		T	
b.					
c.					
d.					

J. Additional Description for Materials Listed Above
Allied Waste Approval ~~#388Y58154~~ # 361Y515283
311626 311663
LD1 2075 LD2 1139 LD3 LD4 LD5 LD6

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Eric Brown — Signature: [signature] — Date (Month Day Year): 1 1 2 2 0 5

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DAN YASKO — Signature: [signature] — Date (Month Day Year):

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date (Month Day Year)

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [signature] — Signature: [signature] — Date (Month Day Year): 11 22 05

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA HAZARDOUS AND PCB WASTES ONLY)

ENVIRONTECH LANDFILL
1300 ASHLEY ROAD
MORRIS IL

[illegible]
KRIPAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL [illegible]
Contract: #3[illegible]

SITE	TICKET	GRID
01	311663	

WEIGHMASTER: JF00069

DATE IN	TIME IN
22 November 2005	1:09 pm
DATE OUT	TIME OUT

VEHICLE	ROLL OFF
ALESSIO8	

REFERENCE	ORIGIN
11817939	EXE ILL

Inbound -

Gross Weight [illegible] LB
Stored Tare Weight 34,160.00 LB
Net Weight 38,780.00 LB 19.39 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.39	TN	CONTAMINATED SOIL				
15.00	YD	RECORD YARDS				
1.00	LS	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE

MWG13-15_18986

ENVIRONTECH LAND ILL
1300 ASHLEY ROAD
MORRIS IL

000505
BUREAU, PYLES, PYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 10a
WESTMONT, IL 60559
Contract: #367515203

SITE	TICKET	GRID
01	311626	

WEIGHMASTER: JF00069

DATE IN	TIME IN
22 November 2005	11:46 am
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI08	

REFERENCE	ORIGIN
11817939	EXE ILL

Gross Weight 75,660.00 LB Inbound -
Stored Tare Weight 34,160.00 LB
Net Weight 41,500.00 LB 20.75 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.75	TN	02 CONTAMINATED SOIL				
15.00	YD	27 RECORD YARDS				
1.00	LO	11 ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

AFETY MEMOS:
lard hats MUST be worn.
ligh Visibility vests MUST be worn.
assengers MUST remain in vehicle at all times.

SIGNATURE _____

MWG13-15_18987

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6760

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: Midwest Generation, 1800 Channahon Rd Joliet Il. 60436 — Location if Different

A. Illinois Manifest Document Number: IL 11817941 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 1970455041

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

5. Transporter 1 Company Name: Alessio & Sons Inc #21 — 6. US EPA ID Number

C. Transporter's ID Number: 1961

D. Transporter's Phone: 815-725-0359

7. Transporter 2 Company Name — 8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: Environtech Landfill, 1800 Ashley Rd. Morris Il. 60450 — 10. US EPA ID Number

G. Facility's IL ID Number: 0638140002

H. Facility's Phone: 815 942 1800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Bottom Ash/Slag	001	DT		T	EPA HW Number
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above: Allied Waste Approval ~~#320Y59151~~ # 361Y 515283

LD1 21163 / 24.16 LD2 21174 / 23.11 LD3 LD4 LD5 LD6

K. Handling Codes for Wastes Listed Above in Item #14

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Elsie Brant | Signature: [signature] | Date Month Day Year: 1 1 2 2 0 5

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charles Whitmore | Signature: [signature] | Date Month Day Year: 1 1 2 2 0 5

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [signature] | Signature: [signature] | Date Month Day Year: 11 22 05

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA (RCRA HAZARDOUS AND PCB WASTES ONLY)

MWG13-15_18988

ENVIRONTECH LANDFILL
1500 ASHLEY ROAD
MORRIS IL

000505
KRIKAU, PYLES, HYSIEWICZ & ASSOCIATES
ATTN: DAVID PYLES
414 PLAZA DRIVE SUITE 104
[illegible]

SITE	TICKET	GRID
01	311704	

WEIGHTMASTER: JF00069

DATE IN	TIME IN
22 November 2005	3:37 pm
DATE OUT	**TIME OUT**

VEHICLE	ROLL OFF
ALESSI021	

REFERENCE	ORIGIN
11817941	EXE ILL

Gr Gross Weight [illegible] 260.00 LB
Shared Tare Weight [illegible] 40.00 LB
Net Weight [illegible] 44,220.00 LB 22.11 TN

Inbound -

QTY.	UNIT		DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.11	TN	06	CONTAMINATED SOIL				
15.00	YD	2	RECORD YARDS				
1.00	LD	11	ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
Hard hats MUST be worn.
High Visibility vests MUST be worn.
Passengers MUST remain in vehicle at all times.

SIGNATURE [signature]

MWG13-15_18989

ENVIRONTECH LANDFILL
1800 ASHLEY ROAD
MORRIS IL

SITE	TICKET	GRID
01	311653	

WEIGHMASTER	
JF00069	
DATE IN	TIME IN
22 November 2005	12:52 pm
DATE OUT	TIME OUT
VEHICLE	ROLL OFF
ALESSI021	
REFERENCE	ORIGIN
11817941	EXE ILL

000505
KRIKAU, PYLES, RYSIEWICZ & ASSOCIATES
ATTN. DAVID PYLES
414 PLAZA DRIVE SUITE 106
WESTMONT, IL 60559
Contract: #36[illegible]15280

Gross Weight 80,960.00 LB Inbound -
Stored Tare Weight 32,640.00 LB
Net Weight 48,320.00 LB 24.16 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.16	TN	02 CONTAMINATED SOIL				
15.00	YD	07 RECORD YARDS				
1.00	LD	[illegible] ENVIRONMENTAL FEE				

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE Chuck

MWG13-15_18990

EXHIBIT 10

RIVERGAGES.COM
Water Levels of Rivers and Lakes

US Army Corps of Engineers

Water Levels By:
Choose An Option

National Weather Service Products

Bookmark

Google Earth What's This? Google Map

Illinois River at Peoria,IL

Stream Name: Illinois River
Gage Zero: 428.40 Ft. NGVD29
Flood Stage:18 Ft.
Record High Stage:29.35 Ft.

Longitude: -89.56444000
Latitude: 40.70222000
Flat Pool : 11.60
River Mile: 164.2 miles above the mouth of the Illinois River
Record High Stage Date: 04/23/2013

Drainage Area : 14165.00 Mi^2

Location of Gage :

Located in Peoria County, IL. at the foot of Grant Street, 2.2 miles upstream from Farm Creek and 4.5 miles upstream from Kickapoo Creek.

The National Weather Service information is also linked in the Additional Links for this station.

This gage is operated by the US Army Corps of Engineers (Rock Island District).

Flat Pool Elevation = 440.0

Latest Data
09/06/2019 10:00 Central

Latest Stage	12.40 Ft.	
24 Hr. Change	+0.17 Ft.	
Tomorrow's Forecast (Issued 09/06/2019 09:59)	12.20 Ft.	Plot Forecast
Last Year's Stage	12.60 Ft.	
Today's Historic Normal Stage	12.05 Ft.	
24 Hr. Precip Total	0.00 In.	View Precip

7 Days | Stage

Plot | Tabulate

Daily Historic Data
(06:00 Central Reading)

Choose A Parameter

From JAN 1 2019
To DEC 31 2019

Stage

Plot (5-Year Limit) | Tabulate | Tabulate (Yearly Formatted)

Additional Links:
View Record Stage High / Lows
DECODES XML
Bench Marks and Reference Points
Historic Flood Profiles (Peoria Pool)
Official National Weather Service information for this station

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us