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 Objection and Appeal from Hearing Officer's Ruling to Admit Complainants' Exhibit 16 as Evidence and Memorandum in Support of Midwest Generation, LLC's Objection and Appeal from Hearing Officer's Ruling to Admit Complainants' Exhibit 16 as Evidence, copies of which are hereby served upon you.

MIDWEST GENERATION, LLC

By: /s/ Jennifer T. Nijman

Dated: November 13, 2017

Jennifer T. Nijman
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Kristen L. Gale
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10 South LaSalle Street, Suite 3600
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CERTIFICATE OF SERVICE

The undersigned, an attorney, certifies that a true copy of the foregoing Notice of Filing and Respondent, Midwest Generation, LLC's Objection and Appeal from Hearing Officer's Ruling to Admit Complainants' Exhibit 16 as Evidence and Memorandum in Support of Midwest Generation, LLC's Objection and Appeal from Hearing Officer's Ruling to Admit Complainants' Exhibit 16 as Evidence was filed electronically on November 13, 2017 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 November 13, 2017 to the parties listed on the foregoing Service List.

/s/ Jennifer T. Nijman

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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MIDWEST GENERATION, LLC,	)	
	)	
Respondent.	)	

MIDWEST GENERATION, LLC'S OBJECTION AND APPEAL FROM HEARING OFFICER'S RULING TO ADMIT COMPLAINANTS' EXHIBIT 16 AS EVIDENCE

Pursuant to 35 Ill. Adm. Code 101.502(b), 101.518 and 101.626, Respondent Midwest Generation, LLC ("MWG"), by its undersigned counsel, submits to the Illinois Pollution Control Board this Objection and Appeal from the Hearing Officer's Ruling to Admit Exhibit 16. In support of its Objection and Appeal, MWG submits its Memorandum in Support and states as follows:

1) On October 23, 2017, the Complainants moved to admit into evidence Exhibit 16, a February 10, 2012 email from Richard Frendt to Maria Race attaching four draft documents titled "Ash Pond Data Evaluation and Summaries" for the Joliet 29 Station, the Powerton Station, the Waukegan Station, and the Will County Station. (Attachment A).

2) On October 23, 2017, over the objection of MWG, the Hearing Officer issued a ruling to admit Exhibit 16 as evidence.

3) MWG appeals the Hearing Officer's decision to admit Exhibit 16 because it is an email attaching a series of draft documents. There are no final copies of the draft documents and

Complainants did not call the person who prepared the draft documents to testify. The email and the draft documents are not relevant evidence upon which a prudent person would rely because the draft documents are uncertain, speculative and not reliable. 5 ILCS 100/10-40, 35 Ill. Adm. Code 101.626(a); *People v. Morgan*, 197 Ill. 2d 404, 455-56, 259 Ill. Dec. 405, 435, 758 N.E.2d 813, 843 (2001).

WHEREFORE, for the reasons stated above, MWG requests that the Board reverse the Hearing Officer's ruling, exclude Exhibit 16 and strike all testimony related to the Exhibit.

Respectfully submitted,
Midwest Generation, LLC

By: /s/ Jennifer T. Nijman
One of Its Attorneys

Jennifer T. Nijman
Susan M. Franzetti
Kristen L. Gale
NIJMAN FRANZETTI LLP
10 South LaSalle Street, Suite 3600
Chicago, IL 60603
312-251-5255

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
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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.	)	

MEMORANDUM IN SUPPORT OF MIDWEST GENERATION, LLC'S OBJECTION AND APPEAL FROM HEARING OFFICER'S RULING TO ADMIT COMPLAINANTS' EXHIBIT 16 AS EVIDENCE

Midwest Generation, LLC ("MWG") submits this Memorandum in Support of its Objection and Appeal from the Hearing Officer's Ruling to Admit Exhibit 16 and states as follows:

I. Background

On October 23, 2017, while Complainants were questioning Ms. Maria Race, Complainants moved to admit as Exhibit 16 a February 10, 2012 email from Richard Frendt to Maria Race[1] along with attached Draft Ash Pond Data Evaluation and Summaries for the four stations at issue in this matter: Joliet 29 Station, Powerton Station, Waukegan Station and Will County Station (collectively "the Stations"). A copy of Exhibit 16 as presented by Complainants is included as Attachment A to this Motion and Memorandum. MWG objected to the admission of Exhibit 16 because it is not relevant evidence, rather it is a draft document not written by Ms. Race and not a

[1] Maria Race was Director of Environmental Services for MWG and called as an adverse witness by Complainants. Richard Frendt was a consultant with the firm Patrick Engineering, Inc. formerly retained by MWG.

document a prudent person would rely upon. 35 Ill. Adm. Code 101.626(a). Overruling MWG's objection, the Hearing Officer admitted Exhibit 16 into evidence.

II. Only Relevant Evidence That is Reliable May Be Admitted into Evidence

The Illinois Pollution Control Board ("Board") rules provide that, in accordance with Section 10-40 of the Illinois Administrative Procedures Act ("Illinois APA"), the Hearing Officer "will admit evidence that is admissible under the rules of evidence as applied in the civil courts of Illinois, except as otherwise provided in this Part." 35 Ill. Adm. Code 101.626. Section 10-40 of the Illinois APA states that, "irrelevant, immaterial, or unduly repetitious evidence shall be excluded,"…and the rules of evidence as applied in civil cases shall be followed. 5 ILCS 100/10-40.

Evidence is only relevant "if it has any tendency to make the existence of any fact that is of consequence to the determination of an action either more or less probable than it would be without the evidence." *People v. Morgan*, 197 Ill. 2d 404, 455-56, 259 Ill. Dec. 405, 435, 758 N.E.2d 813, 843 (2001), *citing People v. Illgen*, 145 Ill. 2d 353, 364, 164 Ill. Dec. 599, 583 N.E.2d 515 (1991). However, evidence is not relevant if it is "remote, uncertain or speculative." *Morgan*, 197 Ill.2d at 456, *citing People v. Cloutier*, 156 Ill. 2d 483, 501, 190 Ill. Dec. 744, 622 N.E.2d 774 (1993). A "court may reject evidence which it determines to be of little probative value because of its uncertainty or conjectural nature." *People v. Bouska*, 118 Ill. App. 3d 595, 601, 74 Ill. Dec. 227, 231-32, 455 N.E.2d 257, 261-62 (1st Dist. 1983), *citing People v. Yuknis*, 79 Ill. App. 3d 243, 249, 398 N.E.2d 258 (1st Distr. 1979).

The Illinois APA allows for the admission of otherwise non-admissible evidence "if it is of a type commonly relied upon by reasonably prudent men in the conduct of their affairs." 5 ILCS 100/10-40. The Board's rules contain a similar exception in Part 101.626(a), which states that only evidence that is material, relevant and would be relied upon by prudent persons, may be admitted.

35 Ill. Adm. Code 101.626(a). Courts have interpreted this to mean that, while hearsay evidence is generally inadmissible in an administrative hearing, the administrative procedure rules create an exception to the rule, but only when the hearsay is reliable. *Metro Utility v. Illinois Commerce Comm'n*, 193 Ill. App. 3d 178, 185, 549 N.E.2d 1327, 1331, 140 Ill. Dec. 455 (1990) (emphasis added).

Exhibit 16 is an out of court statement entered for the truth of the matters stated and is clearly hearsay. As applied in this case, Exhibit 16 must be excluded because it is a draft document that by its very nature as a *draft*, is unreliable. Testimony in this case has documented the errors and inaccuracies in the draft Exhibit 16, further establishing it as unreliable. Complainants elected not to call as a witness the person who drafted Exhibit 16 – who, in his deposition, actually pointed out certain errors and limitations of the draft. MWG is unfairly prejudiced by the admission of Exhibit 16 as an outdated, draft document because the Exhibit is incomplete, does not include attachments that form the basis for the statements, and is impossible to fully vet.

III. An Email from a Non-Testifying Witness Attaching Draft Documents is Not Relevant Because it is Not Reliable and Not Commonly Relied Upon by Prudent Person

Exhibit 16 is not reliable evidence. Exhibit 16 is an email from a non-testifying witness attaching documents that are clearly marked DRAFT on every page. The draft attachments are initial (and outdated) data evaluations from 2012 for each of the Stations. The draft documents do not include any of the supporting materials related to the Stations, including boring logs, groundwater monitoring results, or the groundwater elevations, making the validity of the draft statements impossible to assess.

Mr. Richard Frendt, the author of the email and the draft documents, was a consultant with Patrick Engineering, Inc. ("Patrick Engineering" or "Patrick") who was initially retained by MWG to assist with assessing the ash ponds at the Stations. These draft documents contain Mr. Frendt's

preliminary review of data from a short period of time. Complainants asked Mr. Frendt about this document at his deposition, and Mr. Frendt testified that his observations were preliminary and, following additional information, found to be incorrect. (Attachment B, Excerpt of Richard Frendt Dec. 11, 2014 Deposition, pp. 76:12-79:11). In particular, Mr. Frendt stated:

> "In the specific instance with regard to Powerton, although I don't believe it was data that was generated at the time, we later determined that there's more than one groundwater unit at the site and that there are shallow units and deeper units and that analyzing flow patterns doesn't make any sense if you try to look at all of the wells together. We need to separate them into these different units to make sense of it.
>
> This was something we didn't know at the time that I think actually would later more modify the opinion that we show here at the top of [14]163."
> (Attachment B, Frendt Deposition, pp. 78:24-79:11, emphasis added)

Thus, as described by Mr. Frendt at his deposition, because the documents were not final, Mr. Frendt's observations and conclusions were not correct and would later be modified and revised based upon new and corrected information. By the witnesses' own testimony, the draft documents are preliminary and incorrect on at least one very significant issue.

It has been established that various documents prepared by Mr. Frendt's consulting firm, Patrick Engineering, contained errors that needed to be corrected. In particular, as described in MWG's 2012 Responses to Illinois Environmental Protection Agency ("Illinois EPA")'s Violation Notices, the reports submitted by Patrick Engineering contained transcription errors that required submission of amended reports. (*See* Footnote 6 in each of Exhibits 8B – 11B, attached as Attachments C, D, E, and F). Moreover, Dr. James Kunkel, Complainant's expert, observed the errors made by Patrick at his deposition:

> Q: And, in fact, that was a transcription error by Patrick?
>
> A: Oh, it could have been, yes. Patrick had lots of errors; didn't they? It makes it difficult to interpret.
> (Attachment G, Excerpt of Dr. James Kunkel Deposition, March 17, 2016, p. 141:14-18, emphasis added)

Dr. Kunkel repeated his observation that there were errors in Patrick Engineering's report at the Hearing. On October 27, 2017, Dr. Kunkel stated that his opinion regarding the Waukegan ash ponds "was based on erroneous bottom elevations of the pond provided by Patrick." (PCB13-15 Hearing Transcript, Oct. 27, 2017, p. 125:17-18, excerpt at Attachment H).

As to Exhibit 16 specifically, the parties are well aware that the attached draft document concerning the Powerton Station, is clearly incorrect. As evidenced by Mr. Frendt's deposition, and MWG's Response to Illinois EPA regarding Powerton, MWG had to revise and correct the interpretation of the complex groundwater flow at Powerton and the sample results. (Attachment B and Attachment D, Ex. 9B at MWG13-15_389). Given the statement of Complainants' own expert and the errors by Patrick in other documents, it is equally likely that Exhibit 16 contains other errors or, at the very least, severely outdated information as it relates to the other Stations. As such, the draft documents will serve only to add confusion to the Board by presenting mistaken, draft information. MWG will be prejudiced by reference to or reliance on incorrect and subsequently updated information.

Accordingly, Exhibit 16, and the draft documents contained within the exhibit, are merely conjecture, uncertain, and speculative. Because the draft documents are uncertain, the draft documents are not relevant evidence and thus should have been excluded. *Morgan,* 197 Ill.2d at 456, *People v. Bouska,* 118 Ill. App. 3d at 601. Moreover, even under the more permissive rules of the Board and the Illinois APA, Exhibit 16 should have been excluded because Exhibit 16 and the draft documents contained within are uncertain and speculative, and thus are not reliable. *Metro Utility v. Illinois Commerce Comm'n,* 193 Ill. App. 3d at 185.

MWG requests that the Board reverse the Hearing Officer's Decision, exclude Exhibit 16, and strike all testimony related to the excluded Exhibit.

Respectfully submitted,
Midwest Generation, LLC

By: /s/ Jennifer T. Nijman
One of Its Attorneys

Jennifer T. Nijman
Susan M. Franzetti
Kristen L. Gale
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312-251-5255

ATTACHMENT A

Ash Pond Data Summaries
Frendt, Richard to: Race, Maria 02/10/2012 11:21 AM
Cc: Xinying Wang

History: This message has been forwarded.

Maria:

Nearly forgot to send these to you – Here are some brief summaries of the data for each of the five ash pond sites. I haven't attached data tables to these, since those have already been sent out to everyone with the quarterly reports. The purpose of these documents is just to explain, on a high-level, the overall situation at each site. We can discuss our next steps at some point in the future, when it's convenient for you.

Regards,
Rick

Richard M. Frendt, P.E.
PATRICK ENGINEERING INC.
4970 Varsity Drive
Lisle, Illinois 60532-4101
Tel: 630.795.7464
Cell: 708.359.0806


Crawford Ash Pond Data Evaluation and Summary.pdf


Joliet Ash Pond Data Evaluation and Summary.pdf


Powerton Ash Pond Data Evaluation and Summary.pdf


Waukegan Ash Pond Data Evaluation and Summary.pdf


Will County Ash Pond Data Evaluation and Summary.pdf

Comp. Ex. 16
MWG13-15_14157

ASH POND DATA EVAULATION & SUMMARY

JOLIET #29 STATION
Midwest Generation, LLC
Joliet, Illinois
January 2012

SITE DESCRIPTION

The Joliet 29 Generating Station (the Site) is located in the City of Joliet, Will County, Illinois. The Site is located along the Des Plaines River just to the south of the city of Joliet. The Site includes three active ash ponds (Ash Pond 1, Ash Pond 2, and Ash Pond 3). Two of the ponds are lined with a high-density polyethylene (HDPE), while the third is lined with 12" of geo-composite material on the bottom; the total area of the three ash ponds is approximately 10 acres.

MONITORING WELLS

Eleven monitoring wells have been installed (MW-1 through MW-11) surrounding the ash impoundments at the Joliet 29 facility. The well locations were selected so that both upgradient and downgradient wells were represented, based upon available data regarding the expected groundwater flow direction. Monitoring wells MW-8, MW-10, and MW-11 are installed upgradient of the ash ponds. MW-9 is installed in a location that could be considered either up- or downgradient depending upon which ash pond is considered. Monitoring wells MW-1 through MW-7 are considered to be downgradient wells. The wells are monitored quarterly in accordance with the long-term monitoring plan. Groundwater data has been collected on a quarterly basis starting in December of 2010 and continues to be generated into 2012. A Monitoring Well Location Map is included in this summary

GROUNDWATER ELEVATIONS

Water levels in the monitoring wells are taken quarterly prior to sampling. The groundwater levels were compared to levels collected by the USGS stream flow data at Station Number 05539780 located where Route 53 crosses the Des Plaines River in Joliet, Illinois. The fluctuations in the groundwater elevations were compared to the fluctuations in the river levels for each monitoring event; there does not appear to be a correlation between the River levels and groundwater elevations at the site. The monitoring well elevations have seasonal variations which were not apparent in the river elevation data.

The overall groundwater elevation at the Site increased by 2 to 3 feet during the June 2011 sampling event as compared to the other three quarterly sampling events. This is not unexpected, as periods of high precipitation will recharge the shallow aquifer. During the September and December 2011 sampling events, groundwater elevations were slightly lower than the recorded River level (as compared to the other events, where groundwater was higher than the River). This appears to indicate that when the groundwater elevations are higher, groundwater at the Site is discharging to the River; when groundwater elevations are lower, the River is recharging the shallow aquifer.

Based upon the groundwater elevation data collected to date, the direction of groundwater flow is from the northwest to the southeast, generally toward the Des Plaines River. The direction of groundwater flow remains unchanged regardless of the elevation of the River and the groundwater table.

ANALYTICAL RESULTS

Groundwater samples were collected from the 11 monitoring wells on site on a quarterly basis in 2011. Both upgradient and downgradient wells indicated Class I Groundwater Quality Standard exceedances. The following compounds exceeded their respective Class I standards: antimony, manganese, boron, sulfate, chloride, and total dissolved solids.

Monitoring well MW-9 contains the largest number of exceedances; given that this well is located between two of the ash ponds, it is difficult to draw strong conclusions regarding the concentrations in this well (i.e., analytes due to the ash ponds versus other industrial sources). Other than chloride (often associated with runoff), very few exceedances were found in the on-site wells, indicating that the ash ponds are not likely contributing to the groundwater concentrations. Chlorides were found throughout the site (MW-1 is the only well that has no detection of this chloride), indicating that another (possibly road-related) source is more likely for this compound.

Boron exceeded the Class I standard only in MW-11, an upgradient well. Again, the distribution of boron does not allow a strong conclusion to be drawn with respect to the integrity of the ash ponds.

Patrick performed trend analyses on the following parameters (each of these parameters was detected during at least once during each sampling event): antimony, arsenic, barium, cobalt, copper, iron, manganese, nickel, selenium, boron, sulfate, chloride, nitrogen-nitrate, total dissolved solids, fluoride, and nitrogen-nitrate-nitrite. Analytical parameters without any detections were not included in the analysis. There were no statistically significant (at the 95% confidence level) increasing or decreasing trends for any of the analyzed compounds.

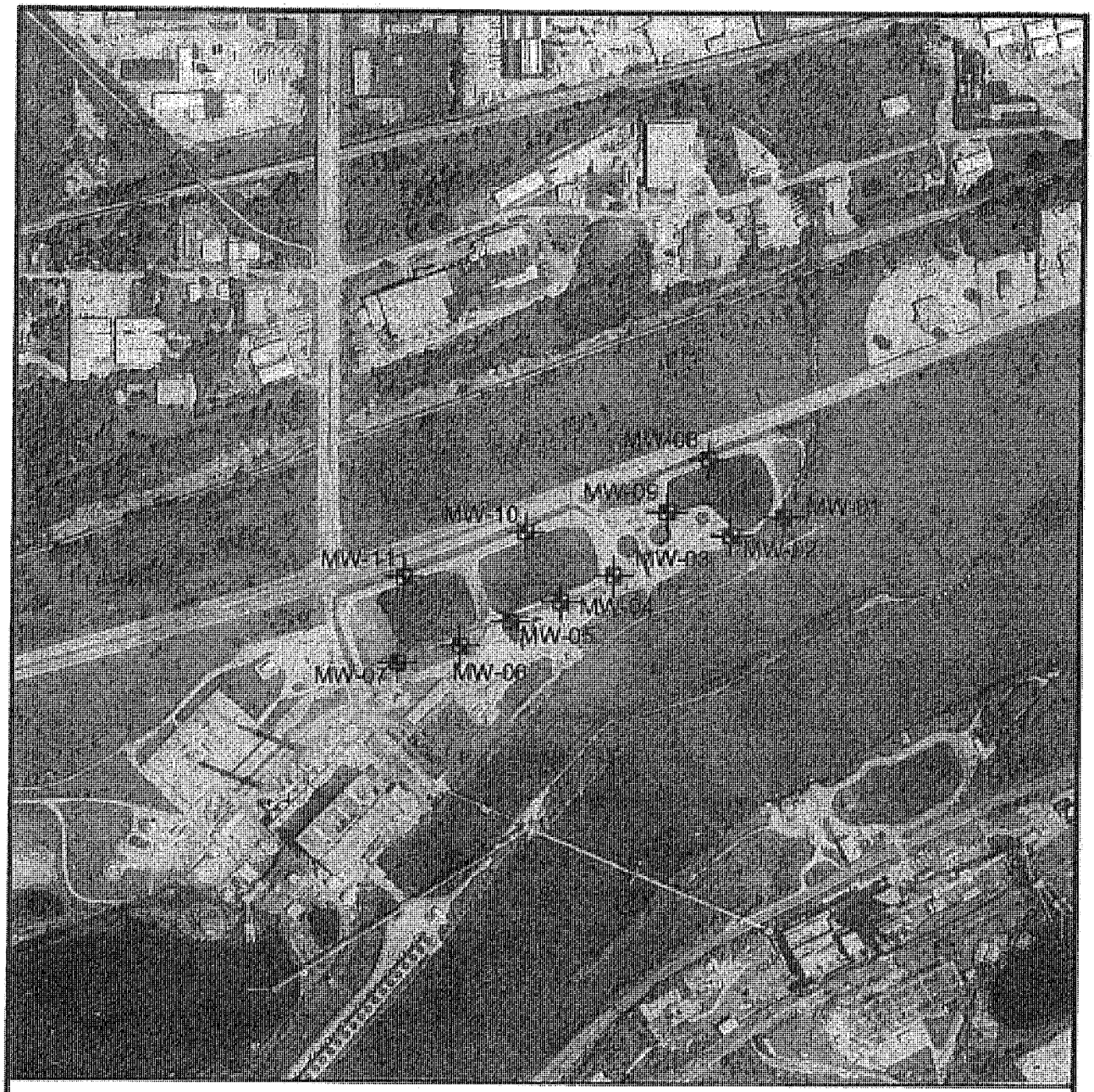
CONCLUSIONS

- Generally, the groundwater was found to be relatively un-impacted at the Joliet 29 site, with the exception of chloride, that is more likely caused by road runoff. No clear pattern of contaminants was found; MW-9, located between two of the ash ponds, next to the clarifiers, contained the highest number of exceedances. It is not clear whether the source of the contaminants found in this well is due to the ash ponds, or some other industrial source or process.

- Patrick could not find any statistically significant trends in the data which indicate that the exceedances are either historical in nature, or more likely naturally occurring.

NEXT STEPS

The monitoring wells on site will continue to be monitored on a quarterly basis through 2012. After six quarters of data have been collected, a statistical analysis will be performed to compare upgradient well results with downgradient well results.



LEGEND

MW-01 Monitoring Well Location

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC., JULY 2009

DRAFT

N

1" = 600'

Date: JAN. 2011	FIGURE 1 MONITORING WELL LOCATION MAP	PATRICK ENGINEERING INC. 4970 Varsity Drive Lisle, Illinois 60532-4101 TEL. (630) 795-2200 FAX (630) 724-1811 PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000488
Proj No.: 21153.034	JOLIET STATION NO. 29 JOLIET, ILLINOIS	
App. By: RMF		

ASH POND DATA EVAULATION & SUMMARY

POWERTON STATION
Midwest Generation, LLC
Pekin, Illinois
January 2012

SITE DESCRIPTION

The Powerton facility (the Site) is located in Pekin, Tazewell County, Illinois. The Site is located along the Illinois River, south and west of the city of Pekin. The surrounding land use consists of the Illinois River to the north, industrial and residential properties to the east, agricultural land to the south, and Lake Powerton to the west.

The site contains three active ash ponds. Each ash pond is lined with 12" of geo-composite material on the bottom, and a geo-membrane liner on the side slopes; the total area of the three ash ponds is approximately 11 acres. One former ash pond that is no longer used is located east of the current ash ponds; it has been partially filled, and has been bisected by a rail loop, but still contains some ash.

MONITORING WELLS

Ten monitoring wells have been installed (MW-1 through MW-10) surrounding the ash impoundments (both former and current) at the Powerton facility. The well locations were selected so that both upgradient and downgradient wells were represented, based upon available data regarding the expected groundwater flow direction (north, toward the Illinois River). Monitoring wells MW-1, MW-9 and MW-10 are installed upgradient of the ash ponds. The wells are monitored quarterly in accordance with the long-term monitoring plan. Groundwater data has been collected on a quarterly basis starting in December of 2010 and is continuing into 2012. A monitoring well location map is included in this summary.

GROUNDWATER ELEVATIONS

Groundwater elevations in each monitoring well are collected quarterly prior to sampling. The groundwater levels were compared to levels collected by the USGS stream flow data at Station Number 05568500 located on the Illinois River at Kingston Mines, Illinois. Fluctuations in the groundwater elevations correlated to fluctuations in the River, indicating the groundwater at the site has a direct hydraulic connection to the surface water. The water elevations in all of the ash ponds, excluding the large, former ash pond to the east, are significantly higher than the surrounding groundwater elevations.

If wells MW-6 and MW-8 are excluded from the analysis, the direction of groundwater flow is clearly found to be from south to north, towards the River, as expected. The groundwater elevations in MW-6 and MW-8 are approximately 12 feet higher than in surrounding wells; the ground surface elevation in this area is also significantly higher than in the surrounding area. Boring logs from these wells also indicate the geology of this area consists of almost entirely fill

material. It is Patrick's opinion that both the topography and geology of this area create a localized groundwater high that is not necessarily attributable to leakage from the nearby wells. This conclusion is also supported by analytical data presented later in this report.

The correlation between groundwater elevations and the Illinois River elevations was weaker in the vicinity of wells MW-1, MW-9 and MW-10, which are the three wells furthest from the River and therefore the three wells that would be expected to be the least affected by changes in River elevation.

ANALYTICAL RESULTS

Groundwater samples were collected from the 10 monitoring wells on site on a quarterly basis in 2011. Both upgradient and downgradient wells on site have Class I Groundwater Quality Standard exceedances. These exceedances include: arsenic, iron, manganese, boron, chloride, nitrogen-nitrate, and total dissolved solids.

Concentrations of constituents exceeding Class I Groundwater Standards in downgradient wells (MW-2 through MW-8) were compared with upgradient well (MW-1, MW-9 and MW-10) concentrations. Average downgradient concentrations of manganese, chloride, total dissolved solids, arsenic and iron were higher than in the upgradient wells. Upgradient concentrations of boron and nitrogen-nitrate were higher than in the downgradient wells. Note that, excluding manganese, chloride, and nitrate, all of the exceedances of Class I standards were detected in only one well (MW-7).

Manganese and chloride (both naturally occurring compounds) were the only compounds that exceeded Class I standards in MW-6 and MW-8, providing further evidence that the ash ponds near these wells are not leaking (no other more traditional coal constituent indicator compounds exceeded standards in these two wells).

Patrick performed trend analyses on the following parameters (arsenic, barium, chromium, cobalt, iron, manganese, nickel, selenium, boron, sulfate, chloride, nitrogen-nitrate, total dissolved solids, and fluoride). Analytical parameters without any detections were not included in the analysis.

The increasing trend in arsenic concentrations in MW-7 was the only statistically significant increase of any constituent in any well. There were no statistically significant (at the 95% confidence level) increasing or decreasing trends for any of the remaining analyzed compounds.

CONCLUSIONS

- The groundwater underlying the Site appears to be in direct hydraulic connection to the Illinois River, except for the groundwater underlying the area near MW-6 and MW-8. There appears to a localized groundwater high in the vicinity of these wells that appears to be caused by local changes in topography and lithology.

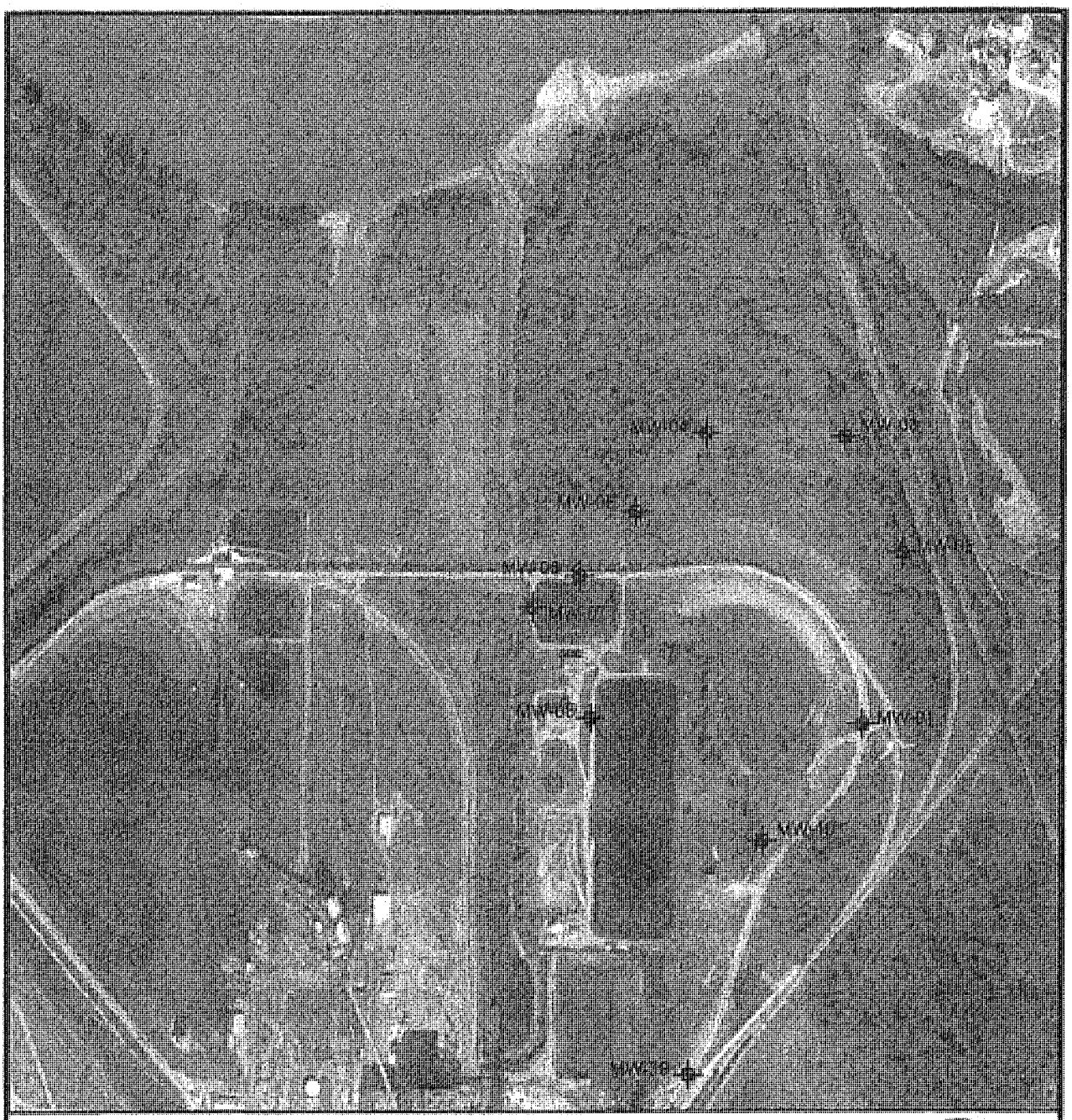
- There does not appear to be any notable downgradient groundwater impact except potentially at well MW-7. Further evaluation of the nature and extent of any downgradient groundwater impact will be possible upon completion of the sixth sampling event and a statistical analysis of upgradient groundwater quality.

NEXT STEPS

The monitoring wells on site continue to be monitored on a quarterly basis. Possible modifications to the current sampling program that may provide useful data with respect to demonstrating the competency of the ash ponds could include:

- Surveying the ash ponds is an additional task for 2012 as listed in an Illinois EPA comment letter response to the initial Hydrogeologic Assessment. The purpose is to compare groundwater levels in the monitoring wells with the ash pond elevations. The additional surveying may provide data that will be useful in clarifying the nature of the groundwater high in the vicinity of MW-6 and MW-8.

- While not necessary at this time, additional investigations into the nature of the groundwater elevations at MW-6 and MW-8 could include the installation of groundwater level transducers or the performance of a tracer test in the ponds closest to MW-7.



LEGEND

MW-01 Monitoring Well Location

DRAFT

N

1" = 600'

AERIAL IMAGE SOURCE:
2005 ORTHOPHOTO TAKEN FROM THE ILLINOIS NATURAL RESOURCES CLEARINGHOUSE

Date: JAN. 2011	FIGURE 1 MONITORING WELL LOCATION MAP	PATRICK ENGINEERING INC.
Proj No.: 21153.018	POWERTON STATION PEKIN, ILLINOIS	4970 Varsity Drive Lisle, Illinois 60532-4101 TEL. (630) 795-2200 FAX (630) 724-1861 PROFESSIONAL DESIGN FIRM LICENSE NO. 184-003408
App. By: RMF		

MWG13-15_14165

ASH POND DATA EVAULATION & SUMMARY

WAUKEGAN STATION
Midwest Generation, LLC
Waukegan, Illinois
January 2012

SITE DESCRIPTION

The Waukegan facility (the Site) is located in the City of Waukegan, Lake County, Illinois. The Site is located along the shore of Lake Michigan on the northeast side of Waukegan. The surrounding land use consists of undeveloped land to the north, apparently vacant industrial land to the south, residential properties to the west, and Lake Michigan to the east. The Site contains two active ash ponds. The ponds are lined with a high-density polyethylene (HDPE) liner; the total area of the two ash ponds is approximately 25 acres.

MONITORING WELLS

Five monitoring wells have been installed (MW-1 through MW-5) surrounding the ash impoundments at the Waukegan facility. The well locations were selected so that both upgradient and downgradient wells were represented, based upon available data regarding the expected groundwater flow direction. Monitoring well MW-5 is installed upgradient of the ash ponds. The wells are monitored quarterly in accordance with the long-term monitoring plan. Groundwater data has been collected on a quarterly basis starting in December of 2010 and is continuing into 2012. A Monitoring Well Location Map is included in this summary.

GROUNDWATER ELEVATIONS

Groundwater levels in the monitoring wells are collected quarterly prior to sampling. The groundwater levels were compared to the Lake Michigan water levels collected by the NOAA Lake Michigan Water Elevation data at stations collected near Milwaukee, Wisconsin and Calumet, Indiana. The data from these two stations were interpolated to calculate an expected elevation near the Waukegan Station. The fluctuations in the groundwater elevations were compared to the fluctuations in the lake water levels for each monitoring event. There appears to be a correlation between Lake levels and the groundwater levels at the Site.

The direction of groundwater flow at the site is west to east, directly towards Lake Michigan.

Waukegan Station operates two ash ponds at the Site. Only one of the ponds is active at any given time. When a given pond is active, its water elevation can be significantly higher (>10') than the natural groundwater elevation at the Site. Yet these levels tend to be maintained for an extended period, indicating that there is no significant leakage through the liner of the pond. Similarly, the non-active pond is maintained at an elevation well below the natural groundwater elevation (<8'), with no observable leakage into the pond. Both of these observations are consistent with the fact that these ponds are lined with an HPDE liner, and do not appear to be hydraulically connected with groundwater at the site.

ANALYTICAL RESULTS

Groundwater samples were collected from the 5 monitoring wells on site on a quarterly basis in 2011. Both the upgradient well and downgradient monitoring wells on site have Class I Groundwater Quality Standard exceedances. The following compounds exceeded their respective Class I standards: arsenic, boron, manganese, sulfate, chloride and total dissolved solids.

Patrick compared upgradient well concentrations with downgradient well concentrations. The concentrations of boron, iron, manganese, chloride and total dissolved solids are higher, sometimes significantly higher, in the upgradient well (MW-5) than in the downgradient wells. The downgradient wells, MW-1 through MW-4, have higher concentrations of arsenic, with the highest concentrations found in MW-1 (the northernmost downgradient well).

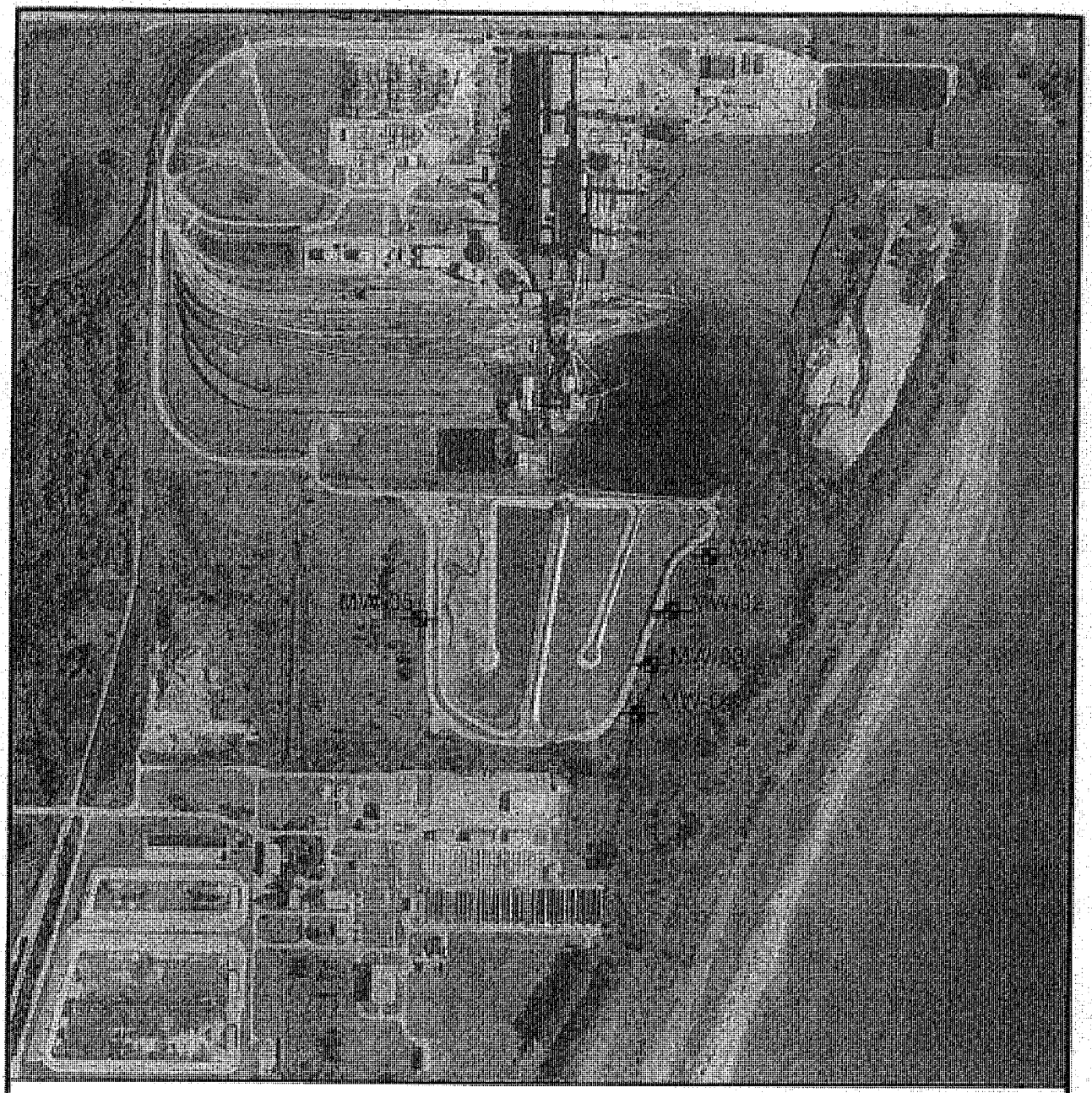
Patrick performed a trend analysis on the following analytical parameters, (arsenic, barium, cyanide, iron, manganese, selenium, boron, sulfate, chloride, nitrogen-nitrate, total dissolved solids, fluoride, and nitrogen-nitrate-nitrite). Analytical parameters without any detections were not included in the analysis. There were no statistically significant (at the 95% confidence level) increasing or decreasing trends for any of the analyzed compounds.

CONCLUSIONS

- There is a strong correlation between Lake Michigan elevations and the groundwater levels in the monitoring wells on site. The groundwater levels collected on site consistently fluctuated on a similar scale with water levels in Lake Michigan which indicate that the groundwater on site is hydraulically connected to the Lake, as expected.
- The pond elevation data when compared with the natural groundwater elevation at the Site provide strong evidence that there is no hydraulic connection between these units; the ponds do not appear to be leaking.
- The groundwater elevation data show that MW-5 is an upgradient well. The elevated concentrations of compounds of interest in MW-5 appear to be the result of the well being installed in a former ash disposal area and not a result of leakage from the current ash ponds.
- The relatively low concentrations of compounds of interest in the downgradient wells, as compared to those found in the upgradient well, appear to indicate that the current ash ponds are not leaking. The source of the elevated concentration of arsenic in MW-1 is unknown, but could be related to the nearby coal pile. The Waukegan Site data appear to support the conclusion that the ash ponds do not appear to be the source of groundwater contamination at the Site.

NEXT STEPS

- The monitoring wells on site will continue to be monitored on a quarterly basis through 2012. Monitoring wells that contain detections will continue to be monitored in order to observe any trend that may be occurring whether the compounds may be increasing or decreasing.
- An additional well was requested by the Illinois EPA in a comment letter in response to the Waukegan Hydrogeologic Assessment. The well was proposed to be installed at the southern edge of the property to assess the potential for off-site migration. No definitive decision regarding the installation of this requested well has yet been made.



LEGEND

MW-01 Monitoring Well Location

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC., JULY 2009

DRAFT

N

1" = 600'

Date: JAN. 2011	FIGURE 1 MONITORING WELL LOCATION MAP	PATRICK ENGINEERING INC. 4070 Vandy Drive Lisle, Illinois 60532-4101 TEL. (630) 795-7200 FAX (630) 724-1881 PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000408
Proj No.: 21153.033	WAUKEGAN STATION WAUKEGAN, ILLINOIS	
App. By: RMF		

ASH POND DATA EVAULATION & SUMMARY

WILL COUNTY STATION
Midwest Generation, LLC
Romeoville, Illinois
January 2012

SITE DESCRIPTION

The Will County Generating Station (the Site) is located in Romeoville, Will County, Illinois. The Site is located between the Chicago Sanitary and Ship Canal (CSSC) and the Des Plaines River east of the city of Romeoville. The surrounding land use consists of undeveloped land to the north, the Chicago Sanitary and Ship Canal to the east, a quarry to the south, and the Des Plaines River to the west. The Site includes four active ash ponds. The ponds are lined with 36" of geo-composite material; the total area of the four ash ponds is approximately 8 acres.

MONITORING WELLS

Ten monitoring wells have been installed (MW-1 through MW-10) surrounding the ash impoundments at the Will County facility. The well locations were selected so that both upgradient and downgradient wells were represented based upon available data regarding the expected groundwater flow direction. Monitoring wells MW-1 through MW-6 were intended to be installed downgradient of the ash ponds. The wells are monitored quarterly in accordance with the long-term monitoring plan. Groundwater data has been collected on a quarterly basis starting in December of 2010 is continuing into 2012. A monitoring well location map is attached to this summary.

GROUNDWATER ELEVATIONS

The groundwater elevation in each of the ten wells was measured prior to sampling. The groundwater levels were compared to levels collected by the USGS stream flow data at Station Number 05536998 located in the CSSC at the Lockport Controlling Works in Lockport, Illinois and at Station Number 05534000 located in the Des Plaines River at Romeoville Road. Fluctuations in the groundwater elevations correlated to fluctuations in the CSSC and the River, indicating the groundwater at the site has a direct hydraulic connection to the surface waters. The elevation of the Des Plaines River is normally higher than the elevation of the CSSC (Wells MW-7 through MW-10 were installed to be the upgradient wells based on this observation). The surface water elevations in the ash ponds were also measured during the initial investigation; the water elevations in the ash ponds were 3 to 6 feet higher than the groundwater elevations in the nearby wells.

Patrick's initial conceptual model of groundwater flow at the Site was that the groundwater was hydraulically connected to both the River and the CSSC with groundwater flowing from west to east. The data collected to date indicates that the groundwater is in direct hydraulic connection to the River and the CSSC; however, the groundwater elevations are all higher than either of the surface waters and the direction of groundwater is generally found to be from the northeast to southwest. It is unknown whether the presence of this groundwater 'mound' between the River

and the CSSC is due simply to natural mounding due to recharge, or is partially related to leakage from the ash ponds themselves. The groundwater elevation in MW-5 has periodically been higher than either MW-4 to the north and MW-6 to the south, which could conceivably be due to a leakage contribution from the South Pond (directly west of MW-5), but it is difficult to make such a conclusion on the basis of the existing data. The collection of additional ash pond elevation data (this was only collected during the first sampling event) may help in further defining the relationships between groundwater and surface water at the Site. Definitive demonstration that the ponds are not leaking could really only be supplied by something like a bromide tracer test, but these are expensive, and even these tests are not guaranteed to settle the matter one way or another.

ANALYTICAL RESULTS

Groundwater samples were collected from the 10 monitoring wells on site on a quarterly basis in 2011. Both upgradient and downgradient wells indicated Class I Groundwater Quality Standard exceedances. The following compounds exceeded their respective Class I standards: manganese, boron, sulfate, chloride, and total dissolved solids (TDS).

Patrick compared the concentrations of those compounds that exceeded the Class I standards in the upgradient and downgradient wells. Based upon the current model of groundwater flow at the Site, only MW-1 appears to be a true upgradient well (MW-2 through MW-6 are considered side-gradient and MW-7 through MW-10 are downgradient). Compared to MW-1, concentrations of boron were higher in all of the other wells; concentrations of sulfate were higher in 7 of the other wells; TDS was higher in 5 out of 9 wells; manganese was higher in 4 out the other wells; and chloride was higher in only 2 of the other wells. The results of these comparisons could be used to argue that the ash ponds are potentially impacting downgradient groundwater at the Site. However, there is still uncertainty regarding the groundwater flow paths and Patrick has not yet performed a rigorous statistical analysis of upgradient groundwater quality.

Patrick performed trend analyses on the following parameters (each of these parameters was detected during at least once during each sampling event): arsenic, barium, cobalt, iron, manganese, nickel, selenium, boron, sulfate, chloride, total dissolved solids, fluoride, nitrogen-nitrite, and nitrogen-nitrate-nitrite. There were no statistically significant (at the 95% confidence level) increasing or decreasing trends for any of the analyzed compounds.

CONCLUSIONS

- The groundwater and surface water elevation data indicate that the groundwater at the site is in direct hydraulic connection with both the CSSC and the Des Plaines River. This conclusion is also supported by the increase in chloride concentrations in the spring of 2011 (chloride concentrations in surface water generally peak in the spring as snow melt and precipitation runoff transport dissolved road salt).

- The groundwater elevations are generally higher than either the CSSC or the River, indicating that there is a groundwater 'mound' underlying the Site. Since the ash pond water elevations are significantly higher than the groundwater elevations and the potentiometric surface maps do not indicate a clear radial flow pattern away from the ash ponds, it is possible that the groundwater mounding is a natural occurrence due to recharge.

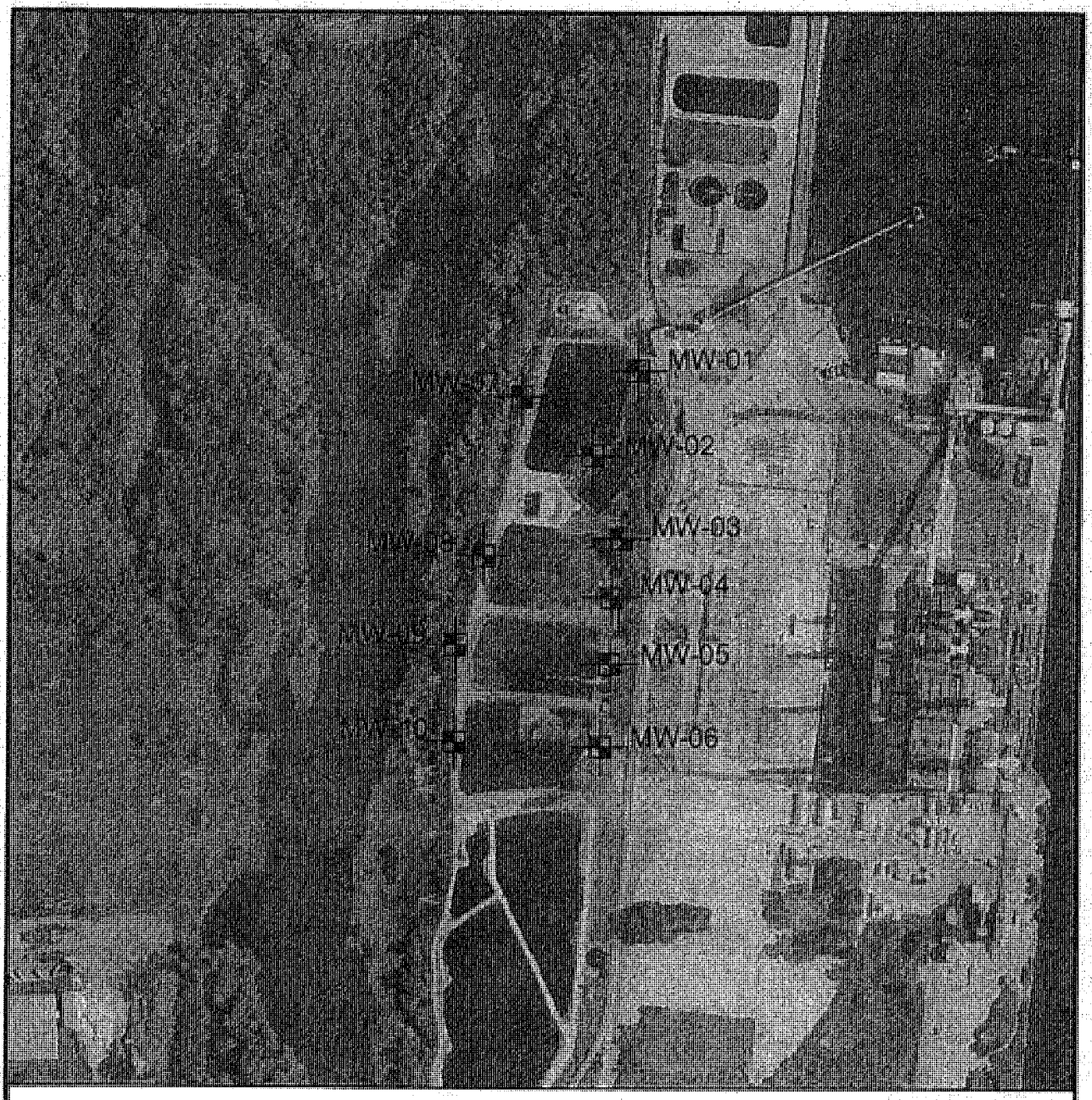
- The results of the groundwater sampling indicate that there are exceedances of the Class I groundwater quality standards for compounds that can be associated with coal ash, most notably boron. Boron and sulfate concentrations are higher in nearly all of the downgradient wells, when compared to MW-1, indicating that the ash ponds are potentially impacting downgradient groundwater. However, given the limited number of upgradient wells at the Site (one, if the mounding is considered), no firm conclusion can be drawn with respect to groundwater analytes at the Site.

NEXT STEPS

The monitoring wells on site continue to be monitored on a quarterly basis. Possible modifications to the current sampling program that may provide useful data with respect to demonstrating the competency of the ash ponds could include:

- Patrick could collect the water elevations of the ash ponds during each quarterly sampling event. While this could provide additional useful data, the ponds elevations experience such frequent fluctuation based solely on the station operations elevation fluctuations in the ash ponds that quarterly pond elevation data may not yield any useful data.

- Given the complicated nature of hydraulic flow and contaminant distribution at the Site, it is difficult to draw any strong conclusions regarding the nature of the ash ponds at the Will County Site. It may be that definitive data on whether or not these ponds are contributing to groundwater contamination would only be provided by a tracer test, using bromide, or some other conservative tracer.



LEGEND

MW-01 Monitoring Well Location

DRAFT

N

1" = 600'

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC., JULY 2008

Date: JAN. 2011	FIGURE 1 MONITORING WELL LOCATION MAP	PATRICK ENGINEERING INC. 4970 Varsity Drive Lisle, Illinois 60532-4101 TEL. (630) 795-2200 FAX (630) 795-1801 PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000408
Proj No.: 21153.017	WILL COUNTY STATION ROMEOVILLE, ILLINOIS	
App. By: RMF		

ATTACHMENT B

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 No-2013-015
Complainants,	)	(Enforcement - Water)
	)	
v.	)	
	)	
MIDWEST GENERATION, LLC,	)	
	)	
Respondent.	)	

The discovery deposition of RICHARD FRENDT, called by the Complainants, for examination, taken pursuant to notice, taken before CARYL L. HARDY, a Notary Public within and for the County of Cook, State of Illinois, and a Certified Shorthand Reporter of said state, taken at 10 South LaSalle Street, Suite 3600, Chicago, Illinois, at the hour of 9:56 a.m., on the 11th day of December, A.D., 2014.

I'm actually -- wait a minute.

(Brief pause.)

BY MS. BUGEL:

Q. This is another where I'm going to ask you to get out Exhibit 24 again. I'm actually going to skip part of this and go to Exhibit 24 again.

MS. NIJMAN: Is there a page?

MS. BUGEL: I'm just skipping some questions here, so bear with me a second.

MS. NIJMAN: Okay.

BY MS. BUGEL:

Q. Can you turn to Bates page 14162.

MS. BUGEL: And that is, for the record, the Ash Pond Data Evaluation and Summary for Powerton Station.

BY MS. BUGEL:

Q. And this -- can you please look at the section titled Groundwater Elevations and the last sentence of the first paragraph: The water elevations in all of the ash ponds, excluding the large former ash pond to the east, are significantly higher than the surrounding groundwater elevations. Do you see where it says that?

A. Yes.

Q. Why did you include this statement in this report?

A. Primarily because we knew this to be a very complex site, especially with regard to water flow. We wanted to compare where the elevations of the ponds themselves were compared to groundwater, compared to other discharging bodies. It's just a way for us to understand better what we call the conceptual model of the site, how things may be flowing.

Q. And can you turn to page 14163. The very top of that page, first sentence: It is Patrick's opinion that both the topography and geology of this area create a localized groundwater high that is not necessarily attributable to leakage from the nearby wells; do you see where it says that?

A. Yes.

Q. Did you mean to say "leakage from the nearby ponds?"

A. Possibly. Let me review the first part of that paragraph.

(Witness reviewing.)

BY THE WITNESS:

A. Yes. It appears to refer to the area

around monitor wells six and eight which, I believe, are in the area that's referred to at the top of page 14163.

So I think I meant leakage from the nearby ash ponds since wells don't really leak --

BY MS. BUGEL:

Q. And can you --

A. -- usually.

Q. Anything can happen, right?

What did you base that conclusion on?

A. It appears that, to begin with, we based it on the geological material that was found in six and eight which were quite a bit different than what we found elsewhere on site. It appeared to be fill material and that very often if you have more permeable fill material surrounded by tighter clay soils, they can act as a sponge and draw water towards them.

So it's not unusual, in fill depression surrounded by tighter clays, to see higher groundwater elevations that are not actually representative of the direction of groundwater flow.

In the specific instance with regard to

Powerton, although I don't believe it was data that was generated at the time, we later determined that there's more than one groundwater unit at the site and that there are shallow units and deeper units and that analyzing flow patterns doesn't make any sense if you try to look at all of the wells together. We need to separate them into these different units to make sense of it.

This was something we didn't know at the time that I think actually would later more modify the opinion that we show here at the top of 163.

(Exhibit No. 142 marked for identification, 12-11-14.)

BY MS. BUGEL:

Q. Okay. And turning -- I'm passing you what's been marked as Exhibit 142. Can you turn to Bates -- well, let's just quickly ask, are you familiar with this report?

A. Generally, yes.

Q. And your signature and name appear on this report at page 3945?

A. Yes.

Q. And this document was prepared by Patrick Engineering?

ATTACHMENT C

NIJMAN · FRANZETTI LLP

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312.251.5250 · fax 312.251.4610 · www.nijmanfranzetti.com

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Susan M. Franzetti
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July 27, 2012

VIA OVERNIGHT MAIL

Illinois EPA
Division of Public Water Supplies
Attn: Andrea Rhodes, CAS #19
P.O. Box 19276
Springfield, IL 62794-9276

Re: Violation Notice: Midwest Generation, LLC, Joliet #29 Generating Station
Identification No.: 6284
Violation Notice No.: W-2012-00059

Dear Ms. Rhodes:

In response to the above-referenced June 11, 2012 Violation Notice ("VN"), received on June 13, 2012, this written response is timely submitted on behalf of the Midwest Generation, LLC ("MWG"), Joliet #29 Generating Station ("Joliet #29"). MWG also requests a meeting with the Illinois Environmental Protection Agency ("Illinois EPA" or the "Agency") to discuss the VN and information provided in this response.

MWG regrets that the Illinois EPA decided to issue the VN because MWG has tried to work cooperatively with the Agency concerning the hydrogeologic assessment of the coal ash ponds at Joliet #29 even though it had significant concerns and objections to how the VN has proceeded in this matter.[1] Nevertheless, MWG complied with the Agency's request that it conduct a hydrogeologic assessment of the area around the coal ash ponds and followed its requirements and comments for how the hydrogeologic assessment should be conducted, even though it was under no legal obligation to do so.[2] At no time however did MWG agree that the scope and nature of the hydrological assessment the Agency required it to perform would

[1] *See, e.g.*, MWG (B. Constantelos) letter to Illinois EPA (A. Keller) dated July 15, 2009. MWG is also working cooperatively with the USEPA with regards to the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640, and is trying to coordinate the responses and requirements of both Agencies. USEPA first issued the proposed rules on June 21, 2010, and requested additional comments and information on Oct. 12, 2011. The additional information comment period closed on November 14, 2011, and MWG is now waiting for the USEPA to issue the final rule.

[2] MWG continues to reserve its objection that the Illinois EPA did not have the legal authority to require the hydrological assessments of the ash ponds under Sections 4 or 12 of the Illinois Environmental Protection Act (the "Act") or the Groundwater Quality Regulations, 35 Ill. Adm. Code Part 620.

COMP. EX. 8B

provide any basis for concluding that the ash ponds were impacting groundwater. The alleged violations in the VN are based solely on the results of the hydrogeologic assessment MWG performed at the Agency's request. The results of the hydrogeologic assessment do not show that the coal ash ponds at the Joliet #29 Station are impacting the groundwater and do not provide the necessary evidence to support the alleged violations contained in the VN.

Well prior to the issuance of this VN, MWG met with the Agency to discuss the groundwater monitoring results and to discuss cooperatively how to proceed based on those results, including what additional actions, if any, the Agency believed were necessary. The Agency told MWG that it had not yet decided how to proceed. The next development was the issuance of the VN. The VN itself provides no information concerning the basis for the Agency's apparent conclusion that the Joliet #29 ash ponds are the cause of the alleged groundwater impacts, other than the conclusory statement that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards." The VN also provides no information concerning the nature or type of corrective action which the Agency may deem acceptable to address the alleged violations. The Agency is not pursuing this matter in a way that allows MWG to prepare an effective response or a Compliance Commitment Agreement.

This letter provides a detailed response to each of the alleged violations in Attachment A of the VN to the extent possible given the lack of information provided in the VN. It also advances MWG's general objection to the legal sufficiency of the notice of the alleged violations contained in the VN. MWG maintains that the Illinois EPA cannot prove the alleged violations in the VN, and does not, by submitting this response, make any admissions of fact or law, or waive any of its defenses to those alleged violations.

I. General Objection to the Legal Sufficiency of the Violation Notice

The VN does not comply with the requirements of Section 31 of the Act. Section 31(a)(1)(B) of the Act requires the Illinois EPA to provide a detailed explanation of the violations alleged. 415 ILCS 5/31(a)(1)(B). Under the Act, MWG is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation.[3] The VN fails to provide adequate notice to MWG of either the alleged violations or the activities which the Agency believes are necessary to address them. The VN states that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards...." (Violation Notice, Attachment A, page 1, 1st paragraph) No further description of the alleged "ash impoundments" is provided in the VN. Three ash impoundments exist at the Joliet #29 Station. It is impossible to identify from the contents of the VN what operations or activities at the Joliet #29 Station the Agency is claiming are the cause of the alleged violations, including

[3] *Citizens Utilities Co., v. IPCB*, 9 Ill.App.3d 158, 164, 289 N.E.2d 642, 648 (2nd Dist., 1972) (a person is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation). *See also, City of Pekin v. Environmental Protection Agency*, 47 Ill.App.3d 187, 192, 361 N.E.2d 889, 893 (3rd Dist., 1977.

whether it is the Agency's position that each of the Station's ash ponds, or only certain ones, have caused the alleged violations. Absent an accurate or complete description of the activities or operations that the Agency is alleging caused the violations, it is also not possible to identify what action might be necessary to resolve them. Attachment A to the VN states: "Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation." However, no such explanation is provided in the VN. In sum, the VN fails to comply with the legal requirement that it include a detailed explanation of the violations alleged, does not inform MWG of the specific conduct constituting the alleged violations and provides no notice of what is necessary to resolve the alleged violations. The Section 31 process is based on fundamental principles of due process. MWG should not have to speculate about what activities it allegedly engaged in that caused the violations and how to address them to resolve the alleged violations. In the absence of this material, statutorily-required information, the Agency also has effectively denied MWG's statutory right to formulate an acceptable Compliance Commitment Agreement to submit for the Agency's approval.

The VN is also deficient regarding its explanation of what laws MWG has allegedly violated. The VN solely alleges that MWG violated "Section 12" of the Act. 415 ILCS 5/12. It does not provide any further specification as to which of the provisions of Section 12 MWG has allegedly violated. Sec. 12 of the Act has nine subsections, consecutively numbered (a) through (i). Each of these subsections describes a different and distinct water pollution prohibition. 415 ILCS 5/12(a)-(i). However, the VN issued to MWG does not identify which of the nine subsections the Agency is alleging MWG violated. Based on the contents of Section 12 of the Act, the Agency is taking the position that MWG violated each and every one of the provisions of Section 12. Based on the relevant facts, it is highly unlikely that this is the intent of the VN. Therefore, the VN's general reference to Section 12 of the Act, without any other explanation, is not a "detailed explanation of the violations." This is another example of how the VN fails to provide MWG with adequate notice as a matter of law and thereby violates MWG's due process rights.[4]

By failing to provide a detailed explanation of the violations and any explanation of the activities that the Illinois EPA believes may resolve the violations, , the Agency has effectively denied MWG the opportunity to properly and thoroughly respond to the alleged violations and to make an acceptable offer to resolve them. The VN's deficiencies conflict with the intent and purpose of Section 31 of the Act, which is to avoid unnecessary litigation. Therefore, MWG respectfully requests that Illinois EPA rescind the VN and suspend any further enforcement action unless and until it has taken the necessary actions to correct and cure the legal deficiencies in the notice of the alleged violations by following the statutory requirements under Section 31(a)(1)(B) of the Act. 415 ILCS 5/31(a)(1)(B).

[4] *See, e.g., Grigoleit Co. v. IEPA*, PCB 89-184, slip op at p. 11 (November 29, 1990) (Failure to notify permit applicant of alleged violations and provide an opportunity to provide information in response was a violation of applicant's due process rights)

II. Response to Alleged Violations in the VN

Subject to and without waiving its objections to the legal sufficiency of the VN, MWG has attempted to discern the legal basis for the alleged violations and to prepare this response in defense to those allegations based on various assumptions. MWG reserves the right to supplement this response, including by submitting a separate response should the Agency provide the legally required notice under Section 31 of the Act.

The VN alleges that the "[o]perations at ash impoundments" at MWG's Joliet #29 Station have resulted in violations of certain of the Groundwater Quality Standards at the respective monitoring wells identified in the VN. (Violation Notice at Attachment A) MWG believes the Agency's use of the term "ash impoundments" is intended to refer to the structures that the Joliet #29 Station commonly refers to as "ash ponds;" that is how they will be referred to here. The Agency further alleges that the alleged violations of the groundwater quality standards in 35 Ill. Admin. Code Part 620 also constitute violations of Section 12 of the Act and the underlying groundwater regulations in 35 Ill. Admin. Code Part § 620. It is undisputable that the Agency has the burden to prove these alleged violations both in proceedings before the Illinois Pollution Control Board ("Board") and in the courts.[5] However, the groundwater monitoring data on which the Agency primarily, if not solely relies, to assert these violations is not sufficient, legally or technically, to prove that any "ash impoundment" is the source of the alleged groundwater impacts. Further, based on the existing condition of the ash ponds, it is not likely that they are the source of the alleged impacts.

To support its defense to the alleged violations, MWG has set forth below a description of: (1) the condition and use of the ash ponds at Joliet #29; (2) the hydrogeologic assessment performed at the Joliet #29 Station; (3) the site hydrology; and (4) why the analytical data from the monitoring wells does not establish that the ash ponds are the source of the alleged exceedances of the groundwater standards.[6] In addition, for certain of the alleged exceedances, additional information not considered by the Agency shows that it is either more likely, or at least as likely, that the source of the alleged exceedance is something other than the ash ponds. In either case, the Agency cannot sustain its burden to prove the alleged violations.

---

[5] Section 31(e) of the Act provides in relevant part: "In hearings before the Board under this Title, the burden shall be on the Agency...to show either that the respondent has caused or threatened to cause...water pollution or that the respondent has violated or threatens to violate any provision of this Act or any rule or regulation of the Board or permit or term or condition thereof." 415 ILCS 5/31(e); *Citizens Utilities v. IPCB*, 9 Ill. App. 3d 158, 164, 289 N.E.2d 642, 646 (1972) (the Agency has the burden of proof in enforcement actions).

[6] In preparing this response, MWG closely reviewed the groundwater monitoring reports previously submitted to the Agency for the monitoring wells which are identified in the VN. In the course of this review, some data transcription errors were found in the previously submitted data tables included in the groundwater monitoring reports. Copies of the corrected data tables are enclosed. The tables are annotated to identify the nature of the corrections made to the previously submitted reports. However, none of the transcription errors affected the values that are the subject of and reported in the VN.

A. The Condition of the Ash Ponds

For several reasons, the construction and operation of the Joliet #29 ash ponds makes it unlikely that they are the cause of the alleged violations. The construction and operation of the ponds minimizes the potential for leakage from the ash ponds to groundwater.

First, the Joliet #29 ash ponds, known as Ponds 1, 2 and 3, are not ash disposal sites. The ash that enters the ponds is routinely removed. Ponds 1 and 2 are used both intermittently and interchangeably with each other. Their use is intermittent because under normal station operations, the ash wastewater generated by Joliet #29 is conveyed mechanically directly to the on-site, permitted Lincoln Stone Quarry Landfill without entering any of the ash ponds. The Lincoln Stone Quarry Landfill is the disposal site, not the ash ponds. However, because there are temporary periods of time when the ash wastewater conveyance system is not operational, due to maintenance reasons, either Pond 1 or Pond 2 is temporarily used until the ash wastewater conveyance system is brought back on line. During those times when ash wastewater is entering Pond 1 or Pond 2, the wastewater exits one of those ponds and then enters Pond 3. Pond 3 provides additional settling time for any residual ash. However, as is evident from visually observing the influent to Ponds 1 and 2 versus the influent to Pond 3, most of the ash settles out in Pond 1 or Pond 2 before flowing to Pond 3. Thus, the amount of ash that accumulates in Pond 3 is minimal. As necessary, the ash that accumulates in the ash ponds is periodically removed. However, because the use and purpose of Pond 3 as an ash settling basin is so minimal, and the rate of ash accumulation is so slow, it has not been necessary to remove ash from Pond 3 during the years that MWG has operated Joliet #29.

Second, unlike many other ash ponds in Illinois, the three ash ponds at Joliet #29 are not simply earthen ponds with no protection against the migration of constituents into the land or groundwater. Each of the Joliet #29 ash ponds is lined to prevent releases to groundwater. Ponds 1 and 2 were relined in 2008 with a high-density polyethylene ("HDPE") liner, overlain by a 12-inch sand cushion layer and a 6-inch limestone warning layer. HDPE liners have a permeability of approximately 10^{-13} cm/sec. Notably, this is a greater degree of permeability than is required in the Illinois Pollution Control Board (the "Board") regulations for constructing a new solid waste landfill where, unlike the ash ponds, waste materials are disposed of on a permanent basis. *See* 35 Ill. Admin. Code § 811.306(d). Pond 3 is lined with a liner of two 6-inch lifts of Poz-o-Pac.[7] The permeability of the Poz-o-Pac liner is 10^{-7} cm/sec, the same degree of permeability that is required in the Board regulations for constructing a new landfill. *See* 35 Ill. Admin. Code § 811.306(d). All of the liners at Joliet #29 achieve or exceed the level of permeability which the Illinois regulations expressly recognize is sufficient to prevent the release of constituents to the environment. Accordingly, the facts regarding the liners in place for these three ash ponds support the conclusion that the ash ponds are not the source of the exceedances of groundwater standards alleged in the VN.

[7] Poz-o-Pac is an aggregate liner similar to concrete.

The VN contains no facts concerning the condition of the Joliet #29 ash ponds that would indicate that they are allowing ash constituents to escape from the ponds. For example, the Agency does not contend that there are any breaches in the integrity of the liners that are allowing ash constituents to be released to the groundwater. The Agency similarly does not claim that the liners are inadequate to prevent the migration of constituents. In the absence of such evidence, it is certainly far more likely than not that the existing ash ponds at the Joliet #29 Station are not the source of the groundwater impacts alleged in the VN.

B. Hydrogeologic Assessment and Site Hydrology

The VN is based on the flawed premise that the hydrologic assessment which the Agency directed MWG to perform in the vicinity of the ash ponds would be sufficient to identify the ash ponds as the source of any elevated levels of constituents in the groundwater. This is simply not the case. The results of the hydrogeologic assessment at best give rise to more questions about the source of the alleged groundwater impacts, and do not prove that the existing ash ponds are the source of those impacts.

The results of the hydrogeologic assessment show a relatively uniform groundwater flow system. Groundwater flows from north to south, consistent with the expected flow direction due to the proximity to the south of Joliet #29 of the Des Plaines River. There does appear to be some convergence of flow in the vicinity of wells MW-2 and MW-5. The elevation of the Des Plaines River correlates to the groundwater elevations, indicating that the River is in direct hydraulic connection with the shallow aquifer. Based upon this groundwater flow direction, groundwater wells MW-8, MW-10, and MW-11 are upgradient wells, and groundwater wells MW-1 through MW-7 and MW-9 are down-gradient wells.

A comparison of the monitoring results from the upgradient (MW-8, MW-10, and MW-11) and down-gradient (MW-1 – MW-7, MW-9) wells does not support the Agency's contention that the ash ponds are the source of the alleged groundwater impacts. The distribution and observation of parameter concentrations is not consistent with coal ash ponds being the source of the impacts identified in the VN. For most of the parameters cited in the alleged violations, the distribution and observation of parameter concentrations is random and inconsistent. As more fully explained below, there are isolated monitoring well results showing exceedances of a given parameter that are not seen in any of the other eleven monitoring wells (*e.g.*, boron, sulfate, total dissolved solids, antimony). These random and isolated detections are not consistent with the ash ponds being the source of the exceedances. Moreover, isolated exceedances occurring within a period of six, consecutive quarterly monitoring events do not confirm the existence of actual groundwater impacts above the applicable standards. For other parameters, such as iron and manganese, the monitoring results are far more consistent with the presence of a reducing environment in the area of groundwater where these elevated levels were detected. Finally, the alleged exceedances for chloride are more logically explained by road salt seeping into the groundwater from U.S. Route 6 to the north, than due to the operation of the ash ponds. Each of these points is discussed in further detail below.

While boron is a primary indicator of potential coal ash impacts to groundwater, there are only two alleged exceedances of boron in monitoring well MW-11. This well is an upgradient monitoring well. These alleged boron exceedances occurred during two consecutive quarterly sampling events, but the boron levels detected in the next three, consecutive quarterly sampling events were all below the boron groundwater standard. Further, when all boron concentrations reported for the remaining 10 monitoring wells are evaluated, there is no indication of elevated boron concentrations that exceed, or even approach exceeding, the boron groundwater standard. There also is no increase in the levels of boron from monitoring wells that are upgradient of the ash ponds to the downgradient monitoring wells. The boron monitoring results clearly fail to support the conclusion that the operation of the ash ponds is causing the alleged groundwater impacts. Absent this evidence, and given that these ponds are lined with HDPE, the evidence supports the conclusion that the ash ponds have not caused the alleged groundwater impacts.

The monitoring data's distribution of sulfate detections from upgradient to downgradient also does not support the allegation that the ash ponds are causing the alleged groundwater impacts. The sulfate levels detected in all of the monitoring wells, with the limited exception of MW-9, are not only low level concentrations but also are similar levels in both the upgradient and downgradient monitoring wells. Monitoring well MW-9 is the only monitoring well where any sulfate exceedances were reported and there are no elevated boron concentrations reported for that well. The isolated, elevated sulfate concentrations in MW-9 are not an indication that the source is the ash ponds. Moreover, there are various, other potential sources of elevated sulfate concentrations in groundwater, both natural and anthropogenic, that are wholly unrelated to coal ash that could be causing the alleged groundwater impacts. Similarly, the alleged exceedances of total dissolved solids ("TDS") also were only observed at MW-9 and not in any of the other monitoring well locations. Again, these geographically isolated exceedances, without the accompanying presence of typical coal ash impact indicators, are technically and legally insufficient to support the conclusion that the ash ponds are the source.

Monitoring well MW-9 also had exceedances of iron and manganese. Both of these constituents are naturally-occurring metals in the Joliet area due to geochemical conditions. The alleged exceedances for iron and manganese are more likely the result of chemical conditions in the groundwater at Joliet #29. The oxidation-reduction potential around MW-9 is consistently low, showing a strongly reducing environment.[8] The field parameter measurements at well MW-9 consistently indicate low dissolved oxygen (DO) and negative oxidation-reduction potential (ORP) which is indicative of a reducing environment. Typically in reducing environments, metals such as iron and manganese can be elevated depending on the associated mineralogy of the local sediments.[9] The oxidation-reduction potential (ORP) data collected in the field during the quarterly sampling is also consistent with the presence of a strongly reducing

[8] See attached Table 1: Field Parameter Data.
[9] Thomas, Mary Ann. The Association of Arsenic with Redox Conditions, Depth, and Ground-Water Age in the Glacial Aquifer System of the Northern United States. Scientific Investigations Report 2007-5036, U.S. Geological Survey, Reston, VA. 2007; "Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater" EPA/600/R-98/128, September 1998. Table B.3.3.

environment. ORP levels at MW-9 are consistently the lowest levels found at the site. Therefore, the data shows that it is more likely than not that the elevated levels of these metals detected in the monitoring data are naturally occurring and unrelated to the operation of the ash ponds.

Manganese was also observed once in two other wells, MW-4 and MW-7, in the first quarterly sampling event. These manganese levels have not been seen in any of the subsequent five, consecutive sampling events. In fact, the subsequent MW-4 and MW-7 quarterly sampling results consistently indicate manganese concentrations approximately one order of magnitude or more lower than those detected in the first quarterly sampling event. The complete data set of manganese monitoring results from these wells strongly indicates that the two single manganese detections are not representative of actual groundwater conditions.

Turning to the antimony monitoring results, the alleged antimony exceedance identified in the VN occurred in monitoring well MW-2. There were also two antimony exceedances at well location MW-3 during the last two quarterly sampling events which were not included in the VN. As with other trace metals, there can be various potential sources of antimony, both natural and anthropogenic. In the absence of elevated concentrations of typical ash leachate parameters such as boron, exceedances of antimony cannot be ascribed to an ash source, much less to a release from the ash ponds.

Finally, the Agency's allegation that the ash ponds are the source of the elevated chloride levels detected in the groundwater is also unsubstantiated. A careful review of the chloride data shows that the source of the elevated chloride levels is unrelated to the ash ponds. The chloride exceedances are generally dispersed throughout the site at almost equivalent concentrations. U.S. Route 6 is adjacent to the north, upgradient of the ash ponds. Moreover, most of the exceedances of the chloride Class I groundwater standards occurred in the winter and spring sampling events.[10] It is well documented that both shallow groundwater and surface water commonly exhibit higher concentrations of chloride in the spring due to rain and snow melt transporting dissolved road salt.[11] The distribution in the groundwater monitoring wells clearly indicates that the ash ponds are not contributing to the chloride exceedances.

In sum, the construction of the ponds with low permeability liners, the lack of elevated boron concentrations across the site and the inconsistent pattern of the constituent concentrations clearly do not support the Agency's contention that the ash ponds are the source of these constituents. The data are more consistent with the opposite conclusion, namely that the ash ponds are not the source of the alleged exceedances.

[10] Seventeen of the twenty-three chloride exceedances occurred during the December and March sampling events.
[11] Mullaney, John R., *et al*, Chloride in Groundwater and Surface Water in Areas Underlain by the Glacial Aquifer System, Northern United States, Scientific Investigations Report 2009-5089, U.S. Geological Survey, Reston, VA. 2009. Table 5.

C. The Joliet #29 Ash Ponds Are Not Causing Groundwater Exceedances

Because the Illinois EPA failed to specify which of the provisions of Section 12 of the Act MWG allegedly violated, MWG has had to speculate to identify the potential Section 12 violations this response needs to address. As stated above, MWG objects to the vagueness of, and legally deficient notice provided by, the VN and reserves its right to responds further when and if the Agency properly identifies the provisions of Section 12 on which it is relying.

For purposes of this response, based upon the regulations cited by the Agency in the VN, MWG has assumed that the Agency's alleged violations of Section 12 are limited to Sections 12(a), which prohibits causing or allowing water pollution, and to Section 12(d), which prohibits causing or allowing the creation of a water pollution hazard. 415 ILCS 5/12(a), (d). Based on these assumptions regarding the substance of the Agency's alleged violations, MWG submits that it cannot show that the ash ponds at Joliet #29 caused or allowed water pollution or created a water pollution hazard.

Overall, the analytical results show that there is no relationship between the ash ponds and the groundwater exceedances. The alleged exceedances of the Class 1 groundwater standards are not consistent with the ash ponds being the source. Boron, a primary indicator for coal ash constituents, is elevated above the groundwater standards at only one out of eleven monitoring wells. The most telling and persuasive data is the complete absence of any boron exceedances from any of the monitoring wells located downgradient of the ash ponds. Certain of the alleged exceedances for other constituents only occur at monitoring wells that are upgradient wells to the ash ponds. Still other alleged exceedances, such as for chloride, are more likely explained by other causes, such as the use of road salt. The monitoring data plainly does not support the Agency's contention that the operation of the "ash impoundments" has resulted in the alleged violations.

To show a violation of Section 12(a) and 12(d), there must be a showing not only of the presence of a potential source of contamination, but also that it is in sufficient quantity and concentration to render the waters harmful. *Bliss v. Illinois EPA,* 138 Ill. App. 3d 699, 704 (1985) ("mere presence of a potential source of water pollutants on the land does not necessarily constitute a water pollution hazard"). In other words, there must be a causal link between the potential source and the water or groundwater. The groundwater monitoring data on which the Agency relies does not establish this essential causal link between the ash ponds and the groundwater. Therefore, the Agency has failed to meet its burden to prove that the ash ponds are the cause of the alleged exceedances of the groundwater standards as required to prove a violation of Sections 12(a) or 12(d) of the Act. 415 ILCS 5/12(a), (d).

The Agency also alleges violations of the groundwater quality regulations based on exceedances of the groundwater quality standards in 35 Ill. Admin. Code § 620.401. There is no violation here of Section 620.401. Section 620.401 solely provides the legal criteria that groundwater must meet the standards appropriate to the groundwater's class. It is a foundational regulation, allowing for different classes of groundwater to meet different groundwater

standards. It is not a prohibition regulation. There is no conduct prohibited by this section of the regulations in which MWG is alleged to have engaged. MWG cannot and did not violate Section 620.401.

The remaining alleged groundwater regulation violations, Sections 620.115, 620.301, 620.405, and 620.410 of the Board Regulations, are all based on the Agency's contention that MWG's operation of the ash ponds has caused the exceedances of the groundwater standards detected in the monitoring data. To sustain these allegations, the Agency must show that MWG caused a discharge of the subject constituents from ash ponds which in turn caused the exceedances of the groundwater standards.[12] The relevant facts and circumstances do not support either conclusion.

The use and condition of the ash ponds does not support a finding that they are releasing constituents to the groundwater. They are not disposal sites. They are only operated intermittently, when the wastewater line that transports ash to the permitted Lincoln Quarry Landfill is unavailable. The ash that accumulates in Ponds 1 and 2 is periodically removed, and so little ash accumulates in Pond 3 that it has not been necessary to remove it since MWG started operating the Joliet #29 Station. The linings in all of the ponds are constructed of materials that provide sufficient permeability, meeting or exceeding accepted regulatory guidance for solid waste landfills, to prevent the release of constituents. Finally, pursuant to the terms of the Joliet #29 Station's NPDES Permit, these ash ponds are part of the flow-through wastewater treatment process at the station. MWG's operation of the ash ponds has been carried out in accordance with the terms and conditions of the NPDES Permit. Under Section 12(f) of the Act, compliance with the terms and conditions of any permit issued under Section 39(b) of the Act is deemed compliance with this subsection.

Similarly, the groundwater data on which the Agency relies does not provide a sufficient scientific or technical evidentiary basis on which to conclude that the ash ponds are causing the alleged groundwater exceedances. The essential "causal link" between the ash ponds and the elevated constituents in the groundwater is missing. The groundwater downgradient of the ash ponds does not show the anticipated constituents associated with a release, or any other indication that the ash ponds are causing the exceedance. For certain parameters, such as chloride, the data clearly point to other, unrelated causes.

Because the ash ponds have not been shown to have caused a release of any contaminants that are causing the groundwater exceedances, the Agency's VN does not support its claims that MWG has violated Sections 620.405 or 620.301 of the Board regulations. Accordingly, MWG also has not violated Section 620.115 of the Board regulations.

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[12] *See People of the State of Illinois v. ESG Watts, Inc.*, PCB 96-107 slip op. at p. 41 (February 5, 1998) (By finding the respondent caused a discharge of constituents into the groundwater causing a violation of the Class II Groundwater standards, the Board found the respondent also violated 35 IAC §§ 620.301 and 620.115)

III. Compliance Commitment Agreement

This VN should not have been issued. Given the absence of proof that the ash ponds are the cause of the alleged groundwater exceedances, the Agency's request for a Compliance Commitment Agreement (CCA) to address the ash ponds is an attempt to compel MWG to conduct unnecessary corrective action to resolve the alleged violations.

Moreover, with the pending federal regulatory process to enact regulations for the design and operation of ash ponds, it is prudent to await the outcome of the proposed federal regulations to determine whether any changes to the ash ponds construction or operation are required by those regulations. The Agency itself has previously advanced this position. In 2010, the Agency's Steven Nightingale testified before the Illinois Pollution Control Board that the Board should consider initiating a temporary moratorium on the closure of coal ash impoundments because of the U.S. EPA's intention to regulate them. (*See In the Matter of Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill.Adm.Code Part 840.101 Through 840.152*, Docket R09-21 (October 7, 2010) at p. 64) On behalf of the Agency, Mr. Nightingale told the Board that if industry had to take action in the interim, it "could end up expending substantial money and resources only to find they are subject to additional and/or different closure requirements for those units." (*Id.*) The Agency's pursuit of this enforcement action, particularly given the deficiencies in its alleged evidence, also threatens to force MWG to take actions that may conflict with or otherwise differ from the requirements in the upcoming federal regulations.

As the hydrogeologic assessment of the Joliet #29 ash ponds showed, there is no threat to human health presented by the alleged exceedances of the groundwater standards. The hydrogeologic assessment investigated the presence of potable water sources within a 2,500-foot radius of the site. Seventeen groundwater wells are installed within 2,500 feet of the site. Two of the wells, which are owned by MWG, are located downgradient of the ash ponds. These wells are screened more than 1,500 feet deep, drawing water from a deep aquifer below the Maquoketa shale confining unit. The Maquoketa shale is an aquitard that separates the shallow groundwater in the unconsolidated units and the Silurian dolomite from the underlying aquifers.[13] Both of the MWG wells are regularly sampled for potable water constituents, and the sampling results have consistently been in compliance with potable water regulations.[14] Shallow groundwater at the site discharges to the Des Plaines River. The nearest downgradient water supply intake in the Des Plaines River, a headwater of the Illinois River, is located at Peoria, approximately 127 miles downstream. The Des Plaines River near the Joliet #29 Station is not used as a drinking water source. In the absence of any potable groundwater receptors or use, groundwater at the Joliet #29 site does not pose any risk to human health. Accordingly, awaiting the outcome of the federal regulatory proposal is clearly appropriate under these circumstances.

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[13] Visocky, Adrian P., *et al.* Geology, Hydrology, and Water Quality of the Cambrian and Ordovician System in Northern Illinois. Illinois State Geological Survey, Illinois State Water Survey. 1985. App. C.

[14] See previously submitted Hydrogeologic Assessment of Midwest Generation Electric Generation Stations: Will County Station, Waukegan Station, Joliet 29 Station, Crawford Station, Powerton Station.

Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

A. The ash ponds will not be used as permanent disposal sites and ash will continue to be removed from the ponds on a periodic basis.

B. The ash ponds will be maintained and operated in a manner which protects the integrity of the existing liners. During the removal of ash from the ponds, appropriate procedures will be followed to protect the integrity of the existing liners, including operating the ash removal equipment in a manner which minimizes the risk of any damage to the liner.

C. During the ash removal process, visual inspections of the ponds will be conducted to identify any signs of a breach in the integrity of the pond liners. In the event that a breach of the pond liners is detected, MWG will notify the Agency and will implement the correction action plan.

D. MWG will continue to monitor the groundwater through the existing eleven groundwater monitoring wells and report its findings to Illinois EPA. MWGen reserves the right to request the Agency's approval of a cessation of all or some of the monitoring requirements based on future monitoring results.

E. MWG will continue to monitor the development of the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640. When the final rule is issued, MWG will promptly notify Illinois EPA how it will comply with the new Federal Rules.

This letter constitutes MWG's response to and proposed CCA for the Violation Notice W-2012-00059. MWG also reserves the right to raise additional defenses and mitigation arguments as may be necessary, in defense of the allegations listed in the Violation Notice in the event of any future enforcement. We look forward to discussing the above information further at the soon to be scheduled meeting with the Agency's representatives. Please contact me to schedule a mutually convenient date for the meeting.

Very truly yours,

Susan M. Franzetti
Counsel for Midwest Generation, LLC

Enclosures

cc: Maria L. Race, Midwest Generation, LCC

Table 3
Groundwater Analytical Results - AMENDED JULY 2012
Joliet Station #29, Illinois
Midwest Generation
21253.034

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-1 (mg/L) 12/6/10	MW-1 (mg/L) 3/23/11	MW-1 (mg/L) 6/14/11	MW-1 (mg/L) 9/14/11	MW-1 (mg/L) 12/7/11	MW-1 (mg/L) 3/15/12	MW-2 (mg/L) 12/6/10	MW-2 (mg/L) 3/23/11	MW-2 (mg/L) 6/14/11	MW-2 (mg/L) 9/14/11	MW-2 (mg/L) 12/7/11	MW-2 (mg/L) 3/15/12
Antimony	Metals 6020	0.006	0.0043	NS	ND	NS	NS	NS	0.012	NS	0.0042	0.0032	ND	ND
Arsenic	Metals 6020	0.05	0.0011	NS	0.0014	NS	NS	NS	ND	NS	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.13	NS	0.14	NS	NS	NS	0.082	NS	0.081	0.1	0.12	0.12
Beryllium	Metals 6020	0.004	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	NS	0.001	NS	NS	NS	ND	NS	ND	ND	ND	ND
Copper	Metals 6020	0.65	0.0032	NS	0.0025	NS	NS	NS	0.0032	NS	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Mercury	Mercury 7470A	0.002	ND	NS	ND	NS	NS	NS	ND	NS	ND	0.0025	ND	ND
Nickel	Metals 6020	0.1	0.0034	NS	0.0029	NS	NS	NS	0.0033	NS	ND	0.0027	0.0023	ND
Selenium	Metals 6020	0.05	ND	NS	ND	NS	NS	NS	ND	NS	ND	0.0038	0.0055	0.0048
Silver	Metals 6020	0.05	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Boron	Metals 6020	2	0.31	NS	0.29	NS	NS	NS	0.31	NS	0.35	0.44	0.74	0.22
Sulfate	Dissolved 9038	400	180	NS	81	NS	NS	NS	190	NS	67	110	150	110
Chloride	Dissolved 9251	200	140	NS	170	NS	NS	NS	140	NS	230	140	140	280
Nitrogen/Nitrate	Nitrogen By calc	10	1.9	NS	2.9	NS	NS	NS	3.1	NS	1.8	2.2	2.9	6.4
Total Dissolved Solids	Dissolved 2540C	1,200	590	NS	670	NS	NS	NS	600	NS	720	690	750	800
Flouride	Dissolved 4500 FC	4	0.45	NS	0.43	NS	NS	NS	0.62	NS	0.58	0.54	0.51	0.53
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	1.9	NS	2.9	NS	NS	NS	3.1	NS	1.8	2.2	2.9	6.4

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
NS- not sampled
mg/L- milligrams per liter

AMENDMENTS
- Value amended from original Table 3 (May 11, 2012).
- Value has not changed; font has been changed from bold to normal.
- Value has not changed; font has been changed from normal to bold.

Table 3
Groundwater Analytical Results - AMENDED JULY 2012
Joliet Station #29, Illinois
Midwest Generation
21253.034

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)
Chemical Name		Class I*	12/7/10	3/23/11	6/14/11	9/14/11	12/7/11	3/15/12	12/7/10	3/23/11	6/14/11	9/14/11	12/7/11	3/15/12
Antimony	Metals 6020	0.006	0.004	ND	ND	0.0065	0.016	0.013	ND	ND	ND	ND	0.0067	0.0057
Arsenic	Metals 6020	0.05	ND	0.0011	ND	0.0012	0.0016	0.0014	ND	ND	ND	ND	0.0011	ND
Barium	Metals 6020	2.0	0.089	0.085	0.092	0.081	0.084	0.081	0.065	0.067	0.059	0.06	0.069	0.07
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	0.00074	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0013	0.0013	ND	ND	ND	ND	ND	ND	ND	0.0018	0.0028	0.0026
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.1	0.048	ND	0.0076	0.008	0.0095	0.33	0.048	0.018	0.066	0.029	0.038
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.011	0.0065	ND	0.0041	0.006	0.0046	0.0067	0.0037	ND	0.0029	0.0038	0.0037
Selenium	Metals 6020	0.05	ND	0.005	ND	ND	ND	ND	0.0025	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	0.00091	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.24	0.36	0.46	0.24	0.23	0.26	0.46	0.37	0.38	0.25	0.34	0.29
Sulfate	Dissolved 9038	400	120	160	120	120	160	190	300	140	84	74	170	210
Chloride	Dissolved 9251	200	260	240	300	160	260	250	270	270	250	150	200	210
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1	2.1	1.1	0.79	ND	0.81	1.6	2.7	1.6	1.4	0.62
Total Dissolved Solids	Dissolved 2540C	1,200	930	1,100	1,000	930	1,100	1,000	1,100	1,000	890	770	970	930
Flouride	Dissolved 4500 FC	4	0.43	0.4	0.41	0.31	0.4	0.39	0.49	0.38	0.44	0.37	0.44	0.41
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	1	2.1	1.1	0.79	ND	0.81	1.6	2.7	1.6	1.4	0.62

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
NS- not sampled
mg/L- milligrams per liter

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Table 3
Groundwater Analytical Results - AMENDED JULY 2012
Joliet Station #29, Illinois
Midwest Generation
21253.034

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)
Chemical Name		Class I*	12/7/10	3/23/11	6/14/11	9/14/11	12/7/11	3/15/12	12/7/10	3/23/11	6/14/11	9/14/11	12/7/11	3/15/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	0.004	0.0035	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	ND	0.0011	0.0011	ND	ND	0.0015	ND	ND	0.0018	0.0016
Barium	Metals 6020	2.0	0.061	0.092	0.053	0.053	0.062	0.069	0.075	0.12	0.082	0.094	0.11	0.13
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	0.0016	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	0.0019	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.0065	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	0.14	0.033	ND	0.036	0.024	0.015
Nickel	Metals 6020	0.1	ND	ND	ND	0.0021	ND	ND	0.0056	0.0025	ND	ND	ND	ND
Selenium	Metals 6020	0.05	ND	0.0072	ND	ND	0.005	ND	0.0029	0.0034	ND	ND	0.0054	0.0051
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	0.00077	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.42	0.52	0.47	0.57	0.49	0.54	0.32	0.44	0.32	0.27	0.3	0.25
Sulfate	Dissolved 9038	400	110	160	100	140	140	190	140	140	87	100	130	110
Chloride	Dissolved 9251	200	150	240	220	120	190	210	130	270	140	140	130	240
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1.2	1.3	1.1	1.5	0.33	ND	1.3	0.91	0.31	0.36	ND
Total Dissolved Solids	Dissolved 2540C	1,200	750	990	850	800	900	930	650	1,000	650	620	710	800
Flouride	Dissolved 4500 FC	4	0.4	0.34	0.39	0.28	0.34	0.32	0.4	0.36	0.44	0.29	0.44	0.36
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	1.2	1.3	1.1	1.5	0.33	ND	1.3	0.91	0.31	0.36	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
NS- not sampled
mg/L- milligrams per liter

AMENDMENTS
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Table 3
Groundwater Analytical Results - AMENDED JULY 2012
Joliet Station #29, Illinois
Midwest Generation
21253.034

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-7 (mg/L) 12/7/10	MW-7 (mg/L) 3/23/11	MW-7 (mg/L) 6/14/11	MW-7 (mg/L) 9/14/11	MW-7 (mg/L) 12/7/11	MW-7 (mg/L) 3/15/12	MW-8 (mg/L) 12/6/10	MW-8 (mg/L) 3/23/11	MW-8 (mg/L) 6/14/11	MW-8 (mg/L) 9/14/11	MW-8 (mg/L) 12/7/11	MW-8 (mg/L) 3/15/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.001	ND	ND	ND	0.0014	0.001	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.13	0.11	0.072	0.092	0.11	0.13	0.054	0.055	0.026	0.048	0.057	0.049
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	0.011	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	0.0025	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.29	0.014	ND	0.08	0.0073	0.015	0.0051	0.0026	0.017	ND	ND	0.0042
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0045	ND	ND	0.014	ND	ND	0.0025	ND	ND	0.012	ND	ND
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.51	0.39	0.25	0.29	0.35	0.3	0.29	0.16	0.12	0.2	0.16	0.13
Sulfate	Dissolved 9038	400	250	120	85	110	160	140	210	87	52	120	170	130
Chloride	Dissolved 9251	200	430	320	140	99	140	300	130	350	150	79	120	410
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1.2	0.76	0.27	0.6	ND	0.33	2.2	1.9	0.95	0.86	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,200	970	580	650	780	870	670	990	580	690	800	1000
Flouride	Dissolved 4500 FC	4	0.36	0.31	0.35	0.27	0.35	0.31	0.51	0.36	0.45	0.25	0.31	0.38
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	1.2	0.76	0.27	0.6	ND	0.33	2.2	1.9	0.95	0.86	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
NS- not sampled
mg/L- milligrams per liter

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Table 3
Groundwater Analytical Results - AMENDED JULY 2012
Joliet Station #29, Illinois
Midwest Generation
21253.034

PATRICK ENGINEERING Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-9 (mg/L) 12/6/10	MW-9 (mg/L) 3/23/11	MW-9 (mg/L) 6/14/11	MW-9 (mg/L) 9/14/11	MW-9 (mg/L) 12/7/11	MW-9 (mg/L) 3/15/12	MW-10 (mg/L) 12/6/10	MW-10 (mg/L) 3/23/11	MW-10 (mg/L) 6/14/11	MW-10 (mg/L) 9/14/11	MW-10 (mg/L) 12/7/11	MW-10 (mg/L) 3/15/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0012	ND
Barium	Metals 6020	2.0	0.031	0.029	0.032	0.029	0.03	0.021	0.05	0.051	0.039	0.039	0.036	0.04
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	0.00059	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0047	0.0034	0.0062	0.011	0.0075	0.0021	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	0.0026	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	0.18	7.3	3.8	1.5	5.5	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	1.1	1.6	0.95	0.82	0.66	1.3	0.12	0.0076	ND	ND	ND	ND
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0094	0.0072	0.013	0.014	0.011	0.0054	0.0052	0.0029	ND	0.0087	0.0024	ND
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.36	0.32	0.29	0.35	0.31	0.38	0.5	0.54	0.54	0.41	0.52	0.52
Sulfate	Dissolved 9038	400	1,600	1,100	580	750	130	1,600	130	130	89	100	190	250
Chloride	Dissolved 9251	200	140	230	290	190	190	170	200	300	7.1	170	180	180
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.97	0.36	0.22	ND	0.39	2.3	2.7	2.6	1.4	ND
Total Dissolved Solids	Dissolved 2540C	1,200	2,600	2,400	1,500	1,700	2,400	2,600	860	1,100	980	730	890	890
Flouride	Dissolved 4500 FC	4	0.61	0.52	0.47	0.39	0.5	0.45	0.43	0.39	0.42	0.41	0.45	0.41
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	0.97	0.36	0.22	ND	0.39	2.3	2.7	2.6	1.4	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
NS- not sampled
mg/L- milligrams per liter

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Table 3
Groundwater Analytical Results - AMENDED JULY 2012
Joliet Station #29, Illinois
Midwest Generation
21253.034

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-11 (mg/L) 12/6/10	MW-11 (mg/L) 3/23/11	MW-11 (mg/L) 6/14/11	MW-11 (mg/L) 9/14/11	MW-11 (mg/L) 12/7/11	MW-11 (mg/L) 3/15/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0013	0.0016	ND	0.0016	0.0019	0.0017
Barium	Metals 6020	2.0	0.064	0.076	0.051	0.054	0.057	0.067
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.052	0.0047	ND	0.0053	0.0047	ND
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0022	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	ND	0.0054	ND	0.0026	0.0033	0.0043
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.47	2.6	2.2	1.1	1.2	1.4
Sulfate	Dissolved 9038	400	140	150	110	110	160	140
Chloride	Dissolved 9251	200	160	270	280	86	140	240
Nitrogen/Nitrate	Nitrogen By calc	10	0.39	1.1	0.92	0.31	0.6	0.3
Total Dissolved Solids	Dissolved 2540C	1,200	770	1,000	710	590	790	850
Flouride	Dissolved 4500 FC	4	0.34	0.31	0.36	0.32	0.31	0.3
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	0.39	1.1	0.92	0.31	0.6	0.3

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
NS- not sampled
mg/L- milligrams per liter

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Table 1
Field Parameter Data
Joliet #29 Station, Joliet, Illinois
Midwest Generation
21253.034

Field Parameter Data - Joliet #29 Station								
Monitoring Well	Date	Time	Temperature (°C.)	Conductivity (ms/cm)	Turbidity (NTU.)	pH	DO (mg/L.)	ORP (mV.)
MW-01	3/23/2011	--	--	--	--	--	--	--
MW-01	6/14/2011	12:08	14.71	1.36	13.26	7.80	6.61	190.0
	6/14/2011	12:10	14.26	1.33	13.33	7.42	3.95	186.1
	6/14/2011	12:12	14.02	1.31	13.12	7.35	3.89	201.1
	6/14/2011	12:14	13.96	1.29	13.29	7.32	3.88	208.8
	6/14/2011	12:16	13.83	1.29	13.24	7.28	3.89	210.7
	6/14/2011	12:18	13.92	1.28	13.11	7.25	4.19	210.6
MW-01	9/14/2011	--	--	--	--	--	--	--
MW-01	12/7/2011	--	--	--	--	--	--	--
MW-01	3/15/2012	--	--	--	--	--	--	--
MW-02	3/23/2011	--	--	--	--	--	--	--
MW-02	6/14/2011	11:32	16.11	1.35	8.31	7.57	6.75	157.7
	6/14/2011	11:34	15.75	1.31	8.40	7.35	6.44	187.9
	6/14/2011	11:36	15.55	1.30	8.26	7.25	6.45	208.1
	6/14/2011	11:38	15.68	1.30	8.17	7.25	6.42	218.0
	6/14/2011	11:40	15.63	1.30	8.12	7.29	6.43	222.6
	6/14/2011	11:42	15.57	1.30	8.99	7.30	6.45	2227.3
MW-02	9/14/2011	11:20	18.87	0.97	9.24	7.41	5.25	-38.0
	9/14/2011	11:22	18.83	0.98	5.90	7.39	5.20	-36.0
	9/14/2011	11:24	18.83	0.98	3.38	7.39	5.25	-37.0
	9/14/2011	11:26	18.81	0.98	2.37	7.37	5.20	-36.0
	9/14/2011	11:28	18.78	0.98	3.51	7.38	5.19	-37.0
	9/14/2011	11:30	18.72	0.98	2.53	7.37	5.21	-36.0
MW-02	12/7/2011	11:16	12.81	0.91	111.70	7.42	6.11	55.0
	12/7/2011	11:18	13.06	0.91	144.10	7.41	5.76	63.0
	12/7/2011	11:20	13.41	0.91	240.50	7.38	5.74	69.0
	12/7/2011	11:22	13.30	0.91	32.78	7.39	5.85	74.0
	12/7/2011	11:24	13.11	0.90	30.67	7.37	5.86	78.0
	12/7/2011	11:26	13.04	0.90	27.41	7.37	5.91	81.0
MW-02	3/15/2012	--	--	--	--	--	--	--
MW-03	3/23/2011	12:30	12.73	1.76	1283.80	7.26	4.73	179.1
MW-03	6/14/2011	9:50	13.04	1.74	1534.29	7.41	7.78	223.5
MW-03	9/14/2011	9:54	11.90	1.15	1884.00	7.37	6.03	-51.0
MW-03	12/7/2011	9:48	10.94	1.19	1276.00	7.48	6.07	145.0
MW-03	3/15/2012	10:48	13.73	1.21	906.90	7.34	6.07	193.0
MW-04	3/23/2011	11:55	12.13	1.76	1277.40	7.15	6.80	196.1
MW-04	6/14/2011	9:20	12.59	1.50	1104.60	7.48	8.20	217.5
MW-04	9/14/2011	9:22	11.78	0.94	2892.00	7.42	7.17	-43.0
MW-04	12/7/2011	9:09	9.67	1.04	1131.00	7.56	6.95	135.0
MW-04	3/15/2012	10:14	12.52	1.06	2549.00	7.40	6.95	177.0
MW-05	3/23/2011	13:05	13.41	1.65	514.90	7.19	6.96	197.8
MW-05	6/14/2011	8:03	13.37	1.38	707.90	7.44	7.16	210.0
MW-05	9/14/2011	8:18	12.15	0.92	125.20	7.25	6.43	-26.0
MW-05	12/7/2011	8:08	11.23	1.02	862.10	7.44	6.07	125.0
MW-05	3/15/2012	7:45	13.52	1.19	1081.00	7.30	6.24	228.0
MW-06	3/23/2011	13:38	12.90	1.65	1284.40	7.51	7.44	183.7
MW-06	6/14/2011	13:25	14.26	1.05	431.20	7.71	6.82	203.8
MW-06	9/14/2011	12:33	12.73	0.77	2785.00	7.53	6.74	-65.0
MW-06	12/7/2011	12:40	13.70	0.87	1700.00	7.71	7.05	113.0
MW-06	3/15/2012	11:20	14.45	1.06	2353.00	7.57	7.47	210.0

Table 1
Field Parameter Data
Joliet #29 Station, Joliet, Illinois
Midwest Generation
21253.034

Field Parameter Data - Joliet #29 Station								
Monitoring Well	Date	Time	Temperature (°C)	Conductivity (ms/cm²)	Turbidity (NTU)	pH	DO (mg/L)	ORP (mV)
MW-07	3/23/2011	14:10	13.58	1.78	1292.20	7.50	7.02	183.2
MW-07	6/14/2011	13:50	12.92	1.02	1892.35	7.61	8.10	202.8
MW-07	9/14/2011	13:04	12.50	0.78	15.33	7.65	7.70	-82.0
MW-07	12/7/2011	13:08	13.07	0.89	1813.00	7.63	6.74	113.0
MW-07	3/15/2012	11:43	15.40	1.18	1164.00	7.53	7.23	175.0
MW-08	3/23/2011	9:55	13.06	1.80	1287.50	7.29	7.82	192.6
MW-08	6/14/2011	12:50	13.15	0.99	437.99	7.70	8.00	196.0
MW-08	9/14/2011	12:03	12.20	0.80	1485.00	7.32	6.06	-47.0
MW-08	12/7/2011	12:10	12.71	0.88	861.90	7.38	6.57	119.0
MW-08	3/15/2012	9:36	14.64	1.40	1275.00	7.49	7.68	130.0
MW-09	3/23/2011	11:10	12.78	3.30	214.00	7.19	7.49	102.2
MW-09	6/14/2011	10:55	16.53	2.57	14.22	7.15	1.12	-40.6
	6/14/2011	10:57	16.04	2.39	14.28	7.07	0.51	-42.3
	6/14/2011	10:59	16.00	2.32	14.14	7.03	0.49	-42.3
	6/14/2011	11:01	15.76	2.30	14.09	7.01	0.49	-29.3
	6/14/2011	11:03	15.78	2.28	13.73	7.01	0.47	-35.7
	6/14/2011	11:05	15.68	2.25	13.28	7.01	0.49	-43.5
MW-09	9/14/2011	10:42	16.36	1.99	46.97	6.87	0.34	-103.0
	9/14/2011	10:44	16.15	1.96	41.89	6.87	0.34	-108.0
	9/14/2011	10:46	16.06	1.94	46.33	6.87	0.34	-111.0
	9/14/2011	10:48	15.99	1.92	34.58	6.89	0.34	-111.0
	9/14/2011	10:50	15.96	1.90	40.02	6.89	0.34	-113.0
	9/14/2011	10:52	15.90	1.88	40.23	6.90	0.33	-114.0
MW-09	12/7/2011	10:30	11.66	1.62	200.50	7.29	1.14	-52.0
	12/7/2011	10:32	11.77	1.61	47.44	7.22	1.61	-43.0
	12/7/2011	10:34	12.35	1.60	96.37	7.21	0.38	-40.0
	12/7/2011	10:36	10.54	1.62	44.06	7.17	1.09	-36.0
	12/7/2011	10:38	11.49	1.58	36.28	7.16	0.72	-38.0
	12/7/2011	10:40	11.94	1.54	76.67	7.19	0.43	-40.0
MW-09	3/15/2012	8:45	14.29	2.31	1116.00	6.86	2.22	2.0
MW-10	3/23/2011	9:20	12.40	1.88	23.50	7.20	7.18	191.6
MW-10	6/14/2011	8:40	12.05	1.58	2312.96	7.40	8.70	210.0
MW-10	9/14/2011	8:48	11.23	0.98	2892.00	7.34	7.42	-37.0
MW-10	12/7/2011	8:40	11.26	0.99	1421.00	7.51	7.12	143.0
MW-10	3/15/2012	8:14	13.08	1.04	1362.00	7.35	7.08	210.0
MW-11	3/23/2011	8:46	13.49	1.69	1293.70	7.23	7.23	194.3
MW-11	6/14/2011	9:31	11.69	1.14	600.28	7.60	8.65	200.8
MW-11	9/14/2011	7:43	12.18	0.79	2426.00	7.38	6.28	-31.0
MW-11	12/7/2011	7:34	13.15	0.92	1751.00	7.46	6.74	136.0
MW-11	3/15/2012	7:08	14.22	1.12	1459.00	7.38	7.37	208.0

Notes:

°C	degrees Celcius
ms/cm²	Microsiemens/Centimeters
NTU	Nephelometric Turbidity Units
mg/L	milligrams/Liter
mV	milliVolts

ATTACHMENT D

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July 27, 2012

VIA OVERNIGHT MAIL

Illinois EPA
Division of Public Water Supplies
Attn: Andrea Rhodes, CAS #19
P.O. Box 19276
Springfield, IL 62794-9276

Re: Violation Notice: Midwest Generation, LLC, Powerton Generating Station
Identification No.: 6282
Violation Notice No.: W-2012-00057

Dear Ms. Rhodes:

In response to the above-referenced June 11, 2012 Violation Notice ("VN"), received on June 14, 2012, this written response is timely submitted on behalf of the Midwest Generation, LLC ("MWG"), Powerton Generating Station ("Powerton"). MWG also requests a meeting with the Illinois Environmental Protection Agency ("Illinois EPA" or the "Agency") to discuss the VN and information provided in this response.

MWG regrets that the Illinois EPA decided to issue the VN because MWG has tried to work cooperatively with the Agency concerning the hydrogeologic assessment of the coal ash ponds at Powerton even though it had significant concerns and objections to how the VN has proceeded in this matter.[1] Nevertheless, MWG complied with the Agency's request that it conduct a hydrogeologic assessment of the area around the coal ash ponds and followed its requirements and comments for how the hydrogeologic assessment should be conducted, even though it was under no legal obligation to do so.[2] At no time however did MWG agree that the scope and nature of the hydrological assessment the Agency required it to perform would provide any basis for concluding that the ash ponds were impacting groundwater. The alleged

[1] *See, e.g.*, MWG (B. Constantelos) letter to Illinois EPA (A. Keller) dated July 15, 2009. MWG is also working cooperatively with the USEPA with regards to the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640, and is trying to coordinate the responses and requirements of both Agencies. USEPA first issued the proposed rules on June 21, 2010, and requested additional comments and information on Oct. 12, 2011. The additional information comment period closed on November 14, 2011, and MWG is now waiting for the USEPA to issue the final rule.

[2] MWG continues to reserve its objection that the Illinois EPA did not have the legal authority to require the hydrological assessments of the ash ponds under Sections 4 or 12 of the Illinois Environmental Protection Act (the "Act") or the Groundwater Quality Regulations, 35 Ill. Adm. Code Part 620.

COMP. Ex. 9B

violations in the VN are based solely on the results of the hydrogeologic assessment MWG performed at the Agency's request. The results of the hydrogeologic assessment do not show that the coal ash ponds at the Powerton Station are impacting the groundwater and do not provide the necessary evidence to support the alleged violations contained in the VN.

Well prior to the issuance of this VN, MWG met with the Agency to discuss the groundwater monitoring results and to discuss cooperatively how to proceed based on those results, including what additional actions, if any, the Agency believed were necessary. The Agency told MWG that it had not yet decided how to proceed. The next development was the issuance of the VN. The VN itself provides no information concerning the basis for the Agency's apparent conclusion that the ash impoundments are the cause of the alleged groundwater impacts, other than the conclusory statement that "[o]perations at ash impoundments [sic] have resulted in violations of the Groundwater Quality Standards." The VN also provides no information concerning the nature or type of corrective action which the Agency may deem acceptable to address the alleged violations. The Agency is not pursuing this matter in a way that allows MWG to prepare an effective response or a Compliance Commitment Agreement.

This letter provides a detailed response to each of the alleged violations in Attachment A of the VN to the extent possible given the lack of information provided in the VN. It also advances MWG's general objection to the legal sufficiency of the notice of the alleged violations contained in the VN. MWG maintains that the Illinois EPA cannot prove the alleged violations in the VN, and does not, by submitting this response, make any admissions of fact or law, or waive any of its defenses to those alleged violations.

I. General Objection to the Legal Sufficiency of the Violation Notice

The VN does not comply with the requirements of Section 31 of the Act. Section 31(a)(1)(B) of the Act requires the Illinois EPA to provide a detailed explanation of the violations alleged. 415 ILCS 5/31(a)(1)(B). Under the Act, MWG is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation.[3] The VN fails to provide adequate notice to MWG of either the alleged violations or the activities which the Agency believes are necessary to address them. The VN states that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards...." (Violation Notice, Attachment A, page 1, 1st paragraph) No further description of the alleged "ash impoundments" is provided in the VN. Multiple ash impoundments exist at the Powerton Station. It is impossible to identify from the contents of the VN what operations or activities at the Powerton Station the Agency is claiming are the cause of the alleged violations, including whether it is the Agency's position that each of the Station's ash ponds, or only certain ones,

[3] *Citizens Utilities Co., v. IPCB*, 9 Ill.App.3d 158, 164, 289 N.E.2d 642, 648 (2nd Dist., 1972) (a person is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation). *See also, City of Pekin v. Environmental Protection Agency*, 47 Ill.App.3d 187, 192, 361 N.E.2d 889, 893 (3rd Dist., 1977.

have caused the alleged violations. Absent an accurate or complete description of the activities or operations that the Agency is alleging caused the violations, it is also not possible to identify what action might be necessary to resolve them. Attachment A to the VN states: "Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation." However, no such explanation is provided in the VN. In sum, the VN fails to comply with the legal requirement that it include a detailed explanation of the violations alleged, does not inform MWG of the specific conduct constituting the alleged violations and provides no notice of what is necessary to resolve the alleged violations. The Section 31 process is based on fundamental principles of due process. MWG should not have to speculate about what activities it allegedly engaged in that caused the violations and how to address them to resolve the alleged violations. In the absence of this material, statutorily-required information, the Agency also has effectively denied MWG's statutory right to formulate an acceptable Compliance Commitment Agreement to submit for the Agency's approval.

The VN is also deficient regarding its explanation of what laws MWG has allegedly violated. The VN solely alleges that MWG violated "Section 12" of the Act. 415 ILCS 5/12. It does not provide any further specification as to which of the provisions of Section 12 MWG has allegedly violated.

Section 12 of the Act has nine subsections, consecutively numbered (a) through (i). Each of these subsections describes a different and distinct water pollution prohibition. 415 ILCS 5/12(a)-(i). However, the VN issued to MWG does not identify which of the nine subsections the Agency is alleging MWG violated. Based on the contents of Section 12 of the Act, the Agency is taking the position that MWG violated each and every one of the provisions of Section 12. Based on the relevant facts, it is highly unlikely that this is the intent of the VN. Therefore, the VN's general reference to Section 12 of the Act, without any other explanation, is not a "detailed explanation of the violations." This is yet another example of how the VN fails to provide MWG with adequate notice as a matter of law and thereby violates MWG's due process rights.[4]

By failing to provide a detailed explanation of the violations and any explanation of the activities that the Illinois EPA believes may resolve the violations, the Illinois EPA has effectively denied MWG the opportunity to properly and thoroughly respond to the alleged violations and to make an acceptable offer to resolve them. The VN's deficiencies conflict with the intent and purpose of Section 31 of the Act, which is to avoid unnecessary litigation. Therefore, MWG respectfully requests that the Agency rescind the VN and suspend any further enforcement action unless and until it has taken the necessary actions to correct and cure the legal deficiencies in the notice of the alleged violations by following the statutory requirements under Section 31(a)(1)(B) of the Act. 415 ILCS 5/31(a)(1)(B)

[4] *See, e.g., Grigoleit Co. v. Illinois EPA*, PCB 89-184, slip op at p. 11 (November 29, 1990) (Failure to notify permit applicant of alleged violations and provide an opportunity to provide information in response was a violation of applicant's due process rights).

II. Response to Alleged Violations in the VN

Subject to and without waiving its objections to the legal sufficiency of the VN, MWG nevertheless has attempted to discern the legal basis for the alleged violations and to prepare this response in defense to those allegations based on various assumptions. MWG reserves the right to supplement this response, including by submitting a separate response should the Agency provide the legally required notice under Section 31 of the Act.

The VN alleges "[o]perations at ash impoundments" at MWG's Powerton Station have resulted in violations of certain of the Groundwater Quality Standards at the respective monitoring wells identified in the VN. (Violation Notice at Attachment A) MWG believes the Agency's use of the term "ash impoundments" is intended to refer to the structures which the Powerton Station commonly refers to as "ash ponds;" that is how they will be referred to here. The Agency further alleges that the alleged violations of the groundwater quality standards in 35 Ill. Admin. Code Part 620 also constitute violations of Section 12 of the Act and the underlying groundwater regulations in 35 Ill. Admin. Code Part 620. It is undisputable that the Agency has the burden to prove these alleged violations both in proceedings before the Illinois Pollution Control Board ("Board") and in the courts.[5] However, the groundwater monitoring data on which the Agency primarily, if not solely, relies to assert these violations is not sufficient, legally or technically, to prove that any "ash impoundments" is the source of the alleged groundwater impacts. Further, based on the existing condition of the ash ponds, it is not likely that they are a source of the alleged impacts.

To support its defense to the alleged violations, MWG has set forth below a description of: (1) the condition and use of the ash ponds at Powerton; (2) the hydrogeologic assessment performed at the Powerton Station; (3) the site hydrology; and (4) why the analytical data from the monitoring wells does not establish that the ash ponds are the source of the alleged exceedances of the groundwater standards.[6] In addition, for certain of the alleged exceedances, additional information not considered by the Agency shows that it is either more likely, or at least as likely, that the source of the alleged exceedance is something other than the ash ponds. In either case, the Agency cannot sustain its burden to prove the alleged violations.

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[5] Section 31(e) of the Act provides in relevant part: "In hearings before the Board under this Title, the burden shall be on the Agency...to show either that the respondent has caused or threatened to cause...water pollution or that the respondent has violated or threatens to violate any provision of this Act or any rule or regulation of the Board or permit or term or condition thereof." 415 ILCS 5/31(e); *Citizens Utilities v. IPCB*, 9 Ill. App. 3d 158, 164, 289 N.E.2d 642, 646 (1972) (the Agency has the burden of proof in enforcement actions).

[6] In preparing this response, MWG closely reviewed the groundwater monitoring reports previously submitted to the Agency for the monitoring wells which are identified in the VN. In the course of this review, some data transcription errors were found in the previously submitted data tables included in the groundwater monitoring reports. Copies of the corrected data tables are enclosed. The tables are annotated to identify the nature of the corrections made to the previously submitted reports. The most significant changes are: (i) consistent with previous data for MW-1, there was no boron exceedance at monitoring well MW-1 in the first quarter 2012 sampling event; (ii) there was no exceedance of selenium at wells MW-7 (4th quarter 2011), MW-9 (1st quarter 2011) and MW-13 (August 2011); and (iii) there was no exceedance of mercury at well MW-12 (4th quarter 2010).

A. The Condition of the Ash Ponds

For several reasons, the construction and operation of the Powerton ash ponds makes it unlikely that they are the cause of the alleged violations. The construction and operation of the ponds minimizes the potential for leakage from the ash ponds to groundwater.

First, the Powerton ash ponds are not disposal sites. The ash that enters the ponds is routinely removed. This operating condition limits the amount of ash accumulated over time which serves to minimize the potential for the release of ash constituents to the groundwater.

Second, unlike many other ash ponds in Illinois, two of the ash ponds at Powerton, the Ash Surge Pond and the Ash Bypass Basin are lined to prevent releases to groundwater. The third pond, the Secondary Ash Settling Basin, is not presently lined. However, as described below, there are no groundwater exceedances of coal ash constituents downgradient of the Secondary Ash Settling Basin, thus supporting the conclusion that it is not a source. When the final federal Coal Combustion Residual Rules are issued, MWG will rely on those rules to make a decision regarding any further modifications to, or the continued use of, the Secondary Ash Settling Basin.

The Ash Surge Pond at Powerton is constructed of Poz-o-Pac material which meets accepted standards for preventing the migration of constituents to the environment.[7] The permeability of the Poz-o-Pac liner is 10^{-7} cm/sec. Notably, this is the same degree of permeability that is required in the Board Regulations for constructing a new solid waste landfill where, unlike the ash ponds, waste materials are to be disposed of on a permanent basis. *See* 35 IAC 811.306(d). Pursuant to a construction permit issued by the Agency, the second ash pond, called the Ash Bypass Basin, was relined in 2010 with a high-density polypropylene (HDPE) liner.[8] The HDPE liner provides an even greater degree of protection against leakage with a permeability of approximately 10^{-13} cm/sec. The liners in the two ash ponds achieve and exceed the level of permeability which the Illinois regulations expressly recognize is sufficient to prevent the release of constituents to the environment. Hence, the facts regarding the liners in place for these two ash ponds also support the conclusion that the ash ponds are not the source of the exceedances of groundwater standards alleged in the VN.

The VN contains no facts concerning the condition of the liners in the Powerton ash ponds that would indicate that they are allowing ash constituents to escape from the ponds. For example, the Agency does not contend that there are any breaches in the integrity of the ash pond liners that are allowing ash constituents to be released to the groundwater. The Agency similarly does not claim that the materials used for the existing liners are inadequate to prevent the migration of constituents, and it would be hard pressed to do so given that the materials either meet or exceed the analogous requirements for Illinois landfills. In the absence of such

[7] Poz-o-Pac is an aggregate liner similar to concrete.
[8] *See* Illinois EPA Water Pollution Control Permit No. 2010-EP-0664 for the Bypass Basin Expansion and Liner Upgrade

evidence, it is certainly far more likely than not that the existing ash ponds at the Powerton Station are not the source of the groundwater impacts alleged in the VN.

B. Hydrogeologic Assessment and Site Hydrology

The VN appears to be based on the flawed premise that the hydrogeologic assessment which the Agency directed MWG to perform in the vicinity of the ash ponds would be sufficient to identify the ash ponds as the source of any elevated levels of constituents in the groundwater. This is simply not the case. The results of the hydrogeologic assessment at best give rise to more questions about the source of the alleged groundwater impacts, and do not prove that the existing ash ponds are the source of those impacts.

The results of the hydrogeologic assessment show that there is some complexity to the site hydrology at Powerton. The complexity of the groundwater flow system arises from the existence of two distinct, though connected, groundwater units underlying the Powerton Station. The first unit is a localized, saturated silt and clay layer and the lower unit is a more extensive sand layer. When the groundwater elevations from all fifteen of the existing monitoring wells are plotted and analyzed for a single monitoring event (*i.e.*, the silt/clay unit wells and the sand unit wells), the groundwater flow system appears very complex. It shows a general groundwater flow direction of south to north, but with very unusual, localized groundwater highs, making a reasonable interpretation of groundwater flow difficult and suggests the presence of some localized, divergent flow. However, when the five monitoring wells that are screened in the silt/clay unit and the ten wells that are screened in the sand unit are plotted separately, it becomes evident that there are two distinct, though connected, groundwater units beneath this portion of the Site. In both units, the groundwater flows from the south/southeast to the north/northwest, toward the adjoining outlet channel west of the ponds. The elevation of the groundwater surface is approximately 10 feet higher in the silt/clay unit than in the sand unit. Because both units flow in the same direction and are in direct physical contact with each other, it is likely that they share some degree of hydraulic connection. Given this groundwater flow system, the data provides no indication of divergent or radial flow associated with the ash ponds.

The VN's allegations fail to make any distinctions among the fifteen monitoring wells that have been installed at the Powerton Station. There is no apparent attempt to evaluate the quarterly groundwater monitoring results, whether on a parameter-by-parameter basis or relative to each of the ash ponds themselves. When these evaluations are performed, the results show that the monitoring data does not support the VN's allegations that the operations of the ash impoundments have caused these groundwater impacts. The results of the evaluations are set forth below, beginning with the parameter-by-parameter evaluation.

Boron and sulfate are constituents known to be associated with coal ash. However, the monitoring data does not support a finding that the alleged boron and sulfate exceedances are due to the operations of the ash ponds. There are no exceedances of boron concentrations in any of the wells within the clay unit (*i.e.*, MW-6, MW-8, MW-12, MW-14 and MW-15) and boron is generally considered a reliable tracer of potential ash leachate impacts. Further, in the course of

this review, a transcription error was discovered in the previously reported first quarter 2012 groundwater sampling results for monitoring well MW-1. There was no exceedance of boron at monitoring well MW-1 in the first quarter 2012 sampling event, which is consistent with previous monitoring results for this well. Corrected data tables for the Powerton groundwater monitoring wells quarterly monitoring results are included with this response.

In addition, of all of the clay unit wells, only MW-14 had reproducible exceedances of sulfate. MW-15 had only one exceedance of sulfate, which did not occur again in any of the subsequent quarterly monitoring results. The remaining groundwater monitoring wells sampling results have reported no sulfate exceedances. Of the monitoring wells located in the underlying sand unit, only wells MW-9 and MW-13 had reproducible exceedances for either boron or sulfate.

As further discussed below, monitoring well MW-9 is the furthest upgradient well within the overall monitoring network. It has the highest detections of boron relative to all the other wells, with the exception of well MW-13. However, monitoring well MW-13 was not installed as part of the hydrogeologic assessment of the ash ponds. It was installed as an upgradient monitoring point pursuant to the construction permit requirements for the Metals Cleaning Basin, which as its name implies, does not receive or store any coal ash. The Metals Cleaning Basin is not associated in any way with the ash storage pond system. Thus, boron present in MW-13 is not evidence of any impact caused by the operation of the ash ponds.

Turning to the alleged pH exceedances, all nine pH exceedances noted in the VN were from a single sampling event - the December 2011 sampling event. They were not detected in the previous quarterly sampling events and have not been repeated since the December 2011 sampling event. Moreover, for MW-2, the alleged pH exceedance reported from this December 2011 sampling event is the only exceedance detected for any parameter over all of the six consecutive quarters of sampling. Given that pH is a field parameter, and no other pH exceedances were detected in any of the wells in any of the other quarterly sampling events, it is far more likely that the December 2011 pH measurements were associated with a malfunctioning field meter. Therefore, the December 2011 pH monitoring results are not indicative of alleged impacts from the ash ponds or that the groundwater in the vicinity of the subject monitoring wells is actually exceeding the pH standard.

A review of the chloride groundwater monitoring results also shows that they are not associated with the operations of the ash impoundments, as alleged in the VN. There were alleged chloride exceedances at monitoring well locations MW-8, MW-12, MW-14 and MW-15. Except for well MW-8, each of these was a single non-reproducible exceedance at each location. At monitoring well MW-8, the chloride exceedances are from only the last two rounds of the six consecutive quarters of groundwater sampling. Chloride is not an indicator of potential coal ash impacts. There are various other potential non-ash related sources of this compound. None of the wells where these alleged chloride exceedances were found had any exceedances of the boron standard.

The only exceedance detected for thallium in all six, consecutive sampling events is an isolated exceedance recorded for a single monitoring well, MW-14. Monitoring well MW-14 was not installed as part of the hydrogeologic assessment of the ash ponds. It instead was installed as a downgradient monitoring well for the Metals Cleaning Basin, which is not associated with the ash storage pond system. Thallium is not a constituent typically associated with ash storage facilities. It was not detected in any of the other fourteen monitoring wells at the Powerton Station in any of six consecutive quarters of groundwater monitoring. Hence, the isolated and unique detection of thallium is not evidence of a release from the ash ponds.

The alleged selenium and mercury exceedances alleged in the VN are almost exclusively the result of transcription errors which occurred in the previous reporting of these results to the Agency. There was no exceedance of selenium detected at monitoring wells MW-7 (4th Quarter 2011), MW-9 (1st Quarter 2011) and MW-13 (3rd Quarter 2011). The original laboratory data package shows selenium concentrations at ten times lower than what was reported in the monitoring results submitted to the Agency. In the quarterly reports submitted to the Agency, the decimal point was erroneously placed in the reported monitoring values, resulting in the reporting of values ten times higher than the actual laboratory results. The single selenium exceedance in monitoring well MW-14 is an isolated event, which occurred over a year ago. No subsequent selenium exceedances have been reported in the quarterly sampling events to date. Like thallium, the isolated detection of selenium is not evidence of a release from an ash pond. There also was no exceedance of mercury at well MW-12 (4th Quarter 2010). The previously reported elevated mercury level was also due to a transcription error. The corrected selenium and mercury groundwater monitoring results are included in the enclosed, corrected Tables.

In summary, a parameter-by-parameter evaluation shows that the monitoring data does not support the VN's allegation that the operation of the ash ponds has caused the alleged exceedances. Isolated monitoring well results showing exceedances of a given parameter that are not seen in any of the other fourteen monitoring wells (*e.g.*, thallium, selenium) do not support the VN's allegations. Multiple pH exceedances from a single sampling event are more indicative of an equipment error than actual groundwater conditions. Similarly, the chloride exceedances, most of which were not reproducible in subsequent sampling events and none are which are associated with boron and sulfate exceedances, also are not consistent with the ash ponds being the source of the exceedances. For other parameters, such as arsenic, manganese and iron, the monitoring results are far more consistent with the presence of a reducing environment in the area of groundwater where these elevated levels were detected. Finally, the alleged exceedances for selenium are not real. They are the result of transcription errors which occurred in the preparation of its quarterly reporting to the Agency due to the incorrect placement of a decimal point in the monitoring results values. This is now corrected in the enclosed Tables.

The separate evaluation of the groundwater monitoring results relative to each of the three active ash ponds and the former ash pond individually also reveals several deficiencies in the alleged violations. Each of these ash ponds is discussed separately below.

Ash Bypass Basin:

The furthest south (upgradient) pond is known as the "Ash Bypass Basin." As previously stated, the Ash Bypass Basin was relined with a HDPE liner in 2010. Monitoring well MW-9 is the upgradient monitoring well for the Ash Bypass Basin and wells MW-11 and MW-12 are the two immediately downgradient wells. Monitoring well MW-12 is screened within the silt/clay unit and monitoring wells MW-9 and MW-11 are screened within the underlying sand unit. For upgradient well MW-9, multiple exceedances of boron and manganese were detected. Monitoring well MW-11 had one exceedance of boron, but this occurred during the last round of quarterly sampling and hence, additional monitoring data is not yet available to determine whether this is an isolated event. While there were multiple exceedances of manganese in monitoring well MW-12, it did not have any reported exceedances of boron. The highest boron concentrations were reported in upgradient well MW-9. This indicates that the boron source is not associated with the operation of the Ash Bypass Basin. Further, the manganese concentrations in well MW-12 are similar to the concentrations measured at upgradient well location MW-9; however, the manganese concentrations at MW-11 (ranging from 2.2 mg/l to 3.6 mg/l) are higher than in the upgradient well which ranges from 0.19 mg/l to 0.48 mg/l. Elevated manganese concentrations can be associated with sources other that ash ponds and can be reflective of localized mineralogy and reduction-oxidation (redox) conditions, especially when elevated levels of both boron and sulfate are absent. Similarly, the alleged iron exceedances in well MW-12 can also be reflective of localized mineralogy and redox conditions especially in the absence of elevated concentrations of boron and sulfate, as is the case here.

The conclusion that the elevated manganese and iron levels are not due to the operation of the ash ponds is further supported by analytical testing performed in August 2008 of plant bottom ash, fly ash and fines. The analytical testing, which included Toxic Characteristic Leaching Procedure (TCLP) analyses, provides relevant information concerning the leaching nature of the ash compounds. The analytical data shows no detections of manganese in TCLP leachate from any of the samples. The leached iron detections range from non-detect to 0.044 mg/l, which is substantially lower than the iron exceedances in monitoring well MW-12. The analytical data does not support the VN's allegations that the source of the alleged exceedances in these monitoring wells is associated with the operation of the Ash Bypass Basin.

The weight of the evidence shows that the Ash Bypass Basin is not causing the alleged groundwater impacts. Moreover, even if a case could be made that it was, MWG has already taken the necessary steps to address it. As described above, the Ash Bypass Basin was relined in 2010 with a state of the art HDPE liner.

Ash Surge Pond:

The Ash Surge Pond is located north (*i.e.*, downgradient) of the Ash Bypass Basin. It is the largest of the ash ponds and is lined. Monitoring wells upgradient of the Ash Surge Pond are MW-12, MW-11 (previously discussed above because they are also downgradient of the Ash Bypass Basin) and monitoring well MW-10. Wells MW-15 and MW-8 are immediately

downgradient of the Ash Surge Pond.[9] Monitoring wells MW-8 and MW-15 are screened within the silt/clay unit and well MW-10 is within the underlying sand unit.

Upgradient well MW-10 had multiple reported exceedances of manganese, ranging from 2.1 mg/l to 3.8 mg/l.[10] (Downgradient well MW-15 has six exceedances of manganese ranging from 0.25 mg/l to 0.60 mg/l and well MW-8 has five exceedances of manganese ranging from 0.18 to 0.28 mg/l. The downgradient concentrations of manganese are clearly lower than in the upgradient wells suggesting that the manganese is not associated with operation of the Ash Surge Basin. It is also noted that neither wells MW-8 nor MW-15 have exceedances of boron, an ash impact indicator. There is also only one reported exceedance of sulfate in monitoring well MW-15 (650 mg/l), which was not reproducible during subsequent, consecutive sampling events. This alleged, isolated sulfate exceedance also was anomalously and significantly higher than all other sulfate detections at this monitoring well location, which ranged from 140 mg/l to 300 mg/l. Hence, the level of the single, alleged sulfate exceedance at MW-15 is more than twice that of any other reported value for this monitoring well.

Monitoring well MW-13 is slightly side gradient of the Ash Surge Basin (located just west of the southwest corner of the basin). As discussed previously, the boron and sulfate detections at this location were the highest of any monitoring well. These levels do not support a finding that that they are caused by the Ash Surge Basin's operations because none of the downgradient monitoring wells from this basin had any similar boron and sulfate levels detected throughout numerous, consecutive sampling events.

Ash Settling Pond:

The Ash Settling Pond is located to the north (downgradient) of the Ash Surge Basin. Monitoring well MW-8's location is considered upgradient of this pond. Monitoring wells MW-6 and MW-7 are immediately downgradient of the Ash Settling Pond. MW-6 is screened within the silt/clay unit and MW-7 is screened within the underlying sand unit. None of these three wells (MWs 6, 7 or 8) had reported exceedances of boron or sulfate. The range of boron detections at MW-6 (0.35 mg/l to 0.63 mg/l) and at MW-7 (0.34 mg/l to 0.61 mg/l) are significantly lower than the range of boron detections in the upgradient monitoring well MW-8 (0.57 mg/l to 0.93 mg/l). Hence, the monitoring data indicates that the concentrations of boron are lower on the downgradient side of the Ash Settling Pond. The same observation is true for the sulfate levels among these same monitoring wells. These findings support the conclusion that the alleged groundwater impacts in the vicinity of the Ash Settling Pond are not associated with its operation.

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[9] Monitoring well MW-15 is also adjacent to the northwest corner of the Metals Cleaning Basin, which is not part of the ash pond system.

[10] The manganese levels are similar to the elevated detections in monitoring well MW-11. Hence, these results are further evidence that the elevated manganese at MW-11 is not associated with the operation of the Ash Bypass Basin because monitoring well MW-10 is approximately 600 feet away from the Ash Bypass Basin and is not downgradient of it.

There were other alleged exceedances in MW-6 and/or MW-7, including a single alleged exceedance of chloride (MW-6) and one for lead (MW-7), as well as manganese, arsenic, iron, and Total Dissolved Solids (TDS)[11], as discussed above regarding iron and manganese, in the absence of elevated concentrations of the coal ash indicators such as boron and sulfate, these alleged exceedances are as likely due to other sources that are unrelated to the Ash Settling Pond or any of the other Powerton ash ponds.

Former Ash Pond:

Monitoring wells MW-1 through MW-5 are located around a former ash pond which is no longer in operation. Monitoring wells MW-1 and MW-10 are located upgradient of this former ash pond. Monitoring wells MW-2 through MW-5 are located downgradient of it. All six of these wells are screened within the sand unit. None of these wells have any exceedances of boron or sulfate. The single boron exceedance noted in the VN for these wells was at well MW-1, which a further review has found to be a transcription error in the prior reporting to the Agency. (See corrected value for MW-1 in enclosed Tables) The boron levels both upgradient and downgradient of the former ash pond are similar to each other, further evidence that the former ash pond is not the source of groundwater impacts. Although there are alleged manganese exceedances in monitoring wells MW-4 and MW-5, the range of these manganese values was lower than in these wells than in the upgradient monitoring well MW-10. The single alleged nitrate exceedance in upgradient monitoring well MW-1 is an isolated, unconfirmed exceedance that is insufficient to prove a violation of the nitrate standard. Further, there are various sources of nitrate in groundwater that are not associated with ash pond operations, especially when no elevated levels of known coal ash indicator compounds are present, which is the case here.

The Agency's broad and all-encompassing allegations regarding the ash ponds are simply not supported by a careful evaluation of the underlying groundwater monitoring data for the respective monitoring wells that are located upgradient and downgradient of each of the subject ash ponds. The groundwater monitoring data on which the VN is based is not sufficient to show that the ash ponds are the source of the alleged exceedances.

C. The Powerton Ash Ponds Are Not Causing Groundwater Exceedances

Because the Agency failed to specify which of the provisions of Section 12 of the Act MWG allegedly violated, MWG has had to speculate to identify the potential Section 12 violations this response needs to address. As stated above, MWG objects to the vagueness of, and legally deficient notice provided by, the VN and reserves its right to respond further when and if the Agency properly identifies the provisions of Section 12 on which it is relying.

[11] The single alleged exceedance for selenium in MW-7 that is included in the VN is due to a transcription error in prior reporting of monitoring results to the Agency. It has been corrected in the enclosed Tables.

For purposes of this response, based upon the regulations cited by the Agency in the VN, MWG has assumed that the Agency's alleged violations of Section 12 are limited to Sections 12(a), which prohibits causing or allowing water pollution, and to Section 12(d), which prohibits causing or allowing the creation of a water pollution hazard. 415 ILCS 5/12(a), (d). Based on these assumptions regarding the substance of the Illinois EPA's alleged violations, MWG submits that the Agency cannot show that the ash ponds at Powerton caused or allowed water pollution or created a water pollution hazard.

The overwhelming number of the alleged exceedances of the Class 1 groundwater standards are random and inconsistent. For all but a few of the parameters, the necessary confirmation of the existence of groundwater impacts above the Class 1 groundwater standards is absent. For the remaining few, the data is insufficient to prove that the source is one or more of the subject ash ponds.

To show a violation of Section 12(a) and 12(d), there must be a showing not only of the presence of a potential source of contamination, but also that it is in sufficient quantity and concentration to render the waters harmful. *Bliss v. Illinois EPA,* 138 Ill. App. 3d 699, 704 (1985) ("mere presence of a potential source of water pollutants on the land does not necessarily constitute a water pollution hazard"). In other words, there must be a causal link between the potential source and the water or groundwater. The groundwater monitoring data on which the Agency relies does not establish this essential causal link between the ash ponds and the groundwater. Therefore, the Agency has failed to meet its burden to prove that the ash ponds are the cause of the alleged exceedances of the groundwater standards as required to prove a violation of Sections 12(a) or 12(d) of the Act. 415 ILCS 5/12(a), (d).

Illinois EPA also alleges violations of the groundwater quality regulations based on exceedances of the groundwater quality standards in 35 Ill. Admin. Code § 620.401. There is no violation here of Section 620.401. Section 620.401 solely provides the legal criteria that groundwater must meet the standards appropriate to the groundwater's class. It is a foundational regulation, allowing for different classes of groundwater to meet different groundwater standards. It is not a prohibition regulation. There is no conduct prohibited by this section of the regulations in which MWG is alleged to have engaged. MWG cannot and did not violate Section 620.401.

The remaining alleged groundwater regulation violations, Sections 620.115, 620.301, 620.405, and 620.410 of the Board Regulations, are all based on the Agency's contention that MWG's operation of the ash ponds has caused the exceedances of the groundwater standards detected in the monitoring data. To sustain these allegations, the Agency must show that MWG caused a discharge of the subject constituents from ash ponds which in turn caused the

exceedances of the groundwater standards.[12] The relevant facts and circumstances do not support either conclusion.

The use and condition of the ash ponds does not support a finding that they are releasing constituents to the groundwater. They are not disposal sites. The ash is regularly removed from the ponds by MWG. The linings in two of the ash ponds are of sufficient permeability, consistent with accepted regulatory guidance, to prevent the release of constituents. Moreover, the groundwater down-gradient of the only unlined ash pond shows no impacts from coal ash constituents. Finally, pursuant to the terms of the Powerton Station's NPDES Permit, these ash ponds are part of the flow-through wastewater treatment process at the station. MWG's operation of the ash ponds has been carried out in accordance with the terms and conditions of the NPDES Permit. Under Section 12(f) of the Act, compliance with the terms and conditions of any permit issued under Section 39(b) of the Act is deemed compliance with this subsection.

Similarly, the groundwater data on which the Agency relies does not provide a sufficient scientific or technical evidentiary basis on which to conclude that the ash ponds are causing the alleged groundwater exceedances. The essential "causal link" between the ash ponds and the elevated constituents in the groundwater is missing. The data is at best inconclusive on this issue, while certain aspects of the data clearly point to other, unrelated causes.

Because the ash ponds have not been shown to have caused a release of any contaminants that are causing the groundwater exceedances, the Agency's VN does not support its claims that MWG has violated Sections 620.405 or 620.301 of the Board regulations. Accordingly, MWG also has not violated Section 620.115 of the Board regulations.

III. Compliance Commitment Agreement

This VN should not have been issued. Given the absence of proof that the ash ponds are the cause of the alleged groundwater exceedances, the Agency's request for a Compliance Commitment Agreement (CCA) is an attempt to compel MWG to conduct unnecessary corrective action.

Moreover, with the pending federal regulatory process to enact regulations for the design and operation of ash ponds, it is prudent to await the outcome of the proposed federal regulations to determine whether any changes to the ash ponds construction or operation are required by those regulations. The Agency itself has previously advanced this position. In 2010, the Agency's Steven Nightingale testified before the Illinois Pollution Control Board that the Board should consider initiating a temporary moratorium on the closure of coal ash impoundments because of the U.S. EPA's intention to regulate them. (*See In the Matter of Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill.Adm.Code Part 840.101 Through*

[12] *See People of the State of Illinois v. ESG Watts, Inc.*, PCB 96-107 slip op. at p. 41 (February 5, 1998) (By finding the respondent caused a discharge of constituents into the groundwater causing a violation of the Class II Groundwater standards, the Board found the respondent also violated 35 IAC §§ 620.301 and 620.115).

840.152, Docket R09-21 (October 7, 2010) at p. 64) On behalf of the Agency, Mr. Nightingale told the Board that if industry had to take action in the interim, it "could end up expending substantial money and resources only to find they are subject to additional and/or different closure requirements for those units." (*Id.*) The Agency's pursuit of this enforcement action, particularly given the deficiencies in its alleged evidence, also threatens to force MWG to take actions that may conflict with or otherwise differ from the requirements in the upcoming federal regulations.

As the hydrogeologic assessment showed, there is no threat to human health presented by the alleged exceedances of the groundwater standards. The hydrogeologic assessment investigated the presence of potable water sources within a 2,500-foot radius of the site. Six wells are located within the 2,500-foot radius of the site; however none of the wells are down-gradient of the ash ponds. In fact, two of the wells supply the Powerton Station with water, and are regularly sampled for potable water constituents. The sampling results have consistently been in compliance with potable water regulations.[13] In the absence of any potable groundwater receptors or use, groundwater at the Powerton site does not pose any risk to human health. Accordingly, awaiting the outcome of the federal regulatory proposal is appropriate under these circumstances.

Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

A. The ash ponds will not be used as disposal sites and ash will continue to be removed from the ponds on a periodic basis.

B. MWG has installed a new liner in the Ash Bypass Basin that provides protection against the migration of ash constituents to the groundwater.

C. The ash ponds and the Ash Bypass Basin will be maintained and operated in a manner which protects the integrity of the existing liners. During the removal of ash from the ponds, appropriate procedures will be followed to protect the integrity of the existing liners, including operating the ash removal equipment in a manner which minimizes the risk of any damage to the liner.

D. During the ash removal process, visual inspections of the ponds will be conducted to identify any signs of a breach in the integrity of the pond liner. In the event that a breach of the pond liner is detected, MWG will notify the Agency and will submit a corrective action plan for repair or replacement, as necessary, of the liner. Upon the Agency's approval, and the issuance of any necessary construction permit, MWG will implement the correction action plan.

[13] See previously submitted Hydrogeologic Assessment of Midwest Generation Electric Generation Stations: Will County Station, Waukegan Station, Joliet 29 Station, Crawford Station, Powerton Station.

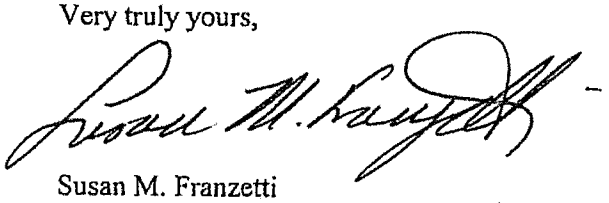
E. MWG proposes to establish a Groundwater Management Zone ("GMZ") below the ash ponds pursuant to Section 620.250 of the Board's regulations. 35 Ill. Admin. Code § 620.250. The corrective action required by the GMZ regulations is addressed by the existing pond liners. MWG is also willing to evaluate the inclusion of institutional controls regarding the area of impacted groundwater, provided that any institutional controls allow for the continued use of the Powerton potable water wells which are located outside of the subject area and for which regular, repeated testing has confirmed are not affected.

F. MWG will continue to monitor the groundwater through the existing fifteen groundwater monitoring wells and report its findings to Illinois EPA, pursuant to Section 620.250(c) of the GMZ Regulations, 35 Ill. Admin. Code § 620.250(c). MWG reserves the right to request the Agency's approval of a cessation of all or some of the monitoring requirements based on future monitoring results.

G. MWG will continue to monitor the development of the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640. When the final rule is issued, MWG will promptly notify Illinois EPA how it will comply with the new Federal Rules.

This letter constitutes our response to and proposed CCA for the Violation Notice W-2012-00057. MWG also reserves the right to raise additional defenses and mitigation arguments as may be necessary, in defense of the allegations listed in the Violation Notice in the event of any future enforcement. We look forward to discussing the above information further at the soon to be scheduled meeting with the Agency's representatives. Please contact me to schedule a mutually convenient date for the meeting.

Very truly yours,



Susan M. Franzetti
Counsel for Midwest Generation, LLC

Enclosures

cc: Maria L. Race, Midwest Generation, LCC

Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Powerton Generation Station
Pekin, Illinois
Midwest Generation
21253.022

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)
Chemical Name		Class I*	12/15/10	3/25/11	6/16/11	9/19/11	12/12/11	3/19/12	12/15/10	3/25/11	6/16/11	9/19/11	12/13/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	0.0018	0.0015	0.0017	ND	ND	ND
Barium	Metals 6020	2.0	0.044	0.026	0.034	0.056	0.044	0.038	0.042	0.025	0.053	0.059	0.066	0.049
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	0.0057	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	0.0077	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	0.0012	0.0022	ND	ND	ND
Nickel	Metals 6020	0.1	0.01	0.008	ND	0.0069	0.0095	ND	0.0086	0.0096	0.0053	0.01	0.0073	ND
Selenium	Metals 6020	0.05	0.0016	0.0022	0.0016	0.0036	0.0027	0.0025	0.0017	0.0032	0.0014	0.0032	0.0037	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.013
Boron	Metals 6020	2	0.45	0.26	0.33	1.0	0.48	0.29	0.38	0.23	0.35	0.83	0.69	0.27
Sulfate	Dissolved 9038	400	50	30	39	83	31	61	52	42	53	70	69	55
Chloride	Dissolved 9251	200	46	37	40	41	26	53	45	43	44	46	40	53
Nitrogen/Nitrate	Nitrogen By calc	10	7.2	4.3	5.7	11	4.1	7.3	7.5	4.5	4.7	4.3	6.9	5.1
Total Dissolved Solids	Dissolved 2540C	1,200	490	340	410	510	440	470	480	420	470	460	490	440
Fluoride	Dissolved 4500 FC	4	0.28	0.32	0.38	ND	ND	ND	ND	0.3	0.35	ND	ND	ND
Radium 226 (pCi/L)	EPA 903.1	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Radium 228 (pCi/L)	EPA 904.0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedances of 35 IAC Part 620
NS-not sampled
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Powerton Generation Station
Pekin, Illinois
Midwest Generation
21253.022

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-3 (mg/L) 12/15/10	MW-3 (mg/L) 3/25/11	MW-3 (mg/L) 6/16/11	MW-3 (mg/L) 9/19/11	MW-3 (mg/L) 12/12/11	MW-3 (mg/L) 3/19/12	MW-4 (mg/L) 12/15/10	MW-4 (mg/L) 3/25/11	MW-4 (mg/L) 6/16/11	MW-4 (mg/L) 9/19/11	MW-4 (mg/L) 12/12/11	MW-4 (mg/L) 3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0017	ND	0.0011	0.0012	0.0012	0.0012	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.038	0.03	0.063	0.081	0.076	0.052	0.055	0.052	0.058	0.041	0.048	0.043
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	0.0045	ND	ND	0.0044	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	0.0026	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	0.012	0.0042	ND	ND	ND	ND	0.0033	0.01	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	0.042	ND	ND	ND	0.017	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.0047	0.0023	ND	0.0037	0.0014	ND	ND	0.68	0.41	0.69	0.35	0.089
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.011	0.0095	ND	0.008	0.0078	ND	0.012	0.012	0.0067	0.011	0.01	0.0055
Selenium	Metals 6020	0.05	ND	0.0036	0.0015	0.0036	0.0021	0.0067	0.0022	0.0037	0.0022	0.0039	0.002	0.0085
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	0.012	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.75	0.18	0.24	0.64	0.7	0.56	0.77	0.83	0.33	0.84	0.79	0.78
Sulfate	Dissolved 9038	400	64	42	47	66	45	72	110	140	48	61	6.7	160
Chloride	Dissolved 9251	200	39	52	59	62	39	54	150	77	43	86	8.1	58
Nitrogen/Nitrate	Nitrogen By calc	10	9.4	5.2	5.4	0.2	0.2	2.1	0.34	0.73	2.7	0.06	0.07	0.65
Total Dissolved Solids	Dissolved 2540C	1,200	480	430	440	460	480	450	680	620	470	580	520	660
Fluoride	Dissolved 4500 FC	4	0.3	0.35	0.41	0.35	ND	ND	0.3	0.39	0.43	0.31	ND	ND
Radium 226 (pCi/L)	EPA 903.1	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Radium 228 (pCi/L)	EPA 904.0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NS-not sampled
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mg/L- milligrams per liter

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Powerton Generation Station
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Midwest Generation
21253.022

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)	MW-6 (mg/L)
Chemical Name		Class I*	12/15/10	3/25/11	6/16/11	9/19/11	12/12/11	3/19/12	12/15/10	3/25/11	6/16/11	9/19/11	12/12/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0011	ND	ND	ND	0.001	ND	0.0042	0.0024	0.0029	0.0031	0.0036	0.002
Barium	Metals 6020	2.0	0.053	0.048	0.046	0.071	0.065	0.054	0.11	0.092	0.1	0.1	0.12	0.097
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	0.0044	0.0042	ND	0.0066	ND	ND	0.006	0.0083	0.0045	0.0085	0.0056	ND
Cobalt	Metals 6020	1.0	0.0025	0.0023	ND	0.0027	0.0022	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	0.0036	0.0061	ND	ND	ND	0.0032	0.0042	ND	0.16
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.13	0.05	0.046	0.082	0.036	ND	1.6	1.6	1.7	1.8	1.9	1.7
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.51	0.49	0.48	0.64	0.5	0.36	0.68	0.68	0.63	0.66	0.63	0.61
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.014	0.013	0.0077	0.014	0.014	0.008	0.0091	0.014	0.0078	0.0099	0.0089	ND
Selenium	Metals 6020	0.05	0.0019	0.003	ND	0.0045	0.0023	0.0028	0.0034	ND	ND	0.0025	0.0033	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	0.0064	ND	ND	ND	ND	0.049
Boron	Metals 6020	2	0.95	0.93	0.79	0.79	0.77	0.82	0.35	0.35	0.43	0.61	0.63	0.39
Sulfate	Dissolved 9038	400	160	170	110	250	170	120	210	250	280	260	170	250
Chloride	Dissolved 9251	200	150	120	89	160	140	82	180	200	160	210	150	150
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.08	ND	ND	1.6	0.037	ND	ND	0.04	0.06	ND
Total Dissolved Solids	Dissolved 2540C	1,200	740	680	640	890	820	590	950	990	1,100	970	1,000	1,100
Fluoride	Dissolved 4500 FC	4	0.27	0.36	0.43	0.25	ND	ND	0.65	0.61	0.63	0.64	0.5	0.47
Radium 226 (pCi/L)	EPA 903.1	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Radium 228 (pCi/L)	EPA 904.0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NS-not sampled
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Pekin, Illinois
Midwest Generation
21253.022

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-7 (mg/L) 12/15/10	MW-7 (mg/L) 3/25/11	MW-7 (mg/L) 6/16/11	MW-7 (mg/L) 9/19/11	MW-7 (mg/L) 12/12/11	MW-7 (mg/L) 3/19/12	MW-8 (mg/L) 12/15/10	MW-8 (mg/L) 3/25/11	MW-8 (mg/L) 6/16/11	MW-8 (mg/L) 9/19/11	MW-8 (mg/L) 12/12/11	MW-8 (mg/L) 3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.026	0.085	0.12	0.18	0.23	0.23	0.0052	0.0039	0.0044	0.0036	0.0052	0.0038
Barium	Metals 6020	2.0	0.55	0.52	0.57	0.57	0.59	0.57	0.11	0.12	0.11	0.11	0.13	0.14
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	0.0026	ND	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	0.0088	0.0075	0.0061	0.011	ND	ND	0.0059	0.0081	0.0059	0.0064	0.0053	ND
Cobalt	Metals 6020	1.0	0.017	0.0056	0.007	0.0055	0.006	0.0067	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	0.14	ND	ND	ND	ND	ND	ND	ND	0.0036	0.0037	0.01	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	8	7.5	10	22	26	31	0.56	2.1	1.7	0.97	0.94	2.3
Lead	Metals 6020	0.0075	0.039	ND	0.0014	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	3.5	5.9	6.4	12	12	11	0.15	0.27	0.29	0.18	0.2	0.27
Mercury	Mercury 7470A	0.002	ND	ND	0.00025	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.045	0.021	0.022	0.026	0.022	0.018	0.011	0.013	0.0076	0.007	0.009	0.0054
Selenium	Metals 6020	0.05	0.0043	0.0026	0.0025	0.0073	0.0054	0.0013	0.0036	0.0013	ND	0.0031	0.0036	0.0018
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	0.076	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.61	0.44	0.43	0.38	0.34	0.35	0.93	0.72	0.64	0.82	0.82	0.57
Sulfate	Dissolved 9038	400	120	49	25	9.1	3.3	3	160	240	140	200	200	300
Chloride	Dissolved 9251	200	170	200	140	130	81	99	180	210	140	210	190	170
Nitrogen/Nitrate	Nitrogen By calc	10	0.043	0.08	ND	0.31	0.03	ND	ND	ND	0.1	1.6	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	860	1,100	1,300	1,300	1,300	1,400	890	990	970	940	990	1,200
Fluoride	Dissolved 4500 FC	4	0.47	0.42	0.58	0.94	0.47	0.54	0.77	0.76	0.81	0.84	0.75	0.7
Radium 226 (pCi/L)	EPA 903.1	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Radium 228 (pCi/L)	EPA 904.0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NS-not sampled
ND- non detect
mg/L- milligrams per liter

AMENDMENTS
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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Powerton Generation Station
Pekin, Illinois
Midwest Generation
21253.022

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)
Chemical Name		Class I*	12/16/10	2/15/11	3/25/11	6/16/11	9/19/11	12/12/11	3/19/12	12/15/10	3/25/11	6/16/11	9/19/11	12/12/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	0.0018	0.0017	ND	0.0012	ND	ND	ND	0.0015	ND	ND	ND
Barium	Metals 6020	2.0	0.038	0.042	0.042	0.038	0.03	0.038	0.035	0.24	0.28	0.36	0.25	0.26	0.26
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	0.0026	0.0027	0.0039	0.0025	0.0026	0.0024
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0041	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	0.066	ND	ND	ND	0.014	ND	ND	0.044	ND	ND	ND
Manganese	Metals 6020	0.15	0.23	0.43	0.45	0.48	0.14	0.28	0.22	2.1	2.8	3.8	2.3	2.3	2.3
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.01	0.011	0.0093	0.0063	0.0065	0.0088	ND	0.015	0.016	0.015	0.01	0.013	0.0091
Selenium	Metals 6020	0.05	0.0024	ND	0.0072	0.0017	0.0043	0.0041	0.0072	0.0042	0.0064	0.0043	0.0057	0.0065	0.0056
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2.1	1.9	1.9	1.9	2.5	2.7	2.6	0.48	0.48	0.52	0.42	0.57	0.54
Sulfate	Dissolved 9038	400	110	99	110	110	130	110	120	62	64	67	64	72	76
Chloride	Dissolved 9251	200	25	33	28	28	30	30	30	40	43	43	49	42	45
Nitrogen/Nitrate	Nitrogen By calc	10	2.9	3.7	5.6	5.6	3.7	2.6	5	3	4	2.1	4.5	4.9	6
Total Dissolved Solids	Dissolved 2540C	1,200	500	470	510	540	500	520	530	530	520	650	470	540	530
Fluoride	Dissolved 4500 FC	4	ND	0.32	0.31	0.34	0.25	ND	ND	ND	0.3	0.36	ND	ND	ND
Radium 226 (pCi/L)	EPA 903.1	20	0.673	0.726	NS	0.955	0.845	0.621	0.592	NS	NS	NS	NS	NS	NS
Radium 228 (pCi/L)	EPA 904.0	20	0.941	0.983	NS	0.974	0.966	0.966	0.831	NS	NS	NS	NS	NS	NS

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NS-not sampled
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Powerton Generation Station
Pekin, Illinois
Midwest Generation
21253.022

ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-11 (mg/L)	MW-11 (mg/L)	MW-11 (mg/L)	MW-11 (mg/L)	MW-11 (mg/L)	MW-11 (mg/L)	MW-12 (mg/L)	MW-12 (mg/L)	MW-12 (mg/L)	MW-12 (mg/L)	MW-12 (mg/L)	MW-12 (mg/L)
Chemical Name		Class I*	12/16/10	2/15/11	6/16/11	9/19/11	12/12/11	3/19/12	12/15/10	2/15/11	6/16/11	9/19/11	12/12/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0021	0.0025	0.0019	0.0016	0.0019	0.0021	0.0088	0.013	0.0064	0.0087	0.0089	0.0042
Barium	Metals 6020	2.0	0.17	0.11	0.18	0.11	0.11	0.13	0.089	0.11	0.091	0.085	0.09	0.071
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	0.0056	0.0044	0.0071	0.0047	ND
Cobalt	Metals 6020	1.0	0.0028	0.0041	0.0024	ND	ND	0.0024	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	0.0032	0.0032	0.0043	ND	ND	ND	ND	ND	0.0032	0.0036	0.0031	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.44	0.01	0.029	0.018	ND	ND	5.5	6.3	5.6	4	3.1	4.8
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	3.2	3.6	2.9	2.2	2.5	2.9	0.32	0.58	0.26	0.37	0.25	0.13
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.019	0.016	0.013	0.011	0.013	0.011	0.0098	0.01	0.0072	0.0075	0.0091	0.0075
Selenium	Metals 6020	0.05	0.0026	0.0015	0.0018	0.004	0.0031	0.0039	0.0026	0.0027	ND	0.0023	0.0034	0.0043
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	0.012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.6	1.8	1.6	1.5	1.8	2.3	1.6	1.4	1.3	1.2	1.3	0.92
Sulfate	Dissolved 9038	400	170	160	210	140	160	130	290	270	350	360	300	310
Chloride	Dissolved 9251	200	70	66	120	53	87	54	170	180	180	190	210	170
Nitrogen/Nitrate	Nitrogen By calc	10	0.41	0.17	0.04	0.74	1.5	0.39	ND	ND	0.14	ND	ND	0.04
Total Dissolved Solids	Dissolved 2540C	1,200	740	710	930	620	730	740	980	1,000	1,100	970	970	1,000
Fluoride	Dissolved 4500 FC	4	0.53	0.56	0.67	0.58	0.44	0.42	0.71	0.61	0.64	0.74	0.61	0.46
Radium 226 (pCi/L)	EPA 903.1	20	0.445	0.174	0.929	0.489	0.733	0.621	0.617	0.207	0.893	0.803	0.923	0.445
Radium 228 (pCi/L)	EPA 904.0	20	0.915	0.967	0.914	0.949	1.03	0.683	0.97	0.973	0.956	0.996	0.952	0.713

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NS-not sampled
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Powerton Generation Station
Pekin, Illinois
Midwest Generation
21253.022

ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-13 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)	MW-14 (mg/L)
Chemical Name		Class I*	12/15/10	2/15/11	4/25/11	6/16/11	8/9/11	10/13/11	12/12/11	4/10/12	12/15/10	2/15/11	4/25/11	6/16/11	8/9/11	10/13/11	12/12/11	4/10/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.011	0.0069	0.0063	0.0057	0.0048	0.0066	0.023	0.027	0.024	0.019	0.0084	0.005	0.0062	0.015	0.0033	0.0039
Barium	Metals 6020	2.0	0.11	0.052	0.073	0.059	0.046	0.083	0.21	0.14	0.034	0.034	0.036	0.04	0.041	0.04	0.045	0.045
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	0.0062	0.0042	0.0045	ND	ND	0.01	0.0055	0.0055	ND	0.0046	0.0078	0.0049	0.0076	0.0096	0.0065	0.0057
Cobalt	Metals 6020	1.0	0.0031	0.0026	0.0023	0.0022	0.0031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	0.0068	0.0037	0.0041	0.004	0.004	0.0055	0.0066	0.0068	0.0037	0.0035	0.0074	0.0071	0.0064	0.0055	0.025	0.0067
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.69	0.052	0.077	ND	0.043	ND	0.11	0.2	2.2	0.94	0.036	0.3	0.71	2	0.12	0.77
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0035
Manganese	Metals 6020	0.15	5	3.8	2.7	2.9	2.6	3.6	3.5	3.5	0.68	0.81	0.29	0.36	0.57	0.84	0.067	0.63
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.03	0.023	0.021	0.018	0.016	0.015	0.022	0.02	0.015	0.015	0.02	0.016	0.016	0.011	0.015	0.018
Selenium	Metals 6020	0.05	0.0046	0.0046	0.0045	0.0039	0.0056	0.004	0.0036	0.0037	0.0024	0.0015	0.065	0.0035	0.003	0.0017	0.0037	0.022
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	0.0019	0.0018	0.0035	0.0039	0.0027	0.0016	0.0016	0.0034
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0084
Boron	Metals 6020	2	3.9	3.1	2.6	3.0	2.7	3.8	4.1	4.0	2.0	1.9	1.9	1.9	1.8	1.9	1.9	1.8
Sulfate	Dissolved 9038	400	1,400	770	580	540	440	660	1,100	1,100	960	820	770	810	940	850	880	990
Chloride	Dissolved 9251	200	160	120	100	86	110	110	180	170	160	160	160	160	240	200	200	190
Nitrogen/Nitrate	Nitrogen By calc	10	0.14	1.3	1.8	2.2	3.6	1.6	0.07	0.06	0.036	ND	1	0.27	0.05	ND	0.33	0.31
Total Dissolved Solids	Dissolved 2540C	1,200	2,600	1,600	1,400	1,300	1,100	1,500	2,100	2,300	1,800	1,700	1,800	1,900	2,000	1,800	1,800	2,200
Fluoride	Dissolved 4500 FC	4	0.28	0.29	0.31	0.44	0.38	0.3	ND	0.32	1.7	1.6	1.1	1.3	1.4	0.68	1.1	1
Radium 226 (pCi/L)	EPA 903.1	20	0.603	0.165	NA	0.741	0	0.244	0.955	0.678	0.577	0.163	NA	0.893	0.474	0.0983	0.857	0.601
Radium 228 (pCi/L)	EPA 904.0	20	0.988	0.966	0.73	1	0.198	0.74	1.01	0.883	0.944	0.96	0.737	0.947	1.1	–	0.985	0.929

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NS-not sampled
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Powerton Generation Station
Pekin, Illinois
Midwest Generation
21253.022

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-15 (mg/L) 12/15/10	MW-15 (mg/L) 2/15/11	MW-15 (mg/L) 4/25/11	MW-15 (mg/L) 6/16/11	MW-15 (mg/L) 8/9/11	MW-15 (mg/L) 10/13/11	MW-15 (mg/L) 12/12/11	MW-15 (mg/L) 4/10/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0099	0.0092	0.0064	0.0052	0.0053	0.011	0.0097	0.0061
Barium	Metals 6020	2.0	0.058	0.052	0.061	0.11	0.057	0.06	0.063	0.075
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	0.0042	0.0061	0.0092	0.0054	0.0091	0.0062	0.0062	0.0071
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	0.0039	0.005	0.0041	0.0037	0.0031	0.0039
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	3.3	2.4	2.1	0.7	2.1	2.6	2.1	0.0011
Lead	Metals 6020	0.0075	ND	ND	0.0012	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.56	0.42	0.36	0.6	0.37	0.48	0.39	0.25
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.013	0.011	0.012	0.015	0.01	0.011	0.011	0.01
Selenium	Metals 6020	0.05	0.0042	0.0079	0.017	0.004	0.002	0.004	0.0047	0.025
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.6	1.4	1.5	1.6	1.3	1.2	1.2	1.4
Sulfate	Dissolved 9038	400	300	220	270	650	250	180	140	200
Chloride	Dissolved 9251	200	180	190	190	170	210	180	200	200
Nitrogen/Nitrate	Nitrogen By calc	10	0.03	0.086	0.04	0.07	0.05	ND	0.07	0.12
Total Dissolved Solids	Dissolved 2540C	1,200	1,000	1,000	1,100	1,600	1,000	890	840	1,000
Fluoride	Dissolved 4500 FC	4	0.69	0.75	0.6	0.73	0.76	0.77	0.75	0.79
Radium 226 (pCi/L)	EPA 903.1	20	0.666	0.174	NA	0.946	0.567	0.922	0.979	0.508
Radium 228 (pCi/L)	EPA 904.0	20	0.902	0.968	0.689	0.983	0.0954	1.04	0.937	0.501

Notes:
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ATTACHMENT E

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July 27, 2012

VIA OVERNIGHT MAIL

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Attn: Andrea Rhodes, CAS #19
P.O. Box 19276
Springfield, IL 62794-9276

Re: Violation Notice: Midwest Generation, LLC, Waukegan Generating Station
Identification No.: 6281
Violation Notice No.: W-2012-00056

Dear Ms. Rhodes:

In response to the above-referenced June 11, 2012 Violation Notice ("VN"), received on June 13, 2012, this written response is timely submitted on behalf of the Midwest Generation, LLC (MWG), Waukegan Generating Station ("Waukegan"). MWG also requests a meeting with the Illinois Environmental Protection Agency ("Illinois EPA" or the "Agency") to discuss the VN and information provided in this response.

MWG regrets that the Illinois EPA decided to issue the VN because MWG has tried to work cooperatively with the Agency concerning the hydrogeologic assessment of the coal ash ponds at Waukegan even though it had significant concerns and objections to how the VN has proceeded in this matter.[1] Nevertheless, MWG complied with the Agency's request that it conduct a hydrogeologic assessment of the area around the coal ash ponds and followed its requirements and comments for how the hydrogeologic assessment should be conducted, even though it was under no legal obligation to do so.[2] At no time however did MWG agree that the

[1] *See, e.g.*, MWG (B. Constantelos) letter to Illinois EPA (A. Keller) dated July 15, 2009. MWG is also working cooperatively with the USEPA with regards to the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640, and is trying to coordinate the responses and requirements of both Agencies. USEPA first issued the proposed rules on June 21, 2010, and requested additional comments and information on Oct. 12, 2011. The additional information comment period closed on November 14, 2011, and MWG is now waiting for the USEPA to issue the final rule.

[2] MWG continues to reserve its objection that the Illinois EPA did not have the legal authority to require the hydrological assessments of the ash ponds under Sections 4 or 12 of the Illinois Environmental Protection Act (the "Act") or the Groundwater Quality Regulations, 35 Ill. Adm. Code Part 620.

COMP. EX. 10B

scope and nature of the hydrological assessment the Agency required it to perform would provide any basis for concluding that the ash ponds were impacting groundwater. The alleged violations in the VN are based solely on the results of the hydrogeologic assessment MWG performed at the Agency's request. The results of the hydrogeologic assessment do not show that the coal ash ponds at the Waukegan Station are impacting the groundwater and do not provide the necessary evidence to support the alleged violations contained in the VN.

Well prior to the issuance of this VN, MWG met with the Agency to discuss the groundwater monitoring results and to discuss cooperatively how to proceed based on those results, including what additional actions, if any, the Agency believed were necessary. The Agency told MWG that it had not yet decided how to proceed. The next development was the issuance of the VN. The VN itself provides no information concerning the basis for the Agency's apparent conclusion that the ash impoundments are the cause of the alleged groundwater impacts, other than the conclusory statement that "[o]perations at ash impoundments [sic] have resulted in violations of the Groundwater Quality Standards." The VN also provides no information concerning the nature or type of corrective action which the Agency may deem acceptable to address the alleged violations. The Agency is not pursuing this matter in a way that allows MWG to prepare an effective response or a Compliance Commitment Agreement.

This letter provides a detailed response to each of the alleged violations in Attachment A of the VN to the extent possible given the lack of information provided in the VN. It also advances MWG's general objection to the legal sufficiency of the notice of the alleged violations contained in the VN. MWG maintains that the Illinois EPA cannot prove the alleged violations in the VN, and does not, by submitting this response, make any admissions of fact or law, or waive any of its defenses to those alleged violations.

I. General Objection to the Legal Sufficiency of the Violation Notice

The VN does not comply with the requirements of Section 31 of the Act. Section 31(a)(1)(B) of the Act requires the Illinois EPA to provide a detailed explanation of the violations alleged. 415 ILCS 5/31(a)(1)(B). Under the Act, MWG is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation.[3] The VN fails to provide adequate notice to MWG of either the alleged violations or the activities which the Agency believes are necessary to address them. The VN states that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards...." (Violation Notice, Attachment A, page 1, 1st paragraph) No further description of the alleged "ash impoundments" is provided in the VN. Two ash impoundments exist at the Waukegan Station. It is impossible to identify from the contents of the VN what operations or activities at the Waukegan Station the Agency is claiming are the cause of the alleged violations, including

[3] *Citizens Utilities Co., v. IPCB*, 9 Ill.App.3d 158, 164, 289 N.E.2d 642, 648 (2nd Dist., 1972) (a person is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation). *See also, City of Pekin v. Environmental Protection Agency*, 47 Ill.App.3d 187, 192, 361 N.E.2d 889, 893 (3rd Dist., 1977.

whether it is the Agency's position that each of the Station's ash ponds, or only one of them, have caused the alleged violations. Absent an accurate or complete description of the activities or operations that the Agency is alleging caused the violations, it is also not possible to identify what action might be necessary to resolve them. Attachment A to the VN states: "Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation." However, no such explanation is provided in the VN. In sum, the VN fails to comply with the legal requirement that it include a detailed explanation of the violations alleged, does not inform MWG of the specific conduct constituting the alleged violations and provides no notice of what is necessary to resolve the alleged violations. The Section 31 process is based on fundamental principles of due process. MWG should not have to speculate about what activities it allegedly engaged in that caused the violations and how to address them to resolve the alleged violations. In the absence of this material, statutorily-required information, the Agency also has effectively denied MWG's statutory right to formulate an acceptable Compliance Commitment Agreement to submit for the Agency's approval.

The VN is also deficient regarding its explanation of what laws MWG has allegedly violated. The VN solely alleges that MWG violated "Section 12" of the Act. 415 ILCS 5/12. It does not provide any further specification as to which of the provisions of Section 12 MWG has allegedly violated.

Sec. 12 of the Act has nine subsections, consecutively numbered (a) through (i). Each of these subsections describes a different and distinct water pollution prohibition. 415 ILCS 5/12(a)-(i). However, the VN issued to MWG does not identify which of the nine subsections the Agency is alleging MWG violated. Based on the contents of Section 12 of the Act, the Agency is taking the position that MWG violated each and every one of the provisions of Section 12. Based on the relevant facts, it is unlikely that this is the intent of the VN. Therefore, the VN's general reference to Section 12 of the Act, without any other explanation, is not a "detailed explanation of the violations." This is yet another example of how the VN fails to provide MWG with adequate notice as a matter of law and thereby violates MWG's due process rights.[4]

By failing to provide a detailed explanation of the violations and any explanation of the activities that the Illinois EPA believes may resolve the violations, the Illinois EPA has effectively denied MWG the opportunity to properly and thoroughly respond to the alleged violations and to make an acceptable offer to resolve them. The VN's deficiencies conflict with the intent and purpose of Section 31 of the Act, which is to avoid unnecessary litigation. Therefore, MWG respectfully requests that Illinois EPA rescind the VN and suspend any further enforcement action unless and until it has taken the necessary actions to correct and cure the legal deficiencies in the notice of the alleged violations by following the statutory requirements under Section 31(a)(1)(B) of the Act. 415 ILCS 5/31(a)(1)(B).

[4] *See, e.g., Grigoleit Co. v. IEPA*, PCB 89-184, slip op at p. 11 (November 29, 1990) (Failure to notify permit applicant of alleged violations and provide an opportunity to provide information in response was a violation of applicant's due process rights).

II. Response to Alleged Violations in the VN

Subject to and without waiving its objections to the legal sufficiency of the VN, MWG nevertheless has attempted to discern the legal basis for the alleged violations and to prepare this response in defense to those allegations based on various assumptions. MWG reserves the right to supplement this response, including by submitting a separate response should the Agency provide the legally required notice under Section 31 of the Act.

The VN alleges that the "[o]perations at ash impoundments" at MWG's Waukegan Station have resulted in violations of certain of the Groundwater Quality Standards at the respective monitoring wells identified in the VN. (Violation Notice at Attachment A) MWG believes the Agency's use of the term "ash impoundments" is intended to refer to the structures, which the Waukegan Station commonly refers to as "ash ponds;" that is how they will be referred to here. The Agency further alleges that the alleged violations of the groundwater quality standards in 35 Ill. Admin. Code Part 620, also constitute violations of Section 12 of the Act and the underlying groundwater regulations in 35 Ill. Admin. Code Part 620. It is undisputable that the Agency has the burden to prove these alleged violations both in proceedings before the Illinois Pollution Control Board ("Board") and in the courts.[5] However, the groundwater monitoring data on which the Agency primarily, if not solely relies, to assert these violations is not sufficient, legally or technically, to prove that any "ash impoundment" is the source of the alleged groundwater impacts. Further, based on the existing condition of the ash ponds, it is not likely that they are the source of the alleged impacts.

To support its defense to the alleged violations, MWG has set forth below a description of: (1) the condition and use of the ash ponds at Waukegan; (2) the hydrogeologic assessment performed at the Waukegan Station; (3) the site hydrology; and (4) why the analytical data from the monitoring wells does not establish that the ash ponds are the source of the alleged exceedances of the groundwater standards.[6] In addition, for certain of the alleged exceedances, additional information not considered by the Agency shows that it is either more likely, or at least as likely, that the source of the alleged exceedance is something other than the ash ponds. In either case, the Agency cannot sustain its burden to prove the alleged violations.

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[5] Section 31(e) of the Act provides in relevant part: "In hearings before the Board under this Title, the burden shall be on the Agency...to show either that the respondent has caused or threatened to cause...water pollution or that the respondent has violated or threatens to violate any provision of this Act or any rule or regulation of the Board or permit or term or condition thereof." 415 ILCS 5/31(e); *Citizens Utilities v. IPCB*, 9 Ill. App. 3d 158, 164, 289 N.E.2d 642, 646 (1972) (the Agency has the burden of proof in enforcement actions).

[6] In preparing this response, MWG closely reviewed the groundwater monitoring reports previously submitted to the Agency for the monitoring wells which are identified in the VN. In the course of this review, some data transcription errors were found in the previously submitted data tables included in the groundwater monitoring reports. Copies of the corrected data tables are enclosed. The tables are annotated to identify the nature of the corrections made to the previously submitted reports. Many of the values for monitoring wells MW-1 through MW-5 for the October 25, 2010 sampling event were inadvertently transposed. Where revised values show either that an alleged exceedance did not exist or that a new exceedance not previously identified was reported, this response expressly identifies such revisions.

A. The Condition of the Ash Ponds

For several reasons, the construction and operation of the Waukegan ash ponds makes it unlikely that they are the cause of the alleged violations. The current construction and use of the ash ponds minimizes the potential for leakage from the ash ponds to groundwater.

First, the Waukegan ash ponds are not a disposal site. The ash that enters the ponds is routinely removed. This operating condition limits the amount of ash accumulated over time which serves to minimize the potential for the release of ash constituents to the groundwater.

Second, unlike many other ash ponds in Illinois, the two ash ponds at Waukegan are not simply earthen ponds with no protection against the migration of constituents into the land or groundwater. Each of the Waukegan ash ponds is lined to prevent releases to groundwater. MWG constructed both ponds in 2002 with a high-density polyethylene ("HDPE") liner, replacing a previously existing HDPE liner, overlain by a 12-inch sand cushion layer and a 6-inch limestone warning layer. Both HDPE liners have a permeability of approximately 10^{-13} cm/sec. Notably, this is a greater degree of permeability than is required in the Illinois Pollution Control Board ("Board") Regulations for constructing a new solid waste landfill where, unlike the ash ponds, waste materials are to be disposed of on a permanent basis. *See* 35 IAC 811.306(d). The liners in the Waukegan ash ponds exceed the level of permeability which the Illinois regulations expressly recognize is sufficient to prevent the release of constituents from landfills to the environment. Hence, the facts regarding the liners for these ash ponds also support the conclusion that the ash ponds are not the source of the exceedances of groundwater standards alleged in the VN.

The VN contains no facts concerning the condition of the Waukegan ash ponds that would indicate it is allowing ash constituents to escape from the ponds. For example, the Agency does not contend that there are any breaches in the integrity of the liners that are allowing ash constituents to be released to the groundwater. The Agency similarly does not claim that the liners are inadequate to prevent the migration of constituents. In the absence of such evidence, it is certainly far more likely than not that the existing ash ponds at the Waukegan Station is not the source of the groundwater impacts alleged in the VN.

B. Hydrogeologic Assessment and Site Hydrology

The VN appears to be based on the flawed premise that the hydrogeologic assessment which the Agency directed MWG to perform in the vicinity of the ash ponds would be sufficient to identify the ash ponds as the source of any elevated levels of constituents in the groundwater. This is simply not the case. The results of the hydrogeologic assessment at best give rise to more questions about the source of the alleged groundwater impacts, and do not prove that the existing ash ponds are the source of those impacts.

The results of the hydrogeologic assessment show a relatively uniform groundwater flow system. Groundwater flows from west to east, consistent with the expected flow direction due to

the proximity to Lake Michigan to the east. Based upon this groundwater flow direction, groundwater well MW-5 is an upgradient well, and groundwater wells MW-1 through MW-4 are downgradient wells.

A comparison of the monitoring results from the upgradient (MW-5) and downgradient (MW-1 – MW-4) wells does not support the Agency's contention that the ash ponds are the source of the alleged groundwater impacts. The distribution and observation of parameter concentrations is not consistent with the ash ponds being the source of the impacts identified in the VN. In fact, the more defensible conclusion is that the ponds are not the source of these impacts.

The highest concentrations and greatest number of exceedances of the groundwater standards were detected in the upgradient well, MW-5. Four parameters, iron, sulfate, total dissolved solids ("TDS"), and chloride exceeded the Class I groundwater standards only in this well. None of these parameters were observed above the groundwater standards in any of the downgradient wells. If the ash ponds were the source of these exceedances, then the upgradient well would not regularly have groundwater exceedances of the Class I groundwater standards; and the downgradient wells likely would. The absence of any exceedances of these constituents in the downgradient wells is strong evidence that the ash ponds are not the source of the groundwater impacts for these parameters at well MW-5.

Moreover, there were more exceedances of the boron Class 1 groundwater standard in MW-5 than in the downgradient wells.[7] Boron is generally considered a primary indicator compound of ash impacts to groundwater. The concentration range of boron in upgradient well MW-5 is substantially greater than the range of boron detections in all the downgradient monitoring wells combined. The boron concentration range in well MW-5 is 12 mg/l to 44 mg/l. The combined range of boron detections in all downgradient wells combined is 1.5 mg/l to 2.8 mg/l. The data does not support the conclusion that the ash ponds are the cause of the alleged groundwater impacts.

The distribution of sulfate detections from upgradient to downgradient groundwater monitoring wells also does not support the allegation that the ash ponds are the cause of the alleged groundwater impacts. Elevated sulfate concentration, when coupled with elevated boron concentration, is an indicator of potential coal ash impacts to groundwater. A review of the sulfate data provides the same trend as explained above for boron. The range of sulfate detections in upgradient well MW-5 is from 780 mg/l to 1,100 mg/l. The range of sulfate detections in all combined downgradient monitoring wells is 97 mg/l to 390 mg/l. All of the upgradient detections exceed the Class I groundwater standard for sulfate. None of the downgradient detections of sulfate exceed the Class I groundwater standard. Again, the data does not support the conclusion that the ash ponds are the cause of the alleged groundwater impacts.

[7] The corrected, enclosed table shows there is an additional boron exceedance reported for well locations MW-2 and MW-5.

For the remaining parameters identified in the VN, the data also shows that the levels detected in the upgradient and downgradient wells are not consistent with the conclusion that the ash ponds are the source of these impacts. First, all but one of the manganese exceedances was observed in the upgradient well, MW-5. The only downgradient exceedance of manganese occurred in only one sampling event (*i.e.*, Monitoring Well MW-4, 9/13/11and has not been replicated since.[8] Also, there was only one exceedance of antimony at MW-2 in the initial sampling event, which has not been replicated since.[9] A single, isolated exceedance that is not reproducible over subsequent, consecutive quarters of sampling is not representative of actual groundwater quality conditions, and hence, is insufficient to prove the alleged violation.

There were several exceedances of arsenic noted at downgradient monitoring well location MW-1. The alleged exceedances for arsenic are more likely the result of chemical conditions in the groundwater at Waukegan. A review of the oxidation-reduction (ORP) field parameter data for the wells indicates that at monitoring well location MW-1, there is consistently a low dissolved oxygen (DO) level coupled with negative ORP readings. This is indicative of a reducing environment in the vicinity of this well. The DO and ORP data for wells MW-2 through MW-4 show some variability in these field parameter readings between sampling events. Generally, any negative ORP measurements tend to be less in these wells than at location MW-1. There were no elevated detections of arsenic in any of the other three downgradient monitoring wells (MW-2 through MW-4). If the subject ash ponds were the cause of the noted arsenic exceedances, then one would expect to see similarly elevated levels of this constituent in the other downgradient monitoring wells, which is not the case here.

High pH levels were sporadically seen in three groundwater wells. An exceedance of the pH groundwater standard was observed in three sampling events in monitoring well MW-1. There were single, non-reproducible pH exceedances at monitoring well locations MW-2 and MW-3. Because pH is a field parameter, these alleged pH exceedances need to be considered in the context of the other detected parameters before drawing any conclusions as to their cause. When the alleged pH exceedances are viewed in their proper context, the data does not support a conclusion that the ash ponds are the source of the elevated pH levels.

In sum, the pattern of the constituent concentrations in groundwater from all of the monitoring wells, including repeatedly observing higher concentrations of constituents in the upgradient well, clearly does not support the contention that the ash ponds are the source of the alleged groundwater standards exceedances. The data are more consistent with the opposite conclusion, namely that the ash ponds are not the source of the alleged exceedances.

[8] The corrected, enclosed table shows there was an additional exceedance of manganese reported for MW-5.
[9] The corrected, enclosed table shows there was not an exceedance of antimony in MW-1, but there was an exceedance of antimony reported for MW-2.

C. The Waukegan Ash Ponds Are Not Causing Groundwater Exceedances

Because the Illinois EPA failed to specify which of the provisions of Section 12 of the Act MWG allegedly violated, MWG has had to speculate to identify the potential Section 12 violations this response needs to address. As stated above, MWG objects to the vagueness of, and legally deficient notice provided by, the VN and reserves its right to responds further when and if the Agency properly identifies the provisions of Section 12 on which it is relying.

For purposes of this response, based upon the regulations cited by the Agency in the VN, MWG has assumed that the Illinois EPA's alleged violations of Section 12 are limited to sections 12(a), which prohibits causing or allowing water pollution, and to Section 12(d), which prohibits causing or allowing the creation of a water pollution hazard. 415 ILCS 5/12(a), (d). Based on these assumptions regarding the substance of the Illinois EPA's alleged violations, MWG submits that Agency cannot show that the ash ponds at Waukegan caused or allowed water pollution or created a water pollution hazard.

Overall the analytical results show that there is no relationship between the ash ponds and the groundwater exceedances. The pattern of the constituent concentrations in groundwater from monitoring wells across the site, including repeatedly observing higher concentrations in the upgradient well, clearly does not support the Agency's contention that the ash ponds are the source of these impacts. The data are more consistent with the opposite conclusion, namely that the ash ponds are not the source of the alleged exceedances.

To show a violation of Section 12(a) and 12(d), there must be a showing not only of the presence of a potential source of contamination, but also that it is in sufficient quantity and concentration to render the waters harmful. *Bliss v. Illinois EPA,* 138 Ill. App. 3d 699, 704 (1985) ("mere presence of a potential source of water pollutants on the land does not necessarily constitute a water pollution hazard"). In other words, there must be a causal link between the potential source and the water or groundwater. The groundwater monitoring data on which the Agency relies does not establish this essential causal link between the ash ponds and the groundwater. Therefore, the Agency has failed to meet its burden to prove that the ash ponds are the cause of the alleged exceedances of the groundwater standards as required to prove a violation of Sections 12(a) or 12(d) of the Act. 415 ILCS 5/12(a), (d).

The Agency also alleges violations of the groundwater quality regulations based on exceedances of the groundwater quality standards in 35 Ill. Admin. Code § 620.401. There is no violation here of Section 620.401. Section 620.401 solely provides the legal criteria that groundwater must meet the standards appropriate to the groundwater's class. It is a foundational regulation, allowing for different classes of groundwater to meet different groundwater standards. It is not a prohibition regulation. There is no conduct prohibited by this section of the regulations in which MWG is alleged to have engaged. MWG cannot and did not violate Section 620.401.

The remaining alleged groundwater regulation violations, Sections 620.115, 620.301, 620.405, and 620.410 of the Board Regulations, are all based on the Agency's contention that MWG's operation of the ash ponds has caused the exceedances of the groundwater standards detected in the monitoring data. To sustain these allegations, the Agency must show that MWG caused a discharge of the subject constituents from ash ponds which in turn caused the exceedances of the groundwater standards.[10] The relevant facts and circumstances do not support either conclusion.

The use and condition of the ash ponds does not support a finding that they are releasing constituents to the groundwater. They are not disposal sites. The ash is regularly removed from the ponds by MWG. The linings in all of the ash ponds are of sufficient low permeability, exceeding accepted regulatory guidance to prevent the release of constituents. Finally, pursuant to the terms of the Waukegan Station's NPDES Permit, these ash ponds are part of the flow-through wastewater treatment process at the station. MWG's operation of the ash ponds has been carried out in accordance with the terms and conditions of the NPDES Permit. Under Section 12(f) of the Act, compliance with the terms and conditions of any permit issued under Section 39(b) of the Act is deemed compliance with this subsection.

Similarly, the groundwater data on which the Agency relies does not provide a sufficient scientific or technical evidentiary basis on which to conclude that the ash ponds are causing the alleged groundwater exceedances. The essential "causal link" between the ash ponds and the elevated constituents in the groundwater is missing. The groundwater impacts in the upgradient well are consistently greater than in the wells downgradient of the ash ponds. The distribution of the impacts is not consistent with the ash ponds being the source of the exceedances. As a whole, the data is at best inconclusive on this issue, while certain data results clearly point to other, unrelated causes.

Because the ash ponds have not been shown to have caused a release of any contaminants that is causing the groundwater exceedances, the Agency's VN does not support its claims that MWG has violated Sections 620.405 or 620.301 of the Board regulations. Accordingly, MWG also has not violated Section 620.115 of the Board regulations.

III. Compliance Commitment Agreement

This VN should not have been issued. Given the absence of proof that the ash ponds are the cause of the alleged groundwater exceedances, the Agency's request for a Compliance Commitment Agreement (CCA) to address the ash ponds is an attempt to compel MWG to conduct unnecessary corrective action to resolve the alleged violations.

[10] *See People of the State of Illinois v. ESG Watts, Inc.*, PCB 96-107 slip op. at p. 41 (February 5, 1998) (By finding the respondent caused a discharge of constituents into the groundwater causing a violation of the Class II Groundwater standards, the Board found the respondent also violated 35 IAC §§ 620.301 and 620.115)

Moreover, with the pending federal regulatory process to enact regulations for the design and operation of ash ponds, it is prudent to await the outcome of the proposed federal regulations to determine whether any changes to the ash ponds construction or operation are required by those regulations. The Agency itself has previously advanced this position. In 2010, the Agency's Steven Nightingale testified before the Illinois Pollution Control Board that the Board should consider initiating a temporary moratorium on the closure of coal ash impoundments because of the U.S. EPA's intention to regulate them. (*See In the Matter of Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill.Adm.Code Part 840.101 Through 840.152*, Docket R09-21 (October 7, 2010) at p. 64) On behalf of the Agency, Mr. Nightingale told the Board that if industry had to take action in the interim, it "could end up expending substantial money and resources only to find they are subject to additional and/or different closure requirements for those units." (*Id.*) The Agency's pursuit of this enforcement action, particularly given the deficiencies in its alleged evidence, also threatens to force MWG to take actions that may conflict with or otherwise differ from the requirements in the upcoming federal regulations.

As the hydrogeologic assessment showed, there is no threat to human health presented by the alleged exceedances of the groundwater standards. The hydrogeologic assessment investigated the presence of potable water sources within a 2,500-foot radius of the site. Eight groundwater wells are installed within 2,500 feet of the site, all east and upgradient of the site. Shallow groundwater at the site discharges to Lake Michigan. Although Lake Michigan is used as a drinking water source, the nearest intake location is too far away to be impacted by the alleged groundwater exceedances. In the absence of any potable groundwater receptors or use, groundwater at the Waukegan site does not pose any risk to human health. Accordingly, awaiting the outcome of the federal regulatory proposal is appropriate under these circumstances. Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

A. The ash ponds will not be used as permanent disposal sites and ash will continue to be removed from the ponds on a periodic basis.

B. The ash ponds will be maintained and operated in a manner which protects the integrity of the existing liners. During the removal of ash from the ponds, appropriate procedures will be followed to protect the integrity of the existing liners, including operating the ash removal equipment in a manner which minimizes the risk of any damage to the liner.

C. During the ash removal process, visual inspections of the ponds will be conducted to identify any signs of a breach in the integrity of the pond liners. In the event that a

breach of the pond liners is detected, MWG will notify the Agency and will submit a corrective action plan for repair or replacement, as necessary, of the liner. Upon the Agency's approval, and the issuance of any necessary construction permit, MWG will implement the correction action plan.

D. Institutional controls will be evaluated for addressing the alleged exceedances of the groundwater standards. There are already Environmental Land Use Controls (ELUCs) in place at a portion of the Waukegan Station.

E. MWG will continue to monitor the groundwater through the existing five groundwater monitoring wells and report its findings to Illinois EPA. MWG reserves the right to request the Agency's approval of a cessation of all or some of the monitoring requirements based on future monitoring results.

F. MWG will continue to monitor the development of the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640. When the final rule is issued, MWG will promptly notify Illinois EPA how it will comply with the new Federal Rules.

This letter constitutes our response to and proposed CCA for the Violation Notice W-2012-00056. MWG also reserves the right to raise additional defenses and mitigation arguments as may be necessary, in defense of the allegations listed in the Violation Notice in the event of any future enforcement. We look forward to discussing the above information further at the soon to be scheduled meeting with the Agency's representatives. Please contact me to schedule a mutually convenient date for the meeting.

Very truly yours,

Susan M. Franzetti
Counsel for Midwest Generation, LLC

Enclosures

cc: Maria L. Race, Midwest Generation, LLC

Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Waukegan Station
Waukegan, Illinois
Midwest Generation
21153.033

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)
Chemical Name		Class I*	10/25/10	3/24/11	6/13/11	9/13/11	12/6/11	3/14/12	10/25/10	3/24/11	6/13/11	9/13/11	12/6/11	3/14/12
Antimony	Metals 6020	0.006	0.0052	ND	ND	ND	ND	ND	0.015	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.054	0.04	0.17	0.077	0.057	0.078	0.025	0.016	0.012	0.0087	0.0094	0.0094
Barium	Metals 6020	2.0	0.023	0.022	0.02	0.038	0.051	0.034	0.0091	0.014	0.024	0.02	0.023	0.017
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	0.02	0.013	ND	ND	ND	ND	0.014	0.019	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	0.0027	0.0086	0.02	0.011	0.0052	0.0034	0.018	0.032	0.038	0.035	0.028
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	0.031	0.03	0.016	0.039	0.032	0.037	0.026	0.0085	0.028	0.022	0.0086	0.0046
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2.6	2	2.6	2.5	2.8	2.5	2.2	2.2	2	1.7	1.9	2
Sulfate	Dissolved 9038	400	350	230	260	280	330	390	230	160	150	200	180	200
Chloride	Dissolved 9251	200	39	48	52	41	32	47	42	45	46	45	50	53
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	0.52	0.3	ND	ND	ND	0.23	0.12	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	460	470	460	570	750	630	410	400	410	460	490	400
Fluoride	Dissolved 4500 FC	4	0.45	0.59	0.71	0.33	0.46	0.46	0.35	0.53	0.8	0.56	0.67	0.88
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	0.021	0.1	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	0.52	0.32	ND	ND	ND	0.23	0.12	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NA - upgradient value not calculated due to non-detection in upgradient wells
ND-non detect
mg/L-milligrams per liter

AMENDMENTS
- Value amended from original Table 3 (May 11, 2012).
- Value has not changed; font has been changed from bold to normal.

Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Waukegan Station
Waukegan, Illinois
Midwest Generation
21153.033

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)
Chemical Name		Class I*	10/25/10	3/24/11	6/13/11	9/13/11	12/6/11	3/14/12	10/25/10	3/24/11	6/13/11	9/13/11	12/6/11	3/14/12
Antimony	Metals 6020	0.006	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0043	0.0041	0.0049	0.0077	0.0049	0.0071	0.006	0.0077	0.0059	0.0058	0.0065	0.0068
Barium	Metals 6020	2.0	0.0057	0.0086	0.018	0.0044	0.0058	0.0049	0.026	0.025	0.034	0.039	0.036	0.038
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	0.0059	0.0044	ND	0.0054	0.0036	0.058	0.035	0.028	0.36	0.025	0.038
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	0.0094	0.016	0.03	0.012	0.011	0.0064	0.0039	ND	0.022	0.025	0.015	0.0091
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.7	2.2	2.3	1.6	1.6	1.5	2	2.1	2	1.8	2.1	2.2
Sulfate	Dissolved 9038	400	120	130	130	97	110	140	250	170	160	160	160	280
Chloride	Dissolved 9251	200	53	49	53	49	51	52	39	47	45	59	60	71
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.29	ND	ND	ND	ND	ND	0.18	0.14	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	280	350	340	300	380	340	430	400	380	470	480	490
Fluoride	Dissolved 4500 FC	4	0.27	0.47	0.39	0.24	0.67	0.64	0.6	0.84	0.97	0.67	0.82	0.73
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	0.29	ND	ND	ND	ND	ND	0.18	0.14	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NA - upgradient value not calculated due to non-detection in upgradient wells
ND-non detect
mg/L-milligrams per liter

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Shaded - Value amended from original Table 3 (May 11, 2012).
Unshaded - Value has not changed; font has been changed from bold to normal.

Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Waukegan Station
Waukegan, Illinois
Midwest Generation
21153.033

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)	MW-5 (mg/L)
Chemical Name		Class I*	10/25/10	3/24/11	6/13/11	9/13/11	12/6/11	3/14/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0076	0.0082	0.0013	ND	0.01	0.01
Barium	Metals 6020	2.0	0.06	0.066	0.057	0.041	0.073	0.063
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	3.5	2.8	0.95	0.42	5.6	6.6
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.71	0.6	0.28	0.03	0.99	0.76
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	0.0026	ND	ND	ND
Selenium	Metals 6020	0.05	0.0028	ND	0.0094	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	28	33	12	30	37	44
Sulfate	Dissolved 9038	400	920	780	1,100	810	1,100	980
Chloride	Dissolved 9251	200	100	120	540	220	110	50
Nitrogen/Nitrate	Nitrogen By calc	10	ND	0.27	0.2	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,500	1,800	3,300	2,300	2,300	2,000
Fluoride	Dissolved 4500 FC	4	0.29	0.34	0.24	0.18	0.29	0.29
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	0.27	0.2	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
NA - upgradient value not calculated due to non-detection in upgradient wells
ND-non detect
mg/L-milligrams per liter

AMENDMENTS
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ATTACHMENT F

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July 27, 2012

VIA OVERNIGHT MAIL

Illinois EPA
Division of Public Water Supplies
Attn: Andrea Rhodes, CAS #19
P.O. Box 19276
Springfield, IL 62794-9276

Re: Violation Notice: Midwest Generation, LLC, Will County Generating Station
Identification No.: 6283
Violation Notice No.: W-2012-00058

Dear Ms. Rhodes:

In response to the above-referenced June 11, 2012 Violation Notice ("VN"), received on June 13, 2012, this written response is timely submitted on behalf of the Midwest Generation, LLC ("MWG"), Will County Generating Station ("Will County"). MWG also requests a meeting with the Illinois Environmental Protection Agency ("Illinois EPA" or "Agency") to discuss the VN and the information provided in this response.

MWG regrets that the Illinois EPA decided to issue the VN because MWG has tried to work cooperatively with the Illinois EPA concerning the hydrogeologic assessment of the coal ash ponds at Will County even though it had significant concerns and objections to how the VN has proceeded in this matter.[1] Nevertheless, MWG complied with the Agency's request that it conduct a hydrogeologic assessment of the area around the coal ash ponds and followed its requirements and comments for how the hydrogeologic assessment should be conducted, even though it was under no legal obligation to do so.[2] At no time however did MWG agree that the scope and nature of the hydrogeologic assessment the Agency required it to perform would

[1] *See, e.g.*, MWG (B. Constantelos) letter to Illinois EPA (A. Keller) dated July 15, 2009. MWG is also working cooperatively with the USEPA with regards to the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640, and is trying to coordinate the responses and requirements of both Agencies. USEPA first issued the proposed rules on June 21, 2010, and requested additional comments and information on October 12, 2011. The additional information comment period closed on November 14, 2011, and MWG is now waiting for the USEPA to issue the final rule.

[2] MWG continues to reserve its objection that the Illinois EPA did not have the legal authority to require the hydrologic assessments of the ash ponds under Sections 4 or 12 of the Illinois Environmental Protection Act (the "Act") or the Groundwater Quality Regulations, 35 Ill. Adm. Code Part 620.

COMP. Ex. 11B

provide any basis for concluding that the ash ponds were impacting groundwater. The alleged violations in the VN are based solely on the results of the hydrogeologic assessment MWG performed at the Agency's request. The results of the hydrogeologic assessment do not show that the coal ash ponds at the Will County Station are impacting the groundwater and do not provide the necessary evidence to support the alleged violations contained in the VN.

Well prior to the issuance of this VN, MWG met with the Agency to discuss the groundwater monitoring results and to discuss cooperatively how to proceed based on those results, including what additional actions, if any, the Agency believed were necessary. The Agency told MWG that it had not yet decided how to proceed. The next development was the issuance of the VN. The VN itself provides no information concerning the basis for the Agency's apparent conclusion that ash impoundments are the cause of the alleged groundwater impacts, other than the conclusory statement that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards." The VN also provides no information concerning the nature or type of corrective action which the Agency may deem acceptable to address the alleged violations. The Agency is not pursuing this matter in a way that allows MWG to prepare an effective response or a Compliance Commitment Agreement.

This letter provides a detailed response to each of the alleged violations in Attachment A of the VN to the extent possible given lack of information provided in the VN. It also advances MWG's general objection to the legal sufficiency of the notice of the alleged violations contained in the VN. MWG maintains that the Illinois EPA cannot prove the alleged violations in the VN, and does not, by submitting this response, make any admissions of fact or law, or waive any of its defenses to those alleged violations.

I. General Objection to the Legal Sufficiency of the Violation Notice

The VN does not comply with the requirements of Section 31 of the Act. Section 31(a)(1)(B) of the Act requires the Illinois EPA to provide a detailed explanation of the violations alleged. 415 ILCS 5/31(a)(1)(B). Under the Act, MWG is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation.[3] The VN fails to provide adequate notice to MWG of either the alleged violations or the activities which the Agency believes are necessary to address them. The VN states that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards...." (Violation Notice, Attachment A, page 1, 1st paragraph) No further description of the alleged "ash impoundments" is provided in the VN. Multiple ash impoundments exist at the Will County Station. It is impossible to identify from the contents of the VN what operations or activities at the Will County Station the Agency is claiming are the cause of the alleged violations, including whether it is the Agency's position that each of the Station's ash ponds, or

[3] *Citizens Utilities Co., v. IPCB*, 9 Ill.App.3d 158, 164, 289 N.E.2d 642, 648 (2nd Dist., 1972) (a person is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation). *See also, City of Pekin v. Environmental Protection Agency*, 47 Ill.App.3d 187, 192, 361 N.E.2d 889, 893 (3rd Dist., 1977.

only certain ones, have caused the alleged violations. Absent an accurate or complete description of the activities or operations that the Agency is alleging caused the violations, it is also not possible to identify what action might be necessary to resolve them. Attachment A to the VN states: "Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation." However, no such explanation is provided in the VN. In sum, the VN fails to comply with the legal requirement that it include a detailed explanation of the violations alleged, does not inform MWG of the specific conduct constituting the alleged violations and provides no notice of what is necessary to resolve the alleged violations. The Section 31 process is based on fundamental principles of due process. MWG should not have to speculate about what activities it allegedly engaged in that caused the violations and how to address them to resolve the alleged violations. In the absence of this material, statutorily-required information, the Agency also has effectively denied MWG's statutory right to formulate an acceptable Compliance Commitment Agreement to submit for the Agency's approval.

The VN is also deficient regarding its explanation of what laws MWG has allegedly violated. The VN solely alleges that MWG violated "Section 12" of the Act. 415 ILCS 5/12. It does not provide any further specification as to which of the provisions of Section 12 MWG has allegedly violated.

Section 12 of the Act has nine subsections, consecutively numbered (a) through (i). Each of these subsections describes a different and distinct water pollution prohibition. 415 ILCS 5/12(a)-(i). However, the VN issued to MWG does not identify which of the nine subsections the Agency is alleging MWG violated. Based on the contents of Section 12 of the Act, the Agency is taking the position that MWG violated each and every one of the provisions of Section 12. Based on the relevant facts, it is highly unlikely that this is the intent of the VN. Therefore, the VN's general reference to Section 12 of the Act, without any other explanation, is not a "detailed explanation of the violations." This is yet another example of how the VN fails to provide MWG with adequate notice as a matter of law and thereby violates MWG's due process rights.[4]

By failing to provide a detailed explanation of the violations and any explanation of the activities that the Illinois EPA believes may resolve the violations, the Illinois EPA has effectively denied MWG the opportunity to properly and thoroughly respond to the alleged violations and to make an acceptable offer to resolve them. The VN's deficiencies conflict with the intent and purpose of Section 31 of the Act, which is to avoid unnecessary litigation. Therefore, MWG respectfully requests that Illinois EPA rescind the VN and suspend any further enforcement action unless and until it has taken the necessary actions to correct and cure the legal deficiencies in the notice of the alleged violations by following the statutory requirements under Section 31(a)(1)(B) of the Act. 415 ILCS 5/31(a)(1)(B).

[4] *See, e.g., Grigoleit Co. v. IEPA*, PCB 89-184, slip op at p. 11 (November 29, 1990) (Failure to notify permit applicant of alleged violations and provide an opportunity to provide information in response was a violation of applicant's due process rights).

II. Response to Alleged Violations in the VN

Subject to and without waiving its objections to the legal sufficiency of the VN, MWG nevertheless has attempted to discern the legal basis for the alleged violations and to prepare this response in defense to those allegations based on various assumptions. MWG reserves the right to supplement this response, including by submitting a separate response should the Agency provide the legally required notice under Section 31 of the Act.

The VN alleges that the "[o]perations at ash impoundments" at MWG's Will County Station have resulted in violations of certain of the Groundwater Quality Standards at the respective monitoring wells identified in the VN. (Violation Notice at Attachment A) MWG believes the Agency's use of the term "ash impoundments" is intended to refer to the structures that the Will County Station commonly refers to as "ash ponds," and that is how they will be referred to here. The Agency further alleges that the alleged violations of the groundwater quality standards in 35 Ill. Admin. Code § 620 also constitute violations of Section 12 of the Act and the underlying groundwater regulations in 35 Ill. Admin. Code § 620. It is undisputable that the Agency has the burden to prove these alleged violations both in proceedings before the Illinois Pollution Control Board and in the courts.[5] However, the groundwater monitoring data on which the Agency primarily, if not solely, relies to assert these violations is not sufficient, legally or technically, to prove that any "ash impoundments" is the source of the alleged groundwater impacts. Further, based on the existing condition of the ash ponds, it is not likely that they are a source of the alleged groundwater impacts.

To support its defense to the alleged violations, MWG has set forth below a description of: (1) the condition and use of the ash ponds at Will County; (2) the hydrogeologic assessment performed at the Will County Station; (3) the site hydrology; and (4) why the analytical data from the monitoring wells does not establish that the ash ponds are the source of the alleged exceedances of the groundwater standards.[6] In addition, for certain of the alleged exceedances, additional information not considered by the Agency shows that it is either more likely, or at least as likely, that the source of the alleged exceedance is something other than the ash ponds. In either case, the Agency cannot sustain its burden to prove the alleged violations.

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[5] Section 31(e) of the Act provides in relevant part: "In hearings before the Board under this Title, the burden shall be on the Agency...to show either that the respondent has caused or threatened to cause...water pollution or that the respondent has violated or threatens to violate any provision of this Act or any rule or regulation of the Board or permit or term or condition thereof." 415 ILCS 5/31(e); *Citizens Utilities v. IPCB*, 9 Ill. App. 3d 158, 164, 289 N.E.2d 642, 646 (1972) (the Agency has the burden of proof in enforcement actions).

[6] In preparing this response, MWG closely reviewed the groundwater monitoring reports previously submitted to the Agency for the monitoring wells that are identified in the VN. In the course of this review, some data transcription errors were found in the previously submitted data tables included in the groundwater monitoring reports. Copies of the corrected data tables are enclosed. The tables are annotated to identify the nature of the corrections made to the previously submitted reports. However, none of the transcription errors affected the values noted in the VN.

A. The Condition of the Ash Ponds

For several reasons, the construction and operation of the Will County ash ponds makes it unlikely that they are the cause of the alleged violations. The current construction and use of the ash ponds minimizes the potential for leakage from the ash ponds to groundwater.

First, the Will County ash ponds are relatively small and they are not used as permanent disposal sites for ash. Ash is stored in the ponds and removed as needed for operational purposes. This operating condition serves to minimize the potential for the release of ash constituents to the groundwater.

Second, unlike many other ash ponds in Illinois, the four ash ponds at Will County are not simply earthen ponds with no protection against the migration of constituents into the land or groundwater. Each of the Will County ash ponds is lined to prevent releases to groundwater. Moreover, as further described below, MWG previously instituted a program which evaluated the ash ponds maintained at its stations with regard to the potential risk of migration of ash constituents to the environment. Pursuant to this internal evaluation, MWG scheduled one of the ash ponds at Will County, Pond 3S, for replacement of its liner because its evaluation showed that this pond theoretically presented the highest threat of a release as compared to the other ponds. However, when MWG initiated the liner replacement project, it found that the existing liner of Pond 3S, consisting of Poz-o-Pac material used to line all of the Will County ash ponds at issue here, was intact and in excellent condition. It did not need to be replaced. Because the new liner materials had already been purchased and the funds committed for the liner replacement, MWG nevertheless proceeded to install the new liner on Pond 3S in 2009. In the course of that project, MWG further discovered that the Poz-o-Pac lining was in such good condition, that it was a significant challenge just to remove it from the ash pond so that the new liner could be installed. Because the Pond 3S liner project showed that the condition and integrity of its Poz-o-Pac liner was excellent, and the other three ash ponds have liners constructed of the same Poz-o-Pac material, the liners in the other three Will County ash ponds have not been replaced. The facts regarding the Pond 3S liner evaluation project serves to rebut the Agency's contention that the ash ponds are the source of the alleged groundwater impacts in the VN.

The other three Will County ash ponds that are still constructed of Poz-o-Pac material meet accepted standards for preventing the migration of constituents to the environment. Each has a bottom constructed of two 12-inch layers of Poz-o-Pac, surrounding 12 inches of fill material, and sides constructed of 3 feet of Poz-o-Pac.[7] The permeability of the Poz-o-Pac liner is 10^{-7} cm/sec. Notably, this is the same degree of permeability that is required in the Illinois Pollution Control Board ("Board") Regulations for constructing a new solid waste landfill where, unlike the ash ponds, waste materials are to be disposed of on a permanent basis. *See* 35 Ill. Admin. Code § 811.306(d). The liners in the Will County ash ponds achieve the level of permeability which the Illinois regulations expressly recognize is sufficient to prevent the release

[7] Poz-o-Pac is an aggregate liner similar to concrete.

of constituents to the environment. Hence, the facts regarding the liners in place for these three ash ponds also support the conclusion that the ash ponds are not the source of the exceedances of groundwater standards alleged in the VN.

The facts to rebut the Agency's alleged violations are even more persuasive regarding the fourth ash pond, Pond 3S. As noted above, Pond 3S was relined in 2009 with a high-density polypropylene (HDPE) liner. The existing Poz-o-Pac liner on the sides of Pond 3S remained in place, with the new HDPE liner placed on top of it, providing even greater protection against the release of ash constituents. The 2009 HDPE liner alone has a permeability of approximately 10^{-13} cm/sec. Hence, the current liner in Pond 3S achieves a level of permeability that is significantly better than the Illinois permeability requirements for solid waste landfills.

The VN contains no facts concerning the condition of the liners in the Will County ash ponds that would indicate that they are allowing ash constituents to escape from the ponds. For example, the Agency does not contend that there are any breaches in the integrity of the ash pond liners that are allowing ash constituents to be released to the groundwater. The Agency similarly does not claim that the materials used for the existing liners are inadequate to prevent the migration of constituents. The Agency would be hard pressed to make such a claim because the liner materials either meet or exceed the analogous requirements for Illinois landfills and the Agency approved the use of these materials when it issued the necessary construction permit for the liner installations. In the absence of such evidence, it is certainly far more likely than not that the existing ash ponds at the Will County Station are not the source of the groundwater impacts alleged in the VN.

B. Hydrogeologic Assessment and Site Hydrology

The VN appears to be based on the flawed premise that the hydrogeologic assessment which the Agency directed MWG to perform in the vicinity of the ash ponds would be sufficient to identify the ash ponds as the source of any elevated levels of constituents in the groundwater. This is simply not the case. The results of the hydrogeologic assessment at best give rise to more questions about the source of the alleged groundwater impacts, and do not prove that the existing ash ponds are the source of those impacts.

The results of the hydrogeologic assessment show that the site hydrology at Will County consists of a complex flow system through the underlying shallow dolomite bedrock. The local groundwater flow in the vicinity of the ash ponds appears to be divergent. However, based on the current water level data, it is not possible to conclude whether the ponds are the cause of the divergence or if other conditions may be affecting the groundwater flow system. Some general observations based on the groundwater monitoring data can be made relative to upgradient versus downgradient monitoring wells. The location of monitoring wells MW-1 and MW-2 generally can be considered to be upgradient of monitoring wells MW-7 and MW-8. Monitoring wells MW-3 through MW-6 can be generally considered to be located upgradient of wells MW-9 and MW-10. The results of a comparison of the groundwater monitoring results for these sets of upgradient and downgradient wells do not support the VN's allegation that the ash ponds are the

source of the alleged groundwater impacts. The monitoring data shows that the distribution of parameter concentrations is so random that the more defensible conclusion is that the ash ponds are not the source.

Generally, the parameters detected in downgradient monitoring wells are at equivalent or lower concentrations of constituents than in the associated upgradient well.[8] In fact, there are more exceedances of the groundwater standards detected in the upgradient wells than in wells downgradient of those locations. Some of the highest concentrations of constituents were found in monitoring well MW-4. The monitoring wells located downgradient of MW-4 (MW-9 and MW-10), which are also downgradient of the ash ponds themselves, consistently have lower parameter concentrations than those found in the upgradient MW-4 monitoring well. This is particularly true of the boron and sulfate levels, which are two typical ash leachate indicators. The detections in monitoring well MW-4 are consistently almost twice as high for boron and three to four times as high for sulfate than the levels found in downgradient monitoring wells MW-9 and MW-10. This pattern of boron and sulfate detections is totally inconsistent with the VN's allegation that the ash ponds are the source of the groundwater exceedances.

The following additional examples taken from the groundwater monitoring data show constituent distributions that are not consistent with the VN's allegation that the ash ponds are the source of impacts to groundwater:

Antimony: Only two monitoring wells, MW-1 and MW-2, show exceedances of antimony. Both of these wells are upgradient of monitoring wells MW-7 and MW-8 where antimony was never detected.

Manganese: The highest concentration of manganese in any of the monitoring wells was 1.0 milligrams per liter (mg/L) at monitoring well MW-4, a monitoring well that is upgradient of MW-9 and MW-10. If the ash ponds were causing the manganese exceedances, there should be higher concentrations of manganese in MW-9 and MW-10 than in MW-4. The reverse is the case here. Manganese has not been detected in MW-9 and the concentrations of manganese in MW-10 are significantly lower than in MW-4.

Additional, similar examples for the other alleged constituent exceedances can be found in the groundwater data from the monitoring wells. In sum, the pattern of the constituent concentrations across these monitoring wells clearly does not support the Agency's contention that the ash ponds are the source of these constituents. The data are more consistent with the opposite conclusion that the ash ponds are not causing these alleged exceedances.

The VN's allegation that the ash ponds are the source of the elevated levels of chloride detected in the groundwater is also wrong. A careful review of the chloride data shows that the

[8] An exception is boron in monitoring well MW-7.

source of the elevated chloride levels is unrelated to the ash ponds. All but one of the chloride exceedances occurred in March 2011. It is well documented that both shallow groundwater and surface water commonly exhibit higher concentrations of chloride in the spring due to rain and snow melt transporting dissolved road salt.[9] Also consistent with the identification of road salt as the source of the chloride exceedances is the fact that the highest concentrations of chloride were found in March 2011 in MW-9. It should also be noted that monitoring well MW-9 is located very close to the Des Plaines River. The Des Plaines River is a known receptor for chloride-containing stormwater and snow melt run-off. Thus, the presence of elevated chloride levels due to the use of road salt is a known occurrence in the vicinity of these monitoring wells. Additional evidence that road salt is the likely source of the chloride exceedances is provided by the March 2012 groundwater monitoring results. There were no exceedances of the chloride groundwater standards in any of the Will County Station monitoring wells in March 2012. These results are consistent with the fact that the Chicago Area had relatively little snow in the 2012 winter and road salt was rarely needed, resulting in lower chloride levels in both surface waters and groundwater.[10]

In sum, the results of the groundwater monitoring conducted at the Will County Station do not show that the ash ponds are the source of the alleged exceedances. The data collected to date is accurately characterized as being inconsistent with the allegation that the operation of the ash ponds has caused the alleged violations.

C. The Will County Ash Ponds Are Not Causing Groundwater Exceedances

Because the Illinois EPA failed to specify which of the provisions of Section 12 of the Act MWG allegedly violated, MWG has had to speculate to identify the potential Section 12 violations this response needs to address. As stated above, MWG objects to the vagueness of, and legally deficient notice provided by, the VN and reserves its right to respond further when and if the Illinois EPA properly identifies the provisions of Section 12 on which it is relying.

For purposes of this response, based upon the regulations cited by the Agency in the VN, MWG has assumed that the Agency's alleged violations of Section 12 are limited to Sections 12(a), which prohibits causing or allowing water pollution, and to Section 12(d), which prohibits causing or allowing the creation of a water pollution hazard. 415 ILCS 5/12(a), (d) Based on these assumptions regarding the substance of the Illinois EPA's alleged violations, MWG submits that the Agency cannot show that the ash ponds at Will County caused or allowed water pollution or created a water pollution hazard.

The analytical results show that the distribution of the exceedances in the groundwater is random, with a predominance of the exceedances occurring in monitoring wells on the east side

[9] Mullaney, John R., *et al*, Chloride in Groundwater and Surface Water in Areas Underlain by the Glacial Aquifer System, Northern United States, Scientific Investigations Report 2009-5089, U.S. Geological Survey, Reston, VA. 2009. Table 5.

[10] Based on snowfall records for O'Hare Airport, the 2011 snowfall totaled 43.4 inches compared to 2012's total snowfall of only 19.8 inches.(Source: http://www.isws.illinois.edu/data.asp; last checked 7/27/12).

of the ash ponds, which are generally upgradient (based on higher water level elevations) of wells on the west side of the ash ponds. To show a violation of Section 12(a) and 12(d), there must be a showing not only of the presence of a potential source of contamination, but also that it is in sufficient quantity and concentration to render the waters harmful. *Bliss v. Illinois EPA,* 138 Ill. App. 3d 699, 704 (1985) ("mere presence of a potential source of water pollutants on the land does not necessarily constitute a water pollution hazard"). In other words, there must be a causal link between the potential source and the water or groundwater. The groundwater monitoring data on which the Agency relies does not establish this essential causal link between the ash ponds and the groundwater. Therefore, the Agency has failed to meet its burden to prove that the ash ponds are the cause of the alleged exceedances of the groundwater standards as required to prove a violation of sections 12(a) or 12(d) of the Act. 415 ILCS 5/12(a), (d).

The Agency also alleges violations of the groundwater quality regulations based on exceedances of the groundwater quality standards in 35 Ill. Admin. Code § 620.401. There is no violation here of section 620.401. Section 620.401 solely provides the legal criteria that groundwater must meet the standards appropriate to the groundwater's class. It is a foundational regulation, allowing for different classes of groundwater to meet different groundwater standards. It is not a prohibition regulation. There is no conduct prohibited by this section of the regulations in which MWG is alleged to have engaged. MWG cannot and did not violate section 620.401.

The remaining alleged groundwater regulation violations, 35 Ill. Admin. Code §§ 620.115, 620.301, 620.405, and 620.410 of the Board Regulations, are all based on the Agency's contention that MWG's operation of the ash ponds has caused the exceedances of the groundwater standards detected in the monitoring data. To sustain these allegations, the Agency must show that MWG caused a discharge of the subject constituents from ash ponds which in turn caused the exceedances of the groundwater standards.[11] The relevant facts and circumstances do not support either conclusion.

The use and condition of the ash ponds does not support a finding that they are releasing constituents to the groundwater. They are not disposal sites. Ash is removed from the ponds by MWG. The linings in all of the ash ponds are of sufficiently low permeability, consistent with accepted regulatory guidance, to prevent the release of constituents. The evidence provided from the 2009 inspection of the Pond 3S liner provides compelling support for the finding that they are not a likely cause of the alleged exceedances of the groundwater standards. Finally, pursuant to the terms of the Will County Station's NPDES Permit, these ash ponds are part of the flow-through wastewater treatment process at the station. MWG's operation of the ash ponds has been carried out in accordance with the terms and conditions of the NPDES Permit. Under Section 12(f) of the Act, compliance with the terms and conditions of any permit issued under Section 39(b) of the Act is deemed compliance with this subsection.

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[11] *See People of the State of Illinois v. ESG Watts, Inc.*, PCB 96-107 slip op. at p. 41 (February 5, 1998) (By finding the respondent caused a discharge of constituents into the groundwater causing a violation of the Class II Groundwater standards, the Board found the respondent also violated 35 IAC §§ 620.301 and 620.115)

Similarly, the groundwater data on which the Agency relies does not provide a sufficient scientific or technical evidentiary basis on which to conclude that the ash ponds are causing the alleged groundwater exceedances. The essential "causal link" between the ash ponds and the elevated constituents in the groundwater is missing. The data is at best inconclusive on this issue, while certain aspects of the data clearly point to other, unrelated causes.

Because the ash ponds have not been shown to have caused a release of any contaminants that is causing the groundwater exceedances, the Agency's VN does not support its claims that MWG has violated sections 620.405 or 620.301 of the Board regulations. Accordingly, MWG also has not violated section 620.115 of the Board regulations.

III. Compliance Commitment Agreement

This VN should not have been issued. Given the absence of proof that the ash ponds are the cause of the alleged groundwater exceedances, the Agency's request for a Compliance Commitment Agreement (CCA) is an attempt to compel MWG to conduct unnecessary corrective action to resolve the alleged violations.

Moreover, with the pending federal regulatory process to enact regulations for the design and operation of ash ponds, it is prudent to await the outcome of the proposed federal regulations to determine whether any changes to the ash ponds construction or operation are required by those regulations. The Agency itself has previously advanced this position. In 2010, the Agency's Steven Nightingale testified before the Illinois Pollution Control Board (the "Board") that the Board should consider initiating a temporary moratorium on the closure of coal ash impoundments because of the U.S. EPA's intention to regulate them. (*See In the Matter of Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill.Adm.Code Part 840.101 Through 840.152*, Docket R09-21 (October 7, 2010) at p. 64) On behalf of the Agency, Mr. Nightingale told the Board that if industry had to take action in the interim, it "could end up expending substantial money and resources only to find they are subject to additional and/or different closure requirements for those units." (*Id.*) The Agency's pursuit of this enforcement action, particularly given the deficiencies in its alleged evidence, also threatens to force MWG to take actions that may conflict with or otherwise differ from the requirements in the upcoming federal regulations.

As the hydrogeologic assessment showed, there is no threat to human health presented by the alleged exceedances of the groundwater standards. The hydrogeologic assessment investigated the presence of potable water sources within a 2,500-foot radius of the site. The shallow dolomite aquifer underlying the site is not used as a potable water source within this radius. The nearest groundwater wells are installed more than 1,500 feet deep, drawing water from a deep aquifer below the Maquoketa confining unit. Shallow groundwater at the site discharges either to the Des Plaines River or the Chicago Sanitary and Ship Canal (the "Canal"). The Canal is not used as a drinking water source. The nearest downgradient water supply intake in the Des Plaines River, a headwater of the Illinois River, is located at Peoria, approximately 137 miles downstream. In the absence of any potable groundwater receptors or use, groundwater

at the Will County site does not pose any risk to human health. Accordingly, awaiting the outcome of the federal regulatory proposal is appropriate under these circumstances.

Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

A. The ash ponds will not be used as permanent disposal sites and ash will continue to be removed from ponds on a periodic basis.

B. The ash ponds will be maintained and operated in a manner which protects the integrity of the existing liners. During the removal of ash from the ponds, appropriate procedures will be followed to protect the integrity of the existing liners, including operating the ash removal equipment in a manner which minimizes the risk of any damage to the liner.

C. During the ash removal process, visual inspections of the ponds will be conducted to identify any signs of a breach in the integrity of the pond liner. In the event that a breach of the pond liner is detected, MWG will notify the Agency and will submit a corrective action plan for repair or replacement, as necessary, of the liner. Upon the Agency's approval, and the issuance of any necessary construction permit, MWG will implement the correction action plan.

D. Institutional controls will be evaluated for addressing the alleged exceedances of the groundwater standards. There are already Environmental Land Use Controls (ELUCs) in place in the vicinity of the Will County Station. The Village of Romeoville presently is preparing an ordinance that would annex the land on which the ash ponds are located. The Village of Romeoville has a groundwater ordinance banning the use of groundwater as a potable water supply throughout the village limits. See attached §§ 50.60 through 50.99 of the Romeoville Code). The groundwater ordinance follows the requirements under the Pollution Control Board TACO regulations, 35 IAC 742.1015. If the Will County Station is not subject to the existing Romeoville ordinance, then MWG will submit for the Agency's review and approval a proposed restrictive covenant that prohibits the installation of potable wells in the area where groundwater exceedances have been detected.

E. MWG proposes to establish a Groundwater Management Zone ("GMZ") below the ash ponds pursuant to section 620.250 of the Board's regulations. 35 Ill. Admin. Code § 620.250. The corrective action required by the GMZ regulations is addressed by the existing pond liners and the proposed institutional control.

F. MWG will continue to monitor the groundwater through the existing ten groundwater monitoring wells and report its findings to Illinois EPA, pursuant to section 620.250(c) of the GMZ Regulations, 35 Ill. Admin. Code § 620.250(c). MWG

reserves the right to request the Illinois EPA's approval of a cessation of all or some of the monitoring requirements based on future monitoring results.

G. MWG will continue to monitor the development of the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640. When the final rule is issued, MWG will promptly notify Illinois EPA how it will comply with the new Federal Rules.

This letter constitutes our response to and proposed CCA for the Violation Notice W-2012-00058. MWG also reserves the right to raise additional defenses and mitigation arguments as may be necessary, in defense of the allegations listed in the Violation Notice in the event of any future enforcement. We look forward to discussing the above information further at the soon to be scheduled meeting with the Agency's representatives.

Very truly yours,

Susan M. Franzetti
Counsel for Midwest Generation, LLC

Enclosures

cc: Maria L. Race, Midwest Generation, LLC

Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Will County Station
Romeoville, Illinois
Midwest Generation
21253.028

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)
Chemical Name		Class I*	12/13/10	3/28/11	6/15/11	9/15/11	12/8/11	3/16/12	12/13/10	3/28/11	6/15/11	9/15/11	12/8/11	3/16/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	0.0063	ND	ND	ND	ND	0.0073	0.017	ND
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	0.0052	0.0032	ND	0.008	0.0058	0.0048
Barium	Metals 6020	2.0	0.05	0.041	0.046	0.038	0.033	0.033	0.061	0.068	0.068	0.048	0.048	0.058
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	0.11	0.10	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.2	0.15	0.22	0.16	0.17	0.16	0.032	0.032	0.043	0.036	0.031	0.031
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0046	0.0038	ND	0.0029	0.004	0.0042	ND	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	ND	ND	ND	0.0053	0.0025	0.0033	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.8	1.6	1.8	1.7	1.6	1.5	1.8	1.7	2.3	2.3	1.7	1.7
Sulfate	Dissolved 9038	400	530	390	280	320	270	430	430	280	400	330	220	330
Chloride	Dissolved 9251	200	110	210	110	120	140	190	110	250	180	110	120	140
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1.1	0.73	0.33	1.4	2.2	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,100	1,100	1,100	760	770	910	870	970	900	720	650	810
Fluoride	Dissolved 4500 FC	4	0.71	0.65	0.53	0.77	0.73	0.69	0.62	0.5	0.42	0.59	0.59	0.46
Nitrogen/Nitrite	Dissolved 4500 NO2	--	ND	ND	ND	0.042	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	--	ND	1.1	0.73	0.37	1.4	2.2	ND	ND	ND	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Will County Station
Romeoville, Illinois
Midwest Generation
21253.028

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-3 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)	MW-4 (mg/L)
Chemical Name		Class I*	12/13/10	3/28/11	6/15/11	9/15/11	12/8/11	3/16/12	12/13/10	3/29/11	6/15/11	9/15/11	12/8/11	3/16/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.002	0.0024	ND	0.0025	0.0018	0.0017	0.0027	0.0016	ND	0.0041	0.0016	0.0015
Barium	Metals 6020	2.0	0.084	0.086	0.071	0.079	0.083	0.075	0.068	0.062	0.05	0.05	0.043	0.036
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	0.0022	ND	ND	ND	ND	0.0011	ND	ND	0.0012	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.37	0.57	ND	0.26	0.19	0.2	0.83	0.78	0.7	1.2	0.64	0.53
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.34	0.31	0.34	0.26	0.29	0.27	0.52	0.58	0.7	1.0	0.62	0.6
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0054	0.0037	ND	0.0061	0.0053	0.0052	0.0048	0.0041	ND	0.0051	0.0047	0.0048
Selenium	Metals 6020	0.05	ND	ND	ND	0.0033	ND	ND	ND	0.0033	ND	ND	0.0086	0.0067
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2.7	2.4	2.6	3.3	2.8	2.7	3.7	3.3	3.6	4.3	3.0	4.0
Sulfate	Dissolved 9038	400	330	270	240	250	280	320	1,500	1,500	1,600	4,800	1,600	2,000
Chloride	Dissolved 9251	200	54	250	100	130	100	95	120	190	120	170	150	150
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.81	ND	0.54	ND	ND	ND	0.19	ND	0.37	0.45
Total Dissolved Solids	Dissolved 2540C	1,200	940	1,000	990	1,000	930	1,000	2,500	2,600	2,800	6,000	3,100	3,700
Fluoride	Dissolved 4500 FC	4	0.5	0.37	0.36	0.45	0.39	0.38	0.52	0.49	0.48	0.53	0.55	0.5
Nitrogen/Nitrite	Dissolved 4500 NO2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	--	ND	ND	0.81	ND	0.54	ND	ND	ND	0.19	ND	0.37	0.45

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Will County Station
Romeoville, Illinois
Midwest Generation
21253.028

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class I*	MW-5 (mg/L) 12/13/10	MW-5 (mg/L) 3/29/11	MW-5 (mg/L) 6/15/11	MW-5 (mg/L) 9/15/11	MW-5 (mg/L) 12/8/11	MW-5 (mg/L) 3/16/12	MW-6 (mg/L) 12/13/10	MW-6 (mg/L) 3/28/11	MW-6 (mg/L) 6/15/11	MW-6 (mg/L) 9/15/11	MW-6 (mg/L) 12/8/11	MW-6 (mg/L) 3/16/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0066	0.0048	ND	0.0025	0.0065	0.0065	0.0018	0.0018	ND	0.0031	0.0022	0.0022
Barium	Metals 6020	2.0	0.051	0.06	0.067	0.07	0.061	0.053	0.05	0.04	0.045	0.041	0.053	0.044
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.0079	0.0067	0.055	0.13	0.038	0.032	0.073	0.051	0.047	0.024	0.038	0.029
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	ND	0.0021	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	0.017	0.014	0.016	0.008	0.01	0.0059	0.0062	0.0028	ND	0.011	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2.6	2.7	3.2	4.0	3.2	2.9	2.7	2.5	2.4	3.0	2.5	2.5
Sulfate	Dissolved 9038	400	580	570	540	690	500	370	500	540	570	420	440	380
Chloride	Dissolved 9251	200	110	150	140	150	130	170	120	210	150	120	120	110
Nitrogen/Nitrate	Nitrogen By calc	10	0.27	1.6	0.97	0.11	1	0.11	ND	ND	0.1	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,000	1,300	1,400	1,500	1,000	1,000	990	1,100	1,200	870	880	900
Fluoride	Dissolved 4500 FC	4	0.41	0.4	0.46	0.49	0.38	0.42	0.85	0.88	0.79	0.97	0.77	0.68
Nitrogen/Nitrite	Dissolved 4500 NO2	--	ND	0.31	0.13	ND	0.17	0.14	ND	0.048	0.16	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	--	0.27	1.9	1.1	0.11	1.2	0.25	ND	ND	0.26	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND- non detect
mg/L- milligrams per liter

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Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Will County Station
Romeoville, Illinois
Midwest Generation
21253.028

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-7 (mg/L)	MW-7 (mg/L)	MW-7 (mg/L)	MW-7 (mg/L)	MW-7 (mg/L)	MW-7 (mg/L)	MW-8 (mg/L)	MW-8 (mg/L)	MW-8 (mg/L)	MW-8 (mg/L)	MW-8 (mg/L)	MW-8 (mg/L)
Chemical Name		Class I*	12/13/10	3/29/11	6/15/11	9/15/11	12/8/11	3/16/12	12/13/10	3/29/11	6/15/11	9/15/11	12/8/11	3/16/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.004	0.0037	ND	0.0042	0.0042	0.0041	0.0067	0.0059	0.0082	0.014	0.012	0.0066
Barium	Metals 6020	2.0	0.045	0.057	0.076	0.082	0.082	0.069	0.069	0.089	0.085	0.099	0.078	0.066
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	0.016	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.23	0.18	ND	0.37	0.5	0.57	0.48	0.38	0.76	0.46	0.68	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.12	0.11	0.15	0.18	0.2	0.2	0.33	0.44	0.47	0.45	0.4	ND
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0029	0.0023	ND	0.0024	0.0021	ND	ND	ND	ND	0.0034	0.002	ND
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	4.7	5.0	5.7	3.4	5.0	5.1	1.7	1.3	1.7	2.3	1.9	1.5
Sulfate	Dissolved 9038	400	610	650	1,000	710	710	770	440	440	420	600	330	330
Chloride	Dissolved 9251	200	160	140	140	160	150	130	93	270	200	160	130	160
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,300	1,500	1,600	1,400	1,300	1,400	930	1,200	1,100	1,300	980	910
Fluoride	Dissolved 4500 FC	4	0.96	0.77	0.71	0.82	0.86	0.76	0.61	0.55	0.57	0.64	0.61	0.52
Nitrogen/Nitrite	Dissolved 4500 NO2	–	ND	0.077	0.035	0.05	0.043	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	–	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND- non detect
mg/L- milligrams per liter

AMENDMENTS
- Value amended from original Table 3 (May 11, 2012).
- Value has not changed; font has been changed from bold to normal.

Table 3
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
Will County Station
Romeoville, Illinois
Midwest Generation
21253.028

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Quality Standard (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-9 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)	MW-10 (mg/L)
Chemical Name		Class I*	12/13/10	3/29/11	6/15/11	9/15/11	12/8/11	3/16/12	12/13/10	3/28/11	6/15/11	9/15/11	12/8/11	3/16/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0059	0.0049	0.0052	0.0065	0.0078	0.0053	0.0041	0.0046	ND	0.0088	0.0083	0.0056
Barium	Metals 6020	2.0	0.025	0.031	0.025	0.023	0.017	0.023	0.098	0.091	0.091	0.11	0.11	0.1
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	0.32	0.46	0.63	0.6	0.71	0.61
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	ND	ND	ND	ND	ND	**0.25**	**0.22**	**0.25**	**0.27**	**0.29**	**0.25**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	0.0036	0.0042	ND	0.0045	0.0031	ND	ND	ND	ND	0.0032	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2.2	1.4	1.7	2.0	1.9	1.4	**2.1**	**1.8**	**2.2**	**2.8**	**2.5**	**2.1**
Sulfate	Dissolved 9038	400	**410**	320	410	400	270	340	370	370	350	420	290	330
Chloride	Dissolved 9251	200	100	280	230	190	140	200	92	130	150	120	120	100
Nitrogen/Nitrate	Nitrogen By calc	10	ND	2.4	0.94	ND	1.9	3.2	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	800	1,000	940	850	660	820	990	960	990	1,000	1,100	990
Fluoride	Dissolved 4500 FC	4	0.33	0.36	0.28	0.28	0.38	0.39	0.66	0.64	0.65	0.67	0.59	0.52
Nitrogen/Nitrite	Dissolved 4500 NO2	–	0.44	1.2	0.16	0.22	0.015	0.12	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	–	ND	3.6	1.1	0.18	2.0	3.3	ND	ND	ND	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND- non detect
mg/L- milligrams per liter

AMENDMENTS
Bold - Value amended from original Table 3 (May 11, 2012).
Bold - Value has not changed; font has been changed from bold to normal.

ATTACHMENT G

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

- - -

SIERRA CLUB, ENVIRONMENTAL LAW AND POLICY CENTER, PRAIRIE RIVERS NETWORK, and CITIZENS AGAINST RUINING THE ENVIRONMENT,	)
Complainants,	)
vs.	) No. PCB 2013-015
MIDWEST GENERATION, LLC,	)
Respondent.	)

DEPOSITION OF

JAMES R. KUNKEL, Ph.D., P.E.

CHICAGO, ILLINOIS

MARCH 17, 2016

ATKINSON-BAKER, INC.
COURT REPORTERS
(800) 288-3376
www.depo.com

REPORTED BY: HEATHER PERKINS, CSR NO. 84-3714

FILE NO.: AA02A71

no way to know. We don't have sufficient data. 12:04:24
Q. At the bottom of Page 20, you state 12:04:35
that the Powerton site groundwater is 12:04:39
contaminated, and you list a whole lot of 12:04:43
constituents, correct? Do you see that? 12:04:45
A. Oh, down here, yes, yes. 12:04:48
Q. Yes. 12:04:52
And you mention mercury? 12:04:52
A. Yes, yes. 12:04:54
Q. Okay. And that was a one-time hit for 12:04:56
mercury, correct? You can look at your chart. 12:05:00
A. I think so. That's part of the 12:05:03
complaint, I think. 12:05:05
Q. And, in fact, that was a transcription 12:05:05
error by Patrick? 12:05:07
A. Oh, it could have been, yes. Patrick 12:05:09
had lots of errors; didn't they? It makes it 12:05:11
difficult to interpret. 12:05:17
Q. You also state that the groundwater is 12:05:18
affected by pH there? 12:05:20
A. Yes. 12:05:23
Q. What's the relevance of that point? 12:05:24
A. Well, because we know that the pH of 12:05:25
the leachate and probably -- and the pond water 12:05:28

ATTACHMENT H

ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, ENVIRONMENTAL LAW & POLICY CENTER, PRAIRIE RIVERS NETWORK AND CITIZENS AGAINST RUINING THE ENVIRONMENT,	)	No. PCB 13-15
Complainants,	)	
vs	)	
MIDWEST GENERATION, LLC,	)	
Respondent.	)	

REPORT OF THE PROCEEDINGS had at the hearing on a motion of the above-entitled cause before the Honorable BRADLEY HALLORAN, Hearing Officer of said Court, Room 9-040, The Thompson Center, Chicago, Illinois, on the 27th day of October, 2017, at the hour of 9:01 a.m.

know what the river levels are. All I know is that when the discharge increases in the stream -- in any stream, the water level goes up unless there is, you know, within reason.

Q. All I'm trying to get -- clarify is that you don't know, correct?

MR. RUSS: Objection. Asked and answered.

HEARING OFFICER HALLORAN: I agree. Sustained. I've heard it six times.

MS. NIJMAN: Okay. Good.

HEARING OFFICER HALLORAN: Thanks.

BY MS. NIJMAN:

Q. Now, as to Waukegan in your July 2015 report you initially opined that there was likely hydrostatic uplift at Waukegan, correct?

A. That was based on erroneous bottom elevations of the pond provided by Patrick.

Q. Okay. So your July '15 report was wrong in that regard?

A. No, based on the data I had, there would have been hydrostatic uplift, but I had incorrect bottom -- pond bottom elevations.

Q. I understand. I'm just trying to