

**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-
Complainants,	)	
	)	
v.	)	
	)	
MIDWEST GENERATION, LLC,	)	
	)	
Respondents	)	

**NOTICE OF ELECTRONIC FILING**

To: Attached Service List

PLEASE TAKE NOTICE that on October 3, 2012, I electronically filed with the Clerk of the Illinois Pollution Control Board (Board) a formal **COMPLAINT** and **ENTRIES OF APPEARANCE**, copies of which are served on you along with this notice. You may be required to attend a hearing on a date set by the Board. Failure to file an answer to this Complaint within 60 days may have severe consequences. Failure to answer will mean that all allegations in this Complaint will be taken as if admitted for purposes of this proceeding. If you have any questions about this procedure, you should contact the hearing officer assigned to this proceeding, the Clerk's Office or an attorney.

Respectfully submitted,



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Dated: Oct 3, 2012

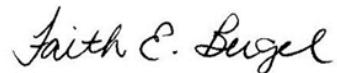
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**ENTRY OF APPEARANCE**

Faith E. Bugel, senior attorney at the Environment Law and Policy Center (“ELPC”), hereby enters her appearance on behalf of ELPC, Sierra Club, and Prairie Rivers Network in the above-captioned cause.

Respectfully submitted,



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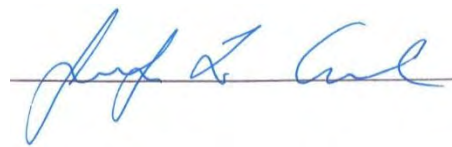
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Jennifer L. Cassel, staff attorney at the Environment Law and Policy Center (“ELPC”), hereby enters her appearance on behalf of ELPC, Sierra Club, and Prairie Rivers Network in the above-captioned cause.

Respectfully submitted,



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**COMPLAINT**

**FACTUAL BACKGROUND**

1. Midwest Generation, LLC (“MWG”) owns and operates the Joliet #29 Generating Station (“Joliet 29”) in Joliet, Illinois in Will and Kendall Counties, on the north side of the Des Plaines River. MWG has historically disposed of coal ash in three ash ponds (two HDPE-lined, one geocomposite-lined) on the same side of the river, and continues to dispose of coal ash in these ponds.
2. MWG installed eleven groundwater monitoring wells (MW-1 through MW-11) around the Joliet 29 ash ponds in 2010, as depicted in the well map included in MWG groundwater monitoring reports for Joliet 29, attached hereto as Exhibit A. Since monitoring began in late 2010, groundwater monitoring results have shown levels of antimony, boron, chloride, iron, manganese, sulfate, and Total Dissolved Solids (“TDS”) which exceed Illinois Groundwater Quality Standards (“GQSs”). *See* violations of Class I and Class II GQSs and

MWG groundwater monitoring data for Joliet 29, attached hereto as Exhibits B, C, and D, respectively.

3. MWG owns and operates the Powerton Generating Station (“Powerton”) in Pekin, Illinois in Tazewell County. MWG has historically disposed of coal ash in three active ash ponds on the site, two of them lined. There is also one abandoned, partially filled ash pond on the site. MWG continues to dispose of coal ash in the active ponds.

4. MWG monitors groundwater at Powerton with a network of 15 wells (MW-1 through MW-15, depicted in the well map included in MWG groundwater monitoring reports for Powerton, attached hereto as Exhibit E). Since monitoring began in late 2010, groundwater monitoring results have shown levels of arsenic, boron, chloride, iron, lead, manganese, mercury, nitrate, selenium, sulfate, thallium, and TDS which exceed Illinois GQS and/or open dumping standards. *See* violations of Class I and Class II GQSs and MWG groundwater monitoring data for Powerton, attached hereto as Exhibits B, C, and F, respectively.

5. MWG owns and operates the Waukegan Generating Station (“Waukegan”) in Waukegan, Illinois in Lake County. There are two active HDPE-lined ponds at this site. MWG has been disposing of coal ash in these ponds for several years and continues to do so.

6. MWG installed 5 wells (MW-1 through MW-5) around the Waukegan ash ponds in 2010, as depicted in the well map included in MWG groundwater monitoring reports for Waukegan, attached hereto as Exhibit G. Groundwater monitoring results from Waukegan show levels of antimony, arsenic, boron, chloride, iron, manganese, pH, sulfate, and TDS which exceed Illinois GQS and/or open dumping standards. *See* violations of Class I and Class II GQSs and MWG groundwater monitoring data for Waukegan, attached hereto as Exhibits B, C, and H, respectively.

7. MWG owns and operates the Will County Generating Station (“Will County”) in Romeoville, Illinois in Will County. There are four active geocomposite-lined ponds on the site that have historically been used for coal ash disposal. MWG continues to dispose of coal ash in these ponds.

8. MWG installed 10 wells around the Will County plant’s ponds in 2010 (MW-1 through MW-10; *see* the well map included in MWG groundwater monitoring reports for Will County, attached hereto as Exhibit I.) Groundwater monitoring results from Will County show levels of antimony, boron, chloride, iron, manganese, pH, sulfate, and TDS which exceed Illinois GQS and/or open dumping standards. *See* violations of Class I and Class II GQSs and MWG groundwater monitoring data for Will County, attached hereto as Exhibits B, C, and J, respectively.

9. On June 11, 2012, the Illinois Environmental Protection Agency (“IEPA”) sent MWG Violation Notices describing violations of Section 12 of the Illinois Environmental Protection Act, 415 ILCS 5/12, and Groundwater Quality regulations at Joliet 29, Powerton, Waukegan, and Will County. *See* Violation Notices for Powerton, Joliet 29, Waukegan, and Will County, attached hereto as Exhibits K–N. In the Violation Notices IEPA identified groundwater monitoring results that exceeded Illinois Class I GQS, which are found at 35 IAC 620.410.

#### THE POLLUTANTS

10. As set forth in detail in Exhibit B, groundwater monitoring results at Joliet 29, Powerton, Waukegan, and/or Will County have exceeded Illinois Class I GQS, 35 Ill. Admin. Code § 620.410, for the following pollutants: Antimony, arsenic, boron, chloride, iron, lead, manganese, mercury, nitrate, selenium, sulfate, total dissolved solids, and thallium.

11. Many of the pollutants found at elevated concentrations in the groundwater monitoring results at Joliet 29, Powerton, Waukegan, and/or Will County are constituents of coal ash.<sup>1</sup>

12. As MWG recognizes, boron is a primary indicator of potential coal ash impacts to groundwater.

13. The pollutants listed in this complaint, when present at the concentrations found in MWG's groundwater wells, make the groundwater unusable. Many of these pollutants are toxic and have been found at concentrations that present a human health risk. Others are dangerous to aquatic ecosystems; this is a significant concern to the extent that contaminated groundwater is migrating into adjacent surface water bodies.

14. Antimony is associated with reduced lifespan, decreased blood glucose, and altered cholesterol in rodents, and with vomiting and cardiac and respiratory effects in humans.<sup>2</sup> To protect public health, the U.S. EPA has established a Maximum Contaminant Level (MCL) of 0.006 mg/L. The Illinois Class I GQS for antimony is also 0.006 mg/L. Even this level may be unsafe; the California EPA, for example, has proposed a much lower Public Health Goal of 0.0007 mg/L.<sup>3</sup>

15. Arsenic is known to cause multiple forms of cancer in humans and is also associated with non-cancer health effects of the skin and the nervous system.<sup>4</sup> Groundwater that exceeds Illinois GQSs for arsenic is highly toxic; based on current U.S. EPA risk estimates, the

<sup>1</sup> See, e.g., U.S. EPA, Human and Ecological Risk Assessment of Coal Combustion Wastes at 2-4 (Draft, April 2000) (listing Coal Combustion Waste constituents), available at <http://earthjustice.org/sites/default/files/library/reports/epa-coal-combustion-waste-risk-assessment.pdf> (last visited October 2, 2012).

<sup>2</sup> See, e.g., U.S. EPA, Integrated Risk Information System: Antimony, <http://www.epa.gov/iris/subst/0006.htm>; California EPA, Draft Public Health Goal for Antimony in Drinking Water (July 2009).

<sup>3</sup> See California EPA, *supra* note 2.

<sup>4</sup> See, e.g., U.S. EPA, Integrated Risk Information System: Arsenic, inorganic, <http://www.epa.gov/iris/subst/0278.htm>; U.S. Agency for Toxic Substances and Disease Registry (ATSDR), Toxicological Profile for Arsenic (Aug. 2007).

cancer risk associated with drinking water at 0.05 mg/L, the Illinois Class I GQS for arsenic, is greater than 2 in 1,000.<sup>5</sup> The risk at 0.2 mg/L, the Class II GQS, is 1 in 100.

16. Oral exposure to boron has led to developmental and reproductive toxicity in multiple species. Specific effects include testicular degeneration, reduced sperm count, reduced birth weight, and birth defects.<sup>6</sup> The EPA has established a child health advisory of 3 mg/L for boron, close to the Illinois Class I and Class II GQS of 2 mg/L.<sup>7</sup>

17. Chloride renders water unusable by imparting a salty taste; to prevent this the EPA has set a secondary drinking water regulation of 250 mg/L, close to the Illinois Class I and Class II GQS of 200 mg/L.<sup>8</sup>

18. Iron renders water unusable by imparting a rusty color and a metallic taste and causing sedimentation and staining; to prevent these effects the EPA has set a secondary drinking water regulation of 0.3 mg/L.<sup>9</sup> The Illinois Class I and II GQS for iron, at 5 mg/L, is much higher than the EPA secondary drinking water regulation, suggesting that violations of the GQS represent concentrations of iron far higher than what would be usable.

19. Lead is known to be toxic to the nervous system, and is particularly associated with effects on childhood neurobehavioral development at very low doses. Lead is also classified by the EPA as a “probable human carcinogen.”<sup>10</sup> The EPA Action Level for lead in drinking water is 0.015 mg/L.<sup>11</sup> This is unlikely to represent a “safe” level of exposure—the

<sup>5</sup> Derived from the U.S. EPA drinking water unit risk of 5E-5 per ug/L. U.S. EPA, *supra* note 8.

<sup>6</sup> *See, e.g.*, U.S. EPA, Toxicological Profile of Boron and Compounds 60-61 (June 2004).

<sup>7</sup> U.S. EPA, 2012 Edition of the Drinking Water Standards and Health Advisories (April, 2012).

<sup>8</sup> U.S. EPA, Secondary Drinking Water Regulations: Guidance for Nuisance Chemicals, <http://water.epa.gov/drink/contaminants/secondarystandards.cfm>.

<sup>9</sup> *Id.*

<sup>10</sup> U.S. EPA, Integrated Risk Information System: Lead and Compounds, <http://www.epa.gov/iris/subst/0277.htm>.

<sup>11</sup> U.S. EPA drinking water standards, *supra* note 7.



EPA has noted, for example, that there may be no threshold for lead toxicity.<sup>12</sup> Groundwater concentrations of lead above the Illinois Class I GQS, 0.0075 mg/L, are thus unsafe to drink.

20. Manganese is also known to be toxic to the nervous system.<sup>13</sup> The EPA has not updated its assessment of manganese toxicity in 16 years, so EPA standards and advisories may not reflect the latest scientific knowledge concerning effects on childhood neurological development,<sup>14</sup> and the EPA Lifetime Health Advisory for manganese – 0.3 mg/L – may not be adequately health-protective. In any event, manganese concentrations greater than 0.05 mg/L render water unusable by discoloring the water, giving it a metallic taste, and causing black staining.<sup>15</sup> Groundwater with manganese above the Illinois Class I GQS – 0.15 mg/L – is clearly not usable and is likely to be toxic.

21. Inorganic mercury is toxic to the kidneys, and has also been associated with developmental toxicity.<sup>16</sup> The California EPA Public Health Goal for inorganic mercury is 0.0012 mg/L; the U.S. EPA MCL, like the Illinois Class I GQS, is 0.002 mg/L.<sup>17</sup>

22. Nitrate is known to cause methemoglobinemia in infants, a condition that impairs oxygen delivery to tissues and can cause bluish skin coloration. The U.S. EPA MCL, the California EPA Public Health Goal, and the Illinois Class I and II GQSs are all 10 mg/L, a level at which infant methemoglobinemia is not expected to occur.<sup>18</sup>

23. Selenium is an essential element, but excess exposure can cause a chemical-specific condition known as selenosis, with symptoms that include hair and nail loss. Various

<sup>12</sup> U.S. EPA, IRIS web page for lead, *supra* note 10.

<sup>13</sup> *See, e.g.*, U.S. EPA, Integrated Risk Information System: Manganese, <http://www.epa.gov/iris/subst/0373.htm>.

<sup>14</sup> *See, e.g.*, G.A. Wasserman et al., Water manganese exposure and children's intellectual function in araihanzar, Bangladesh. 114 ENVIRON. HEALTH PERSP. 124 (2006).

<sup>15</sup> *See* U.S. EPA secondary drinking water regulations, *supra* note 8.

<sup>16</sup> *See, e.g.*, California EPA, Public Health Goal for Inorganic Mercury in Drinking Water (Feb. 1999).

<sup>17</sup> *Id.*; U.S. EPA drinking water standards, *supra* note 7.

<sup>18</sup> *See* U.S. EPA, Integrated Risk Information System: Nitrate, <http://www.epa.gov/iris/subst/0076.htm>; California EPA, Public Health Goals for Nitrate and Nitrite (Dec. 1997).

agencies have derived health-protective values between 0.01 and 0.05 mg/L, but are in agreement that selenium concentrations above 0.05 mg/L, the Illinois Class I and II GQS, are unsafe to drink.<sup>19</sup>

24. High concentrations of sulfates in drinking water impart a salty taste and can cause diarrhea; to protect against these effects, the U.S. EPA has established a secondary MCL of 250 mg/L and a health-based advisory of 500 mg/L.<sup>20</sup> Groundwater with sulfate concentrations above the Illinois Class I and Class II GQS of 400 mg/L is therefore unusable and potentially unsafe.

25. Total Dissolved Solids (TDS) is a measure of multiple dissolved chemicals, but because high TDS is generally associated with hardness, staining, salty taste, and deposits, the U.S. EPA has established a secondary MCL of 500 mg/L.<sup>21</sup> Groundwater with TDS above the Illinois Class I and Class II GQS, 1,200 mg/L, is clearly unusable.

26. Thallium is known to cause neurotoxicity, and is also associated with developmental and reproductive toxicity and other adverse health effects. The Illinois Class I GQS and the U.S. EPA MCL are both 0.002 mg/L.<sup>22</sup>

27. Finally, many of the pollutants associated with coal ash, including but not limited to selenium, are known to bioaccumulate in aquatic ecosystems causing tissue damage and other effects in fish and amphibians. One review, for example, noted that “the combined effects of multiple accumulated elements may lead to numerous changes in individuals that could compromise individual fitness or health,” and provided several examples of coal ash-

<sup>19</sup> See, e.g., California EPA, Public Health Goal for Selenium (Dec. 2010) (Setting a Public Health Goal of 0.03 mg/L); World Health Organization, Guidelines for Drinking Water Quality, 4<sup>th</sup> Ed., 413 (2011) (Setting a provisional guideline of 0.04 mg/L); U.S. EPA drinking water standards, *supra* note 11 (setting forth a MCL of 0.05 mg/L).

<sup>20</sup> U.S. EPA, Drinking Water Advisory: Consumer Acceptability Advice and Health Effects Analysis on Sulfate (Feb. 2003).

<sup>21</sup> See U.S. EPA secondary drinking water regulations, *supra* note 8.

<sup>22</sup> See U.S. EPA drinking water standards, *supra* note 7.

contaminated sites where the health of individuals and communities in aquatic ecosystems had been severely impaired.<sup>23</sup>

### **PARTIES**

28. Citizens Against Ruining the Environment (“CARE”) is located at 230 E. 6th Street, Lockport, IL 60441. CARE is an incorporated, not-for-profit community organization with members in the Lockport area, including Will County. CARE was organized for the purpose of preserving and protecting Illinois's land, air, water, and other natural resources, and protecting the organization's members and other residents of the state from threats of pollution.

29. The Environmental Law and Policy Center (“ELPC”) is an Illinois not-for-profit corporation with its principal office located at 35 East Wacker Drive, Suite 1600, Chicago, IL 60601. ELPC's mission includes advocating for the protection of water quality, and protection of public health related to water quality, throughout the Midwest.

30. Prairie Rivers Network, a nonprofit organization and a state affiliate of the National Wildlife Federation, is Illinois’ statewide leader in river protection, conservation, and restoration. Prairie Rivers Network has a membership of over 700 in Illinois.

31. Sierra Club is the nation’s oldest and largest grassroots environmental organization. Sierra Club is an incorporated, not-for-profit organization with headquarters located at 85 Second Street, 2<sup>nd</sup> Floor, San Francisco, CA, 94105. Sierra Club’s Illinois Chapter office is located at 70 E. Lake St., Suite 1500, Chicago, IL, 60601. Sierra Club’s mission is to preserve, protect, and enhance the natural environment. Sierra Club has 641,000 members, including approximately 23,000 members in Illinois.

<sup>23</sup> C.L. Rowe et al., Ecotoxicological implications of aquatic disposal of coal combustion residues in the United States: A review, 80 ENVTL. MONITORING AND ASSESSMENT 207, 242 (2002); see also A.D. Lemly and J.P. Skorupa, Wildlife and the coal waste policy debate: Proposed rules on coal waste disposal ignore lessons from 45 years of wildlife poisoning, 46 ENVTL. SCI. TECH. 46 (2012).

32. Midwest Generation, LLC (MWG), is a Delaware Corporation doing business in Illinois with principal executive offices at 235 Remington Boulevard, Suite A, Bolingbrook, Illinois 60440. MWG's registered agent is C T Corporation System, 208 S. LaSalle St., Suite 814, Chicago, Illinois 60604. MWG is a subsidiary of Edison Mission Energy ("EME"), of Santa Ana, California. EME is a subsidiary of Edison International, 2244 Walnut Grove Avenue, (P.O. Box 976), Rosemead, California, 91770.

**LEGAL BACKGROUND: OPEN DUMPING**

33. The Illinois Environmental Protection Act prohibits "the open dumping of any waste." 415 ILCS 5/21(a). "Open dumping" is defined as "the consolidation of refuse from one or more sources at a disposal site that does not fulfill the requirements of a sanitary landfill." 415 ILCS 5/3.305. "Refuse" is defined as "waste." 415 ILCS 5/3.385. "Waste" is defined to include "any garbage, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility or other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations" at 415 ILCS 5/3.535. "Sanitary landfills" are defined as "facilit[ies] permitted by the Agency for the disposal waste on land meeting the requirements of the Resource Conservation and Recovery Act [42 USCA § 6901 et seq.]" 415 ILCS 5/3.445. The requirements of the Resource Conservation and Recovery Act include criteria for distinguishing between sanitary landfills and open dumps. 42 USCA § 6944(a). These criteria are found in federal regulations at 40 CFR Part 257. According to 40 CFR § 257.1, facilities failing to meet, inter alia, the criterion at 40 CFR § 257.3-4 are considered prohibited open dumps.

34. 40 CFR § 257.3-4 establishes a criterion for identifying open dumps based on groundwater contamination. 40 CFR § 257.3-4 prohibits "contaminat[i]on of] an underground

drinking water source beyond the solid waste boundary or beyond an alternative compliance boundary.” The contamination must exist beyond either the perimeter of the solid waste disposal area or beyond an alternative boundary established by the state or the courts after finding that establishing such a boundary will not result in the contamination of groundwater that may be used for drinking. 40 C.F.R. § 257.3-4.

35. Groundwater contamination for purposes of RCRA open dumping is demonstrated by an exceedance of one of the Maximum Contaminant Levels (MCLs) set forth in 40 CFR pt. 257 Appendix I (hereinafter “Appendix I MCLs”),<sup>24</sup> in either an actual drinking water source, or in an aquifer with less than 10,000 mg/L total dissolved solids. 40 CFR § 257.3-4. The Appendix I MCLs for the pollutants identified in this complaint are as follows:

Chemical	Appendix I MCL (40 C.F.R. Pt. 257, App. I)
Arsenic	0.05 mg/L
Mercury	0.002 mg/L
Nitrate	10 mg/L
Selenium	0.01 mg/L

#### LEGAL BACKGROUND: WATER POLLUTION

36. The Illinois Environmental Protection Act prohibits “the discharge of any contaminants into the environment . . . so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matter from other sources,” 415 ILCS 5/12(a), and prohibits the deposition of “any contaminants upon the land in such place and manner so as to create a water pollution hazard.” 415 ILCS 5/12(d). “Water pollution” is defined as the “alteration” or

<sup>24</sup> The open dumping MCLs in 40 CFR pt. 257 Appendix I are in some cases different from the most recent Maximum Contaminant Levels promulgated by the U.S. Environmental Protection Agency. For example, the Appendix I MCL for arsenic is 50 ug/L while the current MCL for arsenic is 10 ug/L. See U.S. EPA drinking water standards, *supra* note 7.

“discharge of any contaminant into any waters of the State, as will or is likely to create a nuisance or render such waters harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate uses, or to livestock, wild animals, birds, fish, or other aquatic life.” 415 ILCS 5/3.545.

“Waters” of the State is defined to include “all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this State.” 415 ILCS 5/3.550.

37. 35 Ill. Admin. Code § 620.405 prohibits “the release of any contaminant to groundwater so as to cause a groundwater quality standard set forth in this Subpart to be exceeded.” 35 Ill. Admin. Code § 620.405. The Illinois Administrative Code establishes different groundwater quality standards for Class I and Class II groundwater.

38. 35 Ill. Admin. Code § 620.410 establishes Class I GQSs that cannot be exceeded in potable resource groundwater. “Potable resource groundwater” is defined as:

Groundwater located 10 feet or more below the land surface and within: (1) The minimum setback zone of a well which serves as a potable water supply and to the bottom of such well; (2) Unconsolidated sand, gravel or sand and gravel which is 5 feet or more in thickness and that contains 12 percent or less of fines . . . ; (3) Sandstone which is 10 feet or more in thickness, or fractured carbonate which is 15 feet or more in thickness; or (4) Any geologic material which is capable of a: (A) sustained groundwater yield , from up to a 12 inch borehole, of 150 gallons per day or more from a thickness of 15 feet or less; or (B) Hydraulic conductivity of  $1 \times 10^{-4}$  cm/sec or greater using one of the following test methods or its equivalent: (i) Permeameter; (ii) Slug test; or (iii) Pump test. 35 Ill. Admin. Code § 620.210(a).

39. The definition of Class I groundwater specifically excludes: Class III “special resource groundwater,” Class IV “other groundwater,” which includes groundwater in a zone of attenuation; and groundwater in a “groundwater management zone.” 35 Ill. Admin. Code §

620.210; *see also* 35 Ill. Admin. Code §§ 620.230, 620.240, 620.250.35 Ill. Admin. Code § 620.115 provides that “No person shall cause, threaten or allow a violation of the Act, the [Illinois Groundwater Protection Act] or regulations adopted by the Board thereunder, including but not limited to this part.”35 Ill. Admin. Code § 620.301(a) provides that “No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that: 1) Treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or 2) An existing or potential use of such groundwater is precluded.”

40. 35 Ill. Admin. Code § 620.420 establishes Class II GQs that cannot be exceeded in general resource groundwater. “General resource groundwater” is defined as “groundwater which does not meet the provisions of . . . Class I . . . Class III . . . or . . . Class IV” and “groundwater which is found by the Board, pursuant to the petition procedures set forth in Section 620.260, to be capable of agricultural, industrial, recreational or other beneficial uses.” 35 Ill. Admin. Code § 620.220. Groundwater in a zone of attenuation must meet Class II GQs. 35 Ill. Admin. Code § 620.440(b).

41. The Illinois Class I and Class II GQs for pollutants identified in this report are as follows:

Chemical	Class I GQS (35 Ill. Admin. Code § 620.410)	Class II GQS (35 IAC § 620.420)
Antimony	0.006	0.024
Arsenic	0.05	0.2
Boron	2	2
Chloride	200	200
Iron	5	5
Lead	7.5	100
Manganese	0.15	10
Mercury	0.002	0.01
Nitrate	10	100
pH	6.5 – 9.0	6.5 – 9.0
Selenium	0.05	0.05
Sulfate	400	400
Thallium	2	20
Total Dissolved Solids	1,200	1,200

**COUNT I**

**OPEN DUMPING VIOLATIONS AT POWERTON**

42. Paragraphs 1-41 are realleged and incorporated herein by reference.

43. MWG, through the coal ash disposal ponds at Powerton, has caused or contributed to contamination of the groundwater beneath Powerton in violation of 415 ILCS 5/21(a) and 40 C.F.R. §§ 257.1 and 257.3-4, as shown in Table 1.



**Table 1: Open dumping violations at Powerton.**

	Well	Pollutant	Sample value (mg/L)	Appendix I MCL (mg/L)	Collection date
1	MW-1	Nitrate	0.011	0.010	9/20/11
2	MW-7	Arsenic	0.085	0.050	3/25/11
3	MW-7	Arsenic	0.120	0.050	6/16/11
4	MW-7	Arsenic	0.180	0.050	9/20/11
5	MW-7	Arsenic	0.230	0.050	12/12/11
6	MW-7	Arsenic	0.230	0.050	3/19/12
7	MW-9	Selenium	0.072 <sup>25</sup>	0.010	3/25/11
8	MW-12	Mercury	0.0096 <sup>26</sup>	0.002	12/15/10
9	MW-14	Selenium	0.065	0.010	4/25/11
10	MW-14	Selenium	0.022	0.010	4/10/12
11	MW-15	Selenium	0.017	0.010	4/25/11
12	MW-15	Selenium	0.025	0.010	4/10/12

44. Groundwater samples from seven different wells at Powerton have violated the Appendix I MCLs on the twelve occasions delineated in Table 1.

## COUNT 2

### OPEN DUMPING VIOLATIONS AT WAUKEGAN

45. Paragraphs 1-44 are realleged and incorporated herein by reference.

46. MWG, through the coal ash disposal ponds at Waukegan, has caused or contributed to contamination of the groundwater beneath Waukegan in violation of 415 ILCS 5/21(a), and 40 C.F.R. §§ 257.1 and 257.3-4 as shown in Table 2.

<sup>25</sup> This value was originally reported as 0.072 mg/L. See letter from Richard M. Frendt, Patrick Engineering, to IEPA, Attachment A (July 30, 2012) (transmitting amended groundwater monitoring report for Midwest generation's Powerton Generating Station). MidGen has since revised the value to 0.072 mg/L. *Id.* at Attachments B and C.

<sup>26</sup> This value was originally reported as 0.0096 ug/L. *Id.* at Attachment A. MidGen has since revised the value to nondetect. *Id.* at Attachments B and C.

**Table 2: Open dumping violations at Waukegan.**

	Well	Pollutant	Sample value (mg/L)	Appendix I MCL (mg/L)	Collection date
1	MW-1	Arsenic	0.054	0.050	10/25/10
2	MW-1	Arsenic	0.170	0.050	6/13/11
3	MW-1	Arsenic	0.077	0.050	9/13/11
4	MW-1	Arsenic	0.057	0.050	12/6/11
5	MW-1	Arsenic	0.078	0.050	3/14/12
6	MW-1	Selenium	0.031	0.010	10/25/10
7	MW-1	Selenium	0.030	0.010	3/24/11
8	MW-1	Selenium	0.016	0.010	6/13/11
9	MW-1	Selenium	0.039	0.010	9/13/11
10	MW-1	Selenium	0.032	0.010	12/6/11
11	MW-1	Selenium	0.037	0.010	3/14/12
12	MW-2	Selenium	0.026	0.010	10/25/10
13	MW-2	Selenium	0.028	0.010	6/13/11
14	MW-2	Selenium	0.022	0.010	9/13/11
15	MW-3	Selenium	0.016	0.010	3/24/11
16	MW-3	Selenium	0.030	0.010	6/13/11
17	MW-3	Selenium	0.012	0.010	9/13/11
18	MW-3	Selenium	0.011	0.010	12/6/11
19	MW-4	Selenium	0.022	0.010	6/13/11
20	MW-4	Selenium	0.025	0.010	9/13/11
21	MW-4	Selenium	0.015	0.010	12/6/11

47. Groundwater samples at three of five wells monitored showed violations of the Appendix I MCLs on the twenty-one occasions delineated in Table 2.

**COUNT 3**

**OPEN DUMPING VIOLATIONS AT WILL COUNTY**

48. Paragraphs 1-47 are realleged and incorporated herein by reference.

49. MWG, through the coal ash disposal ponds at Will County, has caused or contributed to contamination of the groundwater beneath Will County in violation of 415 ILCS 5/21(a), and 40 C.F.R. §§ 257.1 and 257.3-4, as shown in Table 3.

**Table 3: Open dumping violations at Will County**

	Well	Pollutant	Sample value (mg/L)	Appendix I MCL (mg/L)	Collection date
1	MW-5	Selenium	0.017	0.010	12/13/10
2	MW-5	Selenium	0.014	0.010	3/28/11
3	MW-5	Selenium	0.016	0.010	6/15/11
4	MW-6	Selenium	0.011	0.010	9/15/11

50. As Table 3 shows, there have been four violations of the open dumping MCL for selenium since monitoring began in late 2010.

**COUNT 4**

**WATER POLLUTION AT JOLIET 29**

51. Paragraphs 1-50 are realleged and incorporated herein by reference.

52. MWG, through the coal ash disposal ponds at Joliet 29, has discharged contaminants into the environment at Joliet 29 and thereby caused water pollution in violation of 415 ILCS 5/12(a) and (d), and 35 Ill. Admin. Code §§ 620.115, 620.301(a), and 620.405. As shown in Exhibits B, C, and D, there have been 55 violations of Illinois Class I Groundwater Quality Standards and 42 violations of Illinois Class II Groundwater Quality Standards since monitoring began in late 2010.

53. Since 2010, the groundwater at Joliet 29 has exceeded the Class I GQSs for antimony, boron, chloride, iron, manganese, sulfate, and TDS, and the Class II GQSs for boron, chloride, iron, sulfate, and TDS. *See* Exhibits B, C, and D.

**COUNT 5**

**WATER POLLUTION AT POWERTON**

54. Paragraphs 1-53 are realleged and incorporated herein by reference.

55. MWG, through the coal ash disposal ponds at Powerton, has discharged contaminants into the environment at Powerton and thereby caused water pollution in violation of 415 ILCS 5/12(a) and (d), and 35 Ill. Admin. Code §§ 620.115, 620.301(a), and 620.405. As shown in Exhibits B, C, and F, there have been 152 violations of Illinois Class I Groundwater Quality Standards and 73 violations of Illinois Class II Groundwater Quality Standards since monitoring began in late 2010.

56. Since 2010, the groundwater at Powerton has exceeded the Class I GQSs for arsenic, boron, chloride, iron, lead, manganese, mercury, nitrate, selenium, sulfate, thallium, and TDS, and the Class II GQSs for arsenic, boron, chloride, iron, manganese, selenium, sulfate, and TDS. *See* Exhibits B, C, and F.

#### **COUNT 6**

#### **WATER POLLUTION AT WAUKEGAN**

57. Paragraphs 1-56 are realleged and incorporated herein by reference.

58. MWG, through the coal ash disposal ponds at Waukegan, has discharged contaminants into the environment at Waukegan and thereby caused water pollution in violation of 415 ILCS 5/12(a) and (d), and 35 Ill. Admin. Code §§ 620.115, 620.301(a), and 620.405. As shown in Exhibits B, C, and H, there have been 51 violations of Illinois Class I Groundwater Quality Standards and 39 violations of Illinois Class II Groundwater Quality Standards since monitoring began in late 2010.

59. Since 2010, the groundwater at Waukegan has exceeded the Class I GQSs for antimony, arsenic, boron, chloride, iron, manganese, pH, sulfate, and TDS, and the Class II GQSs for boron, chloride, iron, pH, sulfate, and TDS. *See* Exhibits B, C, and H.

**COUNT 7**

**WATER POLLUTION AT WILL COUNTY**

60. Paragraphs 1-59 are realleged and incorporated herein by reference.

61. MWG, through the coal ash disposal ponds at Will County, has discharged contaminants into the environment at Will County and thereby caused water pollution in violation of 415 ILCS 5/12(a) and (d), and 35 Ill. Admin. Code §§ 620.115, 620.301(a), and 620.405. As shown in Exhibits B, C, and J, there have been 139 violations of Illinois Class I Groundwater Quality Standards and 105 violations of Illinois Class II Groundwater Quality Standards since monitoring began in late 2010.

62. Since 2010, the groundwater at Will County has exceeded the Class I GQSs for antimony, boron, chloride, iron, manganese, pH, sulfate, and TDS, and the Class II GQSs for boron, chloride, iron, pH, sulfate, and TDS. *See Exhibits B, C, and J.*

**RELIEF REQUESTED**

WHEREFORE, Petitioners request that this Board:

1. Declare that Respondent, Midwest Generation, LLC has violated the Illinois Environmental Protection Act's prohibitions on open dumping and groundwater pollution at its Joliet 29, Powerton, Waukegan, and Will County sites.
2. Impose civil penalties under 415 ILCS 5/42.
3. Order Respondent, under 415 ILCS 5/33, to:
  - Cease and desist from open dumping of coal ash and from causing or threatening to cause water pollution,
  - Modify its coal ash disposal practices so as to avoid future groundwater contamination,

- Remediate the contaminated groundwater so that it meets applicable Illinois groundwater standards; and
4. Grant such other relief as the Board deems just and proper.

Respectfully submitted,



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**LIST OF EXHIBITS**

- A. Map of groundwater monitoring wells at Joliet 29
- B. Violations of Illinois Class I Groundwater Quality Standards at Joliet 29, Powerton, Waukegan, and Will County
- C. Violations of Illinois Class II Groundwater Quality Standards at Joliet 29, Powerton, Waukegan, and Will County
- D. Groundwater monitoring data excerpted from Midwest Generation groundwater monitoring report for Joliet 29
- E. Map of groundwater monitoring wells at Powerton
- F. Groundwater monitoring data excerpted from Midwest Generation groundwater monitoring report for Powerton
- G. Map of groundwater monitoring wells at Waukegan
- H. Groundwater monitoring data excerpted from Midwest Generation groundwater monitoring report for Waukegan
- I. Map of groundwater monitoring wells at Will County
- J. Groundwater monitoring data excerpted from Midwest Generation groundwater monitoring report for Will County
- K. IEPA Violation Notice for Joliet 29
- L. IEPA Violation Notice for Powerton
- M. IEPA Violation Notice for Waukegan
- N. IEPA Violation Notice for Will County


**EXHIBIT A:** Map of groundwater monitoring wells at Joliet 29.

Excerpted from Midwest Generation, LLC, Hydrogeologic Assessment Report – Joliet Generating Station  
No. 29 (Feb. 2011).





**LEGEND**

 MW-01 Monitoring Well Location (November 2010)



GRAPHIC SCALE

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

Date: FEB. 2011

Proj No.: 21053.070

App. By: RMF

**FIGURE 3**  
**MONITORING WELL LOCATION MAP**  
**JOLIET STATION NO. 29**  
**JOLIET, ILLINOIS**

**PATRICK**  
**ENGINEERING INC.**

4970 Varsity Drive  
Lisle, Illinois 60532-4101

TEL. (630) 795-7200  
FAX (630) 724-1681

PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

**EXHIBIT B:** Violations of Illinois Class I Groundwater Quality Standards at Joliet 29, Powerton, Waukegan, and Will County Generating Stations.

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 1 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
1	Joliet 29	MW-2	Antimony	0.012	0.006	12/06/2010
2	Joliet 29	MW-2	Chloride	230	200	6/14/2011
3	Joliet 29	MW-2	Chloride	280	200	3/15/2012
4	Joliet 29	MW-3	Antimony	0.0065	0.006	9/14/2011
5	Joliet 29	MW-3	Antimony	0.016	0.006	12/7/2011
6	Joliet 29	MW-3	Antimony	0.013	0.006	3/15/2012
7	Joliet 29	MW-3	Chloride	260	200	12/7/2010
8	Joliet 29	MW-3	Chloride	240	200	3/28/2011
9	Joliet 29	MW-3	Chloride	300	200	6/14/2011
10	Joliet 29	MW-3	Chloride	260	200	12/7/2011
11	Joliet 29	MW-3	Chloride	250	200	3/15/2012
12	Joliet 29	MW-4	Antimony	0.0067	0.006	12/7/2011
13	Joliet 29	MW-4	Chloride	270	200	12/6/2010
14	Joliet 29	MW-4	Chloride	270	200	3/28/2011
15	Joliet 29	MW-4	Chloride	250	200	6/14/2011
16	Joliet 29	MW-4	Chloride	210	200	3/15/2012
17	Joliet 29	MW-4	Manganese	0.33	0.15	12/7/2010
18	Joliet 29	MW-5	Chloride	240	200	3/28/2011
19	Joliet 29	MW-5	Chloride	220	200	6/14/2011
20	Joliet 29	MW-5	Chloride	210	200	3/15/2012
21	Joliet 29	MW-6	Chloride	270	200	3/28/2011
22	Joliet 29	MW-6	Chloride	240	200	3/15/2012
23	Joliet 29	MW-7	Chloride	430	200	12/6/2010
24	Joliet 29	MW-7	Chloride	320	200	3/28/2011
25	Joliet 29	MW-7	Chloride	300	200	3/15/2012
26	Joliet 29	MW-7	Manganese	0.29	0.15	12/7/2010
27	Joliet 29	MW-8	Chloride	350	200	3/28/2011
28	Joliet 29	MW-8	Chloride	410	200	3/15/2012
29	Joliet 29	MW-9	Chloride	230	200	3/28/2011
30	Joliet 29	MW-9	Chloride	290	200	6/14/2011
31	Joliet 29	MW-9	Iron	7.3	5	6/14/2011
32	Joliet 29	MW-9	Iron	5.5	5	3/15/2012
33	Joliet 29	MW-9	Manganese	1.1	0.15	12/6/2010
34	Joliet 29	MW-9	Manganese	1.6	0.15	3/28/2011
35	Joliet 29	MW-9	Manganese	0.95	0.15	6/14/2011
36	Joliet 29	MW-9	Manganese	0.82	0.15	9/14/2011
37	Joliet 29	MW-9	Manganese	0.66	0.15	12/7/2011
38	Joliet 29	MW-9	Manganese	1.3	0.15	3/15/2012
39	Joliet 29	MW-9	Sulfate	1,600	400	12/6/2010
40	Joliet 29	MW-9	Sulfate	1,100	400	3/28/2011
41	Joliet 29	MW-9	Sulfate	580	400	6/14/2011
42	Joliet 29	MW-9	Sulfate	750	400	9/14/2011

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 2 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
43	Joliet 29	MW-9	Sulfate	1,600	400	3/15/2012
44	Joliet 29	MW-9	TDS	2,600	1,200	12/6/2010
45	Joliet 29	MW-9	TDS	2,400	1,200	3/28/2011
46	Joliet 29	MW-9	TDS	1,500	1,200	6/14/2011
47	Joliet 29	MW-9	TDS	1,700	1,200	9/14/2011
48	Joliet 29	MW-9	TDS	2,400	1,200	12/7/2011
49	Joliet 29	MW-9	TDS	2,600	1,200	3/15/2012
50	Joliet 29	MW-10	Chloride	300	200	3/28/2011
51	Joliet 29	MW-11	Boron	2.6	2	3/28/2011
52	Joliet 29	MW-11	Boron	2.2	2	6/14/2011
53	Joliet 29	MW-11	Chloride	270	200	3/28/2011
54	Joliet 29	MW-11	Chloride	280	200	6/14/2011
55	Joliet 29	MW-11	Chloride	240	200	3/15/2012
56	Powerton	MW-1	Boron	2.9	2	3/19/2012
57	Powerton	MW-1	Nitrate	11	10	9/20/2011
58	Powerton	MW-4	Manganese	0.68	0.15	3/25/2011
59	Powerton	MW-4	Manganese	0.41	0.15	6/16/2011
60	Powerton	MW-4	Manganese	0.69	0.15	9/20/2011
61	Powerton	MW-4	Manganese	0.35	0.15	12/12/2011
62	Powerton	MW-5	Manganese	0.51	0.15	12/15/2010
63	Powerton	MW-5	Manganese	0.49	0.15	3/25/2011
64	Powerton	MW-5	Manganese	0.48	0.15	6/16/2011
65	Powerton	MW-5	Manganese	0.64	0.15	9/20/2011
66	Powerton	MW-5	Manganese	0.50	0.15	12/12/2011
67	Powerton	MW-5	Manganese	0.26	0.15	3/19/2012
68	Powerton	MW-6	Chloride	210	200	9/20/2011
69	Powerton	MW-6	Manganese	0.68	0.15	12/15/2010
70	Powerton	MW-6	Manganese	0.68	0.15	3/25/2011
71	Powerton	MW-6	Manganese	0.63	0.15	6/16/2011
72	Powerton	MW-6	Manganese	0.66	0.15	9/20/2011
73	Powerton	MW-6	Manganese	0.63	0.15	12/12/2011
74	Powerton	MW-6	Manganese	0.61	0.15	3/19/2012
75	Powerton	MW-7	Arsenic	0.085	0.05	3/25/2011
76	Powerton	MW-7	Arsenic	0.12	0.05	6/16/2011
77	Powerton	MW-7	Arsenic	0.18	0.05	9/20/2011
78	Powerton	MW-7	Arsenic	0.23	0.05	12/12/2011
79	Powerton	MW-7	Arsenic	0.23	0.05	3/19/2012
80	Powerton	MW-7	Iron	8	5	12/6/2010
81	Powerton	MW-7	Iron	7.5	5	3/25/2011
82	Powerton	MW-7	Iron	10	5	6/16/2011
83	Powerton	MW-7	Iron	22	5	9/20/2011
84	Powerton	MW-7	Iron	26	5	12/12/2011

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 3 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
85	Powerton	MW-7	Iron	31	5	3/19/2012
86	Powerton	MW-7	Lead	0.039	0.0075	12/15/2010
87	Powerton	MW-7	Manganese	3.5	0.15	12/6/2010
88	Powerton	MW-7	Manganese	5.9	0.15	3/25/2011
89	Powerton	MW-7	Manganese	6.4	0.15	6/16/2011
90	Powerton	MW-7	Manganese	12	0.15	9/20/2011
91	Powerton	MW-7	Manganese	12	0.15	12/12/2011
92	Powerton	MW-7	Manganese	11	0.15	3/19/2012
93	Powerton	MW-7	TDS	1,300	1,200	6/16/2011
94	Powerton	MW-7	TDS	1,300	1,200	9/20/2011
95	Powerton	MW-7	TDS	1,300	1,200	12/12/2011
96	Powerton	MW-7	TDS	1,400	1,200	3/19/2012
97	Powerton	MW-8	Manganese	0.27	0.15	3/25/2011
98	Powerton	MW-8	Manganese	0.29	0.15	6/16/2011
99	Powerton	MW-8	Manganese	0.18	0.15	9/20/2011
100	Powerton	MW-8	Manganese	0.2	0.15	12/12/2011
101	Powerton	MW-8	Manganese	0.27	0.15	3/19/2012
102	Powerton	MW-8	Chloride	210	200	3/25/2011
103	Powerton	MW-8	Chloride	210	200	3/25/2011
104	Powerton	MW-9	Manganese	0.23	0.15	12/16/2010
105	Powerton	MW-9	Manganese	0.45	0.15	3/25/2011
106	Powerton	MW-9	Manganese	0.48	0.15	6/16/2011
107	Powerton	MW-9	Manganese	0.28	0.15	12/12/2011
108	Powerton	MW-9	Manganese	0.22	0.15	3/19/2012
109	Powerton	MW-9	Selenium	0.072	0.05	3/25/2011
110	Powerton	MW-9	Boron	2.1	2	12/16/2010
111	Powerton	MW-9	Boron	2.5	2	9/20/2011
112	Powerton	MW-9	Boron	2.7	2	12/12/2011
113	Powerton	MW-9	Boron	2.6	2	3/19/2012
114	Powerton	MW-10	Manganese	2.1	0.15	12/15/2010
115	Powerton	MW-10	Manganese	2.8	0.15	3/25/2011
116	Powerton	MW-10	Manganese	3.8	0.15	6/16/2011
117	Powerton	MW-10	Manganese	2.3	0.15	9/20/2011
118	Powerton	MW-10	Manganese	2.3	0.15	12/12/2011
119	Powerton	MW-10	Manganese	2.3	0.15	3/19/2012
120	Powerton	MW-11	Manganese	3.2	0.15	12/15/2010
121	Powerton	MW-11	Manganese	3.6	0.15	3/25/2011
122	Powerton	MW-11	Manganese	2.9	0.15	6/16/2011
123	Powerton	MW-11	Manganese	2.2	0.15	9/20/2011
124	Powerton	MW-11	Manganese	2.5	0.15	12/12/2011
125	Powerton	MW-11	Manganese	2.9	0.15	3/19/2012
126	Powerton	MW-11	Boron	2.3	2	3/19/2012

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 4 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
127	Powerton	MW-12	Iron	5.5	5	12/16/2010
128	Powerton	MW-12	Iron	6.3	5	2/15/2011
129	Powerton	MW-12	Iron	5.6	5	6/16/2011
130	Powerton	MW-12	Manganese	0.32	0.15	12/15/2010
131	Powerton	MW-12	Manganese	0.58	0.15	2/15/2011
132	Powerton	MW-12	Manganese	0.26	0.15	6/16/2011
133	Powerton	MW-12	Manganese	0.37	0.15	9/19/2011
134	Powerton	MW-12	Manganese	0.25	0.15	12/12/2011
135	Powerton	MW-12	Mercury	0.0096	0.002	12/15/2010
136	Powerton	MW-12	Chloride	210	200	12/12/2011
137	Powerton	MW-13	Manganese	5	0.15	12/15/2010
138	Powerton	MW-13	Manganese	3.8	0.15	2/15/2011
139	Powerton	MW-13	Manganese	2.7	0.15	4/25/2011
140	Powerton	MW-13	Manganese	2.9	0.15	6/16/2011
141	Powerton	MW-13	Manganese	2.6	0.15	8/9/2011
142	Powerton	MW-13	Manganese	3.6	0.15	10/13/2011
143	Powerton	MW-13	Manganese	3.5	0.15	12/12/2011
144	Powerton	MW-13	Manganese	3.5	0.15	4/10/2012
145	Powerton	MW-13	Boron	3.9	2	12/15/2010
146	Powerton	MW-13	Boron	3.1	2	2/15/2011
147	Powerton	MW-13	Boron	2.6	2	4/25/2011
148	Powerton	MW-13	Boron	3	2	6/16/2011
149	Powerton	MW-13	Boron	2.7	2	8/9/2011
150	Powerton	MW-13	Boron	3	2	10/13/2011
151	Powerton	MW-13	Boron	4.1	2	12/12/2011
152	Powerton	MW-13	Boron	4	2	4/10/2012
153	Powerton	MW-13	Sulfate	1,400	400	12/15/2010
154	Powerton	MW-13	Sulfate	770	400	2/15/2011
155	Powerton	MW-13	Sulfate	580	400	4/25/2011
156	Powerton	MW-13	Sulfate	540	400	6/16/2011
157	Powerton	MW-13	Sulfate	440	400	8/9/2011
158	Powerton	MW-13	Sulfate	660	400	10/13/2011
159	Powerton	MW-13	Sulfate	1,100	400	12/12/2011
160	Powerton	MW-13	Sulfate	1,100	400	4/10/2012
161	Powerton	MW-13	TDS	2,600	1,200	12/15/2010
162	Powerton	MW-13	TDS	1,600	1,200	2/15/2011
163	Powerton	MW-13	TDS	1,400	1,200	4/25/2011
164	Powerton	MW-13	TDS	1,300	1,200	6/16/2011
165	Powerton	MW-13	TDS	1,500	1,200	10/13/2011
166	Powerton	MW-13	TDS	2,100	1,200	12/12/2011
167	Powerton	MW-13	TDS	2,300	1,200	4/10/2012
168	Powerton	MW-14	Manganese	0.68	0.15	12/15/2010

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 5 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
169	Powerton	MW-14	Manganese	0.81	0.15	2/15/2011
170	Powerton	MW-14	Manganese	0.29	0.15	4/25/2011
171	Powerton	MW-14	Manganese	0.36	0.15	6/16/2011
172	Powerton	MW-14	Manganese	0.57	0.15	8/9/2011
173	Powerton	MW-14	Manganese	0.84	0.15	10/13/2011
174	Powerton	MW-14	Manganese	0.63	0.15	4/10/2012
175	Powerton	MW-14	Selenium	0.065	0.05	4/25/2011
176	Powerton	MW-14	Thallium	0.0035	0.002	4/25/2011
177	Powerton	MW-14	Thallium	0.0039	0.002	6/16/2011
178	Powerton	MW-14	Thallium	0.0027	0.002	8/9/2011
179	Powerton	MW-14	Thallium	0.0034	0.002	4/10/2011
180	Powerton	MW-14	Sulfate	960	400	12/15/2010
181	Powerton	MW-14	Sulfate	820	400	2/15/2011
182	Powerton	MW-14	Sulfate	770	400	4/25/2011
183	Powerton	MW-14	Sulfate	810	400	6/16/2011
184	Powerton	MW-14	Sulfate	940	400	8/9/2011
185	Powerton	MW-14	Sulfate	850	400	10/13/2011
186	Powerton	MW-14	Sulfate	880	400	12/12/2011
187	Powerton	MW-14	Sulfate	990	400	4/10/2012
188	Powerton	MW-14	Chloride	240	200	8/9/2011
189	Powerton	MW-14	TDS	1,800	1,200	12/15/2010
190	Powerton	MW-14	TDS	1,700	1,200	2/15/2011
191	Powerton	MW-14	TDS	1,800	1,200	4/25/2011
192	Powerton	MW-14	TDS	1,900	1,200	6/16/2011
193	Powerton	MW-14	TDS	2,000	1,200	8/9/2011
194	Powerton	MW-14	TDS	1,800	1,200	10/13/2011
195	Powerton	MW-14	TDS	1,800	1,200	12/12/2011
196	Powerton	MW-14	TDS	2,200	1,200	4/10/2012
197	Powerton	MW-15	Manganese	0.56	0.15	12/15/2010
198	Powerton	MW-15	Manganese	0.42	0.15	2/15/2011
199	Powerton	MW-15	Manganese	0.36	0.15	4/25/2011
200	Powerton	MW-15	Manganese	0.60	0.15	6/16/2011
201	Powerton	MW-15	Manganese	0.37	0.15	8/9/2011
202	Powerton	MW-15	Manganese	0.48	0.15	10/13/2011
203	Powerton	MW-15	Manganese	0.39	0.15	12/12/2011
204	Powerton	MW-15	Manganese	0.25	0.15	4/10/2012
205	Powerton	MW-15	Sulfate	650	400	6/16/2011
206	Powerton	MW-15	Chloride	210	200	8/9/2011
207	Powerton	MW-15	TDS	1,600	1,200	6/16/2011
208	Waukegan	MW-1	pH	9.92	6.5-9.0	3/24/2011
209	Waukegan	MW-1	pH	9.97	6.5-9.0	6/13/2011
210	Waukegan	MW-1	pH	9.54	6.5-9.0	3/14/2012

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 6 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
211	Waukegan	MW-1	Arsenic	0.054	0.05	10/25/2010
212	Waukegan	MW-1	Arsenic	0.17	0.05	6/13/2011
213	Waukegan	MW-1	Arsenic	0.077	0.05	9/13/2011
214	Waukegan	MW-1	Arsenic	0.057	0.05	12/6/2011
215	Waukegan	MW-1	Arsenic	0.078	0.05	3/14/2012
216	Waukegan	MW-1	Boron	2.6	2	10/25/2010
217	Waukegan	MW-1	Boron	2.6	2	6/13/2011
218	Waukegan	MW-1	Boron	2.5	2	9/13/2011
219	Waukegan	MW-1	Boron	2.8	2	12/6/2011
220	Waukegan	MW-1	Boron	2.5	2	3/14/2012
221	Waukegan	MW-2	pH	9.31	6.5-9.0	3/24/2011
222	Waukegan	MW-2	Antimony	0.015	0.006	10/25/2010
223	Waukegan	MW-2	Boron	2.2	2	10/25/2010
224	Waukegan	MW-2	Boron	2.2	2	3/24/2011
225	Waukegan	MW-3	pH	9.2	6.5-9.0	9/13/2011
226	Waukegan	MW-3	Boron	2.2	2	3/24/2011
227	Waukegan	MW-3	Boron	2.3	2	6/13/2011
228	Waukegan	MW-4	Manganese	0.36	0.15	9/13/2011
229	Waukegan	MW-4	Boron	2.1	2	3/24/2011
230	Waukegan	MW-4	Boron	2.1	2	12/6/2011
231	Waukegan	MW-4	Boron	2.2	2	3/14/2012
232	Waukegan	MW-5	Iron	5.6	5	12/6/2011
233	Waukegan	MW-5	Iron	6.6	5	3/14/2012
234	Waukegan	MW-5	Manganese	0.71	0.15	10/25/2010
235	Waukegan	MW-5	Manganese	0.6	0.15	3/24/2011
236	Waukegan	MW-5	Manganese	0.28	0.15	6/13/2011
237	Waukegan	MW-5	Manganese	0.99	0.15	12/6/2011
238	Waukegan	MW-5	Manganese	0.76	0.15	3/14/2012
239	Waukegan	MW-5	Boron	28	2	10/25/2010
240	Waukegan	MW-5	Boron	33	2	3/24/2011
241	Waukegan	MW-5	Boron	12	2	6/13/2011
242	Waukegan	MW-5	Boron	30	2	9/13/2011
243	Waukegan	MW-5	Boron	37	2	12/6/2011
244	Waukegan	MW-5	Boron	44	2	3/14/2012
245	Waukegan	MW-5	Sulfate	920	400	10/25/2010
246	Waukegan	MW-5	Sulfate	780	400	3/24/2011
247	Waukegan	MW-5	Sulfate	1,100	400	6/13/2011
248	Waukegan	MW-5	Sulfate	810	400	9/13/2011
249	Waukegan	MW-5	Sulfate	1,100	400	12/6/2011
250	Waukegan	MW-5	Sulfate	980	400	3/14/2012
251	Waukegan	MW-5	Chloride	540	200	6/13/2011
252	Waukegan	MW-5	Chloride	220	200	9/13/2011



Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 7 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
253	Waukegan	MW-5	TDS	1,500	1,200	10/25/2010
254	Waukegan	MW-5	TDS	1,800	1,200	3/24/2011
255	Waukegan	MW-5	TDS	3,300	1,200	6/13/2011
256	Waukegan	MW-5	TDS	2,300	1,200	9/13/2011
257	Waukegan	MW-5	TDS	2,300	1,200	12/6/2011
258	Waukegan	MW-5	TDS	2,000	1,200	3/14/2012
259	Will County	MW-1	Antimony	0.0063	0.006	12/8/2011
260	Will County	MW-1	Manganese	0.2	0.15	12/13/2010
261	Will County	MW-1	Manganese	0.22	0.15	6/15/2011
262	Will County	MW-1	Manganese	0.16	0.15	9/15/2011
263	Will County	MW-1	Manganese	0.17	0.15	12/8/2011
264	Will County	MW-1	Manganese	0.16	0.15	3/16/2012
265	Will County	MW-1	Sulfate	530	400	12/13/2010
266	Will County	MW-1	Sulfate	430	400	3/16/2012
267	Will County	MW-1	Chloride	210	200	3/28/2011
268	Will County	MW-2	Antimony	0.0073	0.006	9/15/2011
269	Will County	MW-2	Antimony	0.017	0.006	12/9/2011
270	Will County	MW-2	Boron	2.3	2	6/15/2011
271	Will County	MW-2	Boron	2.3	2	9/15/2011
272	Will County	MW-2	Sulfate	430	400	12/13/2010
273	Will County	MW-2	Chloride	250	200	3/28/2011
274	Will County	MW-3	Boron	2.7	2	12/13/2010
275	Will County	MW-3	Boron	2.4	2	3/28/2011
276	Will County	MW-3	Boron	2.6	2	6/15/2011
277	Will County	MW-3	Boron	3.3	2	9/15/2011
278	Will County	MW-3	Boron	2.8	2	12/8/2011
279	Will County	MW-3	Boron	2.7	2	3/16/2012
280	Will County	MW-3	Chloride	250	200	3/28/2011
281	Will County	MW-3	Manganese	0.34	0.15	12/13/2010
282	Will County	MW-3	Manganese	0.31	0.15	3/28/2011
283	Will County	MW-3	Manganese	0.34	0.15	6/15/2011
284	Will County	MW-3	Manganese	0.26	0.15	9/15/2011
285	Will County	MW-3	Manganese	0.29	0.15	12/8/2011
286	Will County	MW-3	Manganese	0.27	0.15	3/16/2012
287	Will County	MW-4	Boron	3.7	2	12/13/2010
288	Will County	MW-4	Boron	3.3	2	3/28/2011
289	Will County	MW-4	Boron	3.6	2	6/15/2011
290	Will County	MW-4	Boron	4.3	2	9/15/2011
291	Will County	MW-4	Boron	3	2	12/8/2011
292	Will County	MW-4	Boron	4	2	3/16/2012
293	Will County	MW-4	Manganese	0.52	0.15	12/13/2010
294	Will County	MW-4	Manganese	0.58	0.15	3/28/2011

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 8 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
295	Will County	MW-4	Manganese	0.70	0.15	6/15/2011
296	Will County	MW-4	Manganese	1.00	0.15	9/15/2011
297	Will County	MW-4	Manganese	0.62	0.15	12/8/2011
298	Will County	MW-4	Manganese	0.60	0.15	3/16/2012
299	Will County	MW-4	Sulfate	1,500	400	12/13/2010
300	Will County	MW-4	Sulfate	1,500	400	3/28/2011
301	Will County	MW-4	Sulfate	1,600	400	6/15/2011
302	Will County	MW-4	Sulfate	4,800	400	9/15/2011
303	Will County	MW-4	Sulfate	1,600	400	12/8/2011
304	Will County	MW-4	Sulfate	2,000	400	3/16/2012
305	Will County	MW-4	TDS	2,500	1,200	12/13/2010
306	Will County	MW-4	TDS	2,600	1,200	3/28/2011
307	Will County	MW-4	TDS	2,800	1,200	6/15/2011
308	Will County	MW-4	TDS	6,000	1,200	9/15/2011
309	Will County	MW-4	TDS	3,100	1,200	12/8/2011
310	Will County	MW-4	TDS	3,700	1,200	3/16/2012
311	Will County	MW-5	pH	9.51	6.5-9.0	3/28/2011
312	Will County	MW-5	pH	9.3	6.5-9.0	3/16/2012
313	Will County	MW-5	Boron	2.6	2	12/13/2010
314	Will County	MW-5	Boron	2.7	2	3/28/2011
315	Will County	MW-5	Boron	3.2	2	6/15/2011
316	Will County	MW-5	Boron	4	2	9/15/2011
317	Will County	MW-5	Boron	3.2	2	12/8/2011
318	Will County	MW-5	Boron	2.9	2	3/16/2012
319	Will County	MW-5	Sulfate	580	400	12/13/2010
320	Will County	MW-5	Sulfate	570	400	3/28/2011
321	Will County	MW-5	Sulfate	540	400	6/15/2011
322	Will County	MW-5	Sulfate	690	400	9/15/2011
323	Will County	MW-5	Sulfate	500	400	12/8/2011
324	Will County	MW-5	TDS	1,500	1,200	3/28/2011
325	Will County	MW-5	TDS	1,400	1,200	6/15/2011
326	Will County	MW-5	TDS	1,500	1,200	9/15/2011
327	Will County	MW-6	pH	9.65	6.5-9.0	3/29/2011
328	Will County	MW-6	pH	9.27	6.5-9.0	6/15/2011
329	Will County	MW-6	pH	9.44	6.5-9.0	9/15/2011
330	Will County	MW-6	pH	9.39	6.5-9.0	3/16/2012
331	Will County	MW-6	Boron	2.7	2	12/13/2010
332	Will County	MW-6	Boron	2.5	2	3/28/2011
333	Will County	MW-6	Boron	2.4	2	6/15/2011
334	Will County	MW-6	Boron	3	2	9/15/2011
335	Will County	MW-6	Boron	2.5	2	12/8/2011
336	Will County	MW-6	Boron	2.5	2	3/16/2012

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 9 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
337	Will County	MW-6	Chloride	210	200	3/28/2011
338	Will County	MW-6	Sulfate	500	400	12/13/2010
339	Will County	MW-6	Sulfate	540	400	3/28/2011
340	Will County	MW-6	Sulfate	570	400	6/15/2011
341	Will County	MW-6	Sulfate	420	400	9/15/2011
342	Will County	MW-6	Sulfate	440	400	12/8/2011
343	Will County	MW-7	Manganese	0.18	0.15	9/15/2011
344	Will County	MW-7	Manganese	0.2	0.15	12/8/2011
345	Will County	MW-7	Manganese	0.2	0.15	3/16/2012
346	Will County	MW-7	Boron	4.7	2	12/13/2010
347	Will County	MW-7	Boron	5	2	3/28/2011
348	Will County	MW-7	Boron	5.7	2	6/15/2011
349	Will County	MW-7	Boron	3.4	2	9/15/2011
350	Will County	MW-7	Boron	5	2	12/8/2011
351	Will County	MW-7	Boron	5.1	2	3/16/2012
352	Will County	MW-7	Sulfate	610	400	12/13/2010
353	Will County	MW-7	Sulfate	650	400	3/28/2011
354	Will County	MW-7	Sulfate	1,000	400	6/15/2011
355	Will County	MW-7	Sulfate	710	400	9/15/2011
356	Will County	MW-7	Sulfate	710	400	12/8/2011
357	Will County	MW-7	Sulfate	770	400	3/16/2012
358	Will County	MW-7	TDS	1,300	1,200	12/13/2010
359	Will County	MW-7	TDS	1,500	1,200	3/28/2011
360	Will County	MW-7	TDS	1,600	1,200	6/15/2011
361	Will County	MW-7	TDS	1,400	1,200	9/15/2011
362	Will County	MW-7	TDS	1,300	1,200	12/8/2011
363	Will County	MW-7	TDS	1,400	1,200	3/16/2012
364	Will County	MW-8	Boron	2.3	2	9/15/2011
365	Will County	MW-8	Chloride	270	200	3/29/2011
366	Will County	MW-8	Manganese	0.33	0.15	12/13/2010
367	Will County	MW-8	Manganese	0.44	0.15	3/28/2011
368	Will County	MW-8	Manganese	0.47	0.15	6/15/2011
369	Will County	MW-8	Manganese	0.45	0.15	9/15/2011
370	Will County	MW-8	Manganese	0.40	0.15	12/8/2011
371	Will County	MW-8	Sulfate	440	400	12/13/2010
372	Will County	MW-8	Sulfate	440	400	3/28/2011
373	Will County	MW-8	Sulfate	420	400	6/15/2011
374	Will County	MW-8	Sulfate	600	400	9/15/2011
375	Will County	MW-8	TDS	1,300	1,200	9/15/2011
376	Will County	MW-9	pH	10.87	6.5-9.0	3/28/2011
377	Will County	MW-9	pH	10.44	6.5-9.0	6/15/2011
378	Will County	MW-9	pH	10.27	6.5-9.0	9/15/2011

Violations of Illinois Class I groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. Highlighted violations were not listed in the Violation Notices sent by Illinois EPA in June, 2012. **Page 10 of 10.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class I GW standard (mg/L)	Collection date
379	Will County	MW-9	pH	9.55	6.5-9.0	12/8/2011
380	Will County	MW-9	pH	10.56	6.5-9.0	3/16/2012
381	Will County	MW-9	Boron	2.2	2	12/13/2010
382	Will County	MW-9	Chloride	280	200	3/28/2011
383	Will County	MW-9	Chloride	230	200	6/15/2011
384	Will County	MW-9	Sulfate	410	400	12/13/2010
385	Will County	MW-9	Sulfate	410	400	6/15/2011
386	Will County	MW-10	Boron	2.1	2	12/13/2010
387	Will County	MW-10	Boron	2.2	2	6/15/2011
388	Will County	MW-10	Boron	2.8	2	9/15/2011
389	Will County	MW-10	Boron	2.5	2	12/8/2011
390	Will County	MW-10	Boron	2.1	2	3/16/2012
391	Will County	MW-10	Manganese	0.25	0.15	12/13/2010
392	Will County	MW-10	Manganese	0.22	0.15	3/28/2011
393	Will County	MW-10	Manganese	0.25	0.15	6/15/2011
394	Will County	MW-10	Manganese	0.27	0.15	9/15/2011
395	Will County	MW-10	Manganese	0.29	0.15	12/8/2011
396	Will County	MW-10	Manganese	0.25	0.15	12/8/2011
397	Will County	MW-10	Sulfate	420	400	9/15/2011

**EXHIBIT C:** Violations of Illinois Class II Groundwater Quality Standards at Joliet 29, Powerton, Waukegan, and Will County Generating Stations.

Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 1 of 7.**

	<b>Plant</b>	<b>Well</b>	<b>Pollutant</b>	<b>Sample value (mg/L)</b>	<b>Class II GW standard (mg/L)</b>	<b>Collection date</b>
1	Joliet 29	MW-2	Chloride	230	200	6/14/2011
2	Joliet 29	MW-2	Chloride	280	200	3/15/2012
3	Joliet 29	MW-3	Chloride	260	200	12/7/2010
4	Joliet 29	MW-3	Chloride	240	200	3/28/2011
5	Joliet 29	MW-3	Chloride	300	200	6/14/2011
6	Joliet 29	MW-3	Chloride	260	200	12/7/2011
7	Joliet 29	MW-3	Chloride	250	200	3/15/2012
8	Joliet 29	MW-4	Chloride	270	200	12/6/2010
9	Joliet 29	MW-4	Chloride	270	200	3/28/2011
10	Joliet 29	MW-4	Chloride	250	200	6/14/2011
11	Joliet 29	MW-4	Chloride	210	200	3/15/2012
12	Joliet 29	MW-5	Chloride	240	200	3/28/2011
13	Joliet 29	MW-5	Chloride	220	200	6/14/2011
14	Joliet 29	MW-5	Chloride	210	200	3/15/2012
15	Joliet 29	MW-6	Chloride	270	200	3/28/2011
16	Joliet 29	MW-6	Chloride	240	200	3/15/2012
17	Joliet 29	MW-7	Chloride	430	200	12/6/2010
18	Joliet 29	MW-7	Chloride	320	200	3/28/2011
19	Joliet 29	MW-7	Chloride	300	200	3/15/2012
20	Joliet 29	MW-8	Chloride	350	200	3/28/2011
21	Joliet 29	MW-8	Chloride	410	200	3/15/2012
22	Joliet 29	MW-9	Chloride	230	200	3/28/2011
23	Joliet 29	MW-9	Chloride	290	200	6/14/2011
24	Joliet 29	MW-9	Iron	7.3	5	6/14/2011
25	Joliet 29	MW-9	Iron	5.5	5	3/15/2012
26	Joliet 29	MW-9	Sulfate	1,600	400	12/6/2010
27	Joliet 29	MW-9	Sulfate	1,100	400	3/28/2011
28	Joliet 29	MW-9	Sulfate	580	400	6/14/2011
29	Joliet 29	MW-9	Sulfate	750	400	9/14/2011
30	Joliet 29	MW-9	Sulfate	1,600	400	3/15/2012
31	Joliet 29	MW-9	TDS	2,600	1,200	12/6/2010
32	Joliet 29	MW-9	TDS	2,400	1,200	3/28/2011
33	Joliet 29	MW-9	TDS	1,500	1,200	6/14/2011
34	Joliet 29	MW-9	TDS	1,700	1,200	9/14/2011
35	Joliet 29	MW-9	TDS	2,400	1,200	12/7/2011
36	Joliet 29	MW-9	TDS	2,600	1,200	3/15/2012
37	Joliet 29	MW-10	Chloride	300	200	3/28/2011
38	Joliet 29	MW-11	Boron	2.6	2	3/28/2011
39	Joliet 29	MW-11	Boron	2.2	2	6/14/2011
40	Joliet 29	MW-11	Chloride	270	200	3/28/2011
41	Joliet 29	MW-11	Chloride	280	200	6/14/2011
42	Joliet 29	MW-11	Chloride	240	200	3/15/2012
43	Powerton	MW-1	Boron	2.9	2	3/19/2012

Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 2 of 7.**

	<b>Plant</b>	<b>Well</b>	<b>Pollutant</b>	<b>Sample value (mg/L)</b>	<b>Class II GW standard (mg/L)</b>	<b>Collection date</b>
44	Powerton	MW-6	Chloride	210	200	9/20/2011
45	Powerton	MW-7	Arsenic	0.23	0.2	12/12/2011
46	Powerton	MW-7	Arsenic	0.23	0.2	3/19/2012
47	Powerton	MW-7	Iron	8	5	12/6/2010
48	Powerton	MW-7	Iron	7.5	5	3/25/2011
49	Powerton	MW-7	Iron	10	5	6/16/2011
50	Powerton	MW-7	Iron	22	5	9/20/2011
51	Powerton	MW-7	Iron	26	5	12/12/2011
52	Powerton	MW-7	Iron	31	5	3/19/2012
53	Powerton	MW-7	Manganese	12	10	9/20/2011
54	Powerton	MW-7	Manganese	12	10	12/12/2011
55	Powerton	MW-7	Manganese	11	10	3/19/2012
56	Powerton	MW-7	TDS	1,300	1,200	6/16/2011
57	Powerton	MW-7	TDS	1,300	1,200	9/20/2011
58	Powerton	MW-7	TDS	1,300	1,200	12/12/2011
59	Powerton	MW-7	TDS	1,400	1,200	3/19/2012
60	Powerton	MW-8	Chloride	210	200	3/25/2011
61	Powerton	MW-8	Chloride	210	200	3/25/2011
62	Powerton	MW-9	Selenium	0.072	0.05	3/25/2011
63	Powerton	MW-9	Boron	2.1	2	12/16/2010
64	Powerton	MW-9	Boron	2.5	2	9/20/2011
65	Powerton	MW-9	Boron	2.7	2	12/12/2011
66	Powerton	MW-9	Boron	2.6	2	3/19/2012
67	Powerton	MW-11	Boron	2.3	2	3/19/2012
68	Powerton	MW-12	Iron	5.5	5	12/16/2010
69	Powerton	MW-12	Iron	6.3	5	2/15/2011
70	Powerton	MW-12	Iron	5.6	5	6/16/2011
71	Powerton	MW-12	Chloride	210	200	12/12/2011
72	Powerton	MW-13	Boron	3.9	2	12/15/2010
73	Powerton	MW-13	Boron	3.1	2	2/15/2011
74	Powerton	MW-13	Boron	2.6	2	4/25/2011
75	Powerton	MW-13	Boron	3	2	6/16/2011
76	Powerton	MW-13	Boron	2.7	2	8/9/2011
77	Powerton	MW-13	Boron	3	2	10/13/2011
78	Powerton	MW-13	Boron	4.1	2	12/12/2011
79	Powerton	MW-13	Boron	4	2	4/10/2012
80	Powerton	MW-13	Sulfate	1,400	400	12/15/2010
81	Powerton	MW-13	Sulfate	770	400	2/15/2011
82	Powerton	MW-13	Sulfate	580	400	4/25/2011
83	Powerton	MW-13	Sulfate	540	400	6/16/2011
84	Powerton	MW-13	Sulfate	440	400	8/9/2011
85	Powerton	MW-13	Sulfate	660	400	10/13/2011
86	Powerton	MW-13	Sulfate	1,100	400	12/12/2011

Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 3 of 7.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class II GW standard (mg/L)	Collection date
87	Powerton	MW-13	Sulfate	1,100	400	4/10/2012
88	Powerton	MW-13	TDS	2,600	1,200	12/15/2010
89	Powerton	MW-13	TDS	1,600	1,200	2/15/2011
90	Powerton	MW-13	TDS	1,400	1,200	4/25/2011
91	Powerton	MW-13	TDS	1,300	1,200	6/16/2011
92	Powerton	MW-13	TDS	1,500	1,200	10/13/2011
93	Powerton	MW-13	TDS	2,100	1,200	12/12/2011
94	Powerton	MW-13	TDS	2,300	1,200	4/10/2012
95	Powerton	MW-14	Selenium	0.065	0.05	4/25/2011
96	Powerton	MW-14	Sulfate	960	400	12/15/2010
97	Powerton	MW-14	Sulfate	820	400	2/15/2011
98	Powerton	MW-14	Sulfate	770	400	4/25/2011
99	Powerton	MW-14	Sulfate	810	400	6/16/2011
100	Powerton	MW-14	Sulfate	940	400	8/9/2011
101	Powerton	MW-14	Sulfate	850	400	10/13/2011
102	Powerton	MW-14	Sulfate	880	400	12/12/2011
103	Powerton	MW-14	Sulfate	990	400	4/10/2012
104	Powerton	MW-14	Chloride	240	200	8/9/2011
105	Powerton	MW-14	TDS	1,800	1,200	12/15/2010
106	Powerton	MW-14	TDS	1,700	1,200	2/15/2011
107	Powerton	MW-14	TDS	1,800	1,200	4/25/2011
108	Powerton	MW-14	TDS	1,900	1,200	6/16/2011
109	Powerton	MW-14	TDS	2,000	1,200	8/9/2011
110	Powerton	MW-14	TDS	1,800	1,200	10/13/2011
111	Powerton	MW-14	TDS	1,800	1,200	12/12/2011
112	Powerton	MW-14	TDS	2,200	1,200	4/10/2012
113	Powerton	MW-15	Sulfate	650	400	6/16/2011
114	Powerton	MW-15	Chloride	210	200	8/9/2011
115	Powerton	MW-15	TDS	1,600	1,200	6/16/2011
116	Waukegan	MW-1	pH	9.92	6.5-9.0	3/24/2011
117	Waukegan	MW-1	pH	9.97	6.5-9.0	6/13/2011
118	Waukegan	MW-1	pH	9.54	6.5-9.0	3/14/2012
119	Waukegan	MW-1	Boron	2.6	2	10/25/2010
120	Waukegan	MW-1	Boron	2.6	2	6/13/2011
121	Waukegan	MW-1	Boron	2.5	2	9/13/2011
122	Waukegan	MW-1	Boron	2.8	2	12/6/2011
123	Waukegan	MW-1	Boron	2.5	2	3/14/2012
124	Waukegan	MW-2	pH	9.31	6.5-9.0	3/24/2011
125	Waukegan	MW-2	Boron	2.2	2	10/25/2010
126	Waukegan	MW-2	Boron	2.2	2	3/24/2011
127	Waukegan	MW-3	pH	9.2	6.5-9.0	9/13/2011
128	Waukegan	MW-3	Boron	2.2	2	3/24/2011
129	Waukegan	MW-3	Boron	2.3	2	6/13/2011



Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 4 of 7.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class II GW standard (mg/L)	Collection date
130	Waukegan	MW-4	Boron	2.1	2	3/24/2011
131	Waukegan	MW-4	Boron	2.1	2	12/6/2011
132	Waukegan	MW-4	Boron	2.2	2	3/14/2012
133	Waukegan	MW-5	Iron	5.6	5	12/6/2011
134	Waukegan	MW-5	Iron	6.6	5	3/14/2012
135	Waukegan	MW-5	Boron	28	2	10/25/2010
136	Waukegan	MW-5	Boron	33	2	3/24/2011
137	Waukegan	MW-5	Boron	12	2	6/13/2011
138	Waukegan	MW-5	Boron	30	2	9/13/2011
139	Waukegan	MW-5	Boron	37	2	12/6/2011
140	Waukegan	MW-5	Boron	44	2	3/14/2012
141	Waukegan	MW-5	Sulfate	920	400	10/25/2010
142	Waukegan	MW-5	Sulfate	780	400	3/24/2011
143	Waukegan	MW-5	Sulfate	1,100	400	6/13/2011
144	Waukegan	MW-5	Sulfate	810	400	9/13/2011
145	Waukegan	MW-5	Sulfate	1,100	400	12/6/2011
146	Waukegan	MW-5	Sulfate	980	400	3/14/2012
147	Waukegan	MW-5	Chloride	540	200	6/13/2011
148	Waukegan	MW-5	Chloride	220	200	9/13/2011
149	Waukegan	MW-5	TDS	1,500	1,200	10/25/2010
150	Waukegan	MW-5	TDS	1,800	1,200	3/24/2011
151	Waukegan	MW-5	TDS	3,300	1,200	6/13/2011
152	Waukegan	MW-5	TDS	2,300	1,200	9/13/2011
153	Waukegan	MW-5	TDS	2,300	1,200	12/6/2011
154	Waukegan	MW-5	TDS	2,000	1,200	3/14/2012
155	Will County	MW-1	Sulfate	530	400	12/13/2010
156	Will County	MW-1	Sulfate	430	400	3/16/2012
157	Will County	MW-1	Chloride	210	200	3/28/2011
158	Will County	MW-2	Boron	2.3	2	6/15/2011
159	Will County	MW-2	Boron	2.3	2	9/15/2011
160	Will County	MW-2	Sulfate	430	400	12/13/2010
161	Will County	MW-2	Chloride	250	200	3/28/2011
162	Will County	MW-3	Boron	2.7	2	12/13/2010
163	Will County	MW-3	Boron	2.4	2	3/28/2011
164	Will County	MW-3	Boron	2.6	2	6/15/2011
165	Will County	MW-3	Boron	3.3	2	9/15/2011
166	Will County	MW-3	Boron	2.8	2	12/8/2011
167	Will County	MW-3	Boron	2.7	2	3/16/2012
168	Will County	MW-3	Chloride	250	200	3/28/2011
169	Will County	MW-4	Boron	3.7	2	12/13/2010
170	Will County	MW-4	Boron	3.3	2	3/28/2011
171	Will County	MW-4	Boron	3.6	2	6/15/2011
172	Will County	MW-4	Boron	4.3	2	9/15/2011

Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 5 of 7.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class II GW standard (mg/L)	Collection date
173	Will County	MW-4	Boron	3	2	12/8/2011
174	Will County	MW-4	Boron	4	2	3/16/2012
175	Will County	MW-4	Sulfate	1,500	400	12/13/2010
176	Will County	MW-4	Sulfate	1,500	400	3/28/2011
177	Will County	MW-4	Sulfate	1,600	400	6/15/2011
178	Will County	MW-4	Sulfate	4,800	400	9/15/2011
179	Will County	MW-4	Sulfate	1,600	400	12/8/2011
180	Will County	MW-4	Sulfate	2,000	400	3/16/2012
181	Will County	MW-4	TDS	2,500	1,200	12/13/2010
182	Will County	MW-4	TDS	2,600	1,200	3/28/2011
183	Will County	MW-4	TDS	2,800	1,200	6/15/2011
184	Will County	MW-4	TDS	6,000	1,200	9/15/2011
185	Will County	MW-4	TDS	3,100	1,200	12/8/2011
186	Will County	MW-4	TDS	3,700	1,200	3/16/2012
187	Will County	MW-5	pH	9.51	6.5-9.0	3/28/2011
188	Will County	MW-5	pH	9.3	6.5-9.0	3/16/2012
189	Will County	MW-5	Boron	2.6	2	12/13/2010
190	Will County	MW-5	Boron	2.7	2	3/28/2011
191	Will County	MW-5	Boron	3.2	2	6/15/2011
192	Will County	MW-5	Boron	4	2	9/15/2011
193	Will County	MW-5	Boron	3.2	2	12/8/2011
194	Will County	MW-5	Boron	2.9	2	3/16/2012
195	Will County	MW-5	Sulfate	580	400	12/13/2010
196	Will County	MW-5	Sulfate	570	400	3/28/2011
197	Will County	MW-5	Sulfate	540	400	6/15/2011
198	Will County	MW-5	Sulfate	690	400	9/15/2011
199	Will County	MW-5	Sulfate	500	400	12/8/2011
200	Will County	MW-5	TDS	1,500	1,200	3/28/2011
201	Will County	MW-5	TDS	1,400	1,200	6/15/2011
202	Will County	MW-5	TDS	1,500	1,200	9/15/2011
203	Will County	MW-6	pH	9.65	6.5-9.0	3/29/2011
204	Will County	MW-6	pH	9.27	6.5-9.0	6/15/2011
205	Will County	MW-6	pH	9.44	6.5-9.0	9/15/2011
206	Will County	MW-6	pH	9.39	6.5-9.0	3/16/2012
207	Will County	MW-6	Boron	2.7	2	12/13/2010
208	Will County	MW-6	Boron	2.5	2	3/28/2011
209	Will County	MW-6	Boron	2.4	2	6/15/2011
210	Will County	MW-6	Boron	3	2	9/15/2011
211	Will County	MW-6	Boron	2.5	2	12/8/2011
212	Will County	MW-6	Boron	2.5	2	3/16/2012
213	Will County	MW-6	Chloride	210	200	3/28/2011
214	Will County	MW-6	Sulfate	500	400	12/13/2010
215	Will County	MW-6	Sulfate	540	400	3/28/2011

Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 6 of 7.**

	Plant	Well	Pollutant	Sample value (mg/L)	Class II GW standard (mg/L)	Collection date
216	Will County	MW-6	Sulfate	570	400	6/15/2011
217	Will County	MW-6	Sulfate	420	400	9/15/2011
218	Will County	MW-6	Sulfate	440	400	12/8/2011
219	Will County	MW-7	Boron	4.7	2	12/13/2010
220	Will County	MW-7	Boron	5	2	3/28/2011
221	Will County	MW-7	Boron	5.7	2	6/15/2011
222	Will County	MW-7	Boron	3.4	2	9/15/2011
223	Will County	MW-7	Boron	5	2	12/8/2011
224	Will County	MW-7	Boron	5.1	2	3/16/2012
225	Will County	MW-7	Sulfate	610	400	12/13/2010
226	Will County	MW-7	Sulfate	650	400	3/28/2011
227	Will County	MW-7	Sulfate	1,000	400	6/15/2011
228	Will County	MW-7	Sulfate	710	400	9/15/2011
229	Will County	MW-7	Sulfate	710	400	12/8/2011
230	Will County	MW-7	Sulfate	770	400	3/16/2012
231	Will County	MW-7	TDS	1,300	1,200	12/13/2010
232	Will County	MW-7	TDS	1,500	1,200	3/28/2011
233	Will County	MW-7	TDS	1,600	1,200	6/15/2011
234	Will County	MW-7	TDS	1,400	1,200	9/15/2011
235	Will County	MW-7	TDS	1,300	1,200	12/8/2011
236	Will County	MW-7	TDS	1,400	1,200	3/16/2012
237	Will County	MW-8	Boron	2.3	2	9/15/2011
238	Will County	MW-8	Chloride	270	200	3/29/2011
239	Will County	MW-8	Sulfate	440	400	12/13/2010
240	Will County	MW-8	Sulfate	440	400	3/28/2011
241	Will County	MW-8	Sulfate	420	400	6/15/2011
242	Will County	MW-8	Sulfate	600	400	9/15/2011
243	Will County	MW-8	TDS	1,300	1,200	9/15/2011
244	Will County	MW-9	pH	10.87	6.5-9.0	3/28/2011
245	Will County	MW-9	pH	10.44	6.5-9.0	6/15/2011
246	Will County	MW-9	pH	10.27	6.5-9.0	9/15/2011
247	Will County	MW-9	pH	9.55	6.5-9.0	12/8/2011
248	Will County	MW-9	pH	10.56	6.5-9.0	3/16/2012
249	Will County	MW-9	Boron	2.2	2	12/13/2010
250	Will County	MW-9	Chloride	280	200	3/28/2011
251	Will County	MW-9	Chloride	230	200	6/15/2011
252	Will County	MW-9	Sulfate	410	400	12/13/2010
253	Will County	MW-9	Sulfate	410	400	6/15/2011
254	Will County	MW-10	Boron	2.1	2	12/13/2010
255	Will County	MW-10	Boron	2.2	2	6/15/2011
256	Will County	MW-10	Boron	2.8	2	9/15/2011
257	Will County	MW-10	Boron	2.5	2	12/8/2011
258	Will County	MW-10	Boron	2.1	2	3/16/2012

Violations of Illinois Class II groundwater standards at Midwest Generation's Joliet 29, Powerton, Waukegan, and Will County Generating Stations. **Page 7 of 7.**

	<b>Plant</b>	<b>Well</b>	<b>Pollutant</b>	<b>Sample value (mg/L)</b>	<b>Class II GW standard (mg/L)</b>	<b>Collection date</b>
259	Will County	MW-10	Sulfate	420	400	9/15/2011

**EXHIBIT D:** Groundwater monitoring data summary for Joliet 29.

Excerpted from Midwest Generation, LLC, Quarterly Groundwater Monitoring Results – First Quarter 2012 – Amended – Revisions to Original Report Submitted May 11, 2012 – Joliet 29 Generating Station – Ash Impoundments (July 30, 2012).

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 1*	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	0.0025	ND	ND
Mercury	Mercury 7470A	0.002	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	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	0.0035	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	0.31	0.31	NS	0.29	NS	NS	NS	0.31	NS	0.35	0.44	0.74	0.22
Sulfate	Metals 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 2540f*	1,200	590	NS	670	NS	NS	NS	600	NS	720	690	750	800
Fluoride	Dissolved 4500 FC	4	0.45	NS	0.43	NS	NS	NS	0.62	NS	0.58	0.54	0.51	0.53
Nitrogen/Nitrate	Dissolved 4500 NO2	NA	ND	NS	ND	NS	NS	NS	ND	NS	ND	ND	ND	ND
Nitrate/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 1 Groundwater Standards from 35 IAC Part 620  
R04 values show exceedences of 35 IAC Part 620  
ND=not detect  
NS= not sampled  
mg/L= milligrams per liter

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

Chemical Name	Sample Analysis Method	Groundwater Quality Standard Class I*	MW-3		MW-3		MW-3		MW-4		MW-4		MW-4	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Antimony	Metals 6020	0.006	0.004	ND	0.0065	0.016	0.013	ND	ND	ND	0.0067	0.0057	ND	0.0057
Arsenic	Metals 6020	0.05	0.0031	ND	0.0012	0.0016	0.0014	ND	ND	ND	0.0011	0.0011	ND	ND
Barium	Metals 6020	2.0	0.089	0.085	0.092	0.084	0.081	0.065	0.059	0.06	0.069	0.069	0.07	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	0.00074	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	0.0013	0.0013	ND	ND	ND	ND	ND	ND	0.0018	0.0028	0.0026	0.0026
Cobalt	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	0.066	0.066	ND	ND
Manganese	Metals 6020	0.15	0.1	0.048	ND	0.0076	0.0095	0.33	0.048	0.018	0.029	0.029	0.038	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	0.0046	0.0067	0.0037	ND	0.0029	0.0038	0.0037	0.0037
Selenium	Metals 6020	0.05	ND	0.005	ND	ND	ND	0.0025	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	0.00091	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	0.24	0.36	0.46	0.24	0.26	0.46	0.37	0.38	0.25	0.34	0.29	0.29
Boron	Metals 6020	2	120	160	120	160	190	300	140	84	74	170	210	210
Sulfate	Dissolved 9038	400	260	240	300	160	260	270	270	250	250	200	210	210
Chloride	Dissolved 9251	200	260	240	300	160	260	270	270	250	250	200	210	210
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1	2.1	1.1	0.79	ND	1.6	1.6	1.6	1.4	1.4	1.4
Total Dissolved Solids	Dissolved 2540C	1,200	930	1,100	1,000	1,100	1,000	1,000	890	770	970	970	930	930
Fluoride	Dissolved 4300 FC	4	0.43	0.4	0.41	0.31	0.39	0.49	0.38	0.44	0.37	0.44	0.41	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	1.6	1.6	1.6	1.4	1.4	1.4

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

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

Chemical Name	Sample Analysis Method	Groundwater Quality Standard Class 1*	MW-5 (mg/L)		MW-6 (mg/L)		MW-5 (mg/L)		MW-6 (mg/L)			
			12/7/10	3/23/11	6/14/11	9/14/11	12/7/11	3/15/12	6/14/11	9/14/11	12/7/11	3/15/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	0.0035	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	0.0011	0.0011	ND	ND	0.0015	ND	0.0018	0.0016
Barium	Metals 6020	2.0	0.061	0.092	0.053	0.062	0.069	0.075	0.12	0.082	0.094	0.11
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	0.0016	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	0.0019	ND	ND	ND
Copper	Metals 6020	0.65	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
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.0065	ND	ND	ND	ND	0.14	0.033	ND	0.036	0.015
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	0.0021	ND	ND	0.0056	0.0025	ND	ND	ND
Selenium	Metals 6020	0.05	ND	0.0072	ND	ND	0.005	ND	0.0034	ND	ND	0.0051
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	0.00077	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	0.49	0.32	0.44	0.32	0.27	0.3
Bromine	Metals 6020	2	0.42	0.52	0.47	0.57	0.54	0.44	1.40	1.40	1.40	1.10
Sulfate	Dissolved 9038	400	110	160	160	140	190	190	140	87	160	130
Chloride	Dissolved 9251	200	150	240	220	120	210	210	270	140	140	130
Nitrogen/Nitrate	Nitrogen By calc	10	1.2	1.3	1.1	1.1	0.33	0.31	1.3	0.91	0.31	0.36
Total Dissolved Solids	Dissolved 2549C	1,200	750	990	850	800	930	650	1,000	650	710	840
Fluoride	Dissolved 4500 FC	4	0.4	0.34	0.39	0.28	0.32	0.4	0.36	0.44	0.29	0.44
Nitrogen/Nitrate	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrate	Dissolved 4500 NO3	NA	ND	1.2	1.3	1.1	0.33	0.31	1.3	0.91	0.31	0.36

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



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 1*	MW-7 (mg/L)		MW-8 (mg/L)		MW-7 (mg/L)		MW-8 (mg/L)					
			12/7/10	3/23/11	6/14/11	9/14/11	12/7/11	3/15/12	6/14/11	9/14/11	12/7/11	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	0.0014	0.001	ND	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.13	0.11	0.072	0.092	0.13	0.054	0.055	0.026	0.048	0.057	0.049	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	0.015	0.0073	0.0026	0.017	ND	ND	0.0042	ND
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	0.0025	ND	ND	0.012	ND	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	0.35	0.16	0.12	0.2	0.16	0.13	0.13
Sulfate	Metals 6020	400	250	120	85	110	140	160	87	52	120	170	130	130
Chloride	Dissolved 9251	200	450	320	140	99	300	140	350	150	70	120	410	410
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1.2	0.76	0.27	0.6	0.33	2.2	1.9	0.95	0.86	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,200	970	580	650	780	670	990	580	690	800	1000	1000
Fluoride	Dissolved 4500 FC	4	0.36	0.31	0.35	0.27	0.35	0.31	0.36	0.45	0.25	0.31	0.38	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	0.33	2.2	1.9	0.95	0.86	ND	ND

NOTES:  
\*Class 1 Groundwater Standards from 35 IAC Part 620  
Bold values show exceedences of 35 IAC Part 620  
ND-not detect  
NS-not sampled  
mg/L - milligrams per liter

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 1*	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	ND	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	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	0.00059	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	960	730	890	890
Fluoride	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 1 Groundwater Standards from 35 IAC Part 620  
Bold values show exceedences of 35 IAC Part 620  
ND-not detect  
NS- not sampled  
mg/L- milligrams per liter

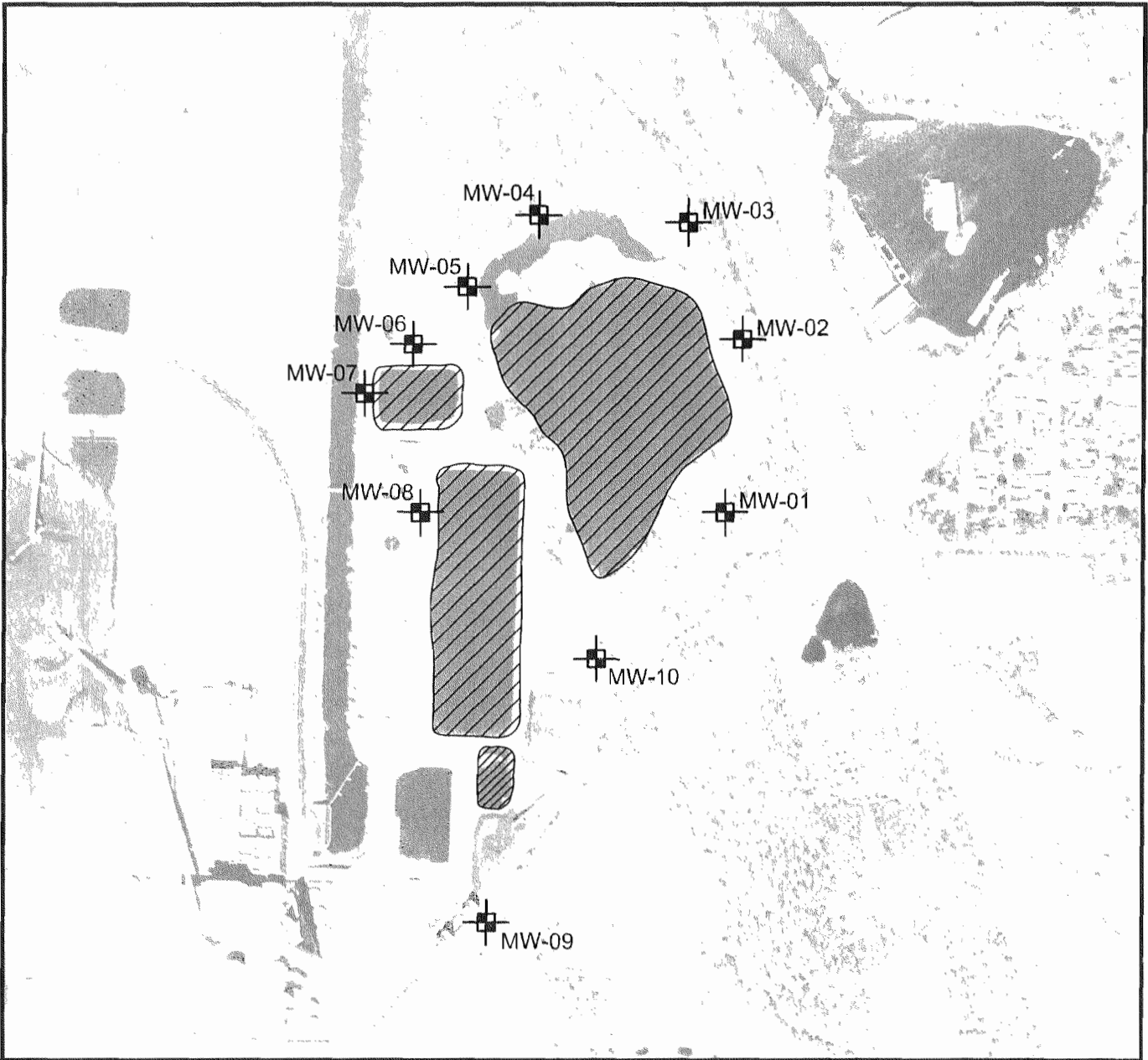
Table 3  
Groundwater Analytical Results - AMENDED JULY 2012  
Joliet Station #29, Illinois  
Midwest Generation  
21253.034

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	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
Chromium	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	0.047	ND	0.053	0.047	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	830
Fluoride	Dissolved 4500 FC	4	0.34	0.31	0.36	0.32	0.31	0.3
Nitrogen/Nitrate	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

**EXHIBIT E:** Maps of groundwater monitoring wells at Powerton.

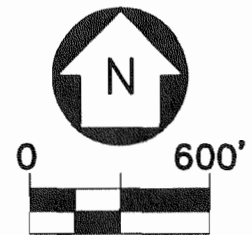
Excerpted from Midwest Generation, LLC, Hydrogeologic Assessment Report – Powerton Generating Station (Feb. 2011); Midwest Generation, LLC, Quarterly Groundwater Monitoring Results – Second Quarter 2011 – Powerton Generating Station – Bypass Cleaning Basin (Aug. 1, 2011).; Midwest Generation, LLC, Bi-Monthly Groundwater Monitoring Results – April 2011 – Powerton Generating Station – Metal Cleaning Basin (Aug. 1, 2011).



LEGEND

 MW-01 MONITORING WELL LOCATION

NOTE:  
ACCURATE GROUNDWATER FLOW DIRECTION IS UNKNOWN AND LIKELY SHIFTS BOTH SEASONALLY  
AND AS A RESULT OF VARYING RIVER ELEVATIONS. GROUNDWATER LIKELY FLOWS WITHIN THE  
RANGE OF DEPICTED GROUNDWATER FLOW DIRECTIONS.



GRAPHIC SCALE

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

<b>Date:</b> FEB. 2011	<b>FIGURE 3</b> <b>MONITORING WELL LOCATION MAP</b>  <b>POWERTON STATION</b> <b>PEKIN, ILLINOIS</b>
<b>Proj No.:</b> 21053.070	
<b>App. By:</b> RMF	


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FAX (630) 724-1681



LEGEND

 MW-01 Existing Monitoring Well Location



1" = 600'

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

Date: JUNE 2011

Proj No.: 21153.018

App. By: RMF

EXISTING MONITORING WELL LOCATION MAP  
Bypass Basin Map

POWERTON STATION  
PEKIN, ILLINOIS

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LEGEND

 MW-01 Existing Monitoring Well Location



1" = 600'

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

**Date: APRIL 2011**

**Proj No.: 21153.018**

**App. By: RMF**

EXISTING MONITORING WELL LOCATION MAP  
Metal Cleaning Basin Map

POWERTON STATION  
PEKIN, ILLINOIS

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**EXHIBIT F:** Groundwater monitoring data summary for Powerton.

Excerpted from Midwest Generation, LLC, Quarterly Groundwater Monitoring Results – First Quarter  
2012 – Amended – Revisions to Original Report Submitted May 11, 2012 – Powerton Generating Station  
– Ash Impoundments (July 30, 2012).



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

Chemical Name	Sample Analytical Method	Groundwater Quality Standard (mg/L) Class P	MW-1		MW-2		MW-3		MW-1		MW-2		MW-3	
			(mg/L) 12/15/10	(mg/L) 3/25/11	(mg/L) 6/16/11	(mg/L) 9/19/11	(mg/L) 12/12/11	(mg/L) 3/19/12	(mg/L) 6/16/11	(mg/L) 9/19/11	(mg/L) 12/12/11	(mg/L) 3/19/12	(mg/L) 6/16/11	(mg/L) 9/19/11
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	0.0018	ND	ND	0.0017	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.044	0.026	0.034	0.056	0.042	0.042	0.053	0.059	0.059	0.066	0.049	0.049
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bismuth	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
Chromium	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	0.65	ND	ND	ND	0.0057	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	5.0	ND	ND	ND	ND	ND	0.0077	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	Mercury 7470A	0.1	ND	ND	ND	ND	ND	ND	ND	ND	0.0012	ND	ND	ND
Nickel	Metals 6020	0.1	0.016	0.0022	0.016	0.069	0.0066	0.0066	0.0096	0.0096	0.0096	0.01	0.0073	0.0073
Selenium	Metals 6020	0.05	0.0016	0.0022	0.0016	0.0027	0.0017	0.0025	0.0052	0.0052	0.0052	0.0032	0.0037	0.0037
Silver	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	2	0.45	0.26	0.33	1.0	0.48	0.29	0.38	0.23	0.33	0.83	0.69	0.27
Boron	Metals 6020	400	30	30	39	83	31	61	52	42	53	70	69	55
Sulfate	Dissolved 9018	200	46	37	40	41	26	53	45	43	44	46	40	53
Chloride	Dissolved 9251	10	7.2	4.3	5.7	11	7.3	7.5	4.5	4.7	4.7	4.3	6.9	5.1
Nitrogen/Ammonia	Nitrogen By Calc	1.200	490	340	410	510	440	470	480	420	470	460	490	440
Total Dissolved Solids	Dissolved 2540C	4	0.28	0.32	0.38	ND	ND	ND	ND	0.3	0.35	ND	ND	ND
Fluoride	Dissolved 4500 FC	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Radium 226 (pCi/L)	EPA 9013.1	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Radium 228 (pCi/L)	EPA 9043.0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

NOTE:  
\*Class 1 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

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

Chemical Name	Sample Analytic Method	Groundwater Quality Standard Class IV	MW-3		MW-3		MW-3		MW-3		MW-4		MW-4		MW-4	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic	Metals 6020	0.056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Asenic	Metals 6020	0.05	0.0017	ND	0.0012	0.0012	0.0012	0.0012	0.0012	ND	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.038	0.03	0.063	0.081	0.076	0.052	0.052	0.058	0.041	0.048	0.048	0.048	0.048	0.043
Beryllium	Metals 6020	0.004	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
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	0.0045	ND	0.0044	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	0.0026	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	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	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	ND	ND
Lead	Metals 6020	0.0075	ND	ND	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	0.44	0.41	0.41	0.35	0.35	0.35	0.35
Mercury	Metals 7430A	0.002	ND	ND	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	ND	0.012	0.0067	0.011	0.01	0.01	0.01	0.01
Selenium	Metals 6020	0.05	ND	0.0016	0.0015	0.0036	0.0021	0.0067	0.0022	0.0037	0.0022	0.0039	0.002	0.002	0.002	0.002
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfur	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	0.12	0.18	0.24	0.24	0.24	0.24	0.24	0.33	0.33	0.34	0.34	0.34	0.34	0.34
Boron	Metals 6020	2	0.75	0.18	0.24	0.24	0.24	0.24	0.24	0.33	0.33	0.34	0.34	0.34	0.34	0.34
Sulfate	Dissolved 9038	400	64	42	47	66	45	72	56	140	44	61	67	67	67	67
Chloride	Dissolved 9251	200	59	52	59	62	59	54	54	150	77	43	56	56	56	56
Nitrogen By Calc	Dissolved 9251	10	9.4	5.2	5.4	0.2	0.2	2.1	2.1	0.34	0.33	0.31	0.31	0.31	0.31	0.31
Total Dissolved Solids	Dissolved 2540C	1,200	480	430	440	460	460	460	460	680	620	470	580	570	570	570
Fluoride	Dissolved 4590 FC	4	0.3	0.35	0.41	0.35	0.35	0.35	0.35	0.3	0.3	0.31	0.31	0.31	0.31	0.31
Radium 226 (pCi/L)	EPA 903.1	20	NS	NS	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	NS	NS

\*Class I Groundwater Standards from 35 IAC Part 620

ND: not detected

NS: not sampled

mg/L: milligrams per liter

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

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-5										MW-4				
			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			
Arsenite	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0011	ND	ND	ND	ND	0.001	ND	0.0024	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031
Barium	Metals 6020	2.0	0.053	0.048	0.046	0.071	0.065	0.12	0.092	0.1	0.1	0.1	0.1	0.12	0.12	0.12	0.097
Beryllium	Metals 6020	0.004	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
Cobalt	Metals 6020	0.1	0.0044	0.0042	ND	0.0066	ND	0.006	0.0083	0.0083	0.0085	0.0085	0.0085	0.0085	0.0085	0.0085	0.0085
Copper	Metals 6020	1.0	0.0025	0.0023	ND	0.0027	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
Cyanide	Metals 6020	0.05	ND	ND	ND	ND	ND	0.0061	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Disolved 9014	0.2	ND	ND	ND	ND	ND	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062	0.0062
Lead	Metals 6020	5.0	0.13	0.05	0.046	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082
Manganese	Metals 6020	0.0075	0.51	0.49	0.48	0.44	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Mercury	Mercury 7470A	0.002	ND	ND	ND	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	0.0099	0.0099	0.0099	0.0099	0.0099
Selenium	Metals 6020	0.05	0.0019	0.003	ND	0.0045	0.0028	0.0028	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
Silver	Metals 6020	0.05	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	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	0.95	0.93	0.79	0.79	0.77	0.77	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Boron	Metals 6020	2	160	170	110	250	170	120	120	210	250	280	260	260	260	260	250
Sulfate	Disolved 9038	400	150	120	80	160	140	140	82	180	200	200	160	150	150	150	150
Chloride	Disolved 9251	200	ND	ND	80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Disolved 2540C	1,200	740	660	640	890	820	590	990	990	1,100	970	1,000	970	1,000	1,100	1,100
Fluoride	Disolved 4500 FC	4	0.77	0.36	0.43	0.25	0.25	ND	0.65	0.61	0.63	0.63	0.64	0.64	0.64	0.64	0.47
Radium 226 (pCi/L)	EPA 903.1	20	NS	NS	NS	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	NS	NS	NS

\*Class 1 Groundwater Standards Item 35 IAC Part 620  
 Bold values show exceedance of 35 IAC Part 620  
 NS-not sampled  
 ND- non detect  
 mg/L- milli grams per liter

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

Chemical Name	Sample Analytic Method	Groundwater Quality Standard (mg/L) Class 1*	MW-7										MW-3				
			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			
Arsenic	Metals 6020	0.06	ND	ND	ND	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	0.23	0.23	0.23	0.052	0.039	0.044	0.026	0.052	0.038
Barium	Metals 6020	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bismuth	Metals 6020	0.005	0.0026	ND	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	Metals 6020	0.1	0.0088	0.0075	0.0061	0.011	ND	ND	ND	ND	ND	0.0059	0.0081	0.0059	0.0064	0.0053	ND
Chromium	Metals 6020	1.0	0.017	0.0056	0.007	0.0055	0.006	0.0067	0.0067	0.0067	0.0067	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	0.14	ND	ND	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	ND	ND	ND
Iron	Metals 6020	5.0	R	7.5	10	22	24	24	24	24	24	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	ND	ND	ND
Manganese	Metals 6020	0.15	3.5	5.9	6.4	12	12	12	12	12	12	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	ND	ND	ND
Nickel	Metals 6020	0.1	0.045	0.021	0.022	0.026	0.022	0.018	0.011	0.013	0.013	0.0036	0.0013	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	0.0013	0.0013	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	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	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	ND	ND	ND
Iron	Metals 6020	2	0.61	0.44	0.43	0.38	0.34	0.35	0.35	0.35	0.35	0.93	0.72	0.64	0.82	0.82	0.57
Sulfate	Dissolved 9038	400	170	49	25	9.1	3.3	3	3	3	3	160	240	140	200	200	300
Chloride	Dissolved 9251	200	170	200	140	130	81	99	81	81	81	160	210	140	190	190	170
Nitrogen	Nitrogen by calc	10	0.443	0.08	ND	0.31	0.03	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	660	1,100	1,300	1,300	1,300	1,400	1,400	1,400	1,400	890	990	970	940	990	1,200
Fluoride	Dissolved 4500 FC	4	0.47	0.47	0.58	0.94	0.87	0.54	0.47	0.54	0.54	0.77	0.26	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	NS	NS	NS
Radium 228 (pCi/L)	EPA 904.0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

\*Class 1 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

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

Chemical Name	Sample Analytic Method	Groundwater Quality Standard (mg/L) (Chem #)	MW-9 (mg/L)										MW-10 (mg/L)			
			12/14/10	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	MW-10 (mg/L)	MW-10 (mg/L)
Antimony	Metals 6020	0.006	ND	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	0.0015	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.038	0.042	0.038	0.038	0.03	0.038	0.038	0.035	0.24	0.28	0.26	0.26	0.26	0.26
Beryllium	Metals 6020	0.004	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
Chromium	Metals 6020	0.1	ND	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	0.0026	0.0027	0.0023	0.0026	0.0024	0.0024
Copper	Metals 6020	0.05	ND	ND	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	ND	ND
Iron	Metals 6020	5.0	ND	0.19	0.066	ND	ND	ND	ND	0.014	ND	ND	ND	0.044	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.23	0.43	0.45	0.48	0.14	0.28	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	ND
Nickel	Metals 6020	0.1	0.01	0.011	0.0093	0.0063	0.0065	0.0065	0.0068	ND	0.015	0.016	0.015	0.013	0.0091	0.0091
Selenium	Metals 6020	0.05	0.0024	ND	0.0072	0.0072	0.0043	0.0041	0.0041	0.0072	0.0042	0.0064	0.0043	0.0037	0.0065	0.0056
Silver	Metals 6020	0.05	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	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	2	2.1	1.9	1.9	1.9	1.9	2.5	2.7	2.6	0.48	0.48	0.52	0.42	0.37	0.54
Sulfate	Dissolved 9038	400	110	99	110	110	130	110	110	120	62	64	67	64	72	76
Chloride	Dissolved 9251	200	25	33	28	28	30	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	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	520	530	530	520	520	470	540	530
Fluoride	Dissolved 4500 FC	4	ND	0.32	0.31	0.34	0.25	0.25	0.25	ND	ND	0.3	0.36	0.36	0.36	0.36
Radium 226 (pCi/L)	EPA 903.1	20	0.673	0.726	NS	0.955	0.43	0.621	0.621	0.392	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	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966

NS= Not Sampled  
ND= non detect  
mg/L= milligrams per liter

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

Chemical Name	Sample Analytical Method	Groundwater Quality Standard (mg/L)	Class P	MW-11												MW-12	
				12/16/10	2/5/11	6/16/11	9/16/11	12/12/11	3/16/12	12/15/10	2/15/11	6/16/11	9/16/11	12/12/11	3/16/12	MW-12 (mg/L)	MW-12 (mg/L)
Antimony	Metals 6020	0.006	ND	ND	ND	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	0.0018	0.0013	0.0008	0.013	0.0064	0.0087	0.0089	0.0042	0.0042
Barium	Metals 6020	3.0	0.17	0.11	0.18	0.11	0.11	0.13	0.089	0.11	0.091	0.091	0.085	0.09	0.09	0.071	0.071
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bismuth	Metals 6020	0.005	ND	ND	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	ND	ND
Cadmium	Metals 6020	0.1	0.0028	0.0041	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024
Cobalt	Metals 6020	1.0	0.0032	0.0032	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043
Copper	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Disolved 9014	0.2	0.44	0.01	0.029	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Iron	Metals 6020	5.0	3.2	3.6	2.9	2.2	2.2	2.5	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Lead	Metals 6020	0.0075	ND	ND	ND	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	2.2	2.5	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Mercury	Mercury 7470A	0.002	ND	ND	ND	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	0.011	0.013	0.011	0.0096	0.01	0.0072	0.0075	0.0091	0.0075	0.0075	0.0075
Selenium	Metals 6020	0.05	0.0026	0.0015	0.0018	0.004	0.0031	0.0039	0.0026	0.0026	0.0027	0.0027	0.0023	0.0034	0.0034	0.0034	0.0034
Silver	Metals 6020	0.05	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	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	ND	ND	ND
Boron	Metals 6020	2	1.6	1.8	1.6	1.5	1.8	1.8	1.8	1.6	1.4	1.3	1.2	1.3	1.2	1.3	0.92
Sulfate	Disolved 9038	400	170	160	210	140	140	130	290	270	350	360	360	300	310	310	310
Chloride	Disolved 9251	200	70	66	120	53	53	87	54	170	180	180	180	190	210	170	170
Nitrogen By Calc	Metals 6020	10	0.41	0.17	0.04	0.74	1.5	0.39	ND	ND	ND	0.14	ND	ND	ND	0.04	0.04
Total Dissolved Solids	Disolved 7440C	1,200	740	710	930	620	620	730	740	980	1,000	1,000	1,100	970	970	1,000	1,000
Fluoride	Disolved 4590 FC	4	0.53	0.56	0.67	0.58	0.44	0.42	0.42	0.71	0.61	0.64	0.74	0.61	0.61	0.46	0.46
Radium 226 (pCi/L)	EPA 903.1	20	0.445	0.174	0.929	0.489	0.733	0.621	0.617	0.617	0.207	0.893	0.803	0.923	0.803	0.445	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	0.952	0.952	0.713	0.713

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

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

Chemical Name	Sample Analytical Method	Groundwater Quality Standard (mg/L) Class 1*	MW-13 (mg/L) 12/15/10	MW-13 (mg/L) 2/15/11	MW-13 (mg/L) 4/25/11	MW-13 (mg/L) 6/16/11	MW-13 (mg/L) 8/9/11	MW-13 (mg/L) 10/13/11	MW-13 (mg/L) 12/12/11	MW-13 (mg/L) 4/10/12	MW-13 (mg/L) 12/15/10	MW-16 (mg/L) 2/15/11	MW-16 (mg/L) 4/25/11	MW-16 (mg/L) 6/16/11	MW-16 (mg/L) 8/9/11	MW-16 (mg/L) 10/13/11	MW-16 (mg/L) 12/12/11	MW-16 (mg/L) 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
Boron	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
Barium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bismuth	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.1	0.0062	0.0042	0.0045	0.0022	0.0031	0.01	0.0055	0.0055	0.0046	0.0074	0.0049	0.0076	0.0016	0.0096	0.0065	0.0057
Chromium	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
Cobalt	Metals 6020	0.05	0.0068	0.0037	0.0041	0.004	0.004	0.0053	0.0066	0.0068	0.0037	0.0033	0.0074	0.0071	0.0064	0.0055	0.025	0.0057
Copper	Metals 6020	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	5.0	0.69	0.032	0.077	ND	0.043	ND	0.11	0.2	2.2	0.94	0.36	0.3	0.71	2	0.12	0.071
Iron	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.15	5	3.8	2.7	2.9	2.6	3.6	3.5	3.5	6.48	0.81	0.39	0.56	0.57	0.84	0.067	0.453
Manganese	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	Mercury 7470A	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.05	0.0046	0.0046	0.0045	0.0029	0.0056	0.004	0.0036	0.0037	0.0024	0.0015	0.015	0.0035	0.003	0.0017	0.0037	0.022
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfur	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	2	3.9	3.1	2.6	3.0	2.7	3.0	4.1	4.0	2.0	1.9	1.9	1.9	1.8	1.9	1.9	1.8
Bromine	Metals 6020	400	1,400	770	590	540	440	640	1,100	1,100	940	830	770	810	940	850	840	990
Chloride	Dissolved 9038	200	160	120	100	86	110	110	180	170	160	160	160	160	240	200	200	190
Sulfate	Dissolved 9251	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
Nitrogen Nitrate	Nitrogen By calc	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	2,800	1,800	1,800	2,200
Total Dissolved Solids	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	0.88	1.1	1
Fluoride	EPA 913.1	20	0.603	0.165	NA	0.741	0	0.444	0.555	0.678	0.577	0.163	NA	0.893	0.474	0.0983	0.457	0.601
Radium 226 (pCi/L)	EPA 904.0	20	0.988	0.866	0.73	1	0.198	0.74	1.01	0.983	0.944	0.96	0.737	0.947	1.1	—	0.985	0.929

Notes:  
\*Class 1 Groundwater Standards from 35 IAC Part 620  
Bold values show exceedance of 35 IAC Part 620  
NS-not sampled  
ND- Non detect  
mg/L- milligrams per liter

Table 3  
GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012  
Powertron Generation Station  
Peekin, Illinois  
Midwest Generation  
21253.022

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) (Class 1)	MW-15							
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)		
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.0099	0.0092	0.0064	0.0052	0.0053	0.011	0.0097	0.0061	0.0061
Boron	Metals 6020	2.0	0.058	0.061	0.11	0.057	0.06	0.063	0.075	0.075
Barium	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	0.0091	0.0062	0.0062	0.0071	0.0071
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.05	ND	ND	0.0039	0.0041	0.0037	0.0031	0.0039	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	0.26	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	0.0025
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	1.6	1.4	1.5	1.6	1.3	1.2	1.2	1.4
Boron	Metals 6020	2	300	220	270	650	250	180	140	200
Sulfate	Dissolved 9038	400	180	190	190	170	210	180	200	200
Chloride	Dissolved 9251	200	100	0.03	0.086	0.04	0.07	0.05	ND	0.07
Nitrogen/Nitrate	Nitrogen By calc	10	1.000	1.000	1.100	1.000	0.900	0.900	0.840	1.000
Total Dissolved Solids	Dissolved 2540C	4	0.60	0.75	0.6	0.73	0.76	0.77	0.75	0.79
Fluoride	Dissolved 4500 FC	4	0.666	0.174	NA	0.946	0.567	0.372	0.979	0.508
Radium 226 (pCi/L)	EPA 903.1	20	0.902	0.568	0.669	0.593	0.0554	1.04	0.937	0.901
Radium 228 (pCi/L)	EPA 904.0	20								

Notes:  
\*Class 1 Groundwater Standards from 35 IAC Part 620  
If all values show exceedances of 35 IAC Part 620  
NS-not sampled  
ND- non detect  
mg/L- milligrams per liter



**EXHIBIT G:** Map of groundwater monitoring wells at Waukegan.

Excerpted from Midwest Generation, LLC, Hydrogeologic Assessment Report – Waukegan Generating Station (Feb. 2011).



LEGEND

 MW-01 MONITORING WELL LOCATION



GRAPHIC SCALE

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

Date: FEB. 2011

FIGURE 3  
MONITORING WELL LOCATION MAP

Proj No.: 21053.070

**WAUKEGAN STATION  
WAUKEGAN, ILLINOIS**

App. By: RMF

**PATRICK  
ENGINEERING INC.**

4970 Varsity Drive  
Lisle, Illinois 60532-4101

TEL. (630) 795-7200  
FAX (630) 724-1681

PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

**EXHIBIT H:** Groundwater monitoring data summary for Waukegan County.

Excerpted from Midwest Generation, LLC, Quarterly Groundwater Monitoring Results – First Quarter  
2012 – Amended – Revisions to Original Report Submitted May 11, 2012 – Waukegan Generating  
Station – Ash Impoundments (July 30, 2012).

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

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-1 (mg/L)		MW-1 (mg/L)		MW-2 (mg/L)		MW-2 (mg/L)		MW-2 (mg/L)			
			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	ND	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	0.23	0.12	0.12	ND	ND

Notes:

\*Class 1 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

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

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-3		MW-3		MW-3		MW-3		MW-4		MW-4		MW-4	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Antimony	Metals 6020	0.006	ND	0.0041	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0043	0.0049	0.0077	0.0049	0.0071	0.0058	0.0065	0.0059	0.0058	0.0065	0.0058	0.0065	0.0068	0.0068
Barium	Metals 6020	2.0	0.0057	0.0086	0.0044	0.0058	0.0049	0.0039	0.0036	0.0034	0.0039	0.0036	0.0039	0.0036	0.0038	0.0038
Beryllium	Metals 6020	0.004	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
Chromium	Metals 6020	0.1	ND	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	ND
Copper	Metals 6020	0.65	ND	ND	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	ND	ND
Iron	Metals 6020	5.0	ND	ND	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	ND	ND
Manganese	Metals 6020	0.15	ND	0.0059	0.0044	ND	0.0054	0.0036	0.0025	0.028	0.036	0.025	0.025	0.038	0.038	0.038
Mercury	Mercury 7470A	0.002	ND	ND	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	ND	ND
Selenium	Metals 6020	0.05	0.0094	0.016	0.012	0.011	0.0064	0.0039	0.015	0.022	0.025	0.015	0.0091	0.0091	0.0091	0.0091
Silver	Metals 6020	0.05	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	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	1.7	2.2	2.3	1.6	1.5	2	2.1	2	1.8	2.1	2.2	2.2	2.2	2.2
Boron	Metals 6020	2	1.7	2.2	2.3	1.6	1.5	2	2.1	2	1.8	2.1	2.2	2.2	2.2	2.2
Sulfate	Dissolved 9038	400	120	130	130	97	110	140	250	170	160	160	160	160	280	280
Chloride	Dissolved 9251	200	53	49	53	49	51	52	39	47	45	59	60	71	71	71
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.29	ND	ND	ND	ND	ND	0.18	0.14	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	280	350	340	300	380	340	450	400	380	470	480	490	490	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	0.73	0.73
Nitrogen/Nitrite	Dissolved 4500 ND2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 ND3	NA	ND	ND	0.29	ND	ND	ND	0.18	0.14	0.14	0.14	0.14	0.14	0.14	0.14

Notes:  
\*Class 1 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

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

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-5 (mg/L)					MW-5 (mg/L) 3/14/12
			10/25/10	3/24/11	6/13/11	9/13/11	12/6/11	
Antimony	Metals 6020	0.06	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	28	33	12	30	37	44
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/Nitric	Dissolved 4500 NO3	NA	ND	0.27	0.2	ND	ND	ND

Notes:  
 \*Class 1 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

**EXHIBIT I:** Map of groundwater monitoring wells at Will County.

Excerpted from Midwest Generation, LLC, Hydrogeologic Assessment Report – Will County Generating Station (Feb. 2011).



LEGEND

 MW-01 MONITORING WELL LOCATION



GRAPHIC SCALE

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

Date: FEB. 2011

Proj No.: 21053.070

App. By: RMF

FIGURE 3  
MONITORING WELL LOCATION PLAN

**WILL COUNTY STATION  
ROMEVILLE, ILLINOIS**

**PATRICK  
ENGINEERING INC.**

4970 Varsity Drive  
Lisle, Illinois 60532-4101

TEL. (630) 795-7200  
FAX (630) 724-1681

PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409



**EXHIBIT J:** Groundwater monitoring data summary for Will County.

Excerpted from Midwest Generation, LLC, Quarterly Groundwater Monitoring Results – First Quarter 2012 – Amended – Revisions to Original Report Submitted May 11, 2012 – Will County Generating Station – Ash Impoundments (July 30, 2012).

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 1*	MW-1		MW-1		MW-1		MW-2		MW-2		MW-2							
			(mg/L)	12/13/10	(mg/L)	9/15/11	(mg/L)	12/8/11	(mg/L)	3/16/12	(mg/L)	12/13/10	(mg/L)	6/15/11	(mg/L)	9/15/11	(mg/L)	12/8/11	(mg/L)	3/16/12
Antimony	Metals 6020	0.006	ND	ND	ND	0.0063	ND	ND	ND	ND	ND	ND	ND	ND	0.0073	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	0.0032	ND	ND	0.008	ND	0.008	0.0058	0.0048	0.0048	0.0048	0.0048
Barium	Metals 6020	2.0	0.05	0.046	0.038	0.033	0.033	0.033	0.033	0.068	0.068	0.068	0.068	0.068	0.048	0.048	0.048	0.048	0.048	0.058
Beryllium	Metals 6020	0.004	ND	ND	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	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.2	0.22	0.16	0.17	0.16	0.16	0.16	0.032	0.032	0.032	0.032	0.032	0.036	0.036	0.036	0.036	0.036	0.031
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0046	0.0038	0.0029	0.004	0.0042	0.0042	0.0042	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.8	1.6	1.7	1.6	1.5	1.5	1.5	1.8	1.7	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3	1.7
Sulfate	Dissolved 9038	400	538	390	280	270	270	270	270	458	458	458	458	458	400	400	400	400	400	330
Chloride	Dissolved 9251	200	110	210	110	120	140	190	190	110	110	110	110	110	180	180	180	180	180	140
Nitrogen/Nitrate	Nitrogen By calc	10	ND	1.1	0.73	1.4	1.4	2.2	2.2	0.33	0.33	0.33	0.33	0.33	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	1,100	1,100	1,100	760	770	770	770	870	870	870	870	870	900	900	900	900	900	810
Fluoride	Dissolved 4500 FC	4	0.71	0.65	0.53	0.77	0.73	0.69	0.69	0.62	0.62	0.62	0.62	0.62	0.5	0.5	0.5	0.5	0.5	0.46
Nitrogen/Nitrite	Dissolved 4500 NO2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	--	ND	1.1	0.73	1.4	1.4	2.2	2.2	0.37	0.37	0.37	0.37	0.37	ND	ND	ND	ND	ND	ND

Notes:  
\*Class 1 Groundwater Standards from 35 IAC Part 620  
Bold values show exceedances of 35 IAC Part 620  
ND= non detect  
mg/L= milligrams per liter

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

PATRIEK www.patriek.com	Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-3		MW-4		MW-3		MW-4	
				(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	Metals 6020	0.05	0.002	0.0024	ND	0.0027	0.0017	ND	0.0041	0.0015
	Barium	Metals 6020	2.0	0.084	0.086	0.071	0.068	0.075	0.083	0.05	0.043
	Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	Metals 6020	1.0	ND	0.0022	ND	0.0011	ND	ND	0.0012	ND
	Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND
	Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND	ND
	Iron	Metals 6020	5.0	0.37	0.57	0.26	0.83	0.2	0.78	1.2	0.64
	Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND
	Manganese	Metals 6020	0.15	0.34	0.31	0.34	0.52	0.27	0.29	0.7	0.62
	Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	Metals 6020	0.1	0.0054	0.0037	0.0061	0.0048	0.0052	0.0053	0.0041	0.0048
	Selenium	Metals 6020	0.05	ND	ND	ND	0.0033	ND	ND	ND	0.0086
	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	2.7	2.4	2.6	3.7	2.7	2.8	3.6	3.0
	Boron	Metals 6020	2	2.7	2.4	2.6	3.7	2.7	2.8	3.6	3.0
	Sulfate	Dissolved 9038	400	330	270	240	1,590	320	280	1,600	2,000
	Chloride	Dissolved 9251	200	54	250	100	120	95	100	120	150
	Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.81	ND	ND	0.54	0.19	0.45
	Total Dissolved Solids	Dissolved 2540C	1,200	940	1,000	990	2,500	1,000	930	2,800	3,700
	Fluoride	Dissolved 4500 FC	4	0.5	0.37	0.36	0.52	0.38	0.39	0.48	0.55
	Nitrogen/Nitrite	Dissolved 4500 NO2	**	ND	ND	ND	ND	ND	ND	ND	ND
	Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	**	ND	ND	0.81	ND	ND	0.54	0.19	0.37

Notes:  
\*Class 1 Groundwater Standards from 35 IAC Part 620  
Bold values show exceedences of 35 IAC Part 620  
ND - non detect  
mg/L - milligrams per liter

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

Chemical Name	Groundwater Quality Standard (mg/L) Class 1*	Sample Analysis Method	MW-5		MW-6		MW-5		MW-6		MW-6	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Antimony	0.006	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	0.05	Metals 6020	0.0066	0.0048	0.0065	0.0018	0.0065	0.0018	0.0065	0.0031	0.0022	0.0022
Barium	2.0	Metals 6020	0.051	0.06	0.067	0.07	0.061	0.05	0.04	0.041	0.053	0.044
Beryllium	0.004	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.005	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	0.1	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	1.0	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	0.65	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	0.2	Dissolved 9014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	5.0	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	0.0075	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	0.15	Metals 6020	0.0079	0.0067	0.055	0.13	0.038	0.073	0.051	0.047	0.024	0.029
Mercury	0.002	Mercury 7470A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	0.1	Metals 6020	ND	ND	ND	0.0021	ND	ND	ND	ND	ND	ND
Selenium	0.05	Metals 6020	0.017	0.014	0.016	0.008	0.01	0.0062	0.0028	0.011	ND	ND
Silver	0.05	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	Metals 6020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5.0	Metals 6020	2.6	2.7	3.2	4.0	3.2	2.7	2.5	2.4	2.5	2.5
Boron	2	Metals 6020	2.6	2.7	3.2	4.0	3.2	2.7	2.5	2.4	2.5	2.5
Sulfate	400	Dissolved 9038	500	570	540	690	500	500	540	570	420	380
Chloride	200	Dissolved 9251	110	150	140	150	130	120	210	150	120	110
Nitrogen/Nitrate	10	Nitrogen By calc	0.27	1.6	0.97	0.11	1	0.11	0.11	0.11	0.11	0.11
Total Dissolved Solids	1,200	Dissolved 2540C	1,000	1,300	1,400	1,500	1,000	990	1,100	1,200	880	900
Fluoride	4	Dissolved 4500 FC	0.41	0.4	0.46	0.49	0.38	0.42	0.48	0.79	0.97	0.68
Nitrogen/Nitrite	**	Dissolved 4500 NO2	ND	0.31	0.13	0.11	0.17	0.14	0.048	0.16	ND	ND
Nitrogen/Nitrate/Nitrite	**	Dissolved 4500 NO3	0.27	1.9	1.1	0.11	1.2	0.25	0.048	0.26	0.16	0.16

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

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 1*	MW-7		MW-8		MW-9		MW-5		MW-3	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Antimony	Metals 6020	0.036	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	0.014	0.012
Barium	Metals 6020	2.0	0.045	0.067	0.076	0.082	0.069	0.069	0.069	0.085	0.099	0.078
Beryllium	Metals 6020	0.004	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
Chromium	Metals 6020	0.1	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
Copper	Metals 6020	0.65	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
Iron	Metals 6020	5.0	0.23	0.18	ND	0.37	0.5	0.57	0.48	0.76	0.46	0.68
Lead	Metals 6020	0.0075	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	0.45	0.4
Mercury	Mercury 7470A	0.002	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	0.0034	0.002
Selenium	Metals 6020	0.05	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
Thallium	Metals 6020	0.002	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
Boron	Metals 6020	2	4.7	5.0	5.7	3.4	5.0	5.1	1.7	1.3	2.3	1.9
Sulfate	Dissolved 9028	400	610	650	1,000	710	710	770	440	420	600	330
Chloride	Dissolved 9251	200	160	140	140	160	150	150	93	270	160	130
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND	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	980
Fluoride	Dissolved 4500 FC	4	0.36	0.77	0.71	0.83	0.86	0.76	0.61	0.55	0.57	0.64
Nitrogen/Nitrite	Dissolved 4500 ND2	--	ND	0.077	0.035	0.05	0.043	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitric	Dissolved 4500 NO3	--	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND

Notes:  
\*Class 1 Groundwater Standards from 35 IAC Part 620  
Bold values show exceedances of 35 IAC Part 620  
ND- non detect.  
mg/L- milligrams per liter

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 1*	MW-9		MW-9		MW-9		MW-10		MW-10		MW-10	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsimony	Metals 6020	0.016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0039	0.0049	0.0052	0.0065	0.0078	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091	0.0091
Barium	Metals 6020	2.0	0.025	0.031	0.025	0.023	0.017	0.023	0.023	0.023	0.023	0.023	0.023	0.023
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	0.0175	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	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	0.0042	0.0045	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031
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	1,000	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	0.15	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 1 Groundwater Standards from 35 IAC Part 620  
ND values show exceedances of 35 IAC Part 620  
ND - not detect  
mg/L - milligrams per liter

**EXHIBIT K:** IEPA Violation Notice for Joliet 29.

Letter from Michael Crumly, Illinois EPA, to Basil G. Constantelos, Midwest Generation (June 11, 2012)  
(transmitting Violation Notice for Joliet #29 Generating Station, Violation Notice No. W-2012-00059).



\*\*\*\*\*PCB 2013-015\*\*\*\*\*  
**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

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

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

217/785-0561

June 11, 2012

CERTIFIED MAIL # 7010 2780 0002 1163 7223  
RETURN RECEIPT REQUESTED

Mr. Basil G. Constantelos: Managing Director, Environmental Services  
Midwest Generation EME, LLC  
2535 Remington Blvd  
Suite A  
Bolingbrook, IL 60440

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

Dear Mr. Constantelos:

This constitutes a Violation Notice pursuant to Section 31(a)(1) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/31(a)(1), and is based upon a review of available information and an investigation by representatives of the Illinois Environmental Protection Agency ("Illinois EPA").

The Illinois EPA hereby provides notice of alleged violations of environmental laws, regulations, or permits as set forth in Attachment A to this notice. Attachment A includes an explanation of the activities that the Illinois EPA believes may resolve the specified alleged violations. Due to the nature and seriousness of the alleged violations, please be advised that resolution of the violations may also require the involvement of a prosecutorial authority for purposes that may include, among others, the imposition of statutory penalties.

A written response, which may include a request for a meeting with representatives of the Illinois EPA, must be submitted via certified mail to the Illinois EPA within 45 days of receipt of this letter. If a meeting is requested, it shall be held within 60 days of receipt of this notice. The response must include information in rebuttal, explanation, or justification of each alleged violation and a statement indicating whether or not the facility wishes to enter into a Compliance Commitment Agreement ("CCA") pursuant to Section 31(a) of the Act. If the facility wishes to enter into a CCA, the written response must also include proposed terms for the CCA that includes dates for achieving each commitment and may include a statement that compliance has been achieved for some or all of the alleged violations. The proposed terms of the CCA should contain sufficient detail and must include steps to be taken to achieve compliance and the necessary dates by which compliance will be achieved.

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

AUG 22 2012

REVIEWER EAV

PLEASE PRINT ON RECYCLED PAPER



Page 2 of 2

ID: 6284 Midwest Generation, LLC, Joliet #29 Generating Station  
VN W-2012-00059

The Illinois EPA will review the proposed terms for a CCA provided by the facility and, within 30 days of receipt, will respond with either a proposed CCA or a notice that no CCA will be issued by the Illinois EPA. If the Illinois EPA sends a proposed CCA, the facility must respond in writing by either agreeing to and signing the proposed CCA or by notifying the Illinois EPA that the facility rejects the terms of the proposed CCA.

If a timely written response to this Violation Notice is not provided, it shall be considered a waiver of the opportunity to respond and meet, and the Illinois EPA may proceed with referral to a prosecutorial authority.

Written communications should be directed to:

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

All communications must include reference to this Violation Notice number, W-2012-00059.

Questions regarding this Violation Notice should be directed to Andrea Rhodes at 217/785-0561.

Sincerely,



Michael Crumly  
Manager, Compliance Assurance Section  
Division of Public Water Supplies  
Bureau of Water

Attachments

cc: Maria Race

CASE ID: 2012-006

PAGE NO. 1 OF 4

**ATTACHMENT A****MIDWEST GENERATION, LLC, JOLIET #29 GENERATING STATION, ID:6284  
VIOLATION NOTICE NO. W-2012-00059:**

A review of information available to the Illinois EPA indicates the following on-going violations of statutes, regulations, or permits. Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation.

**Groundwater Quality**

No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that: treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or an existing or potential use of such groundwater is precluded. No person shall cause, threaten or allow the release of any contaminant to groundwater so as to cause a groundwater quality standard to be exceeded. Midwest Generation, LLC must take actions to mitigate existing contamination and prevent the continuing release of contaminants into the environment.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-2 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	230 mg/l	200 mg/l	06/14/2011
Antimony	0.012 mg/l	0.006 mg/l	12/06/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-3 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	250 mg/l	200 mg/l	03/15/2012
Chloride	260 mg/l	200 mg/l	12/07/2011
Chloride	300 mg/l	200 mg/l	06/14/2011
Chloride	240 mg/l	200 mg/l	03/28/2011
Chloride	260 mg/l	200 mg/l	12/07/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

PAGE NO. 2 OF 4

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, JOLIET #29 GENERATING STATION, ID:6284  
VIOLATION NOTICE NO. W-2012-00059:**

**Violation**

**Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-4 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	210 mg/l	200 mg/l	03/15/2012
Chloride	250 mg/l	200 mg/l	06/14/2011
Chloride	270 mg/l	200 mg/l	03/28/2011
Chloride	270 mg/l	200 mg/l	12/07/2010
Manganese	0.33 mg/l	0.15 mg/l	12/07/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation**

**Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-5 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	210 mg/l	200 mg/l	03/15/2012
Chloride	220 mg/l	200 mg/l	06/14/2011
Chloride	240 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation**

**Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-6 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	270 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

PAGE NO. 3 OF 4

**ATTACHMENT A****MIDWEST GENERATION, LLC, JOLIET #29 GENERATING STATION, ID:6284  
VIOLATION NOTICE NO. W-2012-00059:****Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-7 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	320 mg/l	200 mg/l	03/28/2011
Chloride	430 mg/l	200 mg/l	12/06/2010
Manganese	0.29 mg/l	0.15 mg/l	12/07/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-8 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	410 mg/l	200 mg/l	03/15/2012
Chloride	350 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-9 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	290 mg/l	200 mg/l	06/14/2011
Iron	7.3 mg/l	5.0 mg/l	06/14/2011
Manganese	1.3 mg/l	0.15 mg/l	03/15/2012
Manganese	0.66 mg/l	0.15 mg/l	12/07/2011
Manganese	0.82 mg/l	0.15 mg/l	09/14/2011
Manganese	0.95 mg/l	0.15 mg/l	06/14/2011
Manganese	1.6 mg/l	0.15 mg/l	03/28/2011
Manganese	1.1 mg/l	0.15 mg/l	12/06/2010
Sulfate	1,600 mg/l	400 mg/l	03/15/2012
Sulfate	1,600 mg/l	400 mg/l	12/07/2011
Sulfate	750 mg/l	400 mg/l	09/14/2011
Sulfate	580 mg/l	400 mg/l	06/14/2011

PAGE NO. 4 OF 4

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, JOLIET #29 GENERATING STATION, ID:6284**  
**VIOLATION NOTICE NO. W-2012-00059:**

**Violation****Description**

MW-9 continued

Parameter	Sample Value	GW Standard	Collection Date
Sulfate	1,100 mg/l	400 mg/l	03/28/2011
Sulfate	1,600 mg/l	400 mg/l	12/06/2010
TDS	2,600 mg/l	1,200 mg/l	03/15/2012
TDS	2,400 mg/l	1,200 mg/l	12/07/2011
TDS	1,700 mg/l	1,200 mg/l	09/14/2011
TDS	1,500 mg/l	1,200 mg/l	06/14/2011
TDS	2,400 mg/l	1,200 mg/l	03/28/2011
TDS	2,600 mg/l	1,200 mg/l	12/06/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-10 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	300 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-11 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Boron	2.2 mg/l	2.0 mg/l	06/14/2011
Boron	2.6 mg/l	2.0 mg/l	03/28/2011
Chloride	240 mg/l	200 mg/l	03/15/2012
Chloride	280 mg/l	200 mg/l	06/14/2011
Chloride	270 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

\*\*\*\*\* PCB 2013-015 \*\*\*\*\*

Water System Name

Joliet #29

W-20 12 - 00059

DW Distribution List and/or bccs

<input checked="" type="checkbox"/> VN Central File (Bev)	02 File	Marcia Willhite	Geoff Andres
Mike Crumly	Dianne Potter	Jeri Long	<input checked="" type="checkbox"/> Andrea Rhodes
Paul Connelly	Allison Ristau	Mary Reed	Jewel Brant
Sharon Dowson			
Dave McMillan	<input checked="" type="checkbox"/> Rick Cobb	Jerry Kuhn	
Springfield FOS	Champaign FOS	Collinsville FOS	Elgin FOS
Rockford FOS	Marion FOS		
<input checked="" type="checkbox"/> Connie Tonsor	DLC File	Chuck Gunnarson	<input checked="" type="checkbox"/> Chad Kruse
Jason Boltz	John Kim	Joey Logan-Wilkey	<input checked="" type="checkbox"/> <u>Tom Reuter</u>

Meeting/Response Due Date

Agency Response Due:	Meeting Due:
----------------------	--------------

Approvals (when Applicable)

Dave McMillan Approval On	Jerry Kuhn Approval On
Marcia Willhite Approval On	John Kim Approval On

cc: Addresses (if not already provided on merge)


SPECIAL INSTRUCTIONS:

Correspondence Route Slip

Initiated By <u>GW</u>	CAS Contact <u>Andrea Rhodes</u>
Mail Out DUE Date	Today's Date <u>6-4-11</u>
Peer Review Completed On <u>Mary Reed</u>	Peer Reviewer
Supervisor Review Initials <u>SRH</u>	<u>6/11/12</u>

**EXHIBIT L: IEPA Violation Notice for Powerton.**

Letter from Michael Crumly, Illinois EPA, to Basil G. Constantelos, Midwest Generation (June 11, 2012)  
(transmitting Violation Notice for Powerton Generating Station, Violation Notice No. W-2012-00057).



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

217/785-0561

June 11, 2012

CERTIFIED MAIL # 7010 2780 0002 1163 7254  
RETURN RECEIPT REQUESTED

Mr. Basil G. Constantelos: Managing Director, Environmental Services  
Midwest Generation EME, LLC  
2535 Remington Blvd  
Suite A  
Bolingbrook, IL 60440

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

Dear Mr. Constantelos:

This constitutes a Violation Notice pursuant to Section 31(a)(1) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/31(a)(1), and is based upon a review of available information and an investigation by representatives of the Illinois Environmental Protection Agency ("Illinois EPA").

The Illinois EPA hereby provides notice of alleged violations of environmental laws, regulations, or permits as set forth in Attachment A to this notice. Attachment A includes an explanation of the activities that the Illinois EPA believes may resolve the specified alleged violations. Due to the nature and seriousness of the alleged violations, please be advised that resolution of the violations may also require the involvement of a prosecutorial authority for purposes that may include, among others, the imposition of statutory penalties.

A written response, which may include a request for a meeting with representatives of the Illinois EPA, must be submitted via certified mail to the Illinois EPA within 45 days of receipt of this letter. If a meeting is requested, it shall be held within 60 days of receipt of this notice. The response must include information in rebuttal, explanation, or justification of each alleged violation and a statement indicating whether or not the facility wishes to enter into a Compliance Commitment Agreement ("CCA") pursuant to Section 31(a) of the Act. If the facility wishes to enter into a CCA, the written response must also include proposed terms for the CCA that includes dates for achieving each commitment and may include a statement that compliance has been achieved for some or all of the alleged violations. The proposed terms of the CCA should contain sufficient detail and must include steps to be taken to achieve compliance and the necessary dates by which compliance will be achieved.

EPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

AUG 22 2012

REVIEWER EAP



Page 2 of 2

ID: 6282 Midwest Generation, LLC, Powerton Generating Station

VN W-2012-00057

The Illinois EPA will review the proposed terms for a CCA provided by the facility and, within 30 days of receipt, will respond with either a proposed CCA or a notice that no CCA will be issued by the Illinois EPA. If the Illinois EPA sends a proposed CCA, the facility must respond in writing by either agreeing to and signing the proposed CCA or by notifying the Illinois EPA that the facility rejects the terms of the proposed CCA.

If a timely written response to this Violation Notice is not provided, it shall be considered a waiver of the opportunity to respond and meet, and the Illinois EPA may proceed with referral to a prosecutorial authority.

Written communications should be directed to:

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

All communications must include reference to this Violation Notice number, W-2012-00057.

Questions regarding this Violation Notice should be directed to Andrea Rhodes at 217/785-0561.

Sincerely,



Michael Crumly  
Manager, Compliance Assurance Section  
Division of Public Water Supplies  
Bureau of Water

Attachments

cc: Maria Race

CASE ID: 2012-006

**ATTACHMENT A****MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:**

A review of information available to the Illinois EPA indicates the following on-going violations of statutes, regulations, or permits. Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation.

**Groundwater Quality**

No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that: treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or an existing or potential use of such groundwater is precluded. No person shall cause, threaten or allow the release of any contaminant to groundwater so as to cause a groundwater quality standard to be exceeded. Midwest Generation, LLC must take actions to mitigate existing contamination and prevent the continuing release of contaminants into the environment.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-1 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.39 su	6.5-9.0 su	12/12/2011
Boron	2.9 mg/l	2.0 mg/l	3/19/2012
Nitrate	11 mg/l	10.0 mg/l	9/20/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-2 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.41 su	6.5-9.0 su	12/12/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:**

A review of information available to the Illinois EPA indicates the following on-going violations of statutes, regulations, or permits. Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation including an estimated time period for resolution.

**Groundwater Quality**

No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that: treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or an existing or potential use of such groundwater is precluded. No person shall cause, threaten or allow the release of any contaminant to groundwater so as to cause a groundwater quality standard to be exceeded. Midwest Generation, LLC must take actions to mitigate existing contamination and prevent the continuing release of contaminants into the environment.

**Violation**

**Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-1 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.39 su	6.5-9.0 su	12/12/2011
Boron	2.9 mg/l	2.0 mg/l	3/19/2012
Nitrate	11 mg/l	10.0 mg/l	9/20/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation**

**Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-2 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.41 su	6.5-9.0 su	12/12/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**ATTACHMENT A****MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:****Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-4 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.37 su	6.5-9.0 su	12/12/2011
Manganese	0.35 mg/l	0.15 mg/l	12/12/2011
Manganese	0.69 mg/l	0.15 mg/l	9/20/2011
Manganese	0.41 mg/l	0.15 mg/l	6/16/2011
Manganese	0.68 mg/l	0.15 mg/l	3/25/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-5 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.34 su	6.5-9.0 su	12/12/2011
Manganese	0.26 mg/l	0.15 mg/l	3/19/2012
Manganese	0.50 mg/l	0.15 mg/l	12/12/2011
Manganese	0.64 mg/l	0.15 mg/l	9/20/2011
Manganese	0.48 mg/l	0.15 mg/l	6/16/2011
Manganese	0.49 mg/l	0.15 mg/l	3/25/2011
Manganese	0.51 mg/l	0.15 mg/l	12/15/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-6 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	0.61 mg/l	0.15 mg/l	3/19/2012
Manganese	0.63 mg/l	0.15 mg/l	12/12/2011
Manganese	0.66 mg/l	0.15 mg/l	9/20/2011
Manganese	0.63 mg/l	0.15 mg/l	6/16/2011
Manganese	0.68 mg/l	0.15 mg/l	3/25/2011
Manganese	0.68 mg/l	0.15 mg/l	12/15/2010

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282**  
**VIOLATION NOTICE NO. W-2012-00057:**

**Violation****Description**

MW-6 continued

Parameter	Sample Value	GW Standard	Collection Date
Chloride	210 mg/l	200 mg/l	9/20/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code  
 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-7 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.45 su	6.5-9.0 su	12/12/2011
Arsenic	0.23 mg/l	0.05 mg/l	3/19/2012
Arsenic	0.23 mg/l	0.05 mg/l	12/12/2011
Arsenic	0.18 mg/l	0.05 mg/l	9/20/2011
Arsenic	0.12 mg/l	0.05 mg/l	6/16/2011
Arsenic	0.085 mg/l	0.05 mg/l	3/25/2011
Iron	31 mg/l	5.0 mg/l	3/19/2012
Iron	26 mg/l	5.0 mg/l	12/12/2011
Iron	22 mg/l	5.0 mg/l	9/20/2011
Iron	10 mg/l	5.0 mg/l	6/16/2011
Iron	7.5 mg/l	5.0 mg/l	3/25/2011
Iron	8.0 mg/l	5.0 mg/l	12/15/2010
Lead	0.039 mg/l	0.0075 mg/l	12/15/2010
Manganese	11 mg/l	0.15 mg/l	3/19/2012
Manganese	12 mg/l	0.15 mg/l	12/12/2011
Manganese	12 mg/l	0.15 mg/l	9/20/2011
Manganese	6.4 mg/l	0.15 mg/l	6/16/2011
Manganese	5.9 mg/l	0.15 mg/l	3/25/2011
Manganese	3.5 mg/l	0.15 mg/l	12/15/2010
Selenium	0.054 mg/l	0.05 mg/l	12/12/2011
TDS	1,400 mg/l	1,200 mg/l	3/19/2012
TDS	1,300 mg/l	1,200 mg/l	12/12/2011
TDS	1,300 mg/l	1,200 mg/l	9/20/2011
TDS	1,300 mg/l	1,200 mg/l	6/16/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code  
 620.115, 620.301, 620.401, 620.405, and 620.410.

**ATTACHMENT A****MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:****Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-8 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	0.27 mg/l	0.15 mg/l	3/19/2012
Manganese	0.20 mg/l	0.15 mg/l	12/12/2011
Manganese	0.18 mg/l	0.15 mg/l	9/20/2011
Manganese	0.29 mg/l	0.15 mg/l	6/16/2011
Manganese	0.27 mg/l	0.15 mg/l	3/25/2011
Chloride	210 mg/l	200 mg/l	9/20/2011
Chloride	210 mg/l	200 mg/l	3/25/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-9 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.31 su	6.5-9.0 su	12/12/2011
Manganese	0.22 mg/l	0.15 mg/l	3/19/2012
Manganese	0.28 mg/l	0.15 mg/l	12/12/2011
Manganese	0.48 mg/l	0.15 mg/l	6/16/2011
Manganese	0.45 mg/l	0.15 mg/l	3/25/2011
Manganese	0.43 mg/l	0.15 mg/l	2/15/2011
Manganese	0.23 mg/l	0.15 mg/l	12/16/2010
Manganese	0.19 mg/l	0.15 mg/l	12/15/2010
Selenium	0.072 mg/l	0.05 mg/l	3/25/2011
Boron	2.6 mg/l	2.0 mg/l	3/19/2012
Boron	2.7 mg/l	2.0 mg/l	12/12/2011
Boron	2.5 mg/l	2.0 mg/l	9/20/2011
Boron	2.5 mg/l	2.0 mg/l	9/19/2011
Boron	2.1 mg/l	2.0 mg/l	12/16/2010
Boron	2.2 mg/l	2.0 mg/l	12/15/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**ATTACHMENT A****MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:****Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-10 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.03 su	6.5-9.0 su	12/12/2011
Manganese	2.3 mg/l	0.15 mg/l	3/19/2012
Manganese	2.3 mg/l	0.15 mg/l	12/12/2011
Manganese	2.3 mg/l	0.15 mg/l	9/20/2011
Manganese	3.8 mg/l	0.15 mg/l	6/16/2011
Manganese	2.8 mg/l	0.15 mg/l	3/25/2011
Manganese	2.1 mg/l	0.15 mg/l	12/15/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-11 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.48 su	6.5-9.0 su	12/12/2011
Manganese	2.9 mg/l	0.15 mg/l	3/19/2012
Manganese	2.5 mg/l	0.15 mg/l	12/12/2011
Manganese	2.9 mg/l	0.15 mg/l	9/19/2011
Manganese	2.2 mg/l	0.15 mg/l	6/16/2011
Manganese	3.6 mg/l	0.15 mg/l	2/15/2011
Manganese	3.2 mg/l	0.15 mg/l	12/16/2010
Boron	2.3 mg/l	2.0 mg/l	3/19/2012

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-12 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Iron	5.6 mg/l	5.0 mg/l	6/16/2011
Iron	6.3 mg/l	5.0 mg/l	2/15/2011
Iron	5.5 mg/l	5.0 mg/l	12/15/2010

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:**

**Violation****Description**

MW-12 Continued:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	0.25 mg/l	0.15 mg/l	12/12/2011
Manganese	0.37 mg/l	0.15 mg/l	9/19/2011
Manganese	0.26 mg/l	0.15 mg/l	6/16/2011
Manganese	0.58 mg/l	0.15 mg/l	2/15/2011
Manganese	0.32 mg/l	0.15 mg/l	12/15/2010
Mercury	0.0096 mg/l	0.002 mg/l	12/15/2010
Chloride	210 mg/l	200 mg/l	12/12/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-13 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	3.5 mg/l	0.15 mg/l	4/10/2012
Manganese	3.5 mg/l	0.15 mg/l	12/12/2011
Manganese	3.6 mg/l	0.15 mg/l	10/13/2011
Manganese	2.6 mg/l	0.15 mg/l	8/9/2011
Manganese	2.9 mg/l	0.15 mg/l	6/16/2011
Manganese	2.7 mg/l	0.15 mg/l	4/25/2011
Manganese	3.8 mg/l	0.15 mg/l	2/15/2011
Manganese	5.0 mg/l	0.15 mg/l	12/15/2010
Selenium	0.056 mg/l	0.05 mg/l	8/9/2011
Boron	4.0 mg/l	2.0 mg/l	4/10/2012
Boron	4.1 mg/l	2.0 mg/l	12/12/2011
Boron	3.0 mg/l	2.0 mg/l	10/13/2011
Boron	2.7 mg/l	2.0 mg/l	8/9/2011
Boron	3.0 mg/l	2.0 mg/l	6/16/2011
Boron	2.6 mg/l	2.0 mg/l	4/25/2011
Boron	3.1 mg/l	2.0 mg/l	2/15/2011
Boron	3.9 mg/l	2.0 mg/l	12/15/2010
Sulfate	1,100 mg/l	400 mg/l	4/10/2012
Sulfate	1,100 mg/l	400 mg/l	12/12/2011
Sulfate	660 mg/l	400 mg/l	10/13/2011
Sulfate	440 mg/l	400 mg/l	8/9/2011
Sulfate	540 mg/l	400 mg/l	6/16/2011
Sulfate	580 mg/l	400 mg/l	4/25/2011
Sulfate	770 mg/l	400 mg/l	2/15/2011
Sulfate	1,400 mg/l	400 mg/l	12/15/2010



## ATTACHMENT A

MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
 VIOLATION NOTICE NO. W-2012-00057:

**Violation****Description**

MW-13 continued:

Parameter	Sample Value	GW Standard	Collection Date
Sulfate	580 mg/l	400 mg/l	4/25/2011
Sulfate	770 mg/l	400 mg/l	2/15/2011
Sulfate	1,400 mg/l	400 mg/l	12/15/2010
TDS	2,300 mg/l	1,200 mg/l	4/10/2012
TDS	2,100 mg/l	1,200 mg/l	12/12/2011
TDS	1,500 mg/l	1,200 mg/l	10/13/2011
TDS	1,300 mg/l	1,200 mg/l	6/16/2011
TDS	1,400 mg/l	1,200 mg/l	4/25/2011
TDS	1,600 mg/l	1,200 mg/l	2/15/2011
TDS	2,600 mg/l	1,200 mg/l	12/15/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code  
 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the  
 Groundwater Quality Standards at monitoring well MW-14 for the  
 following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	6.05 su	6.5-9.0 su	12/12/2011
Manganese	0.63 mg/l	0.15 mg/l	4/10/2012
Manganese	0.84 mg/l	0.15 mg/l	10/13/2011
Manganese	0.57 mg/l	0.15 mg/l	8/9/2011
Manganese	0.36 mg/l	0.15 mg/l	6/16/2011
Manganese	0.29 mg/l	0.15 mg/l	4/25/2011
Manganese	0.81 mg/l	0.15 mg/l	2/15/2011
Manganese	0.68 mg/l	0.15 mg/l	12/15/2010
Selenium	0.065 mg/l	0.05 mg/l	4/25/2011
Thallium	0.0034 mg/l	0.002 mg/l	4/10/2012
Thallium	0.0027 mg/l	0.002 mg/l	8/9/2011
Thallium	0.0039 mg/l	0.002 mg/l	6/16/2011
Thallium	0.0035 mg/l	0.002 mg/l	4/25/2011
Sulfate	990 mg/l	400 mg/l	4/10/2012
Sulfate	880 mg/l	400 mg/l	12/12/2011
Sulfate	850 mg/l	400 mg/l	10/13/2011
Sulfate	940 mg/l	400 mg/l	8/9/2011
Sulfate	810 mg/l	400 mg/l	6/16/2011
Sulfate	770 mg/l	400 mg/l	4/25/2011
Sulfate	820 mg/l	400 mg/l	2/15/2011
Sulfate	960 mg/l	400 mg/l	12/15/2010

**ATTACHMENT A****MIDWEST GENERATION, LLC, POWERTON GENERATING STATION, ID:6282  
VIOLATION NOTICE NO. W-2012-00057:****Violation****Description**

MW-14 continued:

Parameter	Sample Value	GW Standard	Collection Date
Chloride	240 mg/l	200 mg/l	8/9/2011
TDS	2,200 mg/l	1,200 mg/l	4/10/2012
TDS	1,800 mg/l	1,200 mg/l	12/12/2011
TDS	1,800 mg/l	1,200 mg/l	10/13/2011
TDS	2,000 mg/l	1,200 mg/l	8/9/2011
TDS	1,900 mg/l	1,200 mg/l	6/16/2011
TDS	1,800 mg/l	1,200 mg/l	4/25/2011
TDS	1,700 mg/l	1,200 mg/l	2/15/2011
TDS	1,800 mg/l	1,200 mg/l	12/15/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-15 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	0.25 mg/l	0.15 mg/l	4/10/2012
Manganese	0.39 mg/l	0.15 mg/l	12/12/2011
Manganese	0.48 mg/l	0.15 mg/l	10/13/2011
Manganese	0.37 mg/l	0.15 mg/l	8/9/2011
Manganese	0.60 mg/l	0.15 mg/l	6/16/2011
Manganese	0.36 mg/l	0.15 mg/l	4/25/2011
Manganese	0.42 mg/l	0.15 mg/l	2/15/2011
Manganese	0.56 mg/l	0.15 mg/l	12/15/2010
Sulfate	650 mg/l	400 mg/l	6/16/2011
Chloride	210 mg/l	200 mg/l	8/9/2011
TDS	1,600 mg/l	1,200 mg/l	6/16/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

\*\*\*\*\* PCB 2013-015 \*\*\*\*\*

Water System Name

Power from

W-2012-00057

DW Distribution List and/or bccs

<input checked="" type="checkbox"/>	VN Central File (Bev)	02 File	Marcia Willhite	Geoff Andres
	Mike Crumly	Dianne Potter	Jeri Long	<input checked="" type="checkbox"/> Andrea Rhodes
	Paul Connelly	Allison Ristau	Mary Reed	Jewel Brant
	Sharon Dowson			
	Dave McMillan	Rick Cobb	Jerry Kuhn	
	Springfield FOS	Champaign FOS	Collinsville FOS	Elgin FOS
	Rockford FOS	Marion FOS		
<input checked="" type="checkbox"/>	Connie Tonsor	DLC File	Chuck Gunnarson	<input checked="" type="checkbox"/> Chad Kruse
	Jason Boltz	John Kim	Joey Logan-Wilkey	<input checked="" type="checkbox"/> Tom Reuter

Meeting/Response Due Date

Agency Response Due:	Meeting Due:
----------------------	--------------

Approvals (when Applicable)

Dave McMillan Approval On	Jerry Kuhn Approval On
Marcia Willhite Approval On	John Kim Approval On

cc: Addresses (if not already provided on merge)


SPECIAL INSTRUCTIONS:

Correspondence Route Slip

Initiated By <i>GW</i>	CAS Contact <i>Andrea Rhodes</i>
Mail Out DUE Date	Today's Date <i>6-4-12</i>
Peer Review Completed On <i>6-4-12</i>	Peer Reviewer <i>Mary Reed</i>
Supervisor Review Initials <i>SRH 6/11/12</i>	

**EXHIBIT M:** IEPA Violation Notice for Waukegan.

Letter from Michael Crumly, Illinois EPA, to Basil G. Constantelos, Midwest Generation (June 11, 2012)  
(transmitting Violation Notice for Waukegan Generating Station, Violation Notice No. W-2012-00056).



\*\*\*\*\*PCB 2013-015\*\*\*\*\*  
**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

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

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

217/785-0561

June 11, 2012

CERTIFIED MAIL # 7010 2780 0002 1163 7216  
RETURN RECEIPT REQUESTED

Mr. Basil G. Constantelos: Managing Director, Environmental Services  
Midwest Generation EME, LLC  
2535 Remington Blvd  
Suite A  
Bolingbrook, IL 60440

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

Dear Mr. Constantelos:

This constitutes a Violation Notice pursuant to Section 31(a)(1) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/31(a)(1), and is based upon a review of available information and an investigation by representatives of the Illinois Environmental Protection Agency ("Illinois EPA").

The Illinois EPA hereby provides notice of alleged violations of environmental laws, regulations, or permits as set forth in Attachment A to this notice. Attachment A includes an explanation of the activities that the Illinois EPA believes may resolve the specified alleged violations. Due to the nature and seriousness of the alleged violations, please be advised that resolution of the violations may also require the involvement of a prosecutorial authority for purposes that may include, among others, the imposition of statutory penalties.

A written response, which may include a request for a meeting with representatives of the Illinois EPA, must be submitted via certified mail to the Illinois EPA within 45 days of receipt of this letter. If a meeting is requested, it shall be held within 60 days of receipt of this notice. The response must include information in rebuttal, explanation, or justification of each alleged violation and a statement indicating whether or not the facility wishes to enter into a Compliance Commitment Agreement ("CCA") pursuant to Section 31(a) of the Act. If the facility wishes to enter into a CCA, the written response must also include proposed terms for the CCA that includes dates for achieving each commitment and may include a statement that compliance has been achieved for some or all of the alleged violations. The proposed terms of the CCA should contain sufficient detail and must include steps to be taken to achieve compliance and the necessary dates by which compliance will be achieved.

Page 2 of 2

ID: 6281 Midwest Generation, LLC, Waukegan Generating Station  
VN W-2012-00056

The Illinois EPA will review the proposed terms for a CCA provided by the facility and, within 30 days of receipt, will respond with either a proposed CCA or a notice that no CCA will be issued by the Illinois EPA. If the Illinois EPA sends a proposed CCA, the facility must respond in writing by either agreeing to and signing the proposed CCA or by notifying the Illinois EPA that the facility rejects the terms of the proposed CCA.

If a timely written response to this Violation Notice is not provided, it shall be considered a waiver of the opportunity to respond and meet, and the Illinois EPA may proceed with referral to a prosecutorial authority.

Written communications should be directed to:

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

All communications must include reference to this Violation Notice number, W-2012-00056.

Questions regarding this Violation Notice should be directed to Andrea Rhodes at 217/785-0561.

Sincerely,



Michael Crumly  
Manager, Compliance Assurance Section  
Division of Public Water Supplies  
Bureau of Water

Attachments

cc: Maria Race

CASE ID: 2012-006

**ATTACHMENT A****MIDWEST GENERATION, LLC, WAUKEGAN GENERATING STATION, ID:6281  
VIOLATION NOTICE NO. W-2012-00056:**

A review of information available to the Illinois EPA indicates the following on-going violations of statutes, regulations, or permits. Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation.

**Groundwater Quality**

No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that: treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or an existing or potential use of such groundwater is precluded. No person shall cause, threaten or allow the release of any contaminant to groundwater so as to cause a groundwater quality standard to be exceeded. Midwest Generation, LLC must take actions to mitigate existing contamination and prevent the continuing release of contaminants into the environment.

**Violation  
Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-1 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	9.54 su	6.5-9.0 su	3/14/2012
pH	9.97 su	6.5-9.0 su	6/13/2011
pH	9.92 su	6.5-9.0 su	3/24/2011
Antimony	0.052 mg/l	0.006 mg/l	10/25/2010
Arsenic	0.078 mg/l	0.05 mg/l	3/14/2012
Arsenic	0.057 mg/l	0.05 mg/l	12/6/2011
Arsenic	0.077 mg/l	0.05 mg/l	9/13/2011
Arsenic	0.17 mg/l	0.05 mg/l	6/13/2011
Arsenic	0.054 mg/l	0.05 mg/l	10/25/2010
Boron	2.5 mg/l	2.0 mg/l	3/14/2012
Boron	2.8 mg/l	2.0 mg/l	12/6/2011
Boron	2.5 mg/l	2.0 mg/l	9/13/2011
Boron	2.6 mg/l	2.0 mg/l	6/13/2011
Boron	2.6 mg/l	2.0 mg/l	10/25/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, WAUKEGAN GENERATING STATION, ID:6281  
VIOLATION NOTICE NO. W-2012-00056:**

**Violation  
Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-2 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	9.31 su	6.5-9.0 su	3/24/2011
Boron	2.2 mg/l	2.0 mg/l	3/24/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation  
Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-3 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	9.20 su	6.5-9.0 su	9/13/2011
Boron	2.3 mg/l	2.0 mg/l	6/13/2011
Boron	2.2 mg/l	2.0 mg/l	3/24/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation  
Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-4 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	0.36 mg/l	0.15 mg/l	9/13/2011
Boron	2.2 mg/l	2.0 mg/l	3/14/2012
Boron	2.1 mg/l	2.0 mg/l	12/6/2011
Boron	2.1 mg/l	2.0 mg/l	3/24/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.



PAGE NO. 3 OF 3

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, WAUKEGAN GENERATING STATION, ID:6281  
VIOLATION NOTICE NO. W-2012-00056**

**Violation  
Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-5 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Iron	6.6 mg/l	5.0 mg/l	3/14/2012
Iron	5.6 mg/l	5.0 mg/l	12/6/2011
Manganese	0.76 mg/l	0.15 mg/l	3/14/2012
Manganese	0.99 mg/l	0.15 mg/l	12/6/2011
Manganese	0.28 mg/l	0.15 mg/l	6/13/2011
Manganese	0.60 mg/l	0.15 mg/l	3/24/2011
Boron	44 mg/l	2.0 mg/l	3/14/2012
Boron	37 mg/l	2.0 mg/l	12/6/2011
Boron	30 mg/l	2.0 mg/l	9/13/2011
Boron	12 mg/l	2.0 mg/l	6/13/2011
Boron	33 mg/l	2.0 mg/l	3/24/2011
Sulfate	980 mg/l	400 mg/l	3/14/2012
Sulfate	1,100 mg/l	400 mg/l	12/6/2011
Sulfate	810 mg/l	400 mg/l	9/13/2011
Sulfate	1,100 mg/l	400 mg/l	6/13/2011
Sulfate	780 mg/l	400 mg/l	3/24/2011
Sulfate	920 mg/l	400 mg/l	10/25/2010
Chloride	220 mg/l	200 mg/l	9/13/2011
Chloride	540 mg/l	200 mg/l	6/13/2011
TDS	2,000 mg/l	1,200 mg/l	3/14/2012
TDS	2,300 mg/l	1,200 mg/l	12/6/2011
TDS	2,300 mg/l	1,200 mg/l	9/13/2011
TDS	3,300 mg/l	1,200 mg/l	6/13/2011
TDS	1,800 mg/l	1,200 mg/l	3/24/2011
TDS	1,500 mg/l	1,200 mg/l	10/25/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

\*\*\*\*\* PCB 2013-015 \*\*\*\*\*

Water System Name Waukegan Station

W-2012 - 00056

DW Distribution List and/or bccs

<input checked="" type="checkbox"/>	VN Central File (Bev)		02 File		Marcia Willhite		Geoff Andres
	Mike Crumly		Dianne Potter		Jeri Long	<input checked="" type="checkbox"/>	Andrea Rhodes
	Paul Connelly		Allison Ristau		Mary Reed		Jewel Brant
	Sharon Dowson						
	Dave McMillan	<input checked="" type="checkbox"/>	Rick Cobb		Jerry Kuhn		
	Springfield FOS		Champaign FOS		Collinsville FOS		Elgin FOS
	Rockford FOS		Marion FOS				
<input checked="" type="checkbox"/>	Connie Tonsor		DLC File		Chuck Gunnarson	<input checked="" type="checkbox"/>	Chad Kruse
	Jason Boltz		John Kim		Joey Logan-Wilkey	<input checked="" type="checkbox"/>	Tom Rauter

Meeting/Response Due Date

Agency Response Due:		Meeting Due:	
----------------------	--	--------------	--

Approvals (when Applicable)

Dave McMillan Approval On	Jerry Kuhn Approval On
Marcia Willhite Approval On	John Kim Approval On

cc: Addresses (if not already provided on merge)


SPECIAL INSTRUCTIONS:

Correspondence Route Slip

Initiated By <u>GW</u>	CAS Contact <u>Andrea Rhodes</u>
Mail Out DUE Date	Today's Date
Peer Review Completed On <u>6-4-12</u>	Peer Reviewer <u>Mary Reed</u>
Supervisor Review Initials <u>SRH 6/11/12</u>	

**EXHIBIT N:** IEPA Violation Notice for Will County.

Letter from Michael Crumly, Illinois EPA, to Basil G. Constantelos, Midwest Generation (June 11, 2012)  
(transmitting Violation Notice for Will County Generating Station, Violation Notice No. W-2012-00058).



\*\*\*\*\*PCB 2013-015\*\*\*\*\*  
**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

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

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

217/785-0561

June 11, 2012

CERTIFIED MAIL # 7010 2780 0002 1163 7230  
RETURN RECEIPT REQUESTED

Mr. Basil G. Constantelos: Managing Director, Environmental Services  
Midwest Generation EME, LLC  
2535 Remington Blvd  
Suite A  
Bolingbrook, IL 60440

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

Dear Mr. Constantelos:

This constitutes a Violation Notice pursuant to Section 31(a)(1) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/31(a)(1), and is based upon a review of available information and an investigation by representatives of the Illinois Environmental Protection Agency ("Illinois EPA").

The Illinois EPA hereby provides notice of alleged violations of environmental laws, regulations, or permits as set forth in Attachment A to this notice. Attachment A includes an explanation of the activities that the Illinois EPA believes may resolve the specified alleged violations. Due to the nature and seriousness of the alleged violations, please be advised that resolution of the violations may also require the involvement of a prosecutorial authority for purposes that may include, among others, the imposition of statutory penalties.

A written response, which may include a request for a meeting with representatives of the Illinois EPA, must be submitted via certified mail to the Illinois EPA within 45 days of receipt of this letter. If a meeting is requested, it shall be held within 60 days of receipt of this notice. The response must include information in rebuttal, explanation, or justification of each alleged violation and a statement indicating whether or not the facility wishes to enter into a Compliance Commitment Agreement ("CCA") pursuant to Section 31(a) of the Act. If the facility wishes to enter into a CCA, the written response must also include proposed terms for the CCA that includes dates for achieving each commitment and may include a statement that compliance has been achieved for some or all of the alleged violations. The proposed terms of the CCA should contain sufficient detail and must include steps to be taken to achieve compliance and the necessary dates by which compliance will be achieved.

IEPA - DIVISION OF RECORDS MANAGEMENT  
RELEASABLE

AUG 22 2012

REVIEWER EAV

4302 N. Main St., Rockford, IL 61103 (815)987-7760  
595 S. State, Elgin, IL 60123 (847)608-3131  
2125 S. First St., Champaign, IL 61820 (217)278-5800  
2009 Mall St., Collinsville, IL 62234 (618)346-5120

9511 Horrigan St., Des Plaines, IL 60016 (847)294-4000  
5407 N. University St., Arbor 113, Peoria, IL 61614 (309)693-5462  
2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200  
100 W. Randolph, Suite 11-300, Chicago, IL 60601 (312)814-6026

Page 2 of 2

ID: 6283 Midwest Generation, LLC, Will County Generating Station  
VN W-2012-00058

The Illinois EPA will review the proposed terms for a CCA provided by the facility and, within 30 days of receipt, will respond with either a proposed CCA or a notice that no CCA will be issued by the Illinois EPA. If the Illinois EPA sends a proposed CCA, the facility must respond in writing by either agreeing to and signing the proposed CCA or by notifying the Illinois EPA that the facility rejects the terms of the proposed CCA.

If a timely written response to this Violation Notice is not provided, it shall be considered a waiver of the opportunity to respond and meet, and the Illinois EPA may proceed with referral to a prosecutorial authority.

Written communications should be directed to:

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

All communications must include reference to this Violation Notice number, W-2012-00058.

Questions regarding this Violation Notice should be directed to Andrea Rhodes at 217/785-0561.

Sincerely,



Michael Crumly  
Manager, Compliance Assurance Section  
Division of Public Water Supplies  
Bureau of Water

Attachments

cc: Maria Race

CASE ID: 2012-006

PAGE NO. 1 OF 7

**ATTACHMENT A****MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283  
VIOLATION NOTICE NO. W-2012-00058:**

A review of information available to the Illinois EPA indicates the following on-going violations of statutes, regulations, or permits. Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation.

**Groundwater Quality**

No person shall cause, threaten or allow the release of any contaminant to a resource groundwater such that: treatment or additional treatment is necessary to continue an existing use or to assure a potential use of such groundwater; or an existing or potential use of such groundwater is precluded. No person shall cause, threaten or allow the release of any contaminant to groundwater so as to cause a groundwater quality standard to be exceeded. Midwest Generation, LLC must take actions to mitigate existing contamination and prevent the continuing release of contaminants into the environment.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-1 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Antimony	0.0063 mg/l	0.006 mg/l	12/08/2011
Manganese	0.16 mg/l	0.15 mg/l	03/16/2012
Manganese	0.17 mg/l	0.15 mg/l	12/08/2011
Manganese	0.16 mg/l	0.15 mg/l	09/15/2011
Manganese	0.22 mg/l	0.15 mg/l	06/15/2011
Manganese	0.20 mg/l	0.15 mg/l	12/13/2010
Sulfate	430 mg/l	400 mg/l	03/16/2012
Sulfate	530 mg/l	400 mg/l	12/13/2010
Chloride	210 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

PAGE NO. 2 OF 7

**ATTACHMENT A**

**MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283  
VIOLATION NOTICE NO. W-2012-00058:**

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-2 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Antimony	0.017 mg/l	0.006 mg/l	12/08/2011
Antimony	0.0073 mg/l	0.006 mg/l	09/15/2011
Boron	2.30 mg/l	2.0 mg/l	09/15/2011
Boron	2.30 mg/l	2.0 mg/l	06/15/2011
Sulfate	430 mg/l	400 mg/l	12/13/2010
Chloride	250 mg/l	200 mg/l	03/28/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-3 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Boron	2.7 mg/l	2.0 mg/l	03/16/2012
Boron	2.8 mg/l	2.0 mg/l	12/08/2011
Boron	3.3 mg/l	2.0 mg/l	09/15/2011
Boron	2.6 mg/l	2.0 mg/l	06/15/2011
Boron	2.4 mg/l	2.0 mg/l	03/28/2011
Boron	2.7 mg/l	2.0 mg/l	12/13/2010
Chloride	250 mg/l	200 mg/l	03/28/2011
Manganese	0.27 mg/l	0.15 mg/l	03/16/2012
Manganese	0.29 mg/l	0.15 mg/l	12/08/2011
Manganese	0.26 mg/l	0.15 mg/l	09/15/2011
Manganese	0.34 mg/l	0.15 mg/l	06/15/2011
Manganese	0.31 mg/l	0.15 mg/l	03/28/2011
Manganese	0.34 mg/l	0.15 mg/l	12/13/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

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**ATTACHMENT A**

**MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283  
VIOLATION NOTICE NO. W-2012-00058:**

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-4 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Boron	4.0 mg/l	2.0 mg/l	03/16/2012
Boron	3.0 mg/l	2.0 mg/l	12/08/2011
Boron	4.3 mg/l	2.0 mg/l	09/15/2011
Boron	3.6 mg/l	2.0 mg/l	06/15/2011
Boron	3.3 mg/l	2.0 mg/l	03/29/2011
Boron	3.7 mg/l	2.0 mg/l	12/13/2010
Manganese	0.60 mg/l	0.15 mg/l	03/16/2012
Manganese	0.60 mg/l	0.15 mg/l	12/08/2011
Manganese	1.00 mg/l	0.15 mg/l	09/15/2011
Manganese	0.70 mg/l	0.15 mg/l	06/15/2011
Manganese	0.58 mg/l	0.15 mg/l	03/29/2011
Manganese	0.52 mg/l	0.15 mg/l	12/13/2010
Sulfate	2,000 mg/l	400 mg/l	03/16/2012
Sulfate	1,600 mg/l	400 mg/l	12/08/2011
Sulfate	4,800 mg/l	400 mg/l	09/15/2011
Sulfate	1,600 mg/l	400 mg/l	06/15/2011
Sulfate	1,500 mg/l	400 mg/l	03/29/2011
Sulfate	1,500 mg/l	400 mg/l	12/13/2010
TDS	3,700 mg/l	1,200 mg/l	03/16/2012
TDS	3,100 mg/l	1,200 mg/l	12/08/2011
TDS	6,000 mg/l	1,200 mg/l	09/15/2011
TDS	2,800 mg/l	1,200 mg/l	06/15/2011
TDS	2,600 mg/l	1,200 mg/l	03/29/2011
TDS	2,500 mg/l	1,200 mg/l	12/13/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-5 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	9.3 su	6.5-9.0 su	03/16/2012
pH	9.51 su	6.5-9.0 su	03/28/2011



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**ATTACHMENT A**

**MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283  
VIOLATION NOTICE NO. W-2012-00058:**

**Violation****Description**

MW-5 continued

Parameter	Sample Value	GW Standard	Collection Date
Boron	2.9 mg/l	2.0 mg/l	03/16/2012
Boron	3.2 mg/l	2.0 mg/l	12/08/2011
Boron	4.0 mg/l	2.0 mg/l	09/15/2011
Boron	3.2 mg/l	2.0 mg/l	06/15/2011
Boron	2.7 mg/l	2.0 mg/l	03/29/2011
Boron	2.6 mg/l	2.0 mg/l	12/13/2010
Sulfate	500 mg/l	400 mg/l	12/08/2011
Sulfate	690 mg/l	400 mg/l	09/15/2011
Sulfate	540 mg/l	400 mg/l	06/15/2011
Sulfate	570 mg/l	400 mg/l	03/29/2011
Sulfate	580 mg/l	400 mg/l	12/13/2010
TDS	1,500 mg/l	1,200 mg/l	09/15/2011
TDS	1,400 mg/l	1,200 mg/l	06/15/2011
TDS	1,300 mg/l	1,200 mg/l	03/29/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-6 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	9.39 su	6.5-9.0 su	03/16/2012
pH	9.44 su	6.5-9.0 su	09/15/2011
pH	9.27 su	6.5-9.0 su	06/15/2011
pH	9.65 su	6.5-9.0 su	03/29/2011
Boron	2.5 mg/l	2.0 mg/l	03/16/2012
Boron	2.5 mg/l	2.0 mg/l	12/08/2011
Boron	3.0 mg/l	2.0 mg/l	09/15/2011
Boron	2.4 mg/l	2.0 mg/l	06/15/2011
Boron	2.5 mg/l	2.0 mg/l	03/28/2011
Boron	2.7 mg/l	2.0 mg/l	12/13/2010
Chloride	210 mg/l	200 mg/l	03/28/2011
Sulfate	440 mg/l	400 mg/l	12/08/2011
Sulfate	420 mg/l	400 mg/l	09/15/2011

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**ATTACHMENT A**

**MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283  
VIOLATION NOTICE NO. W-2012-00058:**

**Violation****Description**

MW-6 continued

Parameter	Sample Value	GW Standard	Collection Date
Sulfate	570 mg/l	400 mg/l	06/15/2011
Sulfate	540 mg/l	400 mg/l	03/28/2011
Sulfate	500 mg/l	400 mg/l	12/13/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-7 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Manganese	0.20 mg/l	0.15 mg/l	03/16/2012
Manganese	0.20 mg/l	0.15 mg/l	12/08/2011
Manganese	0.18 mg/l	0.15 mg/l	09/15/2011
Boron	5.1 mg/l	2.0 mg/l	03/16/2012
Boron	5.0 mg/l	2.0 mg/l	12/08/2011
Boron	3.4 mg/l	2.0 mg/l	09/15/2011
Boron	5.7 mg/l	2.0 mg/l	06/15/2011
Boron	5.0 mg/l	2.0 mg/l	03/29/2011
Boron	4.7 mg/l	2.0 mg/l	12/13/2010
Sulfate	770 mg/l	400 mg/l	03/16/2012
Sulfate	710 mg/l	400 mg/l	12/08/2011
Sulfate	710 mg/l	400 mg/l	09/15/2011
Sulfate	1,000 mg/l	400 mg/l	06/15/2011
Sulfate	650 mg/l	400 mg/l	03/29/2011
Sulfate	610 mg/l	400 mg/l	12/13/2010
TDS	1,400 mg/l	1,200 mg/l	03/16/2012
TDS	1,300 mg/l	1,200 mg/l	12/08/2011
TDS	1,400 mg/l	1,200 mg/l	09/15/2011
TDS	1,600 mg/l	1,200 mg/l	06/15/2011
TDS	1,500 mg/l	1,200 mg/l	03/29/2011
TDS	1,300 mg/l	1,200 mg/l	12/13/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

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**ATTACHMENT A****MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283****VIOLATION NOTICE NO. W-2012-00058:****Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-8 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Boron	2.3 mg/l	2.0 mg/l	09/15/2011
Chloride	270 mg/l	200 mg/l	03/29/2011
Manganese	0.40 mg/l	0.15 mg/l	12/08/2011
Manganese	0.45 mg/l	0.15 mg/l	09/15/2011
Manganese	0.47 mg/l	0.15 mg/l	06/15/2011
Manganese	0.44 mg/l	0.15 mg/l	03/29/2011
Manganese	0.33 mg/l	0.15 mg/l	12/13/2010
Sulfate	600 mg/l	400 mg/l	09/15/2011
Sulfate	420 mg/l	400 mg/l	06/15/2011
Sulfate	440 mg/l	400 mg/l	03/29/2011
Sulfate	440 mg/l	400 mg/l	12/13/2010
TDS	1,300 mg/l	1,200 mg/l	09/15/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

**Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-9 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
pH	10.56 su	6.5-9.0 su	03/16/2012
pH	9.55 su	6.5-9.0 su	12/08/2011
pH	10.27 su	6.5-9.0 su	09/15/2011
pH	10.44 su	6.5-9.0 su	06/15/2011
pH	10.87 su	6.5-9.0 su	03/29/2011
Boron	2.2 mg/l	2.0 mg/l	12/13/2010
Chloride	230 mg/l	200 mg/l	06/15/2011
Chloride	280 mg/l	200 mg/l	03/29/2011
Sulfate	410 mg/l	400 mg/l	06/15/2011
Sulfate	410 mg/l	400 mg/l	12/13/2010

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 Ill. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

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**ATTACHMENT A****MIDWEST GENERATION, LLC, WILL COUNTY GENERATING STATION, ID:6283  
VIOLATION NOTICE NO. W-2012-00058:****Violation****Description**

Operations at ash impoundments have resulted in violations of the Groundwater Quality Standards at monitoring well MW-10 for the following constituents:

Parameter	Sample Value	GW Standard	Collection Date
Boron	2.1 mg/l	2.0 mg/l	03/16/2012
Boron	2.5 mg/l	2.0 mg/l	12/08/2011
Boron	2.8 mg/l	2.0 mg/l	09/15/2011
Boron	2.2 mg/l	2.0 mg/l	06/15/2011
Boron	2.1 mg/l	2.0 mg/l	12/13/2010
Manganese	0.25 mg/l	0.15 mg/l	03/16/2012
Manganese	0.29 mg/l	0.15 mg/l	12/08/2011
Manganese	0.27 mg/l	0.15 mg/l	09/15/2011
Manganese	0.25 mg/l	0.15 mg/l	06/15/2011
Manganese	0.22 mg/l	0.15 mg/l	03/28/2011
Manganese	0.25 mg/l	0.15 mg/l	12/13/2010
Sulfate	420 mg/l	400 mg/l	09/15/2011

Rule/Reg. Section 12 of the Act, 415 ILCS 5/12, 35 I11. Adm. Code 620.115, 620.301, 620.401, 620.405, and 620.410.

*Will County*

*W-2012-00058*

DW Distribution List and/or bccs

<input checked="" type="checkbox"/>	VN Central File (Bev)	02 File	Marcia Willhite	Geoff Andres
	Mike Crumly	Dianne Potter	Jeri Long	Andrea Rhodes
	Paul Connelly	Allison Ristau	Mary Reed	Jewel Brant
	Sharon Dowson			
	Dave McMillan	<input checked="" type="checkbox"/> Rick Cobb	Jerry Kuhn	
	Springfield FOS	Champaign FOS	Collinsville FOS	Elgin FOS
	Rockford FOS	Marion FOS		
<input checked="" type="checkbox"/>	Connie Tonsor	DLC File	Chuck Gunnarson	<input checked="" type="checkbox"/> Chad Kruse
	Jason Boltz	John Kim	Joey Logan-Wilkey	<input checked="" type="checkbox"/> <i>TOM Royster</i>

Meeting/Response Due Date

Agency Response Due:	Meeting Due:
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Approvals (when Applicable)

Dave McMillan Approval On	Jerry Kuhn Approval On
Marcia Willhite Approval On	John Kim Approval On

cc: Addresses (if not already provided on merge)


SPECIAL INSTRUCTIONS:

Correspondence Route Slip

Initiated By	CAS Contact
Mail Out DUE Date	Today's Date
Peer Review Completed On <i>6-4-12</i>	Peer Reviewer <i>Mary Reed</i>
Supervisor Review Initials <i>SRH 6/11/12</i>	

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing **NOTICE OF ELECTRONIC FILING, COMPLAINT, and ENTRIES OF APPEARANCE** were served to all parties of record listed below by Certified Mail, Return Receipt Requested, on October 3, 2012.



Colleen Belak  
Legal Assistant  
Environmental Law and Policy Center  
35 E Wacker Drive. Suite 1600  
Chicago, Illinois 60601  
312-795-3718

TO:

Midwest Generation, LLC  
c/o C T Corporation System  
208 So. LaSalle St., Suite 814  
Chicago, IL 60604