



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

May 17, 2013

RE: FIRST ENERGY ASHTABULA POWER PLANT  
NPDES PERMIT NO. 3IB00012\*KD  
ASHTABULA TWP, ASHTABULA COUNTY  
COMPLIANCE INSPECTION EVALUATION

Mr. Scott F. Brown, P.E., Environmental Engineer  
First Energy Generation Corporation  
76 South Main Street  
Akron, Ohio 44308

Dear Mr. Brown:

On May 16, 2013, a site inspection was conducted at the above referenced facility at 2133 Lake Road East (State Route 531), Ashtabula Township, Ashtabula County. The site is formerly known as Ashtabula Power Plant, Plant Nos. A and B. The inspection was conducted by John Schmidt of this office. Scott Brown, Kristen Susick, and Laura Koch represented from First Energy Power Generation Group. The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit. The last inspection was conducted on May 21, 2012.

The plant currently provides only auxiliary power and is no longer used on a continual basis. No other changes to the industrial process and discharges have been noted since the last inspection. The plant is expected to continue to operate through at least 2015. The system consists of the following industrial processes and discharges (see attached figure):

#### Cooling Water

Cooling water from the plant's boilers is discharged to Lake Erie through Outfall 001. An average of 222 million gallons per day (MGD) is permitted through this outfall, although the plant is maintaining the minimum flow of 70 MGD as the plant is in standby mode. As a precaution, Lake Erie at the outfall contains a surface boom to capture any floating debris.

#### Ash Ponds

Bottom ash and fly ash from the boilers is collected and pumped as liquid slurry to hydrobins for solid separation, with wash water collected in ash ponds located adjacent to Lake Erie. Ash is manually removed by backhoe from the ponds for disposal at a landfill. Clarified water is discharged to Lake Erie via Outfall 002. An average of 231,000 gpd is permitted through this outfall, although actual discharge is significantly less due to the standby mode of the facility.

#### Coal Pile Runoff

Runoff from coal piles and other waste piles south of SR 531 is collected in two ponds, and then flows by gravity to the CPR Building (station 604), where it is intercepted by a lift station. Ash pile runoff is also diverted to this pump station, as is metal cleaning wastes via Outfall 615. The pump station generally pumps at 120 gpm, but actual flow rates can vary from about 80 gpm to 120 gpm (Outfall 604). pH adjustment includes mixing through a three-stage rapid mix neutralization

consisting of three tanks in series: the first raises the pH to 6.5, the second tank raises the pH to 7.5, and the third tank raises the pH to 8.5. Polymer is added and mixed in a fourth tank (flocculation tank), sent to a clarifier for final discharge to Lake Erie through Outfall 002. Sludge is sent to a thickener and disposed of off-site at a landfill. As a precaution, the channel to Lake Erie at the outfall contains a surface boom.

#### Boiler Blow-down

Blow-down water and condenser cooling water from the plant's boilers is discharged to the condenser cooling water through Outfall 605, where it joins Outfall 001 for discharge to Lake Erie. As a precaution, Lake Erie at the outfall contains a surface boom.

#### Metal Cleaning Waste System

Metal cleaning wastes, air heater wash water, and chemical cleaning wastes are diverted to the metals cleaning waste system. Outfall 615 is monitored before manually pumping the effluent to the CPR building for neutralization through lime addition, chemical precipitation in a retention pond. Clarified water flows through a flow meter prior to discharge to Lake Erie through Outfall 002. Sludge is manually removed for transport to a landfill for disposal.

#### Low Volume (Oily Waste) System

Regeneration wastes, and all building floor drains are collected in the low flow waste basin. Wastewaters are filtered and monitored prior to discharge to Lake Erie via Outfall 006.

#### Parking Lot Runoff

The parking lot to the east of the generating station is collected in a number of catch basins and flows to an oil-water separator and surface booms. The treated effluent is discharged through Outfall 005.

#### Transformer Area

The transformer area drains to a perimeter ditch to a collection basin, with a discharge to the box tunnel containing the EMC/Elkem metals discharge. This area is not included in Permit 31B00012\*KD.

#### Observations

Following are observations made during the inspection:

1. The overall condition of the treatment plant during this inspection was satisfactory.
2. Dumpsters for metal recycling are located along the north side of the generating station. Waters collected in this area drains to a sump and is pumped to the ash pond for further treatment.
3. A dumpster for asbestos material accumulation is located in the parking lot west of the generating station. This dumpster is sealed.
4. A log book of repairs and observations is maintained at the facility. FirstEnergy personnel perform routine observations, monitor the facility, and perform the sampling (flow readings; pH readings, water temperature). Jerry Vinson prepares the electronic discharge monitoring report (eDMR) and Ron Myers, plant manager submits of the eDMR through Ohio EPA's Web-based application.

5. The influent sampler is maintained at the proper temperature and collects a flow proportional sample.
6. Outfall 001 was observed to be discharging approximately 70 MGD and was producing a clear effluent. The design flow of the cooling water discharge system is 222 MGD. The plant must maintain a minimum flow of 70 MGD to ensure good mixing with the outfalls from Millennium Inorganic Chemicals (9 MGD) and EMC Metals (Elkem) (2-4 MGD).
7. Outfall 002 was not discharging at the time of the inspection.
8. Outfall 005 was not discharging at the time of the inspection.
9. Outfall 006 was discharging at the time of the inspection. This discharge was of an acceptable visual quality.
10. The two effluent samplers are maintained at the proper temperature and collects flow proportional samples.
11. The overall condition of the treatment plant during this inspection was satisfactory.
12. The hydro bins were observed as not operating at the time of the inspection.
13. Coal and some construction and demolition debris were being stored in the coal pile storage area. Flyash, bottom ash, CPR treatment system sludge were removed from the facility in April 2013. All waters in this area are intercepted by a perimeter ditch and collected in ponds, with treatment through the CPR building.
14. The storm water pollution prevention plan (SWPPP) was updated on May 16, 2012. The annual site certification was completed on May 16, 2012, and the inspection completed on May 16, 2012. Employee training on the plan occurs online in the first quarter of the year. These were all completed exactly one year before the date of the inspection. Please provide the dates that FirstEnergy envisions revising the SWPPP, completing the annual site inspection, and completing the annual site certification.

**NPDES Permit Compliance Review**

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period March 1, 2012 through April 1, 2013 indicates apparent noncompliance of the terms and conditions of your NPDES permit. Specific instances of noncompliance are as follows:

**Limit Violations**

The following apparent limit violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
002	50092	Mercury, Total (Low Level)	30D Qty	0.0000	.00001	5/1/2012
002	61941	pH, Maximum	1D Conc	9.0	11.5	11/1/2012
002	61942	pH, Minimum	1D Conc	6.0	5.1	2/27/2013

Part III, Item 12 of your NPDES permit requires you to notify Ohio EPA of any violations, along with measures taken to ensure that they are not repeated. A fact sheet on this requirement may be found online at [http://epa.ohio.gov/portals/35/permits/24-hour\\_Report\\_FactSheet.pdf](http://epa.ohio.gov/portals/35/permits/24-hour_Report_FactSheet.pdf). Noncompliance notification forms may be found online at <http://epa.ohio.gov/dsw/permits/individuals.aspx>. To-date, Ohio EPA has not received this notification for the May 2012 violation, along with measures to ensure that it is not repeated. The November 2012 and February 2013 violations were noted in a response provided by FirstEnergy on January 22, 2013 and April 4, 2013 respectively, and were instantaneous readings lasting less than 60 seconds. In accordance with the footnotes in the NPDES permit, excursions lasting less than 60 minutes are not considered a violation of the permit. **Ohio EPA concurs that the pH excursions outside the 6.0-9.0 range noted above are not a violation of your NPDES permit.**

Reporting Violations

No monitoring frequency violations or reporting code violations were noted for the period reviewed.

Compliance Schedule Violations

No compliance schedule violations were noted for the period reviewed.

Draft NPDES Permit

Ohio EPA is almost complete with drafting the NPDES renewal permit, and you should be expecting it within the next few weeks.

If you have any questions or comments regarding this inspection, please feel free to contact me at (330) 963-1175.

Respectively,



John M. Schmidt P.E., R.S.  
Environmental Engineer  
Division of Surface Water

JMS/cs

Attachments: Process flow Diagram, Permit 3IB00012

cc: Laura Koch, FirstEnergy Environmental

File/Industrial/FirstEnergy Ashtabula Power Plant/pc

