



## 2017 Fugitive Dust Control Report

### **IPL Petersburg Generating Station Petersburg, Indiana**

Prepared for:

**Indiana Power & Light Company**



6925 N. State Road 57  
Petersburg, Indiana 47567

Prepared by:

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December 2017  
File No. 25211357.33

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**Appendix**

A 2017 Fugitive Dust Monitoring Report

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## 1.0 INTRODUCTION

### 1.1 PURPOSE OF THIS REPORT

The purpose of this report is to document the incidents of fugitive dust and the actions taken to control the fugitive dust at the Petersburg Generating Station in 2017. The report has been prepared to meet the requirements of 40 CFR Part 257, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule April 17, 2015.

### 1.2 STATION DESCRIPTION

The Petersburg Generating Station is located approximately 3 miles east-northeast of Petersburg in Pike County, Indiana. The generating station consists of four coal-fired units. Units 1, 3, and 4 are equipped with electrostatic precipitators (ESP) for particulate control. Unit 2 has a baghouse for particulate control. Each unit is equipped with a wet flue gas desulfurization (FGD) system for sulfur dioxide (SO<sub>2</sub>) control. Coal combustion residuals (CCR) waste product can go to an on-site landfill or an off-site facility. The majority of disposal is off site.

The combustion byproducts of coal are bottom ash, fly ash, and FGD waste. Bottom ash is sluiced to an on-site settling pond. Fly ash is conveyed via a dry ash handling system to storage silos. Depending on the quantity of fly ash, the fly ash may be loaded onto tanker trucks and enclosed trailers for beneficial use, or it may be loaded onto trucks and sent to an on-site landfill, ash ponds, or an off-site facility. The wet FGD systems use limestone to reduce SO<sub>2</sub> and produce FGD byproduct. The FGD systems for Units 1, 2, and 4 produce gypsum, the majority of which is trucked off site for beneficial use. The FGD for Unit 3 produces byproduct that is mixed with fly ash, the majority of which is trucked off site for disposal.

### 1.3 SOURCES OF FUGITIVE DUST

Primary sources of fugitive dust at the Petersburg Generating Station include:

- Small spills of fly ash and bottom ash around pipes and other equipment
- Equipment malfunction
- Small amounts of fly ash generated by unloading fly ash from silos into trucks and railcars
- Trucks carrying fly ash and FGD byproduct traveling on plant roads
- Trucks carrying fly ash and FGD byproduct depositing material in the landfill
- Active portions of CCR landfill
- Dried portions of the settling ponds

## 2.0 MONITORING

### 2.1 FREQUENCY OF MONITORING

Fugitive dust is monitored as part of normal plan operations.

### 2.2 MONITORING METHODS

Fugitive dust is monitored visually. Action levels are implemented as weather conditions, road conditions, and source conditions warrant. Areas of the Petersburg Generating Station monitored include:

- FGD limestone and gypsum storage areas
- Material handling systems
- Plant roadways and parking areas
- Landfill
- Ash settling ponds

### 2.3 CONTROL MEASURES

The CCR handling equipment is designed to minimize dust.

Bottom ash is sluiced with water and piped to dewatering bins, or to an on-site settling pond. The sluice water facilitates bottom ash handling and reduces the amount of dust that may be generated. Dewatered bottom ash can be loaded onto trucks and sold to cement manufacturers for beneficial use.

Fly ash is conveyed via a dry handling system to storage silos. The conveyor system has enclosures installed at drop points on the system to reduce fugitive dust emissions. The fly ash silos employ baghouses to control fugitive dust emissions. The fly ash is conditioned with wet FGD byproduct and loaded onto trucks for transportation to an on-site landfill, ash ponds, or off-site facility. Conditioning ash with wet FGD byproduct facilitates ash handling and reduces dust generation. Truck wheels are washed down as needed to reduce tracking. Fly ash may be loaded onto tanker trucks or enclosed railcars for beneficial use. Transfer operations are monitored by station personnel to prevent or minimize fugitive dust emissions.

The wet FGD systems for Units 1, 2, and 4 produce gypsum which is stored in a covered building. The building reduces the amount of dust that may be generated. The majority of the gypsum is trucked off site for beneficial use. The FGD for Unit 3 produces byproduct that is used to condition the fly ash. The conditioned material is loaded onto trucks for transport to an on-site landfill, ash ponds, or an off-site facility for disposal. The trucks are covered to reduce fugitive dust. The majority of the conditioned material is trucked off site for disposal.

Water spray is used at the landfill to reduce the amount of fugitive dust. Water sprays are suitable for a range of weather conditions, including warm humid conditions like those of

southern Indiana. Other dust control activities at the landfill include compaction of the material with trucks and bulldozers, relocating activity, or reducing activity as needed. If necessary, truck wheels are washed to prevent tracking of sediment on plant roads.

The speed limit is 15 mph on plant roads and parking lots. Reduced speed limits at the site minimize fugitive dust. Inactive portions of the landfill have vegetative cover.

Frequent inspections of piping and other CCR handling equipment at the plant and routine preventative maintenance help to minimize fugitive dust emissions.

### 3.0 CONTROL OF FUGITIVE DUST

Control of fugitive dust at the Petersburg Generating Station is performed in accordance with the CCR Fugitive Dust Control Plan dated October 12, 2015.

Control measures such as watering, street sweeping, wheel washes, housekeeping, reduced speed limits, and covered trucks have been used throughout the year to control fugitive dust.

### 4.0 RECORD OF CITIZEN COMPLAINTS

There have been no citizen complaints in 2017 about fugitive dust.

### 5.0 SUMMARY OF ANY CORRECTIVE MEASURES TAKEN

A fugitive dust monitoring report for 2017 is included in **Appendix A**. As stated in the Report, no fugitive dust crossed the property line during any of the events listed. The Report lists the description of fugitive dust source, the correction actions taken, and the results of the actions.

## **APPENDIX A**

2017 Fugitive Dust Monitoring Report

2017

Fugitive Dust Monitoring Reports				
Date	Time	Description of fugitive dust source	Observer	Corrective action taken and results of the action
4/14/17	12:06 PM	Fly Ash Line to IVCS	Jeff Harter	Repair Line
5/17/17	5:32 PM	Top Ash Line	Roger Sablone	Tighten Flange
5/24/17	5:56 PM	" "	" "	Replace Line
5/26/17	11:05 AM	ACI Silo	Jeff Harter	Stop Unloading (Silo Full)
5 <sup>26</sup> <del>5/30</del> /17	11:31 AM	Fly Ash Line to IVCS	" "	Repair Line
<del>7/26/17</del>	<del>7:04 AM</del>	<del>UTC</del>		
8/1/17	8:02 AM	Fly Ash Line	Art Rillo	Repair Line
8/7/17	10:08 AM	Fly Ash Transport Line	Chris Burton	Replace Expansion Joint
9/2/17	5:54 PM	4-1 Precip. Trunk Line	Don Foley	Replace Line
9/16/17	6:00 PM	Fly Ash Line to IVCS	Joel McCallon	Repair Line
10/2/17	5:24 AM	" "	Drew Bierman	Replace Expansion Joint
10/16/17	5:42 PM	Fly Ash Line	Chris Burton	Repair Line
11/13/17	4:28 PM	U#4 Precip House	Tim Jorgensen	Repair Leak
11/27/17	5:41 PM	U#3 Top Ash Line	Roger Sablone	Replace Expansion Joint
11 <sup>29</sup> <del>11/30</del> /17	9:04 AM	Pug Mill Dust Collector	Jeff Harter	Repair Dust Collector

No Fugitive Dust Crossed The Property Line During Any of the Above Listed Events