

2024 FUGITIVE DUST CONTROL REPORT AES INDIANA PETERSBURG GENERATING STATION 6925 NORTH STATE ROAD 57 PETERSBURG, INDIANA 47567

ATLAS PROJECT NO. 170AES0005

DECEMBER 23, 2024

PREPARED FOR:

AES INDIANA 6925 NORTH STATE ROAD 57 PETERSBURG, INDIANA 47567

ATTENTION: MR. BRADEN HENSON



December 23, 2024

Mr. Braden Henson AES Indiana 6925 North State Road 57 Petersburg, Indiana 47567-0436

Re: 2024 Fugitive Dust Control Report Petersburg Generating Station AES Indiana Petersburg, Indiana Atlas Project No. 170AES0005

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Dear Mr. Henson:

Atlas Technical Consultants is pleased to present the 2024 Fugitive Dust Control Report for the AES Indiana Petersburg Generating Station. This report was prepared to document the dust control measures, describe the effectiveness of the measures, and to identify any citizen complaints related to dust problems.

We appreciate the opportunity to assist you with this project. If you have any questions concerning information contained in this report, please do not hesitate to call either of the undersigned at 317.849.4990.

Sincerely, Atlas Technical Consultants

knothil

Sendhil Kumar, P.E. Principal Engineer

Danizo

Juan D. Carrizo, P.E. Senior Project Engineer

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Attachments: 2024 Fugitive Dust Monitoring Summary Report

2024 Fugitive Dust Control Report AES Petersburg Generating Station Petersburg, Indiana December 2024

Prepared for: AES Indiana, 6925 N. State Road 57, Petersburg, Indiana 47567 Prepared by: Atlas Technical Consultants, 7988 Centerpoint Drive, Indianapolis, Indiana 46256

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A. 2024 Fug	gitive Dust Monit	oring 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 during 2024. 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 4 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 sulphur dioxide (SO2) control.

The combustion by-products of coal are bottom ash, fly ash, and FGD waste. Bottom ash is sluiced to dewatering bins. Fly ash is conveyed via a dry ash handling system to storage silos. Depending on the quantity of fly ash, it 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 or an off-site facility.

The wet FGD systems use limestone to reduce Sulphur Dioxide 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 a by-product that is mixed with fly ash and used as structural fill for the closure of Ash Ponds A and A'.

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 by-product traveling on plant roads
- Trucks carrying fly ash and FGD by-product depositing material in the landfill
- Active portions of CCR landfill
- Dried portions of the settling ponds
- CCR placement as structural fill in the ash ponds in preparation of pond closure in-place.

2.0. MONITORING

2.1. FREQUENCY OF MONITORING

Fugitive dust is monitored daily as part of normal plant 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, under closure conditions

2.3. CONTROL MEASURES

The CCR handling equipment is designed to minimize dust.

Bottom ash is sluiced with water and piped to dewatering bins. The sluice water facilitates bottom ash handling and reduces the amount of dust that may be generated. Dewatered bottom ash can then 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 arranged facility. Conditioning ash with wet FGD byproduct facilitates ash handling and reduces dust generation. 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 fugitive dust that may be generated. The gypsum is used as structural fill for the closure in-place of the ash ponds. The FGD for Unit 3 produces a byproduct that is used to condition the fly ash. The conditioned material is loaded onto trucks for transport to an on-site landfill or an off-site facility for disposal. The trucks are covered with tarps to reduce fugitive dust.

The speed limit is 15 mph on plant roads and parking lots. Reduced speed limits at the site minimizes fugitive dust. In 2024, all portions of the landfill had a vegetative cover. No ash was deposited in the landfill over the past year.

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

Controlling 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, housekeeping, reduced speed limits, and covered trucks are used throughout the year to control fugitive dust.

4.0. RECORD OF CITIZEN COMPLAINTS

There have been no citizen complaints in 2024 about fugitive dust.

5.0. SUMMARY OF ANY CORRECTIVE MEASURES TAKEN

A summary fugitive dust monitoring report for 2024 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: 2024 Fugitive Dust Monitoring Summary Report

1/3, P3, dust, fly ash line leak
1/3, By Prod, dust, from CCP haul trucks tracking on to road
1/8, P3, dust, Precip hopper F-44 Fly Asah leak
1/11, IUCS, dust, fly ash leak
1/17, contractor, dust, coming from CCP haul truck off site
1/19, P3, oil, 3-1 Fly Ash Blower leak
1/22, P3, dust, fly ash line leak in trench west of MS Bldg area
1/31, P4 Bottom Ash Hopper Discharge Line Leak

2/2, By Prod, dust, from CCP haul trucks tracking on to road2/9, P4, fly ash line exp jt leak in trench with water2/23, P3, dust, fly ash leak in 3-1 Precip enclosure2/29-3/1, vac truck leaking on plant road, P4 FGD duct cleaning

3/9, P4, flue gas, 4-2 ID Fan off leaking around shaft3/11, By Prod, dust from IUCS Fly Ash Day Tanks3/29, By Prod, dust, tracking on road CCP haul trucks

4/13, P4, fly ash line leak in trench 4/30, P3, fly ash line exp jt leak behind Comm Bldg

5/2, P3, dust, fly ash line leak 2nd flr5/13, Railroad, dust from cleaning main RR track line running thru plant area5/23, By Prod, dust from CCP haul trucks tracking on road By Gyp Dewatering

6/22, P4, dust, 4-2 Pulv Coal Leak 6/23, P4, dust, fly ash line leak in trench N Switchyard 6/24, P3, fly ash leak #37 Hopper 6/25, P4, fly ash leak #1 Hopper

7/1, P3, fly ash leaks Precip Hoppers7/16, By Prod, dust, fly ash leak at IUCS7/30, By Prod, dust, fly ash leak in trench near Security Office

8/4, P3, dust, Precip Hoppers 31 & 37 fly ash leak
8/8, P3, dust, Precip Hopper #18 fly ash leak
8/12, P4, dust, Precip Hopper #30 fly ash line leak
8/16, By Prod, dust, CCP haul trucks tracking on road after light rain event
8/26, P3 Fly Ash 3A-6 Hopper Exp Jt leak
8/28, P3 Fly Ash leak in trench

9/3, By Prod, dust, CCP haul trucks tracking on road 9/7, P3, dust, multiple fly ash leaks

9/8, P4, dust, Precip Hopper #16 & 24 fly ash leaks
9/10, P3, dust, Precip fly ash line valve leak
9/18, P3, dust, 3-2 Pulv coal leak
9/18, P3, dust, fly ash linel leak in trench
9/19, By Prod, dust, from IUCS area
9/23, P3, dust, blowing plugged fly ash line Bridge area
9/26, By Prod, dust from CCP haul trucks tracking on road
9/26, P3, fly ash on ground east of bridge from plugged line
9/30, P3, dust, fly ash linel leak in Blr Bldg trench
10/1, By Prod, dust from CCP haul trucks tracking on road after light rain event

10/6, P3, fly ash dust from dumping Precip hoppers - P3 off line
10/8, P3, fly ash dust from Economizer valve leak - P3 off line
10/14, P4, dust fly ash line leak half way up hill plant raod area
10/21, By Prod, dust from IUCS Bldg exhaust
10/25, By Prod, dust from CCP haul trucks tracking on road
10/29, P3, dust, blowing fly ash line out vent east end of bridge moisture concern

11/27, P3, Fly Ash Leak in Trench in Boiler Building