ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

2021 FUGITIVE DUST CONTROL REPORT
IPL PETERSBURG GENERATING STATION
6925 NORTH STATE ROAD 57
PETERSBURG, INDIANA 47567

ATC PROJECT NO. 170LF01140

DECEMBER 9, 2021

PREPARED FOR:

AES INDIANA
6925 NORTH STATE ROAD 57
PETERSBURG, INDIANA 47567

ATTENTION: MR. WIL TEAGUE

December 9, 2021

ATC Group Services / Atlas

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Mr. Wil Teague
Senior Scientist
AES Indiana
6925 North State Road 57
Petersburg, Indiana 47567-0436

Re: 2021 Fugitive Dust Control Report
Petersburg Generating Station
AES Indiana
Petersburg, Indiana
ATC Project No. 170LF01140

Dear Mr. Teague:

ATC Group Services, an Atlas Company, is pleased to present the 2021 Fugitive Dust Control Report for the AES 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,

ATC Group Services LLC

Bill Paraskevas, P.E.
Principal Engineer

Copies: Wil Teague (3)

Attachments:
2021 Fugitive Dust Monitoring Summary Report

2021 Fugitive Dust Control Report
AES Petersburg Generating Station
Petersburg, Indiana
December 2021

Prepared for: AES Indiana,
6925 N. State Road 57, Petersburg, Indiana 47567
Prepared by: ATC Group Services,
7988 Centerpoint Drive, Indianapolis, Indiana 46256

Table of Contents

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 2021. 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. Coal combustion residuals (CCR) waste product was also placed as structural fill in Ash Pond A in 2021 as part of the closure plan for said basin.

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 by-product. 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 Pond 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 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. 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 Ash Pond A as part of the in-place closure of this 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 minimize fugitive dust. In 2021, 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 2021 about fugitive dust.

5.0. SUMMARY OF ANY CORRECTIVE MEASURES TAKEN

A summary fugitive dust monitoring report for 2021 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: 2021 Fugitive Dust Monitoring Summary Report

2021

Fugitive Dust Monitoring Reports

Date	Time	Description of fugitive dust source	Observer	Corrective action taken and results of the action
2/24/21	0828	Top Ash Line	Mike Gadlage	Replace Expansion Joint
3/9/21	1730	Top Ash Line	Josh Johnson	Repair Line
3/17/21	0856	Ash Pump	Mike Gadlage	Replace Pump Seals
3/30/21	1000	Fly Ash Line	Jeff Harter	Repair Line
5/30/21	1745	" "	Roger Sablone	" "
5/31/21	1738	Fly Ash Hoppers	Don Foley	Repair Hopper Leaks (patch)
6/10/21	1729	" "	Roger Sablone	" "
6/14/21	1731	BB Filter Separator	Roger Sablone	Patch Hole
6/30/21	0535	#4 Ash Silo	Don Foley	" "
7/3/21	1734	Top Ash Line	Roger Sablone	Repair Line
7/6/21	1514	Plant Roadway (Gravel)	Jeff Harter	Water Roads
7/12/21	0831	Top Ash Line	Roger Sablone	Repair Line
7/24/21	0534	" "	Don Foley	Weld Line
7/27/21	0536	" "	" "	" "
7/30/21	0542	" "	Chris Burton	Repair Line
8/7/21	0523	Fly Ash Feeder	Charles Sapp	Patch Feeder
8/16/21	0527	Fly Ash Line	Chris Burton	Replace Expansion Joint
8/20/21	0726	" "	Art Rillo	Repair Line
8/28/21	0546	" "	Chris Burton	Replace Expansion Joint
9/22/21	1733	" "	Roger Sablone	Repair Line
9/27/21	1738	" "	Charley Sapp	" "

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