



**2023 FUGITIVE DUST CONTROL REPORT  
AES INDIANA PETERSBURG GENERATING STATION  
6925 NORTH STATE ROAD 57  
PETERSBURG, INDIANA 47567**

ATLAS PROJECT NO. 170LF01358

DECEMBER 29, 2023

PREPARED FOR:

AES INDIANA  
6925 NORTH STATE ROAD 57  
PETERSBURG, INDIANA 47567

ATTENTION: MR. JEFF HARTER



December 29, 2023

Mr. Jeff Harter  
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**Re: 2023 Fugitive Dust Control Report  
Petersburg Generating Station  
AES Indiana  
Petersburg, Indiana  
Atlas Project No. 170LF01358**

Dear Mr. Harter:

Atlas Technical Consultants is pleased to present the 2023 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**

A handwritten signature in black ink, appearing to read "Sendhil Kumar".

Sendhil Kumar, P.E.  
Principal Engineer

A handwritten signature in black ink, appearing to read "Juan D. Carrizo".

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

Copies: Braden Henson

Attachments:  
2023 Fugitive Dust Monitoring Summary Report

**2023 Fugitive Dust Control Report  
AES Petersburg Generating Station  
Petersburg, Indiana  
December 2023**

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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## **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 2023. 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 (SO<sub>2</sub>) control. Coal combustion residuals (CCR) waste product was also placed as structural fill in Ash Ponds A and A' in 2023 as part of the closure plan for said basins.

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 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

### **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 Ponds A and 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 minimizes fugitive dust. In 2023, 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 2023 about fugitive dust.

### **5.0. SUMMARY OF ANY CORRECTIVE MEASURES TAKEN**

A summary fugitive dust monitoring report for 2023 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: 2023 Fugitive Dust Monitoring Summary Report**

## Pete Spills & Releases Year 2023

1/2, MH, oily process water, diesel fuel heaters tipped over in pit  
1/2, P4 FGD, process water, Reclaim water line leak east of Sump #8  
1/3, P3 FGD, process water, stack drain line leaking  
1/4-15, P3 stack, air borne debris deposits, FGD carryover issues  
1/4-6, By Prod, dust, tracking on roads from CCP haul trucks  
1/5, BOP, process water, Sump #10 overflow - Sewage Plant effluent  
1/5, By Prod, IUCS Bldg Sumps overflowed  
1/10, ECCP & By Prod, dirt & CCP haul trucks tracking  
1/10, BOP, dust from Street Sweeper  
1/11-13, ECCP & By Prod, dirt & CCP haul trucks tracking after light rain/snow events  
1/14, P2, river circ water coming out manhole lid east of Intake Structure  
1/14, By Prod, CCP haul trucks from FGD WWT Headworks tracking on road  
1/14, Units, oil , 3-1 SBAC leak  
1/17, By Prod, CCP haul trucks tracking  
1/17, P3, process water, CT basin overflow Unit off line in Outage  
1/17-20, P3 FGD, pluggage cleanup into River Road  
1/23, P3 stack, air borne debris deposits, dried leftover materials in stack  
1/24, P4 FGD, 4-1 SO2 Booster Fan oil  
1/26-27, By Prod, CCP haul trucks tracking after previous day snow/rain event  
1/27, MH, dust, tracking on coal haul road  
1/31, By Prod, CCP haul trucks tracking after light snow/freezing rain event  
1/31, BOP, dust from Street Sweeper

2/1, P4, process water, dump Bottom Ash "A" Hopper  
2/2, MH, diesel fuel oil, spill @ mobile equip fuel station  
2/3, By Prod, dust, tracking on roads from CCP haul trucks  
2/14, P3 FGD, slurry, D Module Absorber Header leak  
2/15, By Prod, CCP haul trucks tracking after light rain event  
2/15, P3, EHC Fluid, 3-1 Pump plug broke off leaked into Bldg trench  
2/19, P3, dust, fly ash line leak  
2/22, MH, dust, coal pile, etc high winds  
2/23, P3 Precip, ash leaks  
2/23, By Prod, CCP haul trucks tracking after light rain event  
2/25, P4, dust, 4-2 Precip fly ash line leak  
2/28, P4, dust, fly ash from economizer hopper vent leak inside bldg  
2/28, By Prod, dust, tracking on roads from CCP haul trucks

3/1, By Prod, dust, IUCS Fly Ash Day dumped  
3/2, P3, process water, bottom ash line leak in trench  
3/2, P3, dust, Baghouse compartment #8 door fly ash leak  
3/6, By Prod, dust & tracking, small pile of CCP's on bridge pavement  
3/8, Site Liability, dust, tracking on roads from dirt haul trucks for Ash Pond closure  
3/9, P3, process water, Cooling Tower Basin overflow  
3/9, Mechanics or Plant Lubricators, oily contaminated debris Mech Pad area  
3/9, P2 Control Rm, HVAC freon leak



3/11, P2&3 Baghouse, dust, fly ash line leak by Comm Bldg artea  
3/13, P4 FGD, process water, slurry leak north side  
3/13, P4, dust, 4-2 Pulv coal fines leak  
3/14, P3, oil, 3-3 Coal Feeder oil leak  
3/14, P3 FGD, process water, slurry into River Road area  
3/15, Site Liability & By Prod, dust, tracking on roads from dirt haul trucks for Ash Pond closure & CCP's  
3/16, By Prod, CCP's over Headworks Pad barriers  
3/30, Site Liability, dust, tracking on roads from dirt haul trucks for Ash Pond closure

4/1, P4, oil, 4-1 TDBFP oil pp leak  
4/7, By Prod, tracking from Headworks by CCP Haul Trucks  
4/9, P4 FGD, C Tower Quencher Pump line leak  
4/11, MH, sewage holding tank overflow  
4/12, MH, drainage issue SE side Coal Pile  
4/14, By Prod, dust, haul trucks around Security Gate 1  
4/14, By Prod, chemical, old Polymer leaking from totes in IUCS gravel area  
4/17, Site Liability, dust, hi winds hauling dirt A Ash Pond Closure  
4/17, WT, process water, Service Water Tank overflow  
4/19, P3, coal dust, 3-3 Pulv coal leak  
4/23, P2, oil leak, Turbine Hyd Cplg  
4/26, P2, Fly Ash Line Leak Comm Bldg area  
4/28, P2, Asbestos from Steam Line  
4/29, P3 SCR, ammonia skid leak

5/10, BOP, oil, Used Oil Tank containment overflow into No. 3 Fuel Oil Tank containment  
5/11, P2, process water, bottom ash line leak in trench by MS Bldg  
5/12, P4 Outage, Gyp Dewatering, process water, draining Tanks  
5/12, Site Liability, A Ash Pond Closure, silt fencing for storm water runoff  
5/12, P4 Outage, process water, CT mud removal  
5/15, WT, process water, Service Water Line leak  
5/22, P3 FGD, slurry tank overflow  
5/23, P1 & P2 Unit Transformers oily contaminated rock  
5/24, P3 FGD, slurry leak running out pump house bldg  
5/24, Mech's Pad / Used Oil area, oily contaminated debris  
5/24, P2 FGD, Atomizing Air Compressor oil leaks  
5/25, P3, process water, bottom ash recir water leak in trench inside bldg  
5/31, P4 Outage, oil, 4-1 SO2 Booster Fan oil skid

6/9, P3, oil, 3-2 PA Fan OB Brg oil leak  
6/9, WT, process water, low pH water in temporary CT Acid Tank containment  
6/13, P3 FGD, oil, 3-2 SO2 BF Fan OB Brg oil leak  
6/14, P3, dust, fly ash line elbow leak 2nd flr outside bldg  
6/16, P4 Outage, blow out fly ash line top of hill east of bridge  
6/19, By Prod, CCP haul slight spillage at Security Gate 1 exit  
6/27, P4, fuel oil, ignition oil valve leak  
6/27, P2&3, ammonia, SCR supply line relief valve small leak  
6/30, Site Liability, concrete trucks for WWT pad proj tracking on road up hill to bridge

6/30, P3, process water, Bot ash line leak at B SFC

7/3, Site Liability, WWT OWW Pad proj, concrete trucks tracking up plant hill road

7/5, BOP, porta-john on top of coal pile knocked over by prior storm event

7/6, WT, from temp. CT acid tank containment

7/6, P4, dust, Precip Hopper Fly Ash Line leak

7/6, WT, process water, Service Water Tank overflowing

7/8, P4, dust, Fly Ash Line leak up hill east of Gate 2

7/9, P4,, Ball Mill slurry line leak

7/10, By Prod, process water from Gyp dewatering Bldg north side

7/13, BOP, potable water underground line leak IUCS area

7/13-14, By Prod, tracking on roads by CCP haul trucks

7/20, P4, dust, Precip A4 Hopper gate fly ash leak

7/20, Contractor, Sterling Boiler truck hyd oil hose rupture

7/24 & 26, By Prod, tracking on roads by CCP haul trucks after rain event

7/28, By Prod, dust, IUCS CCP Storage Bldg area

8/8, By Prod, tracking on roads by CCP haul trucks

8/8, contractor, process water, cleaning MSNW bldg HVAC coils

8/10, lubricators, spillage when transferring into Used Oil Tanks

8/14, WT, from temporary Cooling Tower acid tank containment

8/14-15, By Prod, tracking on roads by CCP haul trucks after rain events

8/15, WWT, oil, leaking from regular trash roll-off dumpster

8/16, Site Liability, standing water in ditch from "C" Ash Pond Closure to "A" Pond ditch

8/21, P4, dust, Fly Ash Line leak top of hill plant entrance road

8/24, P3, dust, 3-2 Pulv SW discharge pipe coal leak

8/26, P3, dust, 3-5 Pulv discharge pipe coal leak

8/28, By Prod, FGD WW Headworks Pad, CCP spillage on east block

9/4, P3, oil, 3-2 Fly Ash Blower sight glass leak

9/6-7, By Prod, FGD process water, from Gyp Dewatering Bldg, P4 Filtrate Pp failure

9/7, FGD, process water, running out FGD Pp Bldg to River Road area

9/7, By Prod, grey water, sewage holding tank overflow IUCS Maint trailer

9/7, BOP, tracking on roads bottom of hill by Limestone & CCP haul trucks

9/11, P4, chemical, coal additive 4-3 CaBr leak

9/12, P4, Bottom Ash C Hopper leak

9/14, By Prod, FGD process water, from N end Gyp Dewatering Bldg

9/15, P3, process water, Cooling Tower Basin overflowing Unit off line

9/15, WT, Cooling Tower Acid Tanks, temporary containments, clean up

9/15, WT, process water, Service Water Tank overflowing

9/15, P4, dust, fly ash line exp jt leak bridge near Security Gate #2

9/19, P3 FGD, scrubber slurry D Module valve leaks

9/20, P4 FGD, oil in 4-2 Oxidation Air Compressor containment

9/21, P3 FGD Reclaim Water line leak in Fan Alley

9/21, BOP, tracking on roads after light rain event

9/22, P3, dust, fly ash leak E-34 Hopper

9/26, P4, Bottom Ash leak B Hopper

9/26, WT, process water, Service Water Tank overflowing

9/26, P2, process water, Cooling Tower Basin overflowing

9/28, By Prod, tracking on roads after rain event

10/2, ByProd, dust, IUCS Fly Ash Day Tanks

10/2, P3, dust, fly ash line exp jt leak in trench near St Help Bldg

10/4, P4, dust, fly ash line elbow leak in 4-2 Precip Bldg

10/5, P2 SCR Catalyst removal, leakage from dumpster during rain event

10/6, By Prod, tracking on roads

10/9, P3, oil leak 3-1 Fly Ash Blower

10/9, P4, process water, Cooling Tower Basin overflowing Unit off line

10/9, P4, dust, fly ash line leak in trench

10/11, P3, process water, bottom ash line leak in trench in Blr Bldg

10/12, By Prod, tracking on roads

10/12, P3, dust, fly ash line plugged in trench by Security Gate 2 area

10/16, P4, process water, P4 CTMU line gasket leak

10/16, BOP, vacuum truck spillage P4 north roads to Headworks

10/16, process water, Service Water Tank overflowing

10/16/23, P3 FGD Slurry onto River Road

10/16, By Prod, tracking on roads

10/19, By Prod, tracking on roads after light rain event

10/19, WWT, process water, from southwest corner OWW Reactor overflow hi influent

10/20, P3 & P4, CTMU underground line leak in Scrubber area

10/22, P3, dust, fly ash leak D-31 Precip Hopper area

10/26, P3, dust, 3-2 Pulv coal fines leak

10/27, By Prod, tracking on roads after rain event

10/29, P3FGD, CTMU underground line leak to Scrubber aDemisters

10/29, P4, Fuel Oil, ignition oil line leaks

10/31, WT, process water, draing Seal Water Plant

10/31, P3, external boiler wash down

11/6, ByProd, dust, IUCS conveyor from Filter Cake Bldg

11/7-21, BOP, underground leak near toe slope west side of "A" Ash Pond

11/8, Contractor, Aux Boiler Proj, leak diesel fuel tank on crane

11/16, ByProd, dust, CCP haul trucks tracking on road

11/17, ByProd, CCP haul trucks tracking on road after rain event

11/20, WT, process water, Service Water Tank overflowing

11/22, P4 FGD slurry, 4A Tower overflowed

11/24, fuel oil, aux boiler initial fill line leak

11/25, P4 FGD Reclaim water line leak

12/4, P3, process water, multiple bottom ash line leaks from outage work

12/5, P4 FGD, process water, slurry tank overflow, also caused 4-1 BF Fan trip

12/6, By Prod, dust, from CCP haul trucks tracking during previous day very light rain event

12/6, AES Clean Energy, tracking mud on Blackburn road , tree removal, Solar & Battery Proj

12/6, P3, process water, 3C bottom ash hopper suction line leak

12/11, P3, debris on ground, from P3 Stack unit startup

12/13, P4, process water, "A" bottom ash hopper flange leak

12/17, IUCS, process water, P3 FGD spent slurry tanks overflow

12/17, P3, process water, 3-1 Pulv coal pyrite line leak

Dec 1-18, P4 FGD, hydraulic oil, various slurry control valve hyd oil leaks

12/19, P4, debris on vehicles, from P4 Stack when FGD Pumps tripped