

CCR COMPLIANCE

FUGITIVE DUST CONTROL PLAN

Prepared for:



NRG Power Midwest LP
Cheswick Generating Station
Springdale, Pennsylvania

Prepared by:



CB&I Environmental & Infrastructure, Inc.
Pittsburgh, Pennsylvania 15235

February 2017

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Figure 1 – Site Layout and Potential CCR Fugitive Dust Sources

Attachment A – Recordkeeping Logs

Plan Review/Assessment Log

Date of Review	Reviewer Name	Amendment Required (YES/NO)	Sections Amended and Reason
September 2015	Jill Buckley, NRG Steve Frank, NRG Jesse Varsho, CB&I	NA	Original Plan
February 2017	Jill Buckley, NRG Steve Frank, NRG David Shott, CB&I Laurel Lopez, CB&I	YES	Section 2.2.3, Section 4.2, Figure 1, and Log RCW 5.10-1 (Attachment A); revised to incorporate remote drag chain system for bottom ash handling.

1.0 Introduction

On December 19, 2014, the administrator of the United States Environmental Protection Agency signed the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities final rule (the Rule). The Rule was published in the Federal Register on April 17, 2015 and becomes effective on October 19, 2015. The Rule establishes a comprehensive set of requirements for the disposal of CCR in landfills and surface impoundments at coal-fired power plants under Subtitle D of the Resource Conservation and Recovery Act. These requirements include compliance with location restrictions, design criteria, operating criteria, groundwater monitoring and corrective action, and closure and post-closure care aspects. The operating criteria include air criteria specified in Title 40 of the Code of Federal Regulations (CFR), §257.80 to address the potential pollution caused by windblown dust from CCR units. According to the Rule, owners or operators of CCR units must adopt measures that will effectively minimize CCR from becoming airborne at the facility by developing and operating in accordance with a fugitive dust control plan (Plan) with adequate dust control measures.

The Cheswick Generating Station, operated by NRG Power Midwest LP (NRG), a subsidiary of NRG Energy, Inc., is a coal-fired power plant located in Springdale, Pennsylvania. The Rule applies to this facility due to the disposal of CCR that is generated from the combustion of coal at the site. CCR units associated with the station operations include the Cheswick Ash Disposal Site, the Bottom Ash Recycle Pond (Recycle Pond), and the Bottom Ash Emergency Pond (Emergency Pond).

This Plan has been prepared to comply with the requirements as specified in §257.80(b)(1-7) of the Rule, including certification by a professional engineer as documented in Section 7.0 of this Plan. Additionally, this Plan will be placed in the Cheswick facility's operating record per §257.105(g)(1), noticed to the State Director per §257.106(g)(1), and posted to the publicly accessible internet site per §257.107(g)(1).

2.0 Facility Description

2.1 Process Overview

The Cheswick station is an electric generating facility located at the intersection of Pittsburgh and Porter Streets in Springdale, Pennsylvania. The facility utilizes one main boiler (exhausting through a single stack) which fires coal as the primary fuel and natural gas as an auxiliary fuel during startup, shutdown, and upset conditions. Pollution control equipment for the main boiler includes low nitrogen oxide (NO_x) burners, electrostatic precipitator (ESP) with flue gas conditioning for particulate matter control, selective catalytic reduction system for NO_x control, and a Flue Gas Desulfurization (FGD) system unit to reduce sulfur dioxide (SO₂) emissions. The FGD unit is a wet limestone scrubber with forced oxidation that produces commercial-grade gypsum available for use in wallboard manufacturing. The station also has an oil-fired auxiliary boiler which exhausts to a separate stack.

2.2 CCR Fugitive Dust Sources

The Rule applies to fugitive dust originating from CCR units, roads, and other CCR management and material handling activities. CCR generated at the Cheswick station includes fly ash, bottom ash, and gypsum. The following sub-sections provide a description of fugitive dust sources from handling each type of CCR. Each of these elements is highlighted on Figure 1 included with this Plan.

2.2.1 Cheswick Ash Disposal Site

The Cheswick Ash Disposal Site is owned and operated by NRG and is located approximately three miles from the Cheswick station proper. The ash disposal site has been identified as an existing CCR landfill according to the Rule. CCR materials including fly ash, bottom ash, and gypsum are transported by tarped trucks from the station to the ash disposal site where they are dumped and then spread and compacted with a bulldozer.

2.2.2 Fly Ash Handling

Fly ash is generated from coal combustion in the boiler and is removed from the gas stream electrostatically in the ESP and then pneumatically conveyed to a fly ash silo for storage. From this silo, the ash is pneumatically conveyed to a pugmill where it is wetted to 10 to 15 percent moisture, mixed, and loaded into tarped trucks for transport to the Cheswick Ash Disposal Site.

2.2.3 Bottom Ash Handling

Compared to fly ash, bottom ash is a heavier, coarser material that falls to the bottom of the boiler and has a typical moisture content of approximately 20 percent. From the ash hopper underneath the boiler, bottom ash is sluiced to a submerged flight conveyor (remote drag chain), which carries

and deposits the materials into concrete bunkers. As the bottom ash moves along the conveyor, gravity dewatering occurs. From the bunkers, the dewatered bottom ash is handled via front-end loaders and placed into tarped trucks, which pass through a truck wash and then transport the materials to the Cheswick Ash Disposal Site.

The remote drag chain system has replaced the prior bottom ash handling method that relied upon sluicing to hydrobins located across Pittsburgh Street from the station. Accordingly, the hydrobins have since been deactivated, and the corresponding flows of water/suspended ash to the Recycle Pond and Emergency Pond have ceased. Although the ponds retain their designation as CCR units, they will no longer be receiving CCR materials; however inputs from low-volume waste streams will continue. Under normal operations, the ponds have never been represented as viable contributing sources of CCR fugitive dust emissions, since all solid materials are maintained in a submerged condition. However, the required annual cleanout of the ponds (and transport of the removed materials) does create the potential for fugitive dust generation, and as such, controls implemented during pond cleanout activities are discussed in Section 4.0 of this Plan.

2.2.4 Gypsum Handling

Within the FGD, gypsum is a damp by-product formed through the reaction of SO₂ with the injected limestone slurry. Gypsum is used as a raw material in the manufacture of wallboard, and when commercial market conditions allow, this material is beneficially sold to outside companies. When gypsum cannot be sold due to market conditions or the gypsum does not meet specifications, these materials are transported and disposed at the ash disposal site. Gypsum is processed on covered conveyors and temporarily stored in an on-site dome to control emissions. Gypsum is loaded into trucks at the dome; the trucks are then tarped and transport the gypsum to the Cheswick Ash Disposal Site. This same truck loading procedure is followed for those trucks transporting gypsum to commercial markets. Additionally, the station maintains the capability to load marketable gypsum directly from the on-site dome to awaiting barges via an enclosed conveyor system.

2.2.5 Transport Roadways

As described above, trucks transport conditioned fly ash, bottom ash, and gypsum to the Cheswick Ash Disposal Site. Within the limits of the Cheswick station, and with the exception of a minimal stretch of roadway near the bottom ash ponds (which now principally affords access for cleaning), the trucks travel on paved roads. Once outside the station, the public roadways and the initial portion of the ash disposal site internal road are paved. The internal road transitions from a paved to unpaved surface as approach is made to the actual operating footprint of the ash disposal site. The internal and public roadways and haul routes are shown on Figure 1 of this Plan.

3.0 Fugitive Dust Control Regulatory Requirements

3.1 CCR Rule Air Criteria

Under the Rule, the owner or operator of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.

In order to document these measures, the owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan. According to §257.80(b), the Plan must include the following elements:

- Identification and description of the CCR fugitive dust control measures that will be used to minimize CCR from becoming airborne at the facility, along with an explanation of how the measures selected are applicable and appropriate for site conditions.
- Description of procedures used to emplace CCR as conditioned CCR at CCR landfills. (Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids.)
- Description of procedures used to log citizen complaints received by the facility involving CCR fugitive dust events.
- Description of procedures to periodically assess the effectiveness of the Plan.

The Plan should be updated anytime there is a change in conditions that would substantially affect the written Plan.

In addition to the fugitive dust control plan, §257.80(c) requires the owner or operator of a CCR unit to file an annual fugitive dust control report.

3.2 Other Fugitive Dust Regulatory Requirements

Prior to the promulgation of the Rule, the Cheswick station has been required by other regulations and permits to minimize and monitor fugitive dust from the site.

3.2.1 Title V Operating Permit

The facility is operated according to Title V Operating Permit No. 0054 and Installation Permit No. 0054-I004a issued by the Allegheny County Health Department (ACHD). The permits incorporate fugitive dust emission requirements as codified in Article XXI of the ACHD air regulations. The following citations are relevant to fugitive emission restrictions:

- According to §2104.05 of the ACHD air regulations, the permittee shall not conduct or allow to be conducted any materials handling operation in such a manner that emissions from such operation are visible at or beyond the property line.
- According to §2105.49 of the ACHD air regulations, the person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit, shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne.

The permits also include emission source specific conditions addressing enclosed transfer requirements.

3.2.2 Solid Waste Permit

The Cheswick Ash Disposal Site is operated under Solid Waste Permit No. 300720 issued by the Pennsylvania Department of Environmental Protection (PADEP). The disposal site is operated according to the terms in this permit and the associated PADEP Form G(A), “Air Resources Protection Dust Emissions Estimate and Control Plan,” submitted with the solid waste permit application. The permit and Form G(A) include the following requirements related to fugitive emissions at the ash disposal site:

- Seven dust fall monitors are installed at the ash disposal site in locations approved by PADEP. Dust fall reports are submitted to PADEP quarterly.
- Vehicle traffic is limited to 15 miles per hour (mph) within the ash disposal site.
- All trucks shall be covered with tarps to minimize dust emissions during transit.
- A water tank truck will be used as necessary to suppress dust on active disposal areas, roadways, and parking areas.
- Prior to departure from the site, trucks will pass through a truck washing station to minimize dust emissions during transit.

4.0 Fugitive Dust Control Practices and Procedures

Potential CCR fugitive dust sources have been identified and described in Section 2.0 of this Plan. This section will detail control measures employed at the facility to minimize airborne dust from these sources in accordance with §257.80(b)(1-2) of the Rule.

4.1 Fly Ash Handling

Fly ash is recovered from the hoppers at the base of the ESP and is pneumatically conveyed to a silo controlled with a bin vent filter for storage. From the silo, the fly ash is loaded into a truck, where the load-out point is controlled with a water spray system (barrier curtain). Additionally, emissions from trucks are reduced by keeping a light load in the bed that is not equal to the full capacity of the truck. This allows for available freeboard on the truck bed walls, reducing the amount of dust that is likely to escape out of the bed prior to tarping. After loading is complete, the truck is tarped and driven through a truck wash prior to traveling to the Cheswick Ash Disposal Site.

4.1.1 Monitoring

Observations of visible emissions from the fly ash handling activities are performed once per week during normal daylight operations. A trained employee records whether any emissions are observed and whether these emissions extend beyond the facility property line.

4.1.2 Recordkeeping

Fly ash handling records are maintained in logs completed by station personnel. Blank copies of these logs are included in Appendix A of this Plan. The station maintains the following records for the fly ash handling system:

- Daily records of each time the water suppression system is used at the fly ash silo (Log RCW 5.9-1A).
- Weekly records of visible emission observations of the fly ash handling operations (Log RCW 5.10-1).
- Weekly records confirming that the fly ash is uniformly wet (Log RCW 5.8-1).

The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

4.2 Bottom Ash Handling

4.2.1 Pond Cleaning

Per Section 2.2.3, the Recycle and Emergency Ponds are periodically cleaned out (typically on an annual basis) to remove accumulated materials and to restore capacity for settling solids. The pond to be cleaned is drained to expose the underlying materials, which are then scraped from the bottom and placed along the pond sideslopes to promote further dewatering. Once the materials have sufficiently dewatered (but not to the point of becoming dry), they are removed from the pond and loaded into tarped trucks. The tarped trucks pass through a truck wash and then travel to the Cheswick Ash Disposal Site. After the cleaning is completed, normal operations are restored, maintaining preferential use of the Recycle Pond.

4.2.2 Remote Drag Chain Operations

The remote drag chain system is situated immediately adjacent to the station's coal pile (refer to Figure 1) and receives sluiced bottom ash from the hopper beneath the boiler. The bottom ash is fed onto a submerged flight conveyor that advances the materials slowly along an incline, allowing for the ash to dewater. At the upper end of the conveyor, the bottom ash exits and is deposited into one of two concrete bunkers where free water continues to drain and is collected in a sump for recycle back into the process. In addition to being concrete-lined, the bunkers are walled on three sides to provide wind protection. As constructed, the bunkers provide the necessary elements and controls to eliminate potential designation of this bottom ash management area as a CCR Pile per the Rule. The open side of the bunker provides access to front-end loaders, which scoop the bottom ash and place it into tarped trucks. The tarped trucks pass through a truck wash and then travel to the Cheswick Ash Disposal Site.

4.2.2.1 Monitoring

Observations of visible emissions from the bottom ash handling activities are performed once per week during normal daylight operations. A trained employee records whether any emissions are observed and whether these emissions extend beyond the facility property line.

4.2.2.2 Recordkeeping

Bottom ash handling records are maintained in logs completed by station personnel. Blank copies of these logs are included in Attachment A of this Plan. The station maintains the following records for the bottom ash handling system:

- Weekly records of visible emission observations of the bottom ash handling operations (Log RCW 5.10-1).

The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

4.3 *Gypsum Handling*

Fugitive dust from handling and transport of gypsum is controlled using enclosed conveyors and transport points combined with water application. Damp gypsum materials awaiting transport are temporarily stored in an enclosed dome and then eventually loaded into trucks via a front-end loader. The trucks are tarped prior to leaving the dome and then driven through a truck wash before traveling to either the Cheswick Ash Disposal Site or to wallboard manufacturing facilities. Barge loading operations from the dome are conducted using an enclosed conveyor system with a telescoping chute that minimizes the open drop distance of the gypsum and potential for dust generation. The roads and area surrounding the gypsum dome are watered on an as-needed basis.

4.3.1 *Monitoring*

Observations of visible emissions from the gypsum handling activities are performed once per week during normal daylight operations. A trained employee records whether any emissions are observed and whether these emissions extend beyond the facility property line.

4.3.2 *Recordkeeping*

Gypsum handling records and visible emissions observations are maintained in weekly logs (Log RCW 5.4-1) completed by station personnel. A blank copy of this log is included in Attachment A. The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

4.4 *Transport Roadways*

Paved and unpaved road surfaces internal to the station and the Cheswick Ash Disposal Site (refer to Figure 1) are watered to reduce fugitive dust emissions. The amount of time dedicated to watering the roads is a function of the dryness of the surface and is determined through daily observations by station personnel. The amount of water applied varies seasonally. Roads and parking lots are also periodically swept to reduce potential entrainment of dust. Fugitive dust emissions are further controlled by posting and maintaining a maximum vehicle speed limit of 10 mph within the boundaries of the station property.

All trucks exiting the station and carrying fly ash, bottom ash, or gypsum are equipped with automatic tarping systems that are designed to provide an adequate seal and prevent windblown CCR emissions during transport. Drivers routinely inspect the tarping system for proper closure and tears, rips or any other defects that could contribute to excessive dust emissions during transport.

4.4.1 *Monitoring*

Monitoring of fugitive dust from roadways is accomplished by maintaining a log of the time, location, type, and amount of roadway surface treatment.

4.4.2 *Recordkeeping*

Roadway maintenance records regarding watering/dust control are documented in daily logs (Log RCW 5.6-1) completed by station personnel. A blank copy of this log is included in Attachment A. The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

4.5 *Cheswick Ash Disposal Site*

Fly ash, bottom ash, and gypsum are transported by tarped and washed trucks from the station to the Cheswick Ash Disposal Site. Fugitive dust is minimized at the ash disposal site by spreading and compacting the materials with a bulldozer as soon as practical after being delivered (i.e., the freshly dumped materials are not left on the landfill surface for extended periods of time). Additionally, a water truck regularly circulates to spread water on the internal roadways and the open operating areas of the disposal site. Vehicle traffic operating within the disposal site is restricted to a 15 mph speed limit. Before exiting the ash disposal site and returning to public roadways, trucks are required to pass through a truck wash to remove excess dust.

4.5.1 *Monitoring*

Seven dust fall monitors are installed at the ash disposal site in locations approved by PADEP. Dust fall reports are submitted to PADEP quarterly as a condition of the Solid Waste Permit.

4.5.2 *Recordkeeping*

Records of dust control activities, including road watering and sweeping, are maintained as part of daily operations checklists completed by supervising personnel at the ash disposal site. A blank copy of the checklist is included in Attachment A. The completed checklists are forwarded to the station's Environmental Department and retained for at least five years. Also as noted above, dust fall reports are submitted to PADEP on a quarterly basis.

4.6 *Annual Reporting*

In accordance with §257.80(c) of the Rule, the station must prepare an annual fugitive dust control report that includes the following information:

- A description of actions taken to control CCR fugitive dust
- A record of all citizen complaints
- A summary of any corrective actions taken

The first annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the Cheswick facility's operating record. Subsequent annual reports will be completed one year after the date of the initial annual report. Additionally, as required, the annual reports will be placed in the Cheswick facility's operating record per §257.105(g)(2),

noticed to the State Director per §257.106(g)(2), and posted to the newly established publicly accessible internet site per §257.107(g)(2).

5.0 Procedures for Citizen Complaints

In accordance with §257.80(b)(3) of the Rule, this section outlines the procedure that NRG follows (as contained in NRG's Environmental Policies and Procedures Manual) to log citizen complaints involving fugitive dust events at the station and the ash disposal site. Within 24 hours of receiving a citizen complaint, the station's environmental coordinator will log the complaint in NRG's Environmental Management Information System (EMIS) database. The EMIS database will automatically forward notice of the complaint to the station manager, NRG's regional environmental manager, and NRG's Corporate Environmental Department. NRG will then conduct a thorough investigation. The results of the investigation will be recorded, entered into the EMIS database, and communicated to the appropriate parties. If the investigation confirms a fugitive dust emission event, NRG will undertake a root cause analysis to address the source of the excess fugitive dust and will develop a plan to mitigate future occurrences and remediate impacts, as necessary.

Citizens can contact the Cheswick Generating Station directly at 724-275-1400.

6.0 *Procedures for Plan Assessments and Amendments*

Fugitive dust control practices for each source of CCR fugitive dust are described in Section 4.0 of this Plan. Based on current monitoring requirements and observations, these control measures have been determined to be effective. This Plan will be periodically reviewed by the station's environmental coordinator to ensure full compliance with all fugitive dust control, monitoring, and recordkeeping procedures as outlined herein. During this review, the Plan's effectiveness will be assessed as required per §257.80(b)(4) of the Rule. This review will serve to either confirm the continuing effectiveness of the Plan or will identify sections that require revision/upgrade to reflect any relevant changes in station operations, CCR unit aspects, or necessary improvements in fugitive dust control protocols.

Accordingly, when new processes or modifications of existing processes are planned, the station's environmental coordinator will evaluate the project for potential changes to this Plan. In accordance with §257.80(b)(6) of the Rule, the Plan will be amended to add any new CCR units or to update any modifications in the operation of existing fugitive dust sources. The amended Plan will be reviewed and recertified by a registered professional engineer and will be placed in the Cheswick facility's operating record as required per §257.105(g)(1). The amended Plan will supersede and replace any prior versions. Availability of the amended Plan will be noticed to the State Director per §257.106(g)(1) and posted to the newly established publicly accessible internet site per §257.107(g)(1).

A record of Plan reviews/assessments is provided on the first page of this document, immediately following the Table of Contents.

7.0 Professional Engineer Certification

The undersigned registered professional engineer is familiar with the requirements of §257.80 and has visited and examined the Cheswick station or has supervised examination of the Cheswick station by appropriately qualified personnel. The undersigned registered professional engineer attests that this CCR Fugitive Dust Control Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and meets the requirements of §257.80, and that this Plan is adequate for the Cheswick station. This certification was prepared as required by §257.80(b)(7).

Name of Professional Engineer: Laurel C. Lopez

Company: CB&I Environmental & Infrastructure, Inc.

Signature: *Laurel C. Lopez*

Date: 3/2/17

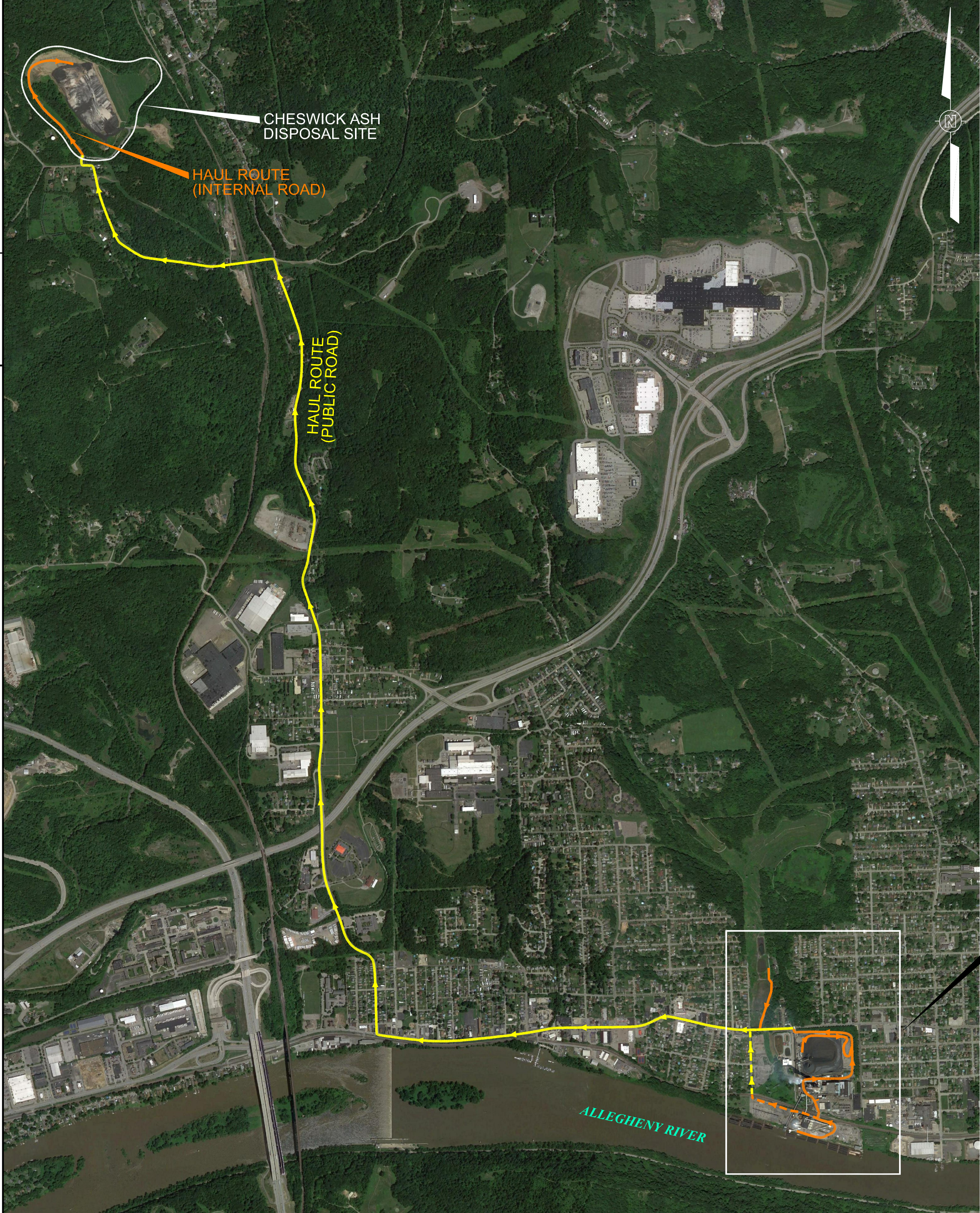
PE Registration State: Pennsylvania

PE Registration Number: PE-055673-E

Professional Engineer Seal:



Figure



OVERALL VIEW



CHESWICK GENERATING STATION PROPER

ENLARGED SITE PLAN



REV	DESCRIPTION / ISSUE	DATE	APPROVED
A	ADDED REMOTE DRAG CHAIN SYSTEM FOR BOTTOM ASH HANDLING	2/28/17	LCL



CB&I
500 Penn Center Boulevard, Suite 1000
Pittsburgh, Pennsylvania 15235

DESIGNED BY:

DJS

DRAWN BY:

GSJ

CHECKED BY:

DJS

APPROVED BY:

JPV

DATE:

8/26/15

SCALE:

AS SHOWN

DRAWING NO.

1009134001-D1

SHEET NO.

--



FIGURE 1
SITE LAYOUT AND POTENTIAL CCR
FUGITIVE DUST SOURCES
CHESWICK GENERATING STATION
SPRINGDALE, ALLEGHENY COUNTY, PENNSYLVANIA

Attachment A

Recordkeeping Logs

RCW 5.4-1

GYPSUM HANDLING WEEKLY RECORDKEEPING ⁽¹⁾THIS FORM IS TO BE COMPLETED WEEKLY

Name:	Employee ID:
Date:	Time:
Visual Inspection of the Gypsum Handling System	
<ul style="list-style-type: none"> Is any dust being emitted from the equipment (conveyors, dome) to the outside air? In operation: Yes <input type="checkbox"/>	Circle One: Yes / No / NA If yes, identify the equipment and corrective actions taken. <hr/> <hr/>
<ul style="list-style-type: none"> Inspect transfer equipment (belts and rollers). Is the equipment in proper working order? In operation: Yes <input type="checkbox"/>	Circle One: Yes / No / NA If no, identify the equipment and corrective actions taken. <hr/> <hr/>
Was Dust Suppressant Applied to Pile (including the off-spec pile)?	Yes / No / NA Name of Material: <hr/> Dilution Ratio: _____ : _____ *Attach Purchase Record of chemical applied

⁽¹⁾ Refer to Section 5.4 of the Cheswick Station Dust Management Plan for additional information on recordkeeping and compliance related to this form. A photograph of each area to be observed is included in Appendix F of the Plan.

Comments: _____

Return Form Each Week to Environmental Department

RCW 5.6-1

DAILY ROADWAY, SHOULDER, PARKING LOT, AND COAL PILE MAINTENANCE FOR DUST CONTROL

	Date/ Time	Location	Method of Treatment	Material Used ⁽¹⁾	Odometer Reading	Dilution Ratio of Water to Binder
Vacuum Sweeping of Paved Surface – Roads and Parking Lots			NA	NA	Start: Stop:	NA
Repair of Paved Surface			Circle those that apply: Patching Repaving Treatment\Sealing	Circle those that apply: Asphalt Concrete Tar\Sealant	NA	NA
Spraying of Unpaved Surface and Shoulders of Paved Surfaces			NA	Circle those that apply: Water Chemical\Binder	Start: Stop:	____:____
Spraying/Flushing of Paved Surfaces			NA	Circle those that apply: Water Chemical\Binder	Start: Stop:	____:____
Spraying of Coal Pile <i>(For water cannon, note time on and off)</i>			NA	Circle those that apply: Water Chemical\Binder	Start: Stop:	____:____

⁽¹⁾ If chemical treatment, attach purchase records of binder(s) or suppressant(s)

Name: _____

Comments: _____

Return Form to Environmental Department

RCW 5.8-1

ASH HANDLING, PROCESSING, AND STORAGE
WEEKLY RECORDKEEPING

THIS FORM IS TO BE COMPLETED WEEKLY

Observer:		Date:	
Time:			
<ul style="list-style-type: none">Fly Ash Unloader (silo)		Is Ash uniformly wet?	Yes / No / NA
In operation: Yes <input type="checkbox"/>		If ash flow unimpeded?	Yes / No / NA
		If NO, what action was taken?	

Comments: _____

Rev. 4
May 2015

ASH HANDLING, PROCESSING, AND STORAGE WATER USAGE RECORDKEEPING

Please record the time and date in which a water suppression system is turned on and off.

[illegible]

Return Form Each Month (or when all lines completed) to Environmental Department

RCW 5.10 -1

ASH HANDLING, PROCESSING AND STORAGE
WEEKLY RECORDKEEPING**THIS FORM IS TO BE COMPLETED WEEKLY**

Observer:		Date:	
Time:			
<ul style="list-style-type: none"> Fly Ash Silo Dust Collector Vents (baghouses) <p>In operation: Yes <input type="checkbox"/></p>		<p>Any emissions observed? Yes / No / NA</p> <p>If yes, did emissions extend beyond the property line? Yes / No / NA</p> <p>If yes, what action was taken?</p>	
<ul style="list-style-type: none"> Fly Ash Silo Load-out <p>In operation: Yes <input type="checkbox"/></p>		<p>Any emissions observed? Yes / No / NA</p> <p>If yes, did emissions extend beyond the property line? Yes / No / NA</p> <p>If yes, what action was taken?</p>	
<ul style="list-style-type: none"> Bottom Ash Bunker Loading, Bunker Storage, Truck Loading <p>In operation: Yes <input type="checkbox"/></p>		<p>Any emissions observed? Yes / No / NA</p> <p>If yes, did emissions extend beyond the property line? Yes / No / NA</p> <p>If yes, what action was taken?</p>	
<ul style="list-style-type: none"> Bottom Ash Hopper Loading/Conveying/Stacking/Screening/Storage Piles (across Pittsburgh Street) <p>(NA – Bottom Ash Conveying/Screening Operation defunct – No longer store material on the ground outside)</p>		<p>Any emissions observed? Yes / No / NA</p> <p>If yes, did emissions extend beyond the property line? Yes / No / NA</p> <p>If yes, what action was taken?</p>	

Comments: _____

Return Form Each Week to Environmental Department

DAILY OPERATIONS CHECKLIST

Date:

Weather:

SITE OPERATIONS

1. Attach map of waste placement locations ☐
 2. Attach copy of waste volume report ☐
 3. Problems at any Waste Pickup Area? yes ☐ no ☐
 4. Problems with Waste Handling? yes ☐ no ☐
 5. Record spills on road --
Time? Driver? Truck? What happened? None
 6. Deviation from Operations Contract? yes ☐ no ☐
 7. Potential Labor Disputes? yes ☐ no ☐
 8. Emergency Disposal Activities? yes ☐ no ☐
 9. Site Security
 - a. Front Gate Locked? yes ☐ no ☐
 - b. Pond Locked? yes ☐ no ☐
 10. Dust Control Activities
- Note: A log of daily dust control activities is required by the site permit***
- a. Paved Roads:
 - i. Sweeping or Watering, from _____ to _____
 - ii. Note any road maintenance or repairs
 - iii. Note reasons for suspending dust control operations, if applicable
 - b. Unpaved Roads:
 - i. Treatment or watering, from _____ to _____
 - ii. Note locations.
 - iii. Note type of dust suppressant, if used.
 - iv. Suppressant mix, if applicable.
 - v. Attach suppressant purchase records, if used.

[illegible]

MAINTENANCE ITEMS:

11. If a rainstorm occurred in the past 24-hours:
 - a. Check storm drain discharge.
 - i. Estimated quantity _____
 - b. Perform Rainstorm Inspection.
 - ii. Attach Rainstorm Checklist ☐

12. Check Leachate
- a. Flowing freely? yes ☐ no ☐
- b. Unusual conditions? yes ☐ no ☐

Note: A log of weekly leachateflow is required by the site permit.

13. Fuel Tank Containment Dry? yes ☐ no ☐

14. Check Truck Wash
a. Sump ☐

CONSTRUCTION ITEMS:

15. Was Clearing and Grubbing Performed? yes ☐ no ☐

16. Was Soil Stockpiled Today? yes ☐ no ☐
- a. Where? Attach map ☐
- b. How Much? _____
- c. # of Nutrient Test Samples
- d. # of USDA Class. Samples
- e. # of Particle Size Samples
- f. # of LOI Samples

17. Was Base System Subgrade Prepared? yes ☐ no ☐
- a. Where? Attach Map
- b. Who inspected for seeps?
- c. Who performed compaction tests?
- d. Who checked final surface?
- e. Attach Inspection Report

18. Was Bottom Ash Placed? yes ☐ no ☐
- a. Where? Attach map.
- b. Who checked depth? How?
- c. Attach Inspection Report

[illegible]

19. Is Final Cover Placement Scheduled for this Week? yes ☐ no ☐
 - a. Quantity _____
 - b. Attach Stockpile sampling results
 - c. Attach survey of final cover subgrade.
20. Was Final Cover Placed? yes ☐ no ☐
 - d. Who inspected subgrade?
 - e. Who performed visual classification?
 - f. Who observed subgrade compaction?
 - g. Who verified final cover thickness?
 - h. Is final cover survey scheduled?
 - i. Attach Inspection reports.
21. Berms Placed Today? yes ☐ no ☐
 - a. New? _____
 - b. Repaired? _____
 - c. Attach copies of nutrient test results
22. Is Seeding Scheduled for This Week? yes ☐ no ☐
 - a. Quantity of lime to be used. _____
 - b. Quantity of fertilizer to be used.
 - c. Attach Copies of nutrient test results.
23. Was Seeding Performed? yes ☐ no ☐
 - a. Attach map.
 - b. Describe seedbed preparation
 - c. Quantity of seed _____
 - d. Quantity of lime _____
 - e. Quantity of fertilizer _____
 - f. Type of mulch _____
 - g. Quantity of mulch _____
24. Stone Placed on Access Roads? yes ☐ no ☐
 - h. Where? Attach map _____
 - i. Quantity _____
25. Was silt fence placed _____ removed _____ or maintained _____
 - j. Where? Attach map _____
 - k. Describe how maintained? _____
26. Check Silt Fence Constructed Yesterday _____

[illegible]