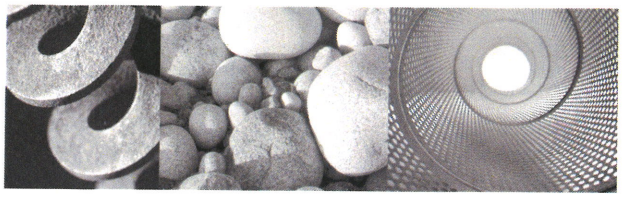


GEI Consultants

Consulting
Engineers and
Scientists

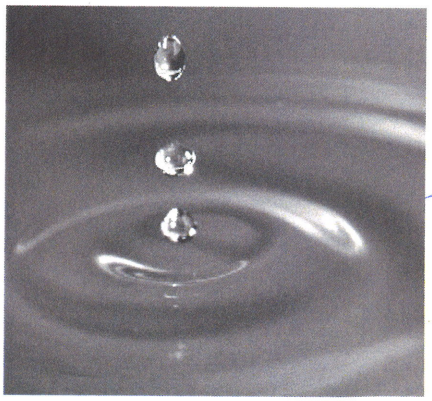
CCR Rule Compliance Report Summary

Mercer Generating Station, Hamilton Township, New Jersey

Submitted to:
PSEG Fossil LLC
80 Park Plaza
Newark, NJ 07101

Submitted by:
GEI Consultants, Inc.
18000 Horizon Way, Suite 200
Mt. Laurel, New Jersey 08054

April 17, 2018
Project 1504710



Tyler K. Schott, P.E.
Project Manager
NJ PE #24GE04794800
Date: April 17, 2018

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Figures

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1. Introduction

On behalf of PSEG Fossil LLC (PSEG), GEI Consultants, Inc. (GEI) has prepared this report to comply with the requirements of 40 CFR 257 as applicable to the former Mercer Generating Station:

- 40 CFR 257.71(a);
- 40 CFR 257.73(a)(2)
- 40 CFR 257.73(c)(1);
- 40 CFR 257.102;
- 40 CFR 257.73(e)
- 40 CFR 257.82(c); and
- 40 CFR 257.73(d)

There are two inactive Coal Combustion Residuals (CCR) impoundments at the facility:

- North Fly Ash Pond; and
- South Fly Ash Pond.

1.1 Description of Impoundments

The site of the former Mercer Generating Station is owned by PSEG Power LLC and located at 2512 Lamberton Road in Hamilton Township, New Jersey. The facility has an inactive 10-acre North Fly Ash Pond and an inactive 6-acre South Fly Ash Pond that ceased receiving CCR prior to October 19, 2015. The impoundments are constructed as predominantly incised ponds with a bermed wall along Lamberton Road that varies in height above the surrounding grade by five-to-six feet. A Notice of Intent (NOI) to initiate closure of the inactive CCR impoundments, under 40 CFR Section 257.100 of the CCR Rule, was posted on the PSEG CCR Rule Compliance Data and Information website on November 6, 2015. Though closure by removal of all CCR is no longer permitted under Section 257.100 of the CCR Rule, closure of these CCR impoundments is proceeding in accordance with Section 257.102 of the CCR Rule and the associated 547-day timeframe extension. As documented in a March 23, 2017 memo prepared by GEI, CCR removal was completed on October 19, 2016.

2. Liner Design Criteria

The owner of an existing inactive CCR surface impoundment must document whether or not such unit was construed with a liner that meets the conditions outlined in 257.71(a). Based on the *Closure Plan: North and South Fly Ash Pond for the Mercer Generating Station*, dated January 19, 2015 and in accordance with 257.110(b)(5), the bottom liner was removed as part of closure activities for the CCR units. As outlined in the Closure Certification Memo, the CCR removal activities were completed on October 19, 2016. Therefore, the quantitative evaluation of each liner is not necessary.

3. Construction History

3.1 Hazard Potential Classification

Given that there is no longer CCR present within the facility impoundments, the hazard potential classification for the North and South Fly Ash ponds is Low. Additionally, in accordance with Section 257.73(a)(3), a written Emergency Action Plan is not required for CCR units at this facility.

3.2 Owner/Operator

The inactive CCR surface impoundments at the facility are owned and were operated by PSEG Fossil located at 80 Park Plaza, Newark, New Jersey.

3.3 Location

The location of the CCR units are shown on **Figure 1**.

3.4 Statement of purpose

The CCR units are not being used. They are inactive as CCR removal activities were completed on October 19, 2016.

3.5 Watershed

The inactive CCR surface impoundments are located within the Duck Creek and Upper Delaware River to Assunpink Creek watershed, which is 2,124 acres.

3.6 Foundation

Based on the visual observations of the impoundments during weekly inspections, a review of historical aerial photographs depicting the impoundment area, the inactive status of the impoundments and the advancement of the closure process to date (i.e., completion of CCR removal from all units), quantitative evaluation of each impoundment foundation is not necessary. Any future potential release of CCR from these units has been mitigated.

3.7 Construction

Based on the visual observations of the impoundments during weekly inspections, a review of historical aerial photographs depicting the impoundment area, the inactive status of the impoundments and the advancement of the closure process to date (i.e., completion of CCR

removal from all units), quantitative evaluation of each impoundment is not necessary. Any future potential release of CCR from these units has been mitigated.

3.8 CCR Unit Details

Figure 2 shows the initial inactive CCR unit layout. **Figure 3** shows the CCR impoundment removal area.

3.9 Instrumentation

The CCR impoundments did not have any instrumentation associated with them therefore this section is not applicable. Furthermore, CCR has been removed and any potential future release of CCR from these units has been mitigated.

3.10 Capacity

All CCR has been removed from the impoundments and as such, quantitative evaluation of area-capacity curves for each impoundment are not necessary. Any future potential release of CCR from these units has been mitigated.

3.11 Spillway

All CCR has been removed from the impoundments. Stormwater accumulating in the impoundments is managed through infiltration and evaporation. The spillway will no longer be utilized and as such, quantitative evaluation of each spillway is not necessary. Any future potential release of CCR from these units has been mitigated.

3.12 Maintenance Plan

Based on the inactive status of the impoundments and the advancement of the closure process to date (i.e., completion of CCR removal from all units), a maintenance plan for the impoundments is not required. As such, quantitative evaluation of a maintenance plan for each impoundment is not necessary. Any future potential release of CCR from these units has been mitigated.

3.13 Instability

The impoundments are primarily constructed as incised ponds and have had all CCR removed. As such, quantitative evaluation of instability records is not necessary. Any future potential release of CCR from these units has been mitigated.

3.14 Periodic Safety Factor Assessments

Given that all CCR has been removed from the inactive impoundments at the facility, the impoundments are no longer under any loading conditions and any future potential release of CCR from these units has been mitigated. Therefore, further evaluation of a specific factor of safety for each unit is unnecessary.

4. CCR Closure

4.1 Closure

PSEG completed removal of all CCR from the CCR impoundments on October 19, 2016.

4.2 Written Closure Plan

The written Closure Plan is as follows:

4.2.1 Narrative Description of CCR Closure by Removal of CCR - Section 257.102(b)(1)(i) and (b)(1)(ii):

Closure of the North and South Fly Ash impoundments at this facility through removal of CCR. The CCR material, including any base liner material and CCR along the sidewalls, was removed using heavy equipment and transported off-site for disposal. A New Jersey Licensed Professional Engineer (Tyler K. Schott, NJ PE #24GE04794800) observed and documented removal activities. Removal activities were completed on October 19, 2016.

Following CCR removal, the groundwater monitoring will be initiated to verify closure by removal has been completed in accordance with Section 257.102(c).

4.2.2 Closure by Leaving CCR in Place - Section 257.102(b)(1)(iii)

Not Applicable

4.2.3 An Estimate of the Maximum Inventory of CCR Ever On-Site - Section 257.102(b)(1)(iv):

Based on the approximate area of the CCR units (16 acres) and the estimated range in depth of CCR material between 6 and 14 feet above mean sea level, the estimated maximum volume of CCR ever maintained at the site at any one time during the active life of the units is 207,000 cubic yards.

4.2.4 An Estimate of the Largest Area Requiring Final Cover – Section, 257.102(b)(1)(v)

Not Applicable

4.2.5 Schedule for Completing CCR Closure – Section 257.102(b)(1)(vi)

The schedule for completing CCR impoundment closure at the Mercer Generating Facility is as follows:

- CCR Removal – Completed as of October 19, 2016
- Permitting for Monitoring Well Installation – Completed March 2018
- Monitoring Well Installation – 3rd Quarter of 2018
- Completion Initial Groundwater Monitoring – By April 17, 2019
- Initial Groundwater Monitoring and Corrective Action Report – By August 1, 2019
- CCR Surface Impoundment Closure – By April 16, 2020

4.3 Closure by Removal of CCR

In accordance with 257.102(c), the CCR has been completely removed from the CCR units as of October 19, 2016. The groundwater monitoring program will be implemented and baseline monitoring will be completed by April 17, 2019 in accordance with the CCR Rule. In the event that groundwater concentrations exceed applicable groundwater protection standards, corrective action will be initiated and final closure will be achieved by the April 16, 2020 deadline specified in the CCR Rule.

4.4 Post-Closure Care Requirements

CCR units at this facility are closing under Section 257.102(c) and as such, this section is not applicable.

4.5 Initiation of Closure Activities

In accordance with 257.102(e), the CCR closure activities commenced and have been completed within the required timeframe outlined.

4.6 Completion of Closure Activities

In accordance with 257.102(f), the CCR removal activities have been completed within the required timeframe outlined. Compliance with the groundwater monitoring requirements is on-going.

4.7 Deed Notations

Deed notations are not required for CCR removal as noted in 257.102(i)(4).

4.8 Record Keeping

Records are being kept in accordance with 257.102(j).

5. Hydrologic and Hydraulic Capacity

5.1 Flood Control System

The CCR has been removed from the impoundments and they currently only receive stormwater originating from direct rainfall. Stormwater accumulating in the impoundments is managed through infiltration and evaporation. As such, a flood control system is not necessary and a quantitative evaluation the flood control system is not necessary. Any future potential release of CCR from these units has been mitigated.

5.2 CCR Discharge

There is currently no surface water discharge from these impoundments so this section is not applicable.

5.3 Flood Control Plan

CCR has been removed from the impoundments and flooding will not generate a surface water release from an existing spillway. As such, a flood control plan is not necessary. Any future potential release of CCR from these units has been mitigated.

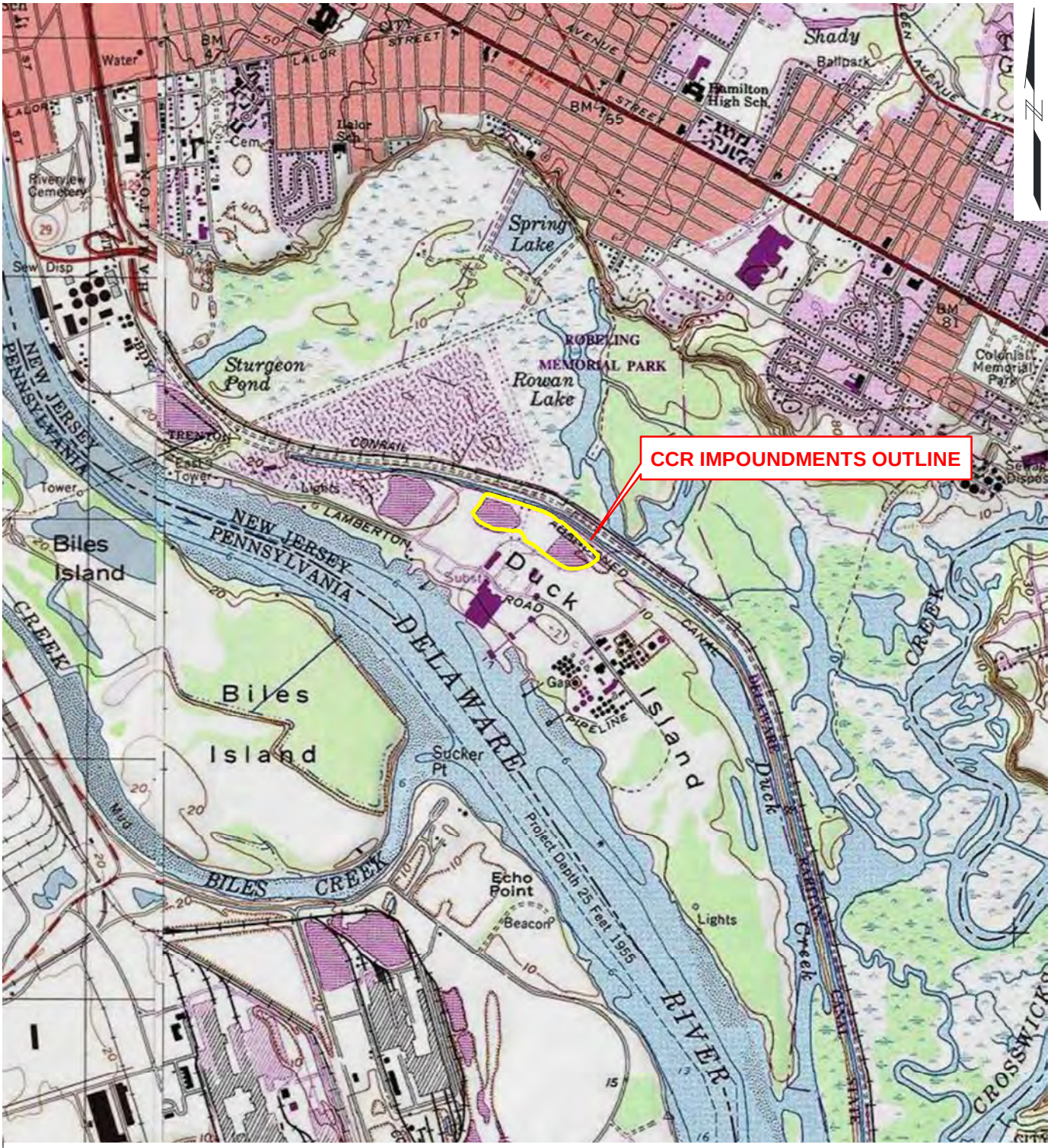
5.4 Record Keeping

Records are being kept in accordance with 257.82(d).

6. Structural Stability

In accordance with 257.73(d), the CCR units must be inspected periodically for structural stability assessment and the inspections documented. As documented in the *2017 Annual Inspection Report* dated October 27, 2017, visual inspections of the CCR surface impoundments were performed by a qualified professional engineer (Tyler K. Schott, NJ, P.E. #24GE04794800) on multiple occasions. As summarized in the *2017 Annual Inspection Report,* dated October 27, 2017, the Impoundments are inactive and all CCR has been removed. Based on visual inspections, the berms are in good condition and no signs of distress or malfunction was observed. Due to the inactive status of the impoundments and the advancement of the closure process to date (i.e., completion of CCR removal from all units), changes in impoundment stability will not increase the chances of any future release of CCR material. The annual inspections will continue to be performed and summarized in the *2018 Annual Inspection Report* in October 2018.

Figures



SOURCE:

1. USGS TOPOGRAPHIC MAP ACCESSED VIA ARCGISONLINE.COM

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SCALE: 1" = 2000'

April 2018 CCR Report PSEG - Mercer Hamilton, New Jersey	GEI Consultants	SITE LOCATION MAP
PSEG Power, LLC New Jersey	Project 1504710	April 2018 Fig. 1

Q:\Project\PSEG - Mercer\2017-08 Annual CCR Inspection Report\Fig 1 - Site Location.mxd

NORTH FLY ASH POND

SOUTH FLY ASH POND

LAMBERTON ROAD

20" DIA. ABOVE GROUND GAS PIPE ON PILES

SPILL BOX NO. 2

NO. 3 WAREHOUSE

230 kV SWITCH YARD

LEGEND

▲ BM–1	SURVEY CONTROL MONUMENT
PL	PROPERTY LINE (APPROXIMATE)
50	EXISTING GROUND SURFACE CONTOUR
	ROAD
X X X	FENCE
	BUILDINGS
PIPE	PIPE
TOWER	ELECTRIC TOWER
	RAILROAD TRACKS
OH	OVERHEAD ELECTRIC
10	PROPOSED EXCAVATION CONTOUR

NOTES:

1. HORIZONTAL DATUM BASED ON NEW JERSEY STATE PLANE COORDINATES, NAD 83.
2. VERTICAL DATUM BASED ON NAVD 88.
3. SITE CONTOURS BASED ON USGS LIDAR SURVEY FROM APRIL 2009. THE DATA WAS OBTAINED FROM THE NEW JERSEY OFFICE OF INFORMATION TECHNOLOGY, OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS.

0 60 120

SCALE: 1" = 60'

April 2018 CCR Report
PSEG - Mercer
Hamilton, New Jersey

PSEG Power, LLC
New Jersey

GEI Consultants

CCR IMPOUNDMENT FOOTPRINT AND INITIAL CONDITIONS PLAN - NORTH AND SOUTH FLY ASH PONDS

Project 1504710 | April 2018 | Fig. 2

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LEGEND

- BM–1 — SURVEY CONTROL MONUMENT
- PL — PROPERTY LINE (APPROXIMATE)
- 50 — EXISTING GROUND SURFACE CONTOUR
- ROAD
- FENCE
- BUILDINGS
- PIPE — PIPE
- TOWER — ELECTRIC TOWER
- RAILROAD TRACKS
- OH — OVERHEAD ELECTRIC
- 10 — PROPOSED EXCAVATION CONTOUR
- EXTENT OF CCR REMOVAL AREA

NOTES:

1. HORIZONTAL DATUM BASED ON NEW JERSEY STATE PLANE COORDINATES, NAD 83.
2. VERTICAL DATUM BASED ON NAVD 88.
3. SITE CONTOURS BASED ON USGS LIDAR SURVEY FROM APRIL 2009. THE DATA WAS OBTAINED FROM THE NEW JERSEY OFFICE OF INFORMATION TECHNOLOGY, OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS.

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SCALE: 1" = 60'

April 2018 CCR Report PSEG - Mercer Hamilton, New Jersey	GEI Consultants	CCR IMPOUNDMENT FOOTPRINT AND REMOVAL AREA - NORTH AND SOUTH FLY ASH PONDS
PSEG Power, LLC New Jersey	Project 1504710	April 2018 Fig. 3

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