PSEG Nuclear LLC
P.O. Box 236, Hancocks Bridge, New Jersey 08038-0236

MAR 01 2017

PSEG
Nuclear LLC

HCH-2017-011

Department of Environmental Protection
Office of Permit Management
Division of Water Quality
PO Box 420
Trenton, N.J. 08625-0420

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM
RESIDUALS DISCHARGE MONITORING REPORT
SL1A STP MONITORING SYSTEM
HOPE CREEK GENERATING STATION
NJPDES PERMIT NJG0256773

Dear Sir or Madam:

Attached is the Residuals Discharge Monitoring Report for the Hope Creek Generating Station for the year of 2016. Also included are the Residuals Waste Characterization Report and the Residuals Transfer Submittal Report of 2016.

This report is required by and prepared specifically for the New Jersey Department of Environmental Protection (NJDEP). It presents only the observed results of measurements and analyses required to be performed by the above agencies. The choice of the measurement devices and analytical methods are controlled by the EPA and the NJDEP, not by the company, and there are limitations on the accuracy of such measurement devices and analytical techniques even when used and maintained as required. Accordingly, this report is not intended as an assertion that any instrument has measured, or that any reading or analytical result represents the true value with absolute accuracy, nor is it an endorsement of the suitability of any analytical or measurement procedure.

If you have any questions concerning this report, please feel free to contact Geoffrey Zeiger at (856) 339-2080.

The Discharge Monitoring Report for Hope Creek Generating Station is now submitted and certified electronically to the NJDEP. This document contains a copy of the Monitoring Report Submittal Forms.

IE25
NRR

Attachments

C Executive Director, DRBC
USNRC - Docket number 50-354

EXPLANATION OF CONDITIONS

For 2016

The following explanations are included to clarify possible deviation from permit conditions.

General - The columns labeled "No. Ex" on the enclosed DMR tabulate the number of daily discharge values outside the indicated limits.

Data reporting and accuracy reflect the working environment, the design capabilities and reliability of the monitoring instruments and operating equipment.

Deviations from required sampling, analysis monitoring and reporting methods and periodicities are indicated on the respective transmittal sheet with explanations below.

Results reported on the Discharge Monitoring Report forms are consistent with permit limits, data supplied from contract laboratories, the 2013 revision of the NJDEP Monitoring Report Form Reference Manual, the 2016 revision to the NJPDES Reference Manual for Online Form Submittal and specific guidance from DEP personnel.

HCH-2017-011
NJPDES DMR

EXPLANATION OF EXCEEDANCES

For 2016

The following exceedances are included in the attached report and explained below.

DSN No.	EXPLANATION
	No Exceedances

PI: 46815
Shell Generation Date: 7/26/2016

State of New Jersey
Department of Environmental Protection

Residuals DMR

HOPE CREEK GENERATING STATION - NJG0256773 - SL1A SQAR-Sludge Holding Tank - 01/01/2016 - 12/31/2016

Permittee:
PSEG NUCLEAR LLC
PO BOX 236

HANCOCKS BRIDGE, NJ 08038

Location of Activity:
HOPE CREEK GENERATING STATION
ARTIFICIAL ISLAND
FOOT OF BUTTONWOOD RD
LOWER ALLOWAYS CREEK, NJ 08038

Report Recipient:
PSE&G Nuclear LLC - MC - N21
Alison Kraus
P.O. BOX 236
HANCOCKS BRIDGE, NJ 08038

NJPDES Permit Number: NJG0256773
Monitoring Period: 01/01/2016 To 12/31/2016
Monitored Location: SL1A SQAR-Sludge Holding Tank
Monitored Location Group:
Region / County: Southern / Salem

Check if Applicable: ☐ No Discharge This Monitoring Period

Monitoring Report Comments:

PI: 46815

Shell Generation Date: 7/26/2016

State of New Jersey

Department of Environmental Protection

Residuals DMR

HOPE CREEK GENERATING STATION - NJG0256773 - SL1A SQAR-Sludge Holding Tank - 01/01/2016 - 12/31/2016

Discharge Monitoring Data:

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Solids, Total	Sample Measurement	*****	*****	*****	*****	1.9	*****	%TS	0	1 Year	COMPOS
00500 + Residuals	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Nitrate Nitrogen, Dry Weight	Sample Measurement	*****	*****	*****	*****	226	*****	MG/KG	0	1 Year	COMPOS
00621 + Residuals	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Nitrogen, Kjeldahl Total, Dry Wt	Sample Measurement	*****	*****	*****	*****	52000	*****	MG/KG	0	1 Year	COMPOS
49579 + Residuals	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Potassium Dry Weight	Sample Measurement	*****	*****	*****	*****	4110	*****	MG/KG	0	1 Year	COMPOS
78472 + Residuals	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Nitrogen, Ammonia Dry Weight	Sample Measurement	*****	*****	*****	*****	9060	*****	MG/KG	0	1 Year	COMPOS
82294 + Residuals	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Calcium Dry Weight	Sample Measurement	*****	*****	*****	*****	17500	*****	MG/KG	0	1 Year	COMPOS
00917 + Residuals	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Molybdenum Dry Weight 78465 + Residuals	Sample Measurement	*****	*****	*****	*****	5.26	*****	MG/KG	0	1 Year	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Phosphorus Dry Weight 78478 + Residuals	Sample Measurement	*****	*****	*****	*****	19100	*****	MG/KG	0	1 Year	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Arsenic, Dry Weight 01003 + Residuals	Sample Measurement	*****	*****	*****	*****	1.44	*****	MG/KG	0	1 Year	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Selenium, Dry Weight 01148 + Residuals	Sample Measurement	*****	*****	*****	*****	2.40	*****	MG/KG	0	1 Year	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Copper, Dry Weight 46394 + Residuals	Sample Measurement	*****	*****	*****	*****	810	*****	MG/KG	0	1 Year	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Beryllium Dry Weight 61524 + Residuals	Sample Measurement	*****	*****	*****	*****	<0.067	*****	MG/KG	0	1 Year	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Cadmium, Dry Weight	Sample Measurement	*****	*****	*****	*****	1.66	*****	MG/KG	0	1 Year	COMPOS
61527 + Residuals	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Zinc, Dry Weight	Sample Measurement	*****	*****	*****	*****	796	*****	MG/KG	0	1 Year	COMPOS
78467 + Residuals	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Lead, Dry Weight	Sample Measurement	*****	*****	*****	*****	9.50	*****	MG/KG	0	1 Year	COMPOS
78468 + Residuals	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Nickel, Dry Weight	Sample Measurement	*****	*****	*****	*****	13.6	*****	MG/KG	0	1 Year	COMPOS
78469 + Residuals	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Mercury, Dry Weight	Sample Measurement	*****	*****	*****	*****	0.440	*****	MG/KG	0	1 Year	COMPOS
78471 + Residuals	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Chromium, Dry Weight	Sample Measurement	*****	*****	*****	*****	7.99	*****	MG/KG	0	1 Year	COMPOS
78473 + Residuals	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	*****			1/Year	COMPOS
	QL	******	******		******	******	******				
Lab Certification #	Sample Measurement	PA166	PA011								
99999 99 Lab	Permit Requirement	REPORT Lab #	REPORT Lab #		REPORT Lab #	REPORT Lab #	REPORT Lab #			Not Applic	NOT AP
	QL	******	******		******	******	******				

PI: 46815
Shell Generation Date: 7/26/2016

State of New Jersey
Department of Environmental Protection
Residuals Waste Characterization Report

HOPE CREEK GENERATING STATION - NJG0256773 - SL1P SQAR-Sludge Production - 01/01/2016 - 12/31/2016

Sample Date: (mm/dd/yyyy)	07/27/2016

Waste Characterization Data:

Parameter	Reported Value	Units	Remark Code	Sample Type
Amt Sludge Rmvd, Gallons *ASR3 + Residuals	10000	GAL/YEAR		CALCTD
Total Amount of Sludge Removed *ASUD + Residuals	0.7197	DMT/YR		CALCTD
Solids, Total 00500 + Residuals	1.900	%TS		COMPOS
Lab Certification # 99999 99 Lab	PA166			NOT AP
Lab Certification # 99999 99 Lab	PA011			NOT AP
Lab Certification # 99999 99 Lab				NOT AP
Lab Certification # 99999 99 Lab				NOT AP
Lab Certification # 99999 99 Lab				NOT AP

PI: 46815
Shell Generation Date: 7/26/2016

State of New Jersey
Department of Environmental Protection

Residuals Transfer Report

HOPE CREEK GENERATING STATION - NJG0256773 - SL1A SQAR-Sludge Holding Tank - 01/01/2016 - 12/31/2016

Permittee:
PSEG NUCLEAR LLC
PO BOX 236

HANCOCKS BRIDGE, NJ 08038

Location of Activity:
HOPE CREEK GENERATING STATION
ARTIFICIAL ISLAND
FOOT OF BUTTONWOOD RD
LOWER ALLOWAYS CREEK, NJ 08038

Report Recipient:
PSE&G Nuclear LLC - MC - N21
Alison Kraus
P.O. BOX 236
HANCOCKS BRIDGE, NJ 08038

NJPDES Permit Number: NJG0256773
Monitoring Period: 01/01/2016 To 12/31/2016
Monitored Location: SL1A SQAR-Sludge Holding Tank
Monitored Location Group: N/A
Region / County: Southern / Salem

Check if Applicable: ☐ No Discharge This Monitoring Period

Monitoring Report Comments:

PI: 46815
Shell Generation Date:

State of New Jersey
Department of Environmental Protection

Residuals Transfer Report

HOPE CREEK GENERATING STATION - NJG0256773 - SL1A SQAR-Sludge Holding Tank - 01/01/2016 - 12/31/

Residuals Transfer Data:

#	Sent To	Rec'd From	Facility ID Number	Amount Transferred		Intra-Facility Monitored Location
				Quantity	Units	
1		X	46815	10000	GALLONS	SL1A SQAR-Sludge Holding Tank
2	X		46249	0.7197	Dry Metric Tons Per Year	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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17						
18						
19						
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21						
22						