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

MAY 24 2018

PSEG
Nuclear LLC

HCH-2018-026

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
DISCHARGE MONITORING REPORT
HOPE CREEK GENERATING STATION
NJPDES PERMIT NJ0025411

Dear Sir or Madam:

Attached is the Discharge Monitoring Report for the Hope Creek Generating Station for the month of April 2018.

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 Tom Adams at (856) 339-1715.

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

NJPDES DMR

Attachments

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

MAY 24 2018

EXPLANATION OF CONDITIONS

April 2018

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.

MAY 24 2018

EXPLANATION OF EXCEEDANCES

April 2018

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

DSN No.	EXPLANATION

No Exceedances

PI: 46815
Shell Generation Date: 4/1/2018

State of New Jersey
Department of Environmental Protection

Surface Water Discharge Monitoring Report

HOPE CREEK GENERATING STATION - NJ0025411 - 461A DSN 461A - DSW - 04/01/2018 - 04/30/2018

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: NJ0025411
Monitoring Period: 04/01/2018 To 04/30/2018
Monitored Location: 461A DSN 461A - DSW
Monitored Location Group:
Region / County: Southern / Salem

Check if Applicable: ☐ No Discharge This Monitoring Period

Monitoring Report Comments:

CTBD sampled and analyzed for TRC 4 times for week ending on 4/21/18 to obtain additional operating information.

PI: 46815
Shell Generation Date: 4/1/2018

State of New Jersey
Department of Environmental Protection

Surface Water Discharge Monitoring Report

HOPE CREEK GENERATING STATION - NJ0025411 - 461A DSN 461A - DSW - 04/01/2018 - 04/30/2018

Discharge Monitoring Data:

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Flow, In Conduit or Thru Treatment Plant	Sample Measurement	35.601	58.912		*****	*****	*****		0	Continuous	METER
50050 1 Effluent Gross Value	Permit Requirement	REPORT 01MOAV	REPORT 01DAMX	MGD	*****	*****	*****	*****		Continuous	METER
	QL	******	******		******	******	******				
Flow, In Conduit or Thru Treatment Plant	Sample Measurement	44.918	58.571		*****	*****	*****		0	Continuous	METER
50050 7 Intake From Stream	Permit Requirement	REPORT 01MOAV	REPORT 01DAMX	MGD	*****	*****	*****	*****		Continuous	METER
	QL	******	******		******	******	******				
pH	Sample Measurement	*****	*****		7.5	*****	8.2		0	1 Week	GRAB
00400 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	6.0 01DAMN	*****	9.0 01DAMX	SU		1/Week	GRAB
	QL	******	******		******	******	******				
LC50 Statre 96hr Acu Mysid Bahia	Sample Measurement	*****	*****		CODE=N Not Required	*****	*****		0	1 Year	COMPOS
TAN3E 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	REPORT 01RPMN	*****	*****	%EFFL		1/Year	COMPOS
	QL	******	******		******	******	******				
IC25 Statre 7day Chr Mysid Bahia	Sample Measurement	*****	*****		CODE=N Not Required	*****	*****		0	1 Year	COMPOS
TBP3E 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	REPORT 01RPMN	*****	*****	%EFFL		1/Year	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Chlorine Produced Oxidants *CPOX 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	<0.1	<0.1	MG/L	0	3 Week	GRAB
	Permit Requirement	*****	*****		*****	0.2 01MOAV	0.5 01DAMX			3/Week	GRAB
	QL	******	******		******	******	******				
Temperature, oC 00010 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	17.7	24.6	DEG.C	0	Continuous	METER
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	36.2 01DAMX			Continuous	METER
	QL	******	******		******	******	******				
Temperature, oC 00010 7 Intake From Stream	Sample Measurement	*****	*****	*****	*****	12.3	15.3	DEG.C	0	Continuous	METER
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX			Continuous	METER
	QL	******	******		******	******	******				
Carbon, Tot Organic (TOC) 00680 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	3.66	3.66	MG/L	0	1 Month	GRAB
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX			1/Month	GRAB
	QL	******	******		******	******	******				
Carbon, Tot Organic (TOC) 00680 2 Effluent Net Value	Sample Measurement	*****	*****	*****	*****	-2.02	-2.02	MG/L	0	1 Month	CALCTD
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX			1/Month	CALCTD
	QL	******	******		******	******	******				
Carbon, Tot Organic (TOC) 00680 7 Intake From Stream	Sample Measurement	*****	*****	*****	*****	3.30	3.30	MG/L	0	1 Month	GRAB
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX			1/Month	GRAB
	QL	******	******		******	******	******				
Sulfate, Total (as SO4) 00945 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	CODE=N Not Req	E=N Not Required	UG/L	0	1 6 Months	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX			1/6 Months	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Boron, Total (as B) 01022 1 Effluent Gross Value	Sample Measurement	*****	*****		*****	CODE=N Not Req	E=N Not Required		0	1 6 Months	COMPOS
	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	UG/L		1/6 Months	COMPOS
	QL	******	******		******	******	******				
Heat (winter) (per Hr.) 81387 1 Effluent Gross Value	Sample Measurement	108	280		*****	*****	*****		0	1 Day	CALCTD
	Permit Requirement	REPORT 01MOAV	662 01DAMX	MBTU/HR	*****	*****	*****	*****		1/Day	CALCTD
	QL	******	******		******	******	******				
Chromium, Total (as Cr) 01034 1 Effluent Gross Value	Sample Measurement	*****	*****		*****	11	11		0	1 Month	COMPOS
	Permit Requirement	*****	*****	*****	*****	200 01MOAV	200 01DAMX	UG/L		1/Month	COMPOS
	QL	******	******		******	******	******				
Nickel, Total Recoverable 01074 1 Effluent Gross Value	Sample Measurement	*****	*****		*****	CODE=N Not Req	E=N Not Required		0	1 6 Months	COMPOS
	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	UG/L		1/6 Months	COMPOS
	QL	******	******		******	******	******				
Zinc, Total (as Zn) 01092 1 Effluent Gross Value	Sample Measurement	*****	*****		*****	41	41		0	1 Month	COMPOS
	Permit Requirement	*****	*****	*****	*****	1000 01MOAV	1000 01DAMX	UG/L		1/Month	COMPOS
	QL	******	******		******	******	******				
Copper, Total Recoverable 01119 1 Effluent Gross Value	Sample Measurement	*****	*****		*****	9.8	9.8		0	1 Quarter	COMPOS
	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	UG/L		1/Quarter	COMPOS
	QL	******	******		******	******	******				
Cyanide, free 00719 1 Effluent Gross Value	Sample Measurement	*****	*****		*****	CODE=N Not Req	E=N Not Required		0	1 6 Months	COMPOS
	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	UG/L		1/6 Months	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Lab Certification #	Sample Measurement	17451	06003		03036	PA051					
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: 4/1/2018

State of New Jersey
Department of Environmental Protection

Surface Water Discharge Monitoring Report

HOPE CREEK GENERATING STATION - NJ0025411 - 461C DSN 461C - DSW internal - 04/01/2018 - 04/30/2018

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: NJ0025411
Monitoring Period: 04/01/2018 To 04/30/2018
Monitored Location: 461C DSN 461C - DSW internal
Monitored Location Group:
Region / County: Southern / Salem

Check if Applicable: ☐ No Discharge This Monitoring Period

Monitoring Report Comments:

PI: 46815
Shell Generation Date: 4/1/2018

State of New Jersey
Department of Environmental Protection

Surface Water Discharge Monitoring Report

HOPE CREEK GENERATING STATION - NJ0025411 - 461C DSN 461C - DSW internal - 04/01/2018 - 04/30/2018

Discharge Monitoring Data:

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Flow, In Conduit or Thru Treatment Plant 50050 1 Effluent Gross Value	Sample Measurement	0.038	0.130	MGD	*****	*****	*****	*****	0	Continuous	METER
	Permit Requirement	REPORT 01MOAV	REPORT 01DAMX		*****	*****	*****			Continuous	METER
	QL	******	******		******	******	******				
Solids, Total Suspended 00530 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	6	6	MG/L	0	1 Month	COMPOS
	Permit Requirement	*****	*****		*****	30 01MOAV	100 01DAMX			1/Month	COMPOS
	QL	******	******		******	******	******				
Petrol Hydrocarbons, Total Recoverable 45501 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	<6	<6	MG/L	0	2 Month	GRAB
	Permit Requirement	*****	*****		*****	10 01MOAV	15 01DAMX			2/Month	GRAB
	QL	******	******		******	******	******				
Carbon, Tot Organic (TOC) 00680 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	5	5	MG/L	0	1 Month	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	50 01DAMX			1/Month	COMPOS
	QL	******	******		******	******	******				
Zinc, Total Recoverable 01094 1 Effluent Gross Value	Sample Measurement	*****	*****	*****	*****	CODE=N Not Req	E=N Not Required	UG/L	0	1 6 Months	COMPOS
	Permit Requirement	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX			1/6 Months	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Copper,	Sample	*****	*****		*****					1	
Total Recoverable	Measurement				CODE=N	Not Req	E=N Not Required		0	6 Months	COMPOS
01119 1	Permit	*****	*****	*****	*****	REPORT	REPORT	UG/L			
Effluent Gross Value	Requirement					01MOAV	01DAMX			1/6 Months	COMPOS
	QL	******	******		******	******	******				
Lab Certification #	Sample	17451	06003		03036	PA051					
	Measurement										
99999 99	Permit	REPORT	REPORT		REPORT	REPORT	REPORT				
Lab	Requirement	Lab #	Lab #		Lab #	Lab #	Lab #			Not Applic	NOT AP
	QL	******	******		******	******	******				

PI: 46815
Shell Generation Date: 4/1/2018

State of New Jersey
Department of Environmental Protection

Surface Water Discharge Monitoring Report

HOPE CREEK GENERATING STATION - NJ0025411 - 462B DSN 462B - DSW Internal - 04/01/2018 - 04/30/2018

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: NJ0025411
Monitoring Period: 04/01/2018 To 04/30/2018
Monitored Location: 462B DSN 462B - DSW Internal
Monitored Location Group:
Region / County: Southern / Salem

Check if Applicable: ☐ No Discharge This Monitoring Period

Monitoring Report Comments:

PI: 46815
Shell Generation Date: 4/1/2018

State of New Jersey
Department of Environmental Protection

Surface Water Discharge Monitoring Report

HOPE CREEK GENERATING STATION - NJ0025411 - 462B DSN 462B - DSW Internal - 04/01/2018 - 04/30/2018

Discharge Monitoring Data:

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Flow, In Conduit or Thru Treatment Plant	Sample Measurement	0.025	0.048		*****	*****	*****		0	Continuous	METER
50050 1 Effluent Gross Value	Permit Requirement	REPORT 01MOAV	REPORT 01DAMX	MGD	*****	*****	*****	*****		Continuous	METER
	QL	******	******		******	******	******				
BOD, 5-Day (20 oC)	Sample Measurement	*****	*****		*****	191	191		0	1 Month	COMPOS
00310 G Raw Sew/influent	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	MG/L		1/Month	COMPOS
	QL	******	******		******	******	******				
BOD, 5-Day (20 oC)	Sample Measurement	1	1		*****	7	7		0	1 Month	COMPOS
00310 1 Effluent Gross Value	Permit Requirement	8 01MOAV	REPORT 01WKAV	KG/DAY	*****	30 01MOAV	45 01WKAV	MG/L		1/Month	COMPOS
	QL	******	******		******	******	******				
BOD, 5-Day (20 oC)	Sample Measurement	*****	*****		96.3	*****	*****		0	1 Month	CALCTD
00310 K Percent Removal	Permit Requirement	*****	*****	*****	87.5 01MOAVMN	*****	*****	PERCENT		1/Month	CALCTD
	QL	******	******		******	******	******				
Solids, Total Suspended	Sample Measurement	*****	*****		*****	338	338		0	1 Month	COMPOS
00530 G Raw Sew/influent	Permit Requirement	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	MG/L		1/Month	COMPOS
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Solids, Total Suspended	Sample Measurement	*****	*****		*****	9	9		0	1 Month	COMPOS
00530 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	*****	30 01MOAV	45 01WKAV	MG/L		1/Month	COMPOS
	QL	******	******		******	******	******				
Solids, Total Suspended	Sample Measurement	*****	*****		97	97	*****		0	1 Month	CALCTD
00530 K Percent Removal	Permit Requirement	*****	*****	*****	85 01MOAVMN	REPORT 01MOAV	*****	PERCENT		1/Month	CALCTD
	QL	******	******		******	******	******				
Oil and Grease	Sample Measurement	*****	*****		*****	<1	<1		0	1 Month	GRAB
00556 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	*****	10 01MOAV	15 01DAMX	MG/L		1/Month	GRAB
	QL	******	******		******	******	******				
Nitrogen, Ammonia Total (as N)	Sample Measurement	*****	*****		*****	6	6		0	1 Month	COMPOS
00610 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	*****	35 01MOAV	REPORT 01DAMX	MG/L		1/Month	COMPOS
	QL	******	******		******	******	******				
Coliform, Fecal General	Sample Measurement	*****	*****		*****	<1	<1		0	1 Month	GRAB
74055 1 Effluent Gross Value	Permit Requirement	*****	*****	*****	*****	200 01MOGE	400 01WKGE	#/100ML		1/Month	GRAB
	QL	******	******		******	******	******				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Zinc,	Sample	*****	*****		*****					1	
Total Recoverable	Measurement				CODE=N	Not Req	E=N Not Required		0	6 Months	COMPOS
01094 1	Permit	*****	*****	*****	*****	REPORT	REPORT	UG/L			
Effluent Gross Value	Requirement					01MOAV	01DAMX			1/6 Months	COMPOS
	QL	******	******		******	******	******				
Copper,	Sample	*****	*****		*****					1	
Total Recoverable	Measurement				CODE=N	Not Req	E=N Not Required		0	6 Months	COMPOS
01119 1	Permit	*****	*****	*****	*****	REPORT	REPORT	UG/L			
Effluent Gross Value	Requirement					01MOAV	01DAMX			1/6 Months	COMPOS
	QL	******	******		******	******	******				
Cyanide, free	Sample	*****	*****		*****					1	
	Measurement				CODE=N	Not Req	E=N Not Required		0	6 Months	COMPOS
00719 1	Permit	*****	*****	*****	*****	REPORT	REPORT	UG/L			
Effluent Gross Value	Requirement					01MOAV	01DAMX			1/6 Months	COMPOS
	QL	******	******		******	******	******				
Lab Certification #	Sample	17451	06003		PA051						
	Measurement										
99999 99	Permit	REPORT	REPORT		REPORT	REPORT	REPORT				
Lab	Requirement	Lab #	Lab #		Lab #	Lab #	Lab #			Not Applic	NOT AP
	QL	******	******		******	******	******				

PSEG
Hope Creek Chemistry
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Mail Code H-15
Hancocks Bridge, NJ 08038

Document Control Desk
USNRC
Docket Number 50-354
Washington, DC 20555