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

# JUN 22 2017



#### HCH-2017-026

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:

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Attached is the Discharge Monitoring Report for the Hope Creek Generating Station for the month of May 2017. Included also are the semi-annual Consolidated Waste Characterization Reports for DSN 461C and DSN 462B.

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 Kyle Culver at (856) 339-2096.

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.

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## HCH-2017-026 NJPDES DMR

## Attachments

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

#### HCH-2017-026 NJPDES DMR

#### **EXPLANATION OF CONDITIONS**

#### May 2017

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-2017-026 NJPDES DMR

EXPLANATION OF EXCEEDANCES

May 2017

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

4

DSN No.

# EXPLANATION

# No Exceedances



PI: 46815 Shell Generation Date:

4/1/2017

# Surface Water Discharge Monitoring Report

## HOPE CREEK GENERATING STATION - NJ0025411 - 461A DSN 461A - DSW - 05/01/2017 - 05/31/2017

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:	05/01/2017 To 05/31/2017
Monitored Location:	461A DSN 461A - DSW
Monitored Location Group:	
Region / County:	Southern / Salem

**Check if Applicable:** No Discharge This Monitoring Period



PI: 46815 Shell Generation Date: 4/1/2017

Surface Water Discharge Monitoring Report

# HOPE CREEK GENERATING STATION - NJ0025411 - 461A DSN 461A - DSW - 05/01/2017 - 05/31/2017

<b>Discharge Monitori</b>	ng Data:								-		
Parameter		Quantity or	Loading	Units	Quali	ty or Concent	ration	Units	No Ex.	Frequency of Analysis	Sample Type
Flow, In Conduit or Thru Treatment Plant	Sample Measurement	47.821	67.854		****	****	*****		0	Continuous	METER
50050 1 Effluent Gross Value	Permit Requirement QL	REPORT 01MOAV	REPORT 01DAMX	MGD	*****	****	*****	***** Y	12.1	Continuous	METER
Flow, In Conduit or Thru Treatment Plant	Sample Measurement	62.106	72.161		*****		*****	an that	0	Continuous	METER
50050 7 Intake From Stream	Permit Requirement QL	REPORT 01MOAV	01DAMX	™GD	*****	*****	***** * "	*****		Continuous	METER
рН	Sample Measurement	*****	*****		8.4	*****	8.5		0	1 Week	GRAB
00400 1 Effluent Gross Value	Permit Requirement QL	*****	*****	2744474 (). 1	6.0 01DAMN	*****	9.0 01DAMX	SÚ		1/Week	GRAB
LC50 Statre 96hr Acu Mysid Bahia	Sample Measurement	*****	<b>#***</b>	COL	E=N Not Req	Jired	***** 1795 (1		0	1 Year	COMPOS
TAN3E 1 Effluent Gross Value	Permit Requirement QL	#****	*****	*****	REPORT 01RPMN	******	*****	%EFFL	N. S.	1/Year	COMPOS
IC25 Statre 7day Chr Mysid Bahia	Sample Measurement	*****	*****	COI	E=N Not Req	***** Jired	*****		0	1 Year	COMPOS
TBP3E 1 Effluent Gross Value	Permit Requirement	1000 xxxxx	3*****	*****	REPORT 01RPMN	******	*****	%EFFL		1/Year	COMPOS
	QL										

Parameter		Quantity or	Loading	Units	Quali	ty or Concen	tration	Units	No Ex.	Frequency of Analysis	Sample Type
Chlorine Produced	Sample	*****	****		****	<0.1	<0.1		0	3 Week	GRAB
*CPOX 1	Permit	*****	*****	*****	*****	0.2	0.5	MG/I		1100K	
Effluent Gross Value	Requirement					01MOAV	01DAMX			3/Week	GRAB
	RQL	*****	******		*****	0.1	0.1	-		o, i i boli	
Temperature,	Sample	*****	*****		****	28.1	33.4				
oC	Measurement								0	Continuous	METER
00010 1	Permit	*****	*****	*****	*****	REPORT	36.2	DEG.C			
Effluent Gross Value	Requirement					01MOAV	01DAMX			Continuous	METER
	QL	******	*****		*****	******	*****				
Temperature,	Sample	****	*****		*****	18.0	20.0				
оС	Measurement	2							0	Continuous	METER
00010 7	Permit	*****	****	*****	****	REPORT	REPORT	DEG.C			
Intake From Stream	Requirement					01MOAV	01DAMX			Continuous	METER
	QL	******	*****		******	*****	******				
Carbon, Tot Organic	Sample	****	*****		*****	1.46	1.46			1	
(TOC)	Measurement				1				0	Month	GRAB
00680 1	Permit	*****	*****	*****	*****	REPORT	REPORT	MG/L			
Effluent Gross Value	Requirement					01MOAV	01DAMX			1/Month	GRAB
	QL	*****	*****		*****	******	*****				3 355
Carbon, Tot Organic	Sample	*****	*****		*****	-0.23	-0.23		_	1	
(TOC)	Measurement								0	Month	CALCTD
00680 2	Permit	*****	****	*****	*****	REPORT	REPORT	MG/L	100	10 (1990) 	
Effluent Net Value	Requirement					01MOAV	01DAMX			1/Month	CALCTD
	QL	******	*****		******	*****	*****				
Carbon, Tot Organic	Sample	*****	****		*****	1.13	1.13			1	
(TOC)	Measurement								0	Month	GRAB
00680 7	Permit	*****	*****	****	*****	REPORT	REPORT	MG/L			
Intake From Stream	Requirement					01MOAV	01DAMX			1/Month	GRAB
	QL	******	*****		******	******	*****	1. Sec. 19-1			

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Parameter		Quantity or	Loading	Units	Quali	ty or Concent	ration	Units	No Ex.	Frequency of Analysis	Sample Type
Sulfate, Total	Sample	*****	*****		A****					1	
(as SO4)	Measurement				COL	E=N Not Req	E=N Not Req	uired	0	6 Months	COMP24
00945 1	Permit	*****	*****	*****	*****	REPORT	REPORT	UG/L	1990 . 1990 .		
Effluent Gross Value	Requirement	in žmi – jih				01MOAV	01DAMX			1/6 Months	COMP24
	QL	*****	*****		******	*****	*****				
Boron, Total	Sample	*****	****		****					1	
(as B)	Measurement				COL	E=N Not Req	E=N Not Req	uired	0	6 Months	COMPOS
01022 1	Permit	*****	*****	* *****	*****	REPORT	REPORT	UG/L	1.4.1		
Effluent Gross Value	Requirement		1.1			01MOAV	01DAMX			1/6 Months	COMPOS
	QL 🕂	******	*****	(*	******	****	*****				
Heat (winter)	Sample	294	422		*****	*****	*****	1 A A		1	
(per Hr.)	Measurement								0	Day	CALCTD
81387 1	Permit	REPORT	662	MBTU/HR	*****	*****	*****	*****			
Effluent Gross Value	Requirement	01MOAV	⊎01DAMX i							1/Day	CALCTD
	QL	22212-		N 145	*****		*****			7	<u> </u>
Copper,	Sample	*****	*****		*****					1	
Total Recoverable	Measurement		44.44		COL	E=N Not Req	E=N Not Req	uired	0	6 Months	COMPOS
	Permit					REPORT	REPORT	UG/L		in the second	
Effluent Gross Value	Requirement		******		+++++++	UTIMOAV	UIDAMX			1/6 Months	COMPOS
		17151	00000			2	2				
Lab Certification #	Sample	17451	06003		PA010	03036					
00000 00	Demot	DEDODT	AFRODT		DEDODT	DEBODT	BEDOBT	2			
99999 99	Permit	REPORT	REPORT		REPORT	REPORT	REPORT		1.00		107.15
Lab	Requirement	LaD #				Lap#	Lao #			Not Applic	NOT AP
L	QL .	Service 1	- 1. S. M. 2.				a de la composición d			Sandra Page	A CONTRACT OF A

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PI: 46815	
Shell Generation Date:	4/1/2017



# Surface Water Discharge Monitoring Report

## HOPE CREEK GENERATING STATION - NJ0025411 - 461C DSN 461C - DSW internal - 05/01/2017 - 05/31/2017

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:	05/01/2017 To 05/31/2017
Monitored Location:	461C DSN 461C - DSW internal
Monitored Location Group:	
Region / County:	Southern / Salem

Check if Applicable: I No Discharge This Monitoring Period



PI: 46815 Shell Generation Date: 4/1/2017

# Surface Water Discharge Monitoring Report

# HOPE CREEK GENERATING STATION - NJ0025411 - 461C DSN 461C - DSW internal - 05/01/2017 - 05/31/2017

Discharge Monitori	ng 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	0.036	0.110		*4***	*****	A.****		0	Continuous	METER
50050 1 Effluent Gross Value	Permit Requirement QL	REPORT	REPORT 01DAMX	MGD	*****	*****	+++** ++++++	*****	a Carallan	Continuous	METER
Solids, Total Suspended	Sample Measurement				**************************************	3	3		0	1 Month	COMPOS
00530 1 Effluent Gross Value	Permit Requirement QL	*****	7.4.4 7.4.4		******	30 01MOAV	100 01DAMX	MG/L		1/Month	COMPOS
Petrol Hydrocarbons, Total Recoverable	Sample Measurement		*****		*****	· <2	<2		0	2 Month	GRAB
45501 1 Effluent Gross Value	Permit Requirement QL	*****	***** ******		******	10 01MOAV	15 01DAMX	MG/L		2/Month	GRAB
Carbon, Tot Organic (TOC)	Sample Measurement	*****			ANTRA COLUMN	8	8		0	1 Month	COMPOS
00680 1 Effluent Gross Value	Permit Requirement QL	*****	*****		*****	REPORT 01MOAV	50 01DAMX	MG/L		1/Month	COMPOS
Lab Certification #	Sample Measurement	17451	06003		PA010	03036					
99999 99 Lab	Permit Requirement QL	REPORT Lab #	REPORT Lab #		REPORT Lab #	REPORT Lab #	REPORT Lab #			*+ Not Applic	NOT AP

PI: 46815	
Shell Generation Date:	4/1/

4/1/2017



State of New Jersey Department of Environmental Protection

# Surface Water Discharge Monitoring Report

## HOPE CREEK GENERATING STATION - NJ0025411 - 462B DSN 462B - DSW Internal - 05/01/2017 - 05/31/2017

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 <u>Report Recipient:</u>

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

NJPDES Permit Number:	NJ0025411
Monitoring Period:	05/01/2017 To 05/31/2017
Monitored Location:	462B DSN 462B - DSW Internal
Monitored Location Group:	
Region / County:	Southern / Salem

Check if Applicable: I No Discharge This Monitoring Period

Shell Generation Date: 4/1/2017

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# State of New Jersey Department of Environmental Protection

# Surface Water Discharge Monitoring Report

# HOPE CREEK GENERATING STATION - NJ0025411 - 462B DSN 462B - DSW Internal - 05/01/2017 - 05/31/2017

Discharge Monitori	ng Data:						-				
Parameter		Quantity or	Loading	Units	Qualit	ty or Concent	ration	Units	No Ex.	Frequency of Analysis	Sample Type
Flow, In Conduit or Thru Treatment Plant	Sample Measurement	0.026	0.046		*****	*****	*****		0	Continuous	METER
50050 1 Effluent Gross Value	Permit Requirement QL	REPORT 01MOAV	REPORT 01DAMX	MGD	*****	*****	*****	-		Continuous	METER
BOD, 5-Day (20 oC)	Sample Measurement	*****	*****	an sa	*****	387	387		0	1 Month	COMPOS
00310 G Raw Sew/influent	Permit Requirement QL	*****	*****		*****	REPORT 01MOAV	REPORT 01DAMX	MG/L		1/Month	COMPOS
BOD, 5-Day (20 oC)	Sample Measurement	1	1		*****	2	2		0	1 Month	COMPOS
00310 1 Effluent Gross Value	Permit Requirement QL	8 01MOAV ******	REPORT 01WKAV	KG/DAY	****	30 01MOAV	45 01WKAV	MG/L		1/Month	COMPOS
BOD, 5-Day (20 oC)	Sample Measurement	*****	ettat		99.5				0	1 . Month	CALCTD
00310 K Percent Removal	Permit Requirement QL	*****	*****	*****	87.5 01MOAVMN		*****	PERCENT		1/Month	CALCTD
Solids, Total Suspended	Sample Measurement	*****			*****	408	408		0	1 Month	COMPOS
00530 G Raw Sew/influent	Permit Requirement QL	*****	*****	*****	*****	REPORT 01MOAV	REPORT 01DAMX	MG/L		1/Month	COMPOS

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Parameter		Quantity or	Loading	Units	Quali	ty or Concent	ration	Units	No Ex.	Frequency of Analysis	Sample Type
Solids, Total	Sample	*****	****		*****	10	10			1	_
Suspended	Measurement	She a	an an Anna an A			-	L		0	Month	COMPOS
00530 1	Permit	*****	*****	*****	*****	30	45	MG/L			
Effluent Gross Value	Requirement					01MOAV	01WKAV		(Pr	1/Month	COMPOS
	QL	*****	*****		*****	*****	+****				10.0
Solids, Total	Sample	*****	*****		98	98	*****			1	
Suspended	Measurement								0	Month	CALCTD
00530 K	Permit	*****	*****	*****	85	REPORT	*****	PERCENT			
Percent Removal	Requirement				01MOAVMN	01MOAV				1/Month	CALCTD
	QL	*****	*****		*****	*****	*****		29 20		
Oil and Grease	Sample	*****	*****		****	<2	<2			1	
	Measurement								0	Month	GRAB
00556 1	Permit	*****	*****	*****	*****	10	15	MG/L		2 A A	
Effluent Gross Value	Requirement					01MOAV	01DAMX	1200		1/Month	GRAB
	QL.	*****	*****	97	*****	*****	*****				
Nitrogen, Ammonia	Sample	*****	*****	29.8	*****	3	3			1	
Total (as N)	Measurement								0	Month	COMPOS
00610 1	Permit	****	*****	****	*****	35	REPORT	MG/L			
Effluent Gross Value	Requirement	1. S.	100	18. J		01MOAV	01DAMX			1/Month	COMPOS
	QL	*****	*****		*****	******	*****				
Enterococci	Sample	*****	*****		*****	<1	<1			1	
	Measurement			aring Salah					0	Month	GRAB
61211 1	Permit	****	*****	*****	*****	REPORT	REPORT	#/100ML			
Effluent Gross Value	Requirement		Marine and Anna and A			01MOGE	01WKGE	States .		1/Month	GRAB
	QL	*****	*****		*****	*****	*****			C. C	
Coliform, Fecal	Sample	*****	*****		*****	<10	<10	30 (P-7 (C))		1	
General	Measurement								0	Month	GRAB
74055 1	Permit	*****	*****	*****	*****	200	400	#/100ML		10.1. Ma	
Effluent Gross Value	Requirement			276.04		01MOGE	01WKGE			1/Month	GRAB
	QL	*****	*****		*****	******	*****		(	2443) 223	
Lab Certification #	Sample	17451	06003		PA010						
	Measurement										
99999 99	Permit	REPORT	REPORT		REPORT	REPORT	REPORT				
Lab	Requirement	Lab #	Lab #		Lab #	Lab #	Lab#			Not Applic	NOT AP
	QL	*****	*****	a particular	*****	*****	*****		-		



PI: 46815 Shell Generation Date:

1/1/2017

# **Consolidated Waste Characterization Report**

## HOPE CREEK GENERATING STATION - NJ0025411 - 461C DSN 461C - DSW internal - 01/01/2017 - 06/30/2017

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

NJ0025411
01/01/2017 To 06/30/2017
461C DSN 461C - DSW internal
N/A
Southern / Salem

Check if Applicable: I No Discharge This Monitoring Period

1/1/2017



# State of New Jersey Department of Environmental Protection

# **Consolidated Waste Characterization Report**

## HOPE CREEK GENERATING STATION - NJ0025411 - 461C DSN 461C - DSW internal - 01/01/2017 - 06/30/2017

Sample Date: (mm/dd/yyyy)

05/09/2017

Waste Characterization Data:				
Parameter	Reported Value	Units	Remark Code	Sample Type
Nitrogen, Ammonia Total (as N)	421	UG/L		GRAB
00610 1 Effluent Gross Value				
Zinc, Total Recoverable	24	UG/L		GRAB
01094 1 Effluent Gross Value				
	RQL = 10			
Cadmium, Total Recoverable	<1.0	UG/L		GRAB .
01113 1 Effluent Gross Value				
	RQL = 4	1.1.1		
Copper, Total Recoverable	14	UG/L		GRAB
01119 1 Effluent Gross Value				
· · · · · · · · · · · · · · · · · · ·	RQL = 2			
Dichlorobromomethane	<1.0	UG/L		GRAB
32101 1 Effluent Gross Value				
	RQL = 6			
Chloroform	1.5	UG/L		GRAB
32106 1 Effluent Gross Value		1.		
	RQL = 5	1		
Lab Certification #	PA010			NOT AP
99999 99 Lab		Charles and the second second		
Lab Certification #			· · ·	NOT AP
99999 99 Lab				

Parameter	Reported Value	Units	Remark Code	Sample Type
Lab Certification # 99999 99 Lab				NOT AP
Lab Certification # 99999 99 Lab				NOT AP
Lab Certification # 99999 99 Lab				NOT AP

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**Consolidated Waste Characterization Report** 

PI: 46815		
Shell Generation Date:	1/1/2017	
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HOPE CREEK GENERATING STATION - NJ0025411 - 462B DSN 462B - DSW Internal - 01/01/2017 - 06/30/2017

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

NJ0025411
01/01/2017 To 06/30/2017
462B DSN 462B - DSW Internal
N/A
Southern / Salem

Check if Applicable: 🔲 No Discharge This Monitoring Period



# **Consolidated Waste Characterization Report**

### HOPE CREEK GENERATING STATION - NJ0025411 - 462B DSN 462B - DSW Internal - 01/01/2017 - 06/30/2017

Sample Date: (mm/dd/yyyy) 05/10/2017

Waste Characterization Data:				
Parameter	Reported Value	Units	Remark Code	Sample Type
Cyanide, Total (as CN)	<5.0	UG/L		GRAB
00720 1 Effluent Gross Value				
	RQL = 40			
Nickel, Total Recoverable	<10	UG/L		GRAB
01074 1 Effluent Gross Value				
	RQL = 10			
Zinc, Total Recoverable	31	UG/L		GRAB
01094 1 Effluent Gross Value				
-	RQL = 10			
Cadmium, Total Recoverable	<1.0	UG/L		GRAB
01113 1 Effluent Gross Value		100 A		
	RQL = 4			
Chromium, Total Recoverable	<2.5	UG/L		GRAB
01118 1 Effluent Gross Value				
	RQL = 10		<u>.</u>	
Copper, Total Recoverable	13	UG/L		GRAB
01119 1 Effluent Gross Value				
	RQL = 2			
Lab Certification #	PA010			NOT AP
99999 99 Lab				
Lab Certification #				NOT AP
99999 99 Lab				

	Reported Value	Units	Remark Code	Sample Type
ab Certification # 09999 99 Lab				NOT AP
ab Certification # 09999 99 Lab				NOT AP
ab Certification # 099999 99 Lab	fi			NOT AP

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