AUG 23 2013

SCH13-034 CERTIFIED MAIL RETURN RECEIPT REQUESTED ARTICLE NUMBER: 7007 2560 0002 0170 1082



Department of Environmental Protection Division of Water Quality Bureau of Permit Management P.O. Box 029 Trenton, N.J. 08625-0029

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE MONITORING REPORT SALEM GENERATING STATION NJPDES PERMIT NJ0005622

Dear Sir:

Attached is the Discharge Monitoring Report for the Salem Generating Station for the month of July 2013.

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 Mark Pyle (856) 339-2331.

Sincerely,

John F. Perry (/ Site Vice President – Salem

Attachment (12 DMR's)

C Executive Director, DRBC USNRC - Docket numbers 50-272 & 50-311



EXPLANATION OF CONDITIONS

July 2013

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Included in this months report is the NJPDES Acute Toxicity Biomonitoring Report for the 6 month period ending July 2013.

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 noted on the respective transmittal sheet.

Results reported on the Discharge Monitoring Report forms are consistent with permit limits, data supplied from contract laboratories, the December 2007 revision of the NJDEP DMR Instruction Manual and specific guidance from DEP personnel.

EXPLANATION OF EXCEEDANCES

July 2013

The following exceedance(s) are included in the attached report and explained below.

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. . . .

EXPLANATION **No Exceedances**

COUNTY OF SALEM STATE OF NEW JERSEY

I, John F. Perry, of full age, being duly sworn according to law, upon my oath depose and say:

- 1. I am the Site Vice President Salem for PSEG Nuclear, and as such am authorized to sign Salem's Discharge Monitoring Reports submitted to the New Jersey Department of Environmental Protection pursuant to the Station's New Jersey Pollutant Discharge Elimination System permit.
- 2. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.
- 3. The signature on the attached Discharge Monitoring Reports is my signature and I am submitting this affidavit in satisfaction of the requirement that my signature be notarized.

John F. Perry () Site Vice President – Salem

Sworn and subscribed before me this 22 No day of August 2013

Deloris D. Hadden Notary Public of New Jersey My Commission Expires 3/29/2015 ID # 2073649

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	FACA – SW Outfall FACA
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Salem	County
CHECK IF APPLICABLI	E: 🔲 No Discharge this Monitoring Period 🛛 🗌 Monitorin	g Report Comments Attached

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John F. Perry, Site Vice President - S		<u>N/A</u>			
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICEI	GRADE AND RE	GRADE AND REGISTRY NUMBER (IF APPLICABLE)			
Joh F. Perry		08/22/2013	856-339-3463		
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUT	HORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER		
*For a local agency where the highest-anking operator person designated by that person shall sign the following	does not have the ability to authorize capital expenditu g certification:	res and hire personnel	', a person having that responsibility or		
I certify under penalty of law and in accordance with N.	I.S.A. 58:10A-6F(5) that I have reviewed the attached d	ischarge monitoring re	ports.		
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>		
NAME AND TITLE	SIGNATURE	DATE	AREA CODE/PHONE NUMBER		

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PERMIT NUMBER:	MON	ITORED LOCA	TION: N	IONITOR	RING PERIOD:	FACILITY N	AME:					
NJ0005622	FAC	A SW Outfall F	ACA 7	/1/2013 1	FO 7/31/2013	PSEG NUCL	EAR LLC SAL	EM GEN	I GENERATIN			
PARAMETER	$\mathbf{\nabla}$		OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE	
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Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166							
99999 99 Lab	PERMIT REQUIREMENT	REPORT	REPORT		REPORT	REPORT	REPORT			Not Applic		
	QL	*****	*****		2-1-1-1 ****** TANK	Contract and a second second	A					

Comments: If there are any questions in regards to the monitoring report form, please contact Susan Rosenwinkel of the BPSP - Region 2 at (609)292-4860 or via email at "srosenwi@dep.state.nj.us".

Surface Water Discharge Monitoring Report Submittal Form

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NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	FACB – SW Outfall FACB
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Salen	a County
CHECK IF APPLICABLE:	No Discharge this Monitoring Period	Ionitoring Report Comments Attached

<u>WHO MUST SIGN</u> The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

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John F. Perry, Site Vice I		<u>N/A</u>					
NAME AND TITLE OF PRINCIPAL EXECUT	GRADE AND REGISTRY NUMBER (IF APPLICABLE)						
_ Gol F. P.e.	ul	08/22/2013	856-339-3463				
SIGNATURE OF PRINCIPAL EXECUTIVE C	OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER				
*For a local agency where the higliest-ran person designated by that person shall sig	ing operator does not have the ability to authorize capital expenditu n the following certification:	ures and hire personne	el, a person having that responsibility of				
I certify under penalty of law and in accord	ance with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached	discharge monitoring r	eports.				
N/A	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>				
NAME AND TITLE	SIGNATURE	DATE	AREA CODE/PHONE NUMBER				

PERMIT NUMBER:	MON	IITORED LOCA	TION: N	IONITOR	NING PERIOD:	FACILITY N	AME:				
NJ0005622	FAC	B SW Outfall F	ACB 7	/ 1 /2013 T	013 TO 7/31/2013 PSEG NUCLEAR LLC SALEM GENERATIN					ΓΙΝ	
PARAMETER	\triangleright	QUANTITY	OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Temperature, oC	SAMPLE MEASUREMENT	****	*****		*****	28.3	29.8		0	Continuous	CONTIN
00010 G Raw Sew/influent	PERMIT REQUIREMENT			*****	1. Constant States and State	REPORT 01MOAV	REPORT 01DAMX	DEG.C		Continuous:	E * CONTIN
Temperature,		******	*****		*****	313	278				Content
oC 00010 1 Effluent Gross Value	PERMIT			*****	All according to the second		46.1 M	DEG.C		Continuous	
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99999 99 Lab		REPORT	REPORT Lab #]	REPORT	REPORT	REPORT			Not Applic	NOT AP
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Comments: If there are any questions in regards to the monitoring report form, please contact Susan Rosenwinkel of the BPSP - Region 2 at (609)292-4860 or via email at "srosenwi@dep.state.nj.us".

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYearMonthDay712013To731	Year 2013 FACC – SW Outfall FACC
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern	/ Salem County
CHECK IF APPLICABLE	No Discharge this Monitoring Period	Monitoring Report Comments Attached

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John F. Perry, Site Vice Pr		<u>N/A</u>					
NAME AND TITLE OF PRINCIPAL EXECUTIV	GRADE AND REC	CISTRY NUMBER (IF APPLICABLE)					
_ Gol F. Peu	ef	08/22/2013	856-339-3463				
SIGNATURE OF PRINCIPAL EXECUTIVE OF	FICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER				
*For a local agency where the highest-rank person designated by that person shall sign	ng operator does not have the ability to authorize capital expenditu the following certification:	ures and hire personnel,	a person having that responsibility or				
I certify under penalty of law and in accorda	nce with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached o	discharge monitoring rep	ports.				
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>				
NAME AND TITLE	SIGNATURE	DATE	AREA CODE/PHONE NUMBER				

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PERMIT NUMBER: NJ0005622	MON	ITORED LOCA	TION: M	//////////////////////////////////////	NG PERIOD:	FACILITY NA	FACILITY NAME: PSEG NUCLEAR LLC. SALEM GENERATIN				
PARAMETER			DR LOADING	LOADING UNITS		S QUALITY OR CONCENTRATION		UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	2552	2552		*****	*****	*****		Ō	lDay	CALCTD
50050 G Raw Sew/influent	PERMIT REQUIREMENT	3024 01MOAV	REPORT, 01DAMX	MGD	******			*****		til/Day	CALCTD
Thermal Discharge	SAMPLE	13155	13259	<u>+</u>	*****	*****	*****		0	VDay	CALCTO
00015 2 Effluent Net Value	PERMIT	REPORT DE	01DAMX	MBTU/HR				*****		1/Day	CALCTD
Lab Certification #		רכבר'ו רכבר'ו	17451								
99999 99 Lab		REPORT Lab #	REPORT		REPORT Lab #	REPORT	REPORT Lab #				NOT AP
	QL 👷	*****	*****	-	*****		2.1 2 ###### 1 114				2241 We 16

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Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013731	Year 2013 048C – SW Outfall 48C
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern	/ Salem County
CHECK IF APPLICABLE	No Discharge this Monitoring Period	Monitoring Report Comments Attached

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NAME AND TITLE OF PRINCIPAL EXECUTI	GRADE AND REC	GISTRY NUMBER (IF APPLICABLE)					
SIGNATURE OF PRINCIPAL EXECUTIVE OF *For a local agency where the highest-rank person designated by that person shall sign	FICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR ng operator does not have the ability to authorize capital expenditu the following certification:	DATE DATE ures and hire personnel,	AREA CODE/PHONE NUMBER a person having that responsibility of				
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<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>				
NAME AND TITLE	SIGNATURE	DATE	AREA CODE/PHONE NUMBER				

PERMIT NUMBER:	MON	ITORED LOCA	TION: M	IONITOR	NING PERIOD:	FACILITY N	AME:				
NJ0005622	0480	SW Outfall 48	C 7/	/1/2013 T	O 7/31/2013	PSEG NUCL	EAR LLC SAL	EM GEN	ERAT	ſIN	
PARAMETER	$\mathbf{>}$	QUANTITY (DR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	0.2531	0.5948		*****	*****	*****		0	VDGY	CALCTD
50050 1 Effluent Gross Value	PERMIT REQUIREMENT.	REPORT 01MOAV	REPORT	MGD				*****		1/Day,	CALCTD
Solids, Total	SAMPLE MEASUREMENT		10111111111111111111111111111111111111		*****	6	7			2/MONTH	Compos
Suspended 00530 1 Effluent Gross Value				*****		30 01MOAV	01DAMX	MG/L		2/Month	COMPOS
Nitrogen, Ammonia Total (as N)	SAMPLE		*****		****	3	5		0	2/month	COMPOS
00610 1 Effluent Gross Value	PERMIT			******		95 35 01MOAV	70 01DAMX	MG/L		2/Month	COMPOS
Petroleum Hydrocarbons		*****	*****		*****	く 5	く5		0	2/Mait#	GRAB
00551 1 Effluent Gross Value				******		10 1001MOAV	15 O1DAMXS	MG/L		2/Month #	GRAB
Carbon, Tot Organic (TOC)	SAMPLE	. *****	*****		<u>, - 1997, 1977, 1979, 1979, 1978, 1978, 1978, 1978, 1978, 1978</u> ★★★★★★	8	ବ	L	0	2/MONTH	Compos
00680 1 Effluent Gross Value				******			01DAMX	MG/L		≉ 2/Month,	COMPOS
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166		The second of the second se	L			
99999 99 Lab	PERMIT	REPORT	REPORT		REPORT Lab #	REPORT/10 The Lab # 1.2	REPORT			Not Applic	NOT AP
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Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	481A – SW Outfall 481A
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Salem	County

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John F. Perry, Site Vice President - Salem		<u>N/A</u>					
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, O	R *LICENSED OPERATOR GRADE AND R	GRADE AND REGISTRY NUMBER (IF APPLICABLE)					
John F. Penny	08/22/201	856-339-3463					
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LI	CENSED OPERATOR DATE	AREA CODE/PHONE NUMBER					
*For a local agency where the highest-ranking operator does not have the ability t person designated by that person shall sign the following certification:	o authorize capital expenditures and hire personn	el, a person having that responsibility o					
I certify under penalty of law and in accordance with N.J.S.A. 58:10A-6F(5) that I	have reviewed the attached discharge monitoring	eports.					
N/A N/A	N/A	N/A					

	IT URED LOCA		IONITOR	RING PERIOD:	FACILITY NA	AME:				
481A	SW Outfall 48	1A 7/	/1/2013 T	O 7/31/2013	PSEG NUCL	EAR LLC SAL	EM GEN	ERAI	FIN	
\triangleright	QUANTITY (OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
SAMPLE MEASUREMENT	463	465		****	*****	****		0	1 Day	CALCTD
	REPORT-	REPORT 01DAMX*	MGD				*****		1/Day	CALCTD
SAMPLE MEASUREMENT	*****	*****		7.1	****	7.8		0	1/week	GRAB
PERMIT REQUIREMENT.		a Digertableitere endeter States and a states	*****	6.0 01DAMN		9.0 01DAMX	SU		1/Week	GRAB
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PERMIT REQUIREMENT.			*****	50 01DAMN			%EFFL		¥2/Year A	COMPOS COMPOS
SAMPLE MEASUREMENT	****	*****		****	CODE=N	CODE=N		0	CODE=N	CODE=N
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SAMPLE MEASUREMENT	*****	*****		*****	٢ ٥.١	2011		O	3/week	GRAB
		****** ******	******		REPORT 01MOAV	0.2 01DAMX	MG/L		3/Week	GRAB
	481A	481A SW Outfall 48 QUANTITY O SAMPLE MEASUREMENT QL SAMPLE MEASUREMENT QL SAMPLE MEASUREMENT QL SAMPLE MEASUREMENT QL SAMPLE MEASUREMENT QL SAMPLE MEASUREMENT QL SAMPLE MEASUREMENT REQUIREMENT REQUIREMENT SAMPLE MEASUREMENT REQUIREMENT SAMPLE MEASUREMENT REQUIREMENT SAMPLE MEASUREMENT SAMPLE	481A SW Outfall 481A QUANTITY OR LOADING QUANTITY OR LOADING SAMPLE MEASUREMENT PERMIT REQURRENT ALL SAMPLE MEASUREMENT REQURRENT REQURRENT ALL SAMPLE MEASUREMENT REQURRENT ALL SAMPLE MEASUREMENT ALL SAMPLE MEASUREMENT ALL SAMPLE MEASUREMENT ALL SAMPLE MEASUREMENT ALL SAMPLE MEASUREMENT ALL SAMPLE MEASUREMENT ALL ALL SAMPLE MEASUREMENT ALL ALL ALL ALL ALL ALL ALL AL	Michaele Colombia ABIA SW Outfall 481A 7/1/2013 T QUANTITY OR LOADING UNITS MADLE QUANTITY OR LOADING UNITS MEASUREMENT 46.3 46.5 PENNT 01MOAV REPORT MGD QUANTITY OR LOADING UNITS MGD QUANTITY OR LOADING UNITS MGD QUANTITY OR DOADNX REPORT MGD QUANTITY REQUIREMENT ******* ******* MADLE ******* ******* VAL ******* ******* VAL ******* ******* SAMPLE ******* ******* MEASUREMENT ******* ******* VAL ******* ******* QL ******* ******* MEASUREMENT <	481A SW Outfall 481A 7/1/2013 TO 7/31/2013 QUANTITY OR LOADING UNITS QUALT SAMPLE 46.3 46.5 PERMIT AREPORT REPORT 01DAMX* MGD SAMPLE QUALT REPORT MGD SAMPLE REPORT 01DAMX* MGD SAMPLE REPORT 01DAMX* MGD SAMPLE 01DAMX* MGD SAMPLE	481A SW Outfall 481A 7/1/2013 TO 7/31/2013 PSEG NUCL QUANTITY OR LOADING UNITS QUALITY OR CONCENTR MEADUREMENT 46.3 46.5	ABIA SW Outfail 481A 7/1/2013 TO 7/31/2013 PSEG NUCLEAR LLC SALI OUANTITY OR LOADING UNITS QUALITY OR CONCENTRATION MARKER 463 465 MEAURENN 463 465 MEAURENN REPORT MGD MARKER 010AMX 010AMX OLIGE 010AMX 010AMX MEAURENN 7.1 7.8 MEAURENN 7.3 MARKER 7.3 MEAURENN 7.3 MEAURENN 7.3 MEAURENN 7.3 MEAURENN	481A SW Outfall 481A 7/1/2013 TO 7/31/2013 PSEG NUCLEAR LLC SALEM GEN QUANTITY OR LOADING UNITS QUALITY OR CONCENTRATION UNITS MARKEN 46.3 46.5	ABIA SW Outfall 481A 7/1/2013 TO 7/31/2013 PSEG NUCLEAR LLC SALEM GENERAT QUANTITY OR LOADING UNITS QUALITY OR CONCENTRATION UNITS MEMOREMENT 46.3 46.5	481A SW Outfall 481A 7/1/2013 TO 7/31/2013 PSEG NUCLEAR LLC SALEM GENERATIN OUANTITY OR LOADING UNITS QUALITY OR CONCENTRATION UNITS O 1/0.000 MANUERMENT 46.3 46.5 0 1/0.000 MANUERMENT REPORT REPORT 0 1/0.000 MANUERMENT COMPANY REPORT 0 1/0.000 MANUERMENT 0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

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PERMIT NUMBER:	ERMIT NUMBER:MONITORED LOCATION:MJ0005622481A SW Outfall 481A7		MONITORED LOCATION: MONITORING PERIOD: FACILITY NAME:		AME:	· · · · · ·					
NJ0005622			7/1/2013 TO 7/31/2013 PSEG NUCLEAR LLC SAL								
PARAMETER		QUANTITY OR LOADING		UNITS	QUALI	QUALITY OR CONCENTRATION				FREQ. OF ANALYSIS	SAMPLE TYPE
Temperature, oC	SAMPLE MEASUREMENT	*****	*****		*****	36.3	38,9		0	11Day	CONTIN
00010 1 Effluent Gross Value	PERMIT REQUIREMENT			2: \$1 \$1 \$2		REPORT 01MOAV	REPORT 01DAMX	DEG.C		1/Day	CONTIN
	QL		**************************************	<u>.</u>	*****						
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166						
99999 99 Lab	PERMIT	REPORT	REPORT		REPORT, Lab # 44	REPORT	REPORT			Not Applic,	NOT AP
	QL	· · · · · · · · · · · · · · · · · · ·	******	計 派 - ソ		and the second states of	Service and and the service of the s			经 有关资料	

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	482A – SW Outfall 482A
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
CHECK IE ADDI ICADI I	REGION / COUNTY: Southern / Salem	County 2 Report Commonts Attached

<u>WHO MUST SIGN</u> The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of and/or imprisonment, pursuant to N.J.A.C. 7:14A-6.9(B). The New Jersey water Pollution Control Act provides for penalties up to \$50,000 per violation.

John F. Perry, Site Vice President - Salem	<u>N/A</u> GRADE AND REGISTRY NUMBER (IF APPLICABLE)				
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUT					
Joh F. Pery		08/22/2013	856-339-3463		
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZ	ED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER		
*For a local agency where the highest-ranking operator does n person designated by that person shall sign the following certij	ot have the ability to authorize capital expenditur leation:	es and hire personnel,	a person having that responsibility or		
I certify under penalty of law and in accordance with N.J.S.A. 5	8:10A-6F(5) that I have reviewed the attached dis	scharge monitoring rep	orts.		
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>		

A States and the state

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

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Option 2

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PERMIT NUMBER:	MONITORED LOCATION:			MONITORED LOCATION: MONITORING PERIOD: FACILITY NAME:				AME:				
NJ0005622	482A	SW Outfall 482A 7/1/2013 TO 7/31/2013			PSEG NUCL	PSEG NUCLEAR LLC SALEM GENERATIN						
PARAMETER	$\mathbf{\nabla}$	QUANTITY OR LOADING		R LOADING UNITS		QUALITY OR CONCENTRATION				FREQ. OF ANALYSIS	SAMPLE TYPE	
Temperature, oC	SAMPLE MEASUREMENT	*****	*****		*****	36.0	38.4		٥	VDay	CONTIN	
00010 1 Effluent Gross Value	PERMIT REQUIREMENT			*****		REPORT 01MOAV	REPORT	DEG.C		1/Day : -		
	al 🕬	**************************************	A Barris and a second second	<u> </u>	and the second second second		MARCH STREET					
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166							
99999 99 Lab	PERMIT	REPORT	REPORT Lab #		REPORT	REPORT Lab#	REPORT Lab #			- Not Applic	NOT AP	
	QL *	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	H-44 1 + + + + + + + + + + + + + + + + + +	ě.	State of the second sec	and as the second second					違い。 第二次 第二次 第二次 第二次 第二次 第二次 第二次 第二次	

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:				
NJ0005622	MonthDayYear712013To7312013	483A – SW Outfall 483A				
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038				
CHECK IF APPLICABLE	REGION / COUNTY: Southern / Salem E: No Discharge this Monitoring Period	County onitoring Report Comments Attached				

<u>WHO MUST SIGN</u> The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of and/or imprisonment, pursuant to N.J.A.C. 7:14A-6.9(B). The New Jersey water Pollution Control Act provides for penalties up to \$50,000 per violation.

John F. Perry, Site Vice President - Salem		<u>N/A</u>					
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORI	GRADE AND REGISTRY NUMBER (IF APPLICABLE)						
Joh F. Perry		08/22/2013	856-339-3463				
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED A	GENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER				
*For a local agency where the highest-ranking operator does not ha person designated by that person shall sign the following certificati	ve the ability to authorize capital expenditur on:	es and hire personnel,	a person having that responsibility of				
I certify under penalty of law and in accordance with N.J.S.A. 58:10	A-6F(5) that I have reviewed the attached dis	scharge monitoring rep	orts.				
<u>N/A</u>	<u>N/A</u>	N/A	<u>N/A</u>				

NAME AND TITLE

AREA CODE/PHONE NUMBER

PERMIT NUMBER:	MON	ITORED LOCA	TION: M	IONITOR	NING PERIOD:	FACILITY NA	AME:				
NJ0005622	483A	SW Outfall 48:	3A 7	/1/2013 T	O 7/31/2013	PSEG NUCL	EAR LLC SAL	EM GEN	ERAT	ſIN	
PARAMETER	\triangleright	QUANTITY (OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	460	461		*****	*****	*****		Ò	1Day	CALCTO
50050 1 Effluent Gross Value		REPORT 01MOAV	REPORT 01DAMX	MGD	. University of the			******		1/Day :	CALCTD
pH	SAMPLE MEASUREMENT	*****	*****		7.2	*****	8.0	<u> </u>	0	Yweek	GRAB
00400 1 Effluent Gross Value				******	6.0 01DAMN		9.0 01DAMX	SU		1/Week	GRAB
рН	SAMPLE MEASUREMENT	*****	*****		7.3	*****	Π.9		0	1/week	GRAB
00400 7 Intake From Stream	PERMIT REQUIREMENT			*****				SU		1/Week	GRAB
Chlorine Produced	SAMPLE MEASUREMENT	*****	*****	;	*****	CODE=N	CODE = N		0	CODE=N	CODE=N
*CPOX 1 Effluent Gross Value	PERMIT. REQUIREMENT.			*****		0.3 Car01MOAV	0.5 01DAMX	MG/L		, ∹3/Week, s	GRAB 27
Option 1 Chlorine Produced Oxidants	SAMPLE MEASUREMENT	*****	*****	 	*****	<0.1	२० ७		0	3/week	G-RAB
*CPOX 1 Effluent Gross Value				*****		REPORT 01MOAV	0.2 01DAMX	MG/L		3/Week	GRAB
Temperature, oC	SAMPLE MEASUREMENT	***	*****		*****	32.9	38.5		0	1/Day	CONTIN
00010 1 Effluent Gross Value	PERMIT REQUIREMENT			******		REPORT	REPORT 01DAMX	DEG.C		(<mark>1/Day</mark>	
	QL	1002 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 10 10 10 *** ****		*****	A STATE AND A STATE OF					

Comments: Any questions in regards to the monitoring report form can be directed to S. Rosenwinkel of the BPSP - Region 2 at (609)292-4860.

PERMIT NUMBER:	MON	IITORED LOCA	TION: I	MONITORING PERIOD: 7/1/2013 TO 7/31/2013		FACILITY N	FACILITY NAME: PSEG NUCLEAR LLC SALEM GENERATIN				
NJ0005622	483A	SW Outfall 48	3A 7			PSEG NUCL					
PARAMETER	$\mathbf{\mathbf{X}}$		OR LOADING UNIT		QUALITY OR CONCENTRATION			UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166						
99999 99 Lab		REPORT : Lab #	REPORT Lab'#		Lab #		REPORT 4			Not Applic	NOT AP
	- [Selfer QLIII)的	化同常本***意题的问题	·····································	÷.	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	1000 ******* 10 ****			「福祉	王子子 是这些代表的"从此	建行了 现在是否是我们的问题;

Comments: Any questions in regards to the monitoring report form can be directed to S. Rosenwinkel of the BPSP - Region 2 at (609)292-4860.

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PI 46814

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:	
NJ0005622	MonthDayYear712013To7312013	484A – SW Outfall 484A	
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038	
CHECK IF APPLICARLI	REGION / COUNTY: Southern / Salen	a County g Report Comments Attached	

WHO MUST SIGN The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

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John F. Perry, Site Vice President - Salem	<u>N/A</u>					
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	GRADE AND REG	ISTRY NUMBER (IF APPLICABLE)				
John F. Perul	08/22/2013_	856-339-3463	-			
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER				
*For a local agency where the highest-ranking operator does not have the ability to authorize capital expenditur person designated by that person shall sign the following certification:	es and hire personnel, a	a person having that responsibility or	•			

I certify under penalty of law and in accordance with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached discharge monitoring reports.

N/A	N/A	N/A	N/A

PERMIT NUMBER:	MON	IITORED LOCA	TION: I	NONITOR	RING PERIOD:	FACILITY N	AME:				
NJ0005622	484A	SW Outfall 48	4A 7	7/1/2013 TO 7/31/2		PSEG NUCLEAR LLC SA			ERA	ΓIN	
PARAMETER	$\mathbf{ imes}$	QUANTITY	OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	451	451		*****	*****	*****		0	1004	CALCTD
50050 1 Effluent Gross Value		REPORT 01MOAV	REPORT 01DAMX	MGD				******		id 1/Day	CALCTD
рН		******	*****		<u> </u>	******	78			Kupek	COAB
00400 1 Effluent Gross Value				******	6:0 201DAMN		9.01 (19.01) 1.10 (10.01) 1.10 (10.01) 1.	SU		1/Week	GRAB
pH	SAMPLE	*****	*****	<u></u>	7.3	*****	7.9		0	Threek	GRAB
00400 7 Intake From Stream					REPORT 01DAMN		REPORT 11 01DAMX	SU		1/Week	GRAB
LC50 Statre 96hr Acu Cyprinodon	SAMPLE	****	<u>,</u>	<u></u>	CODE=N	****	******		C C C C C C C C C C C C C C C C C C C	CODE=N	CODE = N
TAN6A 1 Effluent Gross Value	PERMIT				50 01DAMN #			%EFFL		2/Year	COMPOS,
Chlorine Produced Oxidants	SAMPLE MEASUREMENT	*****	*****		*****	CODE=N	CODE=N		0	CODE=N	CODE = N
*CPOX 1 Effluent Gross Value		******		н 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	*******	0.3 01MOAV	0.5 01DAMX	MG/L			GRAB
Chlorine Produced Oxidants	SAMPLE MEASUREMENT	1.2719999月9日,4月15月8日(1993年19月19日) ★★★★★★	******		2011年1月11日21日1日21日1日21日1日1日1日1日1日1日1日1日1日1日1日	<u> <0.1</u>	20.1		0	3/week	GRAB
*CPOX 1 Effluent Gross Value				14 15 16 16 16 16 16 16 16 16 16 16 16 16 16		REPORT 01MOAV	0.2 01DAMX	MG/L		3/Week	GRAB .
Option 2	¹⁹ 读QL ⁹⁹ 词	······································	12-32 14 20 14 14		NAME OF A DECEMBER OF A DEC	With the second second	A STATE OF A	1			

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

PI 46814

Surface Water	Dischar	ge Monitor	ing Report	, ,							PI 46814
PERMIT NUMBER:	MONITORED LOCATION			MONITORING PERIOD: FACILITY NAME:							
NJ0005622	484A	484A SW Outfall 484A 7/1/2013 TO 7/31/2013 PSEG NUCLEAR LLC SAI				LEM GENERATIN					
PARAMETER	\searrow	QUANTITY	OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Temperature, oC	SAMPLE MEASUREMENT	*****	*****		*****	36.6	39.2		0	YDay	CONTIN
00010 1 Effluent Gross Value			******			REPORT	REPORT	DEG.C		1/Day	CONTIN
	QLA	With the same with	2	ŝi l	WHEN THE REAL PROPERTY AND IN THE REAL PROPERTY AND INTERPORTS AND INTE	With Assault Street	AND ANARAS				
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PAILL						
99999 99 Lab	PERMIT	REPORT	REPORT Lab # 15.	646 X 1	REPORT Lab # 12	REPORT	REPORT			Not Applic	NOT AP
		War wat wat the state of the st	Wetter and a second second	1. Contract (1. Co	A way Creaters of Paris	(1.1) (1.1 + + + + + + + + + + + + + + + + + +	3			42-1-4-1-4-1-1-	ALC: NO. OF STREET, ST.

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	485A – SW Outfall 485A
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Salem	County
CHECK IF APPLICABLI	E: 🔲 No Discharge this Monitoring Period 🛛 🗌 Monitoring	g Report Comments Attached

WHO MUST SIGN The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

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John F. Perry, Site Vice President - Salem	<u>N/A</u>				
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	GRADE AND REG	JISTRY NUMBER (IF APPLICABLE)			
Joh F. Perez	08/22/2013	856-339-3463			
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER			
*For a local agency where the highest ranking operator does not have the ability to authorize capital expenditur person designated by that person shall sign the following certification:	es and hire personnel,	a person having that responsibility o			

I certify under penalty of law and in accordance with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached discharge monitoring reports.

	21/4		27/2
NI/A	NZA	NI/A	NI/A
IN/A	1 1/ 7 1	19/73	19/2

AREA CODE/PHONE NUMBER

PERMIT NUMBER:	MON	ITORED LOCA	TION: M	ONITOR	ING PERIOD:	FACILITY NA	AME:				
NJ0005622	485A	SW Outfall 48	5A 7/	1/2013 T	O 7/31/2013	PSEG NUCL	EAR LLC SALE	EM GEN	ERAT	ÎN	
PARAMETER	\triangleright	QUANTITY (DR LOADING	UNITS	QUALI	Y OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	424	424		****	****	****		٥	11004	CALCTD
50050 1 Effluent Gross Value	PERMIT			MGD				******		(1/Day:	
pH		*****	*****		7.3	*****	7.8	. <u></u> .	0	Never	GRAB
00400 1 Effluent Gross Value				*****	6.0.44 01DAMN		9.0*** 01DAMX	SU		1/Week	GRAB
рН	SAMPLE	*****	****		7.3	*****	7.9		0	Yweek	GRAB
00400 7 Intake From Stream				******	REPORT 01DAMN		REPORT 1	SU		1/Week	GRAB
LC50 Statre 96hr Acu Cyprinodon	SAMPLE		*****	<u> </u>	CODE=N	*****	*****		0	CODE=N	CODE=N
TAN6A 1 Effluent Gross Value				******	50 01DAMN #			%EFFL		2/Year.	COMPOS
Chlorine Produced Oxidants	SAMPLE MEASUREMENT	*****	*****		*****	CODE=N	CODE=N		0	CODE=N	CODE=N
*CPOX 1 Effluent Gross Value Option 1				*****	·······	0.3 01MOAV	0.5 01DAMX	MG/L		3/Week	ĞRAB
Chlorine Produced Oxidants	SAMPLE	12000000000000000000000000000000000000			10 3 39 56 16 19 47 32 32 38 38 56 56 56 56 56 56 56 56 56 56 56 56 56	20.1	70.1 		0	3/week	GRAB
*CPOX 1 Effluent Gross Value Option 2		*****		*****		REPORT 01MOAV	0.2 01DAMX	MG/L		3/Week	GRAB.

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

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PERMIT NUMBER:	MON	ITORED LOCA	TION: N	NONITOF	RING PERIOD:	FACILITY N	NAME:				
NJ0005622	485A	SW Outfall 48	5A 7	7/1/2013 7	I/2013 TO 7/31/2013 PSEG NUCLEAR LLC SALEM GENERATIN				TIN		
PARAMETER	\searrow	QUANTITY	OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Temperature, oC	SAMPLE MEASUREMENT	; *****	****		****	36.3	39,0		0	Vpay	CONTIN
00010 1 Effluent Gross Value				*****		REPORT 01MOAV	REPORT IS 01DAMX	DEG.C		1/Day	CONTIN
	QL	5 PM *****	1]	1 Filterin and		We have a second s				
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166						
99999 99 Lab		REPORT	REPORT		REPORT	REPORT	REPORT			Not Applic	NOT AP
	QL	*****	100 HANNA 12 10 1		*****	******	MARTIN ANALAS ANALAS				

Comments: The permittee is required to perform acute toxicity testing on a minimum of one representative CWS outfall while DSN 48C is being routed to that outfall.

Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	486A – SW Outfall 486A
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Salem	County
CHECK IF APPLICABLI	E: 🔲 No Discharge this Monitoring Period 🛛 🗌 Monitorin	g Report Comments Attached

<u>WHO MUST SIGN</u> The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of and/or imprisonment, pursuant to N.J.A.C. 7:14A-6.9(B). The New Jersey water Pollution Control Act provides for penalties up to \$50,000 per violation.

John F. Perry, Site Vice President - Salem	<u></u>	<u>N/A</u>
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	GRADE AND REG	ISTRY NUMBER (IF APPLICABLE)
Joh F. Peur	08/22/2013	856-339-3463
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER
*For a local opency where the higher waking operator does not have the ability to authorize capital expenditur	es and hire personnel	a person having that responsibility

*For a local agency where the highes Anking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall sign the following certification:

I certify under penalty of law and in accordance with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached discharge monitoring reports.

<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

AREA CODE/PHONE NUMBER

PERMIT NUMBER:	MON	ITORED LOCA	TION: M	ONITOR	ING PERIOD:	FACILITY NA	AME:				
NJ0005622	486A	SW Outfall 486	6A 7/	1/2013 T	0 7/31/2013	PSEG NUCL	EAR LLC SAL	EM GEN	ERAT	'IN	
PARAMETER	\triangleright	QUANTITY (DR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	434	435		*****	*****	*****		0	Day	CALCTD
50050 1 Effluent Gross Value		REPORT 01MOAV		MGD				*****	2 7	1/Day	CALCTD
pH	SAMPLE MEASUREMENT	·	*****		7.2	****	7.8		0	Vweek	GRAB
00400 1 Effluent Gross Value	PERMIT			******	6.0 01DAMN		01DAMX	SU		1/Week	T GRAB
рН	SAMPLE	*****	*****		7.3	*****	7.9		0	Vieleek	GRAG
00400 7 Intake From Stream	PERMIT			******	REPORT 01DAMN		REPORT 01DAMX	SU		1/Week	GRAB
Chlorine Produced	SAMPLE MEASUREMENT	*****	*****		*****	CODE=N	CODE=N			CODE=N	CODE=N
*CPOX 1 Effluent Gross Value				******		0.3 01MOAV	0.5 01DAMX	MG/L		3/Weekix	GRAB
Chlorine Produced Oxidants	SAMPLE	*****	[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]		****	K0'/	40.1		0	3/week	GRAB
*CPOX 1 Effluent Gross Value Option 2			1912, 1919	******			0.2 01DAMX	MG/L		3/Week	GRAB
Temperature, oC	SAMPLE	<u>新聞教育的</u>	<u></u>	 	▲ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★	32.9	38.6			VDay	CONTIN
00010 1 Effluent Gross Value	PERMIT RÉQUIREMENT			*****		REPORT 01MOAV	REPORT 01DAMX	DEG.C		1/Day es	
	`QL' ☆	******	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -		1745 A.S. ******	The second second	Contract of the second states		MAR		

Comments: Any questions in regards to the monitoring report form can be directed to S. Rosenwinkel of the BPSP - Region 2 at (609)292-4860.

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PERMIT NUMBER:	MONITORED LOCATION:		MONITORING PERIOD:		FACILITY NAME:						
NJ0005622	486A	486A SW Outfall 486A 7			7/1/2013 TO 7/31/2013		PSEG NUCLEAR LLC SALEM GENERATIN				
PARAMETER	$\mathbf{\mathbf{X}}$	QUANTITY (OR LOADING	UNITS	QUALI	QUALITY OR CONCENTRATION			NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Lab Certification #	SAMPLE MEASUREMENT	17327	17451		PA 166						
99999 99 Lab		REPORT	REPORT		REPORT Lab #	REPORT Lab #	REPORT S			Not Applic	NOT AP
	QL	with the state of the state	Star + + + + + + + * * * *	lija Ber De	·********	Halling and the state	********				

Comments: Any questions in regards to the monitoring report form can be directed to S. Rosenwinkel of the BPSP - Region 2 at (609)292-4860.

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Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	487B – SW Outfall 487B
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Salem	County
CHECK IF APPLICABLE:	🛛 🖾 No Discharge this Monitoring Period 🛛 🛄 Monitori	ng Report Comments Attached

<u>WHO MUST SIGN</u> The highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility shall sign the certification or, in his absence a person designated by that person. For a local agency, the highest ranking operator of the treatment works shall sign the certification. Where the highest ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall also sign the second certification at the bottom of this page. If the local agency has contracted with another entity to operate the treatment works, the highest-ranking official of the contracted entity shall sign the certification.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of and/or imprisonment, pursuant to N.J.A.C. 7:14A-6.9(B). The New Jersey water Pollution Control Act provides for penalties up to \$50,000 per violation.

John F. Perry, Site Vice President - Salem	<u>N/A</u>			
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	GRADE AND REC	SISTRY NUMBER (IF APPLICABLE)		
John F. Peur	08/22/2013	856-339-3463		
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATE	AREA CODE/PHONE NUMBER		
*For a local agency where the highest-ranging operator does not have the ability to authorize capital expenditur person designated by that person shall sign the following certification:	es and hire personnel,	a person having that responsibility or		

I certify under penalty of law and in accordance with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached discharge monitoring reports.

<u>N/A</u> <u>N/A</u> <u>N/A</u>				
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

AREA CODE/PHONE NUMBER

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Surface Water Discharge Monitoring Report Submittal Form

NJPDES PERMIT	MONITORING PERIOD	MONITORED LOCATION:
NJ0005622	MonthDayYear712013To7312013	
PERMITTEE: PSE&G NUCLEAR LLC 80 PARK PLAZA NEWARK, NJ 07101	LOCATION OF ACTIVITY: PSEG NUCLEAR LLC SALEM GENERATING STATION ALLOWAY CREEK NECK RD HANCOCKS BRIDGE, NJ 08038	REPORT RECIPIENT: PSEG NUCLEAR LLC PO BOX 236/N21 HANCOCKS BRIDGE, NJ 08038
	REGION / COUNTY: Southern / Sale	m County
CHECK IF APPLICABLE	No Discharge this Monitoring Period Monito	ring Report Comments Attached

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John F. Perry, Site Vice President - Salem	<u>N/A</u>				
NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	GRADE AND REG	ISTRY NUMBER (IF APPLICABLE)			
Joh F. Perry	08/22/2013	856-339-3463			
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER, AUTHORIZED AGENT, OR *LICENSED OPERATOR	DATÉ	AREA CODE/PHONE NUMBER			

*For a local agency where the highest-ranking operator does not have the ability to authorize capital expenditures and hire personnel, a person having that responsibility or person designated by that person shall sign the following certification:

I certify under penalty of law and in accordance with N.J.S.A. 58:10A-6F(5) that I have reviewed the attached discharge monitoring reports.

<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
NAME AND TITLE	SIGNATURE	DATE	AREA CODE/PHONE NUMBER

PERMIT NUMBER:	MON	ITORED LOCA	TION: M	IONITOR	RING PERIOD:	FACILITY N	AME:				
NJ0005622	489A	SW Outfail 489	9A 7/	/1/2013 T	0 7/31/2013	PSEG NUCL	EAR LLC SAL	EM GEN	ERAT	ΓIN	
PARAMETER	\searrow		OR LOADING	UNITS	QUALI	TY OR CONCENTR	ATION	UNITS	NO. EX.	FREQ. OF ANALYSIS	SAMPLE TYPE
Flow, In Conduit or Thru Treatment Plant	SAMPLE MEASUREMENT	0.0914	0.0914		*****	*****	*****	· · · · · · · · · · · · · · · · · · ·	0	1/month	CALCTD
50050 1 Effluent Gross Value	PERMIT REQUIREMENT	REPORT 01MOAV	REPORT	MGD	******			******		\$1/Month	CALCTD
рН	SAMPLE MEASUREMENT	******	*****		75	******	7,5			1/mont	RRAB
00400 1 Effluent Gross Value	PERMIT	ini indi anco initi Li contente di contente Li contente di		*****	6.0 01DAMN		9.0 	SU		1/Month	GRAB
Solids, Total Suspended	SAMPLE	*****	*****		8	8	*****	L	0	1/month	GRAB
00530 1 Effluent Gross Value	PERMIT			*****	100 01DAMX	30 01MOAV		MG/L		1/Month	GRAB
Petroleum	SAMPLE MEASUREMENT	*****	*****		*****	45	<u>たい</u> の保護のようなななない。 くら		0	1 Montif	GRAB
00551 1 Effluent Gross Value	PERMIT			*****		01MOAV	01DAMX	MG/L			GRAB:
Carbon, Tot Organic (TOC)	SAMPLE MEASUREMENT	*****	*****		*****	4	4		0	1/month	GRAB
00680 1 Effluent Gross Value	PERMIT			*****	******	REPORT	1 of the solution of the solut	MG/L		1/Month-	GRAB
Lab Certification #	SAMPLE MEASUREMENT	17327	17451	1	PA ILL						
99999 99 Lab		REPORT () .	REPORT (S Lab.#		REPORT	REPORT	REPORT Lab #			Not Applic	NOTAP
	QL		A		王多治日#######	1999	See 19 See 19			March 1	

Comments: If there are any questions in regards to the monitoring report form, please contact Susan Rosenwinkel of the the BPSP - Region 2 at (609)292-4860 or via email at "srosenwi@dep.state.nj.us".

000NJPDES BIOMONITORING REPORT FORM - ACUTE TOXICITY

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Permit No.: NJ[000562	2]	DSN [485]
Facility name:	PSEG Nuclear LLC - Salem Gene	erating Station	1
Facility address: [Artificial Island]
[Lower Alloways Creek, NJ 08038	3]
Facility contact person:	[Mr. Christopher White		
phone #.	[(850) 555-2078		J
Acute toxicity laboratory:	[New England Bioassay	· · · · · · · · · · · · · · · · · · ·]
	[77 Batson Drive]
	Manchester, CT 06042		
Acute laboratory certifica	tion No.: [CT405]	
Test Specifications:			
Effluent type (e.g., final, p	oredisinfection): [Final E	Effluent]
Test type (check one):	Static Renewal (6-hr)	_ Renewal (24-hr)_X_ Flow	-through
Test Results:			
Test starting date: [<u>6/26/13</u>] Comple	etion date: [<u>6/30/13</u>]	
Test endpoint (check one)	: LC50_X_ NMAT	EC50	
LC50/EC50 (% effluent):	[]	95% Confidence interval: [NA]
Highest percent mortality	in any test concentration (if annlica	ble). [5%	1
inghest percent mortanty	Test concentration	ation: [100%]
Test organism: [Sheenshead Minnow	l' [Cuprinodon vari	egatus 1
1000 01guilloini. [(common name)	(scientific nat	ne)
Quality Control Summar	<u>- ¥</u> :		
Control mortality: [_0%]%		
Temperature maintained w	rithin 20° + 2°C?	Yes <u>X</u>	No
Dissolved oxygen levels al	ways greater than 40% saturation?	Yes X	No
Two or more concentration	as exhibit a trend deviation?	Yes	No <u>X</u>
Certification:		-11/ -1	-1
Accuracy of report certifie	d by:Laboratory Manager	Date Date	8//3

Test Organism Data:

Test organism source (check one): Cultured_____ Commercial hatchery_X___(specify)[<u>Aquatic BioSystems; Fort Collins, Colorado</u>__]

Test Organism Acclimation:

Is the culture water and test dilution water the same, and is the culture water temperature and dilution water temperature identical? Yes <u>No X</u> If yes, proceed to Test Design section.

 Fish and Grass Shrimp:

 Initial number of organisms:
 [460]

 Total acclimation period:
 [<1] day,</td>

 Acclimation period to 100 percent dilution water at the specified test temperature and test salinity:

 [received in ASW at 25 ± 2 ppt; NEB dripped in fresh ASW at 25 ± 2 ppt until testing]

 Number of mortalities:
 [0] %

 Test organism age at start of test (days):
 [10 days]

<u>Mysid and Cladoceran:</u>	
Initial Number of Organisms:	[N/A]
Test organism age at start of test (days):	[N/A]
Culture water source:	[<u>N/A</u>]
Culture water salinity:	[N/A]
Culture water temperature:	[N/A]
Dilution water source:	[<u>N/A</u>]
Dilution water salinity upon collection:	[N/A]
Number of mortalities:	[N/A]%

Test Design:

Number of effluent test concentrations:	[9]
Number of replicates/test concentration:	[2]
Number of test organisms/replicate:	[10]
Volume of liquid in test chambers (liters):	[0.5]
Flow-through bioassay exchange rate:	ĺ	N/A] (cycles/day)

Effluent Sampling:

Plant sampling location: [Outfall 485 (#1, #2	, #3, & #4 samples)]		
Effluent type: [Cooling Water]		
Discharge (check one):	Continuous X_	Intermittent				
Effluent sample type: 24-1	hr. compositeX	6-hr composite	Grab	Other	_(Describe)[]

Sample-C	Collection	Sample Da	ta taken upon t laboratory	Use in To	oxicity Test
Beginning Date/Time	Ending Date/Time	D.O.	PH	Date(s)	Time(s) ^a
6/24/13 1000	6/25/13 1000	8.0 mg/L	7.5 SU	6/26/13	1445 h
6/25/13 1000	6/26/13 1000	8.1 mg/L	7.3 SU	6/27/13	1430 h
6/26/13 1000	6/27/13 1000	8.0 mg/L	7.3 SU	6/28/13	1430 h
6/27/13 1000	6/28/13 1000	6.2 mg/L	7.7 SU	6/29/13	1430 h

^a - Indicates time test concentrations were mixed after warming to test temperature

 Maximum sample holding time (hours):
 [_____< 24 h]</td>

 Testing location (check one):
 On-site _____
 Remote Laboratory _X ____

Effluent Sample Adjustments:

Were any salinity adjustr If yes, specify the source [<u>Instant Ocean Artificia</u>	nents made? Yes_X No of sea salts, brine or water used: <u>I Sea Salts (Aquarium Systems; Mentor, OH)</u>]
Were any pH adjustment If yes, specify the reagen The pH level upon samp The pH level after the ad The adjusted pH level	s made? <u>Yes</u> <u>No_X</u> t used [<u>3 N HCl</u>], the amount used[<u>Not required</u>] le collection (initial pH): [7.3 to 7.7 SU] dition of the sea salts (drifted pH) [7.9 to 8.2 SU] [not required]
Was the effluent sample If yes, please specify the	filtered in any manner? Yes NoX mesh size: [N/A]
Were any adjustments to If yes, specify the dechlo Specify the chlorine leve Was an additional contro	the levels of chlorine made? Yes <u>No_X</u> rination agent used [<u>N/A</u>] and the amount of reagent used [<u>N/A</u>] ls prior to [< 0.05 mg/L] and after addition of the reagent[<u>N/A</u>] l included in the test containing the dechlorination agent? Yes <u>No_X</u>
Dilution Water:	
Effluent receiving water:	[] Delaware River
Dilution water source:	Instant Ocean Artificial Salt Water $(25 \pm 1 \text{ ppt salinity; } 120 \text{ mg/L as CaCO}_1 \text{ Alkality}$ (If reconstituted water is used specify type)
If a substitute dilution wa its use been approved by	ter (i.e. not the receiving water) was used, had NJDEP in the acute methodology questionnaire? Yes_X No
Collection location: Collection date(s):	[] []N/A
Test Results:	
LC50/EC50 (% Effluent)	24 hours 48 hours 72 hours 96 hours : [> 100%] [> 100%] [> 100%] [> 100%]
Calculation method:	[Observation]
NOTE: Attach the statist	ical printouts used to determine the LC50 value, and the mortality data sheets.
Is the calculated LC50/E0	250 valid according to the specifications of the method used? Yes X No
Miscellaneous:	
Were any exposure cham If yes, specify concentrati N/A	pers aerated during the test? Yes No_X ons and duration, including the lowest percent saturation reached prior to aeration and at what
Were the test organisms of NOTE: Attach a copy of	bserved for appearance and behavior at least daily? Yes X_ No the acute toxicity test bench sheets with observation coded for each day.

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Revised 9/96
ACUTE TOXICITY TEST REPORT (JUNE 2013)

PSEG Nuclear LLC Salem Generating Station Permit No. NJ 0005622 (DSN 485)

17 July 2013

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Performed by:

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New England Bioassay, A division of GZA Geoenvironmental, Inc. 77 Batson Drive Manchester, CT 06042

NJ Laboratory Certification Number: CT405

SUMMARY

1 - 2 - A -

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Client:		PSEG Nuclear LLC								
Project]	Name:	Salem Generating Statio	n							
Dischar	ge Serial									
Number	:	485 (#1, #2, #3, & #4 san	mples)							
NJPDES	S Number:	NJ 0005622	NJ 0005622							
Job Nun	aber:	05.0044750.00								
Test Nur	nber:	Influent Acute Toxicity T Effluent Acute Toxicity 7	Fest: 13-1323 Test: 13-1324							
Test Ma	terial:	Influent [C33-2819, C33-2824, C	33-2830, and C33-2838]							
		Final Effluent - DSN 485 [C33-2820, C33-2825, C33-2831, and C33-2839]								
Sample I	Dates:	24-25, 25-26, 26-27, and 27-28 June 2013								
Test Dat	es:	26-30 June 2013								
Test Dur	ation:	96-h Static Renewal								
Test Met	hods:	NJDEP Regulations Governing the Certification of Laboratories and Environmental Measurements, 1996 (N.J.A.C. 7:18).								
Test Spe	cies:	Sheepshead Minnow (Cy	prinodon variegatus)							
		Source: Aquatic Biosystems, Inc. Age: 10 days old								
Receiving	g Water:	Delaware River								
Dilution	Water:	Artificial Saltwater								
Results:		Sheepshead Minnow: C	Syprinodon variegatus							
	Influent Acute To	<u>xicitv Test</u>	Effluent Acute Toxicity Test							
	24-h LC ₅₀ : > 100%	6 influent	24-h LC ₅₀ : > 100% effluent							
	48-h LC ₅₀ : > 100%	6 influent	48-h LC_{50} : > 100% effluent							
	72-h LC ₅₀ : > 100%	6 influent	72-h LC_{50} : > 100% effluent							
	96-h LC ₅₀ : > 100%	6 influent	96-h LC ₅₀ : > 100% effluent							

JUNE 2013 ACUTE TOXICITY TEST REPORT

PSEG - Nuclear LLC Salem Generating Station Permit No. NJ 0005622 DSN 485

17 July 2013

INTRODUCTION

This report contains results of 96-h static-renewal toxicity tests with sheepshead minnows (*Cyprinodon variegatus*) initiated during June 2013. Acute toxicity testing was performed using four sets of 24-h composite effluent or influent samples collected during 24-28 June 2013 from the Salem Generating Station of PSEG Nuclear LLC in Lower Alloways Creek, New Jersey. The acute toxicity tests were conducted by exposing immature *C. variegatus* to the effluent or influent samples for a period of 96 h (test dates: 26-30 June 2013). All toxicity test work reported here was performed at New England Bioassay (NEB) in Manchester, CT for PSEG.

MATERIALS AND METHODS Sample Collection and Handling

Four 24-h composite samples of final effluent were collected during 24-28 June 2013 from discharge outfall 485 at PSEG's Salem Generating Station in Lower Alloways Creek, NJ. Concurrent with the effluent collection, four 24-h composite samples of influent were also collected. Samples were collected by PSEG LTS staff. Samples for acute toxicity testing (Table 1) were delivered to NEB via commercial overnight courier service or by PSEG LTS personnel. Sample.receipt dates were-26, 27, 28, and 29 June 2013.-Copies of chain of custody documentation are in Appendix A.

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TABLE 1.DESCRIPTION OF INFLUENT AND EFFLUENT SAMPLES
FROM THE SALEM GENERATING FACILITY
COLLECTED BY PSEG-LTS STAFF DURING JUNE 2013
FOR STATIC-RENEWAL ACUTE TOXICITY TESTS

Sample Description	Sample Date (time)	Sample Type	NEB ID Nos.
EFFLUENT SAMPLES			
Final Effluent #1 (DSN 485)	6/24-25/13 (1000-1000 h)	24-h Composite	C33-2820
Final Effluent #2 (DSN 485)	6/25-26/13 (1000-1000 h)	24-h Composite	C33-2825
Final Effluent #3 (DSN 485)	6/26-27/13 (1000-1000 h)	24-h Composite	C33-2831
Final Effluent #4 (DSN 485)	6/27-28/13 (1000-1000 h)	24-h Composite	C33-2839
INFLUENT SAMPLES			
Influent #1 (485)	6/24-25/13 (1000-1000 h)	24-h Composite	C33-2819
Influent #2 (485)	6/25-26/13 (1000-1000 h)	24-h Composite	C33-2824
Influent #3 (485)	6/26-27/13 (1000-1000 h)	24-h Composite	C33-2830
Influent #4 (485)	6/27-28/13 (1000-1000 h)	24-h Composite	C33-2838

Standard wet chemistry analyses [pH, dissolved oxygen, specific conductivity, salinity, total residual chlorine (TRC), hardness and alkalinity] were performed on influent and effluent samples upon receipt at NEB (Table 2). TRC was measured by using a Fisher CL Titrimeter (Model 397). Salinity of influent and effluent samples ranged from 4 to 5 parts per thousand (ppt). Salinity was adjusted to 25 ± 1 ppt by addition of Instant Ocean artificial sea salts before use in testing. After salting, the pH of the influent and effluent samples ranged from 7.9 to 8.2; no pH adjustments with 3 N hydrochloric acid were required. Samples were not dechlorinated before use in testing.

Test Organisms

Test organisms used in acute toxicity testing were sheepshead minnows, *Cyprinodon variegatus*, obtained from a commercial supplier (Aquatic Biosystems, Fort Collins, CO). Sheepshead minnows (age: 10 days old at test initiation) were acclimated upon receipt to artificial saltwater at a salinity of 25 ± 2 ppt and a temperature of $20^\circ \pm 2^\circ$ C until test initiation. Organisms were healthy and free from disease before use in testing. Fish behavior was observed and recorded during testing; raw data sheets are provided in Appendix A.

Test Methods

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Acute test procedures were performed in accordance with the NJDEP document titled "Regulations Governing the Certification of Laboratories and Environmental Measurements" (N.J.A.C. 7:18, 1996, 2003). Sheepshead minnow acute toxicity tests were initiated on 26 June 2013 (Test Day 0) with samples (effluent or influent) collected during 24-25 June 2013. Tests were renewed for the next three days (Test Days 1, 2, and 3) with samples collected during 25-26 June, 26-27 June, and 27-28 June 2013.

Sheepshead minnows were exposed to nine test concentrations (6.25, 12.5, 25, 50, 60, 70, 80, 90, and 100% effluent or influent) plus an artificial saltwater (ASW) control. The ASW was prepared by adding Instant Ocean artificial sea salts (Aquarium Systems, Mentor, Ohio) to Milli-Q prepared deionized water to produce a salinity of 25 ± 1 ppt. The ASW was stored in a carboy and aerated before use in testing.

TABLE 2.INITIALWETCHEMISTRYRESULTSFORFINALEFFLUENT AND INFLUENT SAMPLESCOLLECTEDFROMTHESALEMGENERATINGSTATIONINLOWERALLOWAYSCREEK, NJ DURING JUNE 2013

Analysis Performed	Salem Generating Station Effluent									
	#1	#2	#3	#4						
Dissolved oxygen (mg/L)	8.0	8.1	8.0	6.2						
Temperature (°C)	1.8	4.1	0.8	0.8						
pH (SU)	7.5	7.3	7.3	7.7						
Sp. Conductivity (µmhos/cm)	7090	7540	7740	8650						
Salinity (ppt)	4	4	5	4						
TRC (mg/L) (Amperometric method)	< 0.05	< 0.05	< 0.05	< 0.05						
Hardness (mg/L as CaCO ₃)	900	1000	1000	1000						
Alkalinity (mg/L as CaCO ₃)	55	55	55	55						
Ammonia, as N (mg/L)*	<0.100	<0.100	<0.100	<0.100						
Analysis Performed	Salem Generating Station Influent									
	#1	#2	#3	#4						
Dissolved oxygen (mg/L)	8.2	7.3	7.4	5.5						
Temperature (°C)	1.6	4.1	1.8	0.6						
pH (SU)	7.6	7.5	7.3	7.8						
Sp. Conductivity (µmhos/cm)	7090	7580	7690	8360						
Salinity (ppt)				4						
TRC (mg/L) (Amperometric method)	< 0.05	< 0.05	< 0.05	< 0.05						
Hardness (mg/L as CaCO ₃)	800	800	1000	1000						
Alkalinity (mg/L as CaCO ₃)	55	55	60	55						
Ammonia, as N (mg/L)*	<0.100	0.150	<0.100	<0.100						

*Ammonia analyses performed by LTS.

- -----

Sheepshead minnow tests contained 10 animals per replicate with two replicates per test concentration, including the control. Test volume per replicate was 500 mL and test solution depth was approximately 6.2 cm in each test chamber. Mean test temperatures and individual temperature readings were $20^{\circ} \pm 2^{\circ}$ C. Effluent and influent salinity was 25 ± 1 ppt. Aeration was not required during the 96-h tests. Reference toxicant tests using sodium dodecyl sulfate (SDS) are routinely performed with sheepshead minnows obtained from Aquatic Biosystems, Inc. to monitor organism sensitivity.

Statistical Analysis

Survival data for fish tests were analyzed for acute adverse effects (death) by determining daily LC_{50} values. The LC_{50} is a statistically-estimated effluent concentration which is lethal to 50% of test organisms at time of observation. When adequate mortality data were available, LC_{50} values were determined by using computer packages based on U.S. EPA's 1993 acute guidance manual.

RESULTS

Results of 96-h static-renewal acute toxicity tests indicated that Salem effluent and influent samples collected during 24-28 June 2013 were not acutely toxic to sheepshead minnows. The 96-h LC₅₀ values for final effluent and influent were > 100% sample (Table 3). Survival of minnows exposed to the 6.25% to 100% effluent concentrations was \geq 95% at 96 h (Table 4). The influent samples collected concurrently with the effluent samples exhibited no significant acute toxicity to sheepshead minnows. Survival of sheepshead minnows was also \geq 95% in the 6.25% to 100% influent concentrations at 96 h (Table 4).

Survival of *C. variegatus* was 100% in the artificial saltwater controls at test completion for both the effluent and influent tests. Surviving organisms appeared healthy and were swimming normally in all concentrations for the test duration. Raw toxicity data sheets and printouts for statistical analyses of the acute tests are in Appendix A.

TABLE 3.	RESULTS	OF	ACUTE	TOXICITY	TESTS	PERFORMED	ON	SALEM
	GENERAT	ING	STATIO	N EFFLUENT	Г AND II	NFLUENT SAM	PLES	5

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Test Species	Test ID No.	Test Day	LC ₅₀ (% effluent)	95%Confidence Limits
Acute Tests			<u>Test I</u>	Dates: 26-30 June 2013
<u>Final Effluent</u>				
C. variegatus	13-1324	24 h 48 h 72 h 96 h	> 100 ^a > 100 > 100 > 100 > 100	N/A ^b N/A N/A N/A
Influent				
C. variegatus	13-1323	24 h 48 h 72 h 96 h	> 100 > 100 > 100 > 100 > 100	N/A N/A N/A N/A

 a \qquad LC $_{50}$ values for test days 1 through 4 were determined by observation.

^b N/A: Not applicable.

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TABLE 4.SURVIVAL RESULTS FOR 96-H STATIC-RENEWAL
ACUTE TOXICITY TESTS WITH FINAL EFFLUENT AND
INFLUENT SAMPLES COLLECTED DURING 24-28 JUNE
2013 FROM THE SALEM GENERATING STATION WITH
Cyprinodon variegatus
(TEST DATES: 26-30 JUNE 2013)

Test					
Concentration		Daily Surv	ival (%) ^a		
(% Effluent)	1	2	3	4	
Final Effluent	100 (0)	100 (0)	100 (0)	100 (0)	
ASW CONTROL [®]	100 (0)	100 (0)	100 (0)	100 (0)	
(ID N0. 13-1324)					
6.25	100 (0)	100 (0)	100 (0)	100 (0)	
12.5	100 (0)	100 (0)	100 (0)	100 (0)	
25	100 (0)	100 (0)	100 (0)	100 (0)	
50	100 (0)	100 (0)	100 (0)	100 (0)	
60	100 (0)	100 (0)	100 (0)	100 (0)	
70	100 (0)	100 (0)	100 (0)	100 (0)	
80	100 (0)	100 (0)	100 (0)	100 (0)	
90	100 (0)	100 (0)	100 (0)	100 (0)	
100	100 (0)	95 (1)	95 (1)	95 (1)	
Influent					
ASW CONTROL ^b	100 (0)	100 (0)	100 (0)	100 (0)	
(ID NO. 13-1323)					
6.25	95(1)	95 (1)	95 (1)	95 (1)	
12.5	100 (0)	100 (0)	95 (1)	95 (1)	
25	100 (0)	100 (0)	100 (0)	100 (0)	
50	100 (0)	100 (0)	100 (0)	100 (0)	
60	100 (0)	100 (0)	100 (0)	100 (0)	
70	.100 (0)	- 100.(0)	100 (0) .	100 (0)	
80	100 (0)	100 (0)	100 (0)	100 (0)	
90	100 (0)	100 (0)	100 (0)	100 (0)	
100	100 (0)	95 (1)	95 (1)	95 (1)	

^a Number outside parentheses represents daily *C. variegatus* survival as a percentage; number inside parentheses represents number of organisms dead out of 20.

^b ASW Control: Laboratory-prepared artificial saltwater.

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Reference Toxicant Testing

Reference toxicant tests using sodium dodecyl sulfate (SDS) are routinely conducted with sheepshead minnows obtained from Aquatic Biosystems (AB) to monitor organism sensitivity; sheepshead minnows used in the influent and effluent toxicity tests were obtained from AB. For the June 2013 testing with AB-purchased fish, 96-h survival data were used to calculate a LC_{50} value for the purchased *C. variegatus*. Per NJDEP, the test was conducted at $20^{\circ} \pm 1^{\circ}$ C. The 96-h LC_{50} was estimated at 7.508 mg/L SDS. Survival of control fish was 100% at test completion (96 h). Copies of statistical summary sheets for SDS for AB sheepshead minnows are in Appendix A.

CERTIFICATION

I certify that the toxicity test data presented in this report were obtained under my direction or supervision in accordance with protocols of the New Jersey Department of Environmental Protection. The information is, to the best of my knowledge and belief, true, accurate, and complete.

Kimberly Wills Laboratory Manager

7/18/13

APPENDIX A

JUNE 2013 TESTING (TEST DATES: 26-30 JUNE 2013)

CHAIN OF CUSTODY FORMS, COPIES OF RAW DATA FORMS, AND STATISTICAL PRINTOUTS FOR ACUTE EFFLUENT AND INFLUENT TOXICITY TESTS WITH Cyprinodon variegatus

NEW ENGLAND BIOASSAY ACUTE TOXICITYDATA FORM COVER SHEET FOR REFERENCE TOXICANT LC50 TESTS

CLIENT:	New England Bioassy				C. varieg	ATUS TEST ID NO: 13-13-10
ADDRESS:	77 Batson Drive				<u>o</u> . <u>mine</u>	
	Monohester CT 06040					
CONTACT	Ki= Wills	- ··				
SAMPLE ITPE:	Reference Toxicant - Sodium Dodecyr	Sullate				
I. <u>STOCK SOL</u> SDS Lot ⁻ SDS Stock Conce	UTION PREPARATION Number : 50513(4-19) entration :200 g/L	II. <u>TEST SOL</u> Test Sol'n Vol.: Control	UTION PREPERA	<u>ATION</u> mL	III. ASW Loi Sa	DILUTION WATER SOURCE t No : <u>CRJO33-03</u> \ linity : <u>25</u> ppt
Stock Solution	Volume : <u>500</u> mL	150/1	12	mL	Alka	linity : mg/L as CaCO;
SDS Ca	lculated : g	3.0 c/T	<u>8</u> 4	mL		
SDS V	Weighed : <u>0.10014</u> g	6.0 g/l.	48	m[.		
		12.5 p/L	100	mI.		
		25.0 g/L	300	 mL		
		Vol. Stock U: Vol. Remain	ing: 176	mL mL (Calc	ulated)	
<u>Invertebrate</u>		voi, kemau			ureu)	
TYPE OF TEST	TEST SET UP (TECH. INIT.):	PD			RESULTS	OF C.variegatus 48hrs LC59 TEST
DEFINITIVE [X]	SCREEN [] RANGE [] R	ENEWAL []	MI	ETHOD	LC ₅₀ (g/L)	95% CONFIDENCE LIMITS (g/L)
TEST SPECIES : _	Cyprinodon variegatus		BINOMIAL I	DISTIBUTION	1 ;	
NEB LO	DT#: CV 13AB (6-18) B		MOVING AVE	RAGE ANGL	E :	
	AGE: Days			PROBIT	[:	<u> </u>
	TEST SOLUTION VOLUME : 700	(mL) TR	IMMED SPEARM	IAN KARBER	1.7.508	6.609-8.53
NO. ORGA	NISMS PER TEST CHAMBER : <u>10</u>			OTHER	د:	<u> </u>
NO. ORGAN	ISMS PER CONCENTRATION : 20			NOAEI	<u>3.0</u>	,
ŇO.	ORGANISMS PER CONTROL : 20			NOAEI		
START DATE :	e/19/13 AT 1410			NOALL	. 110 - 0631	erved - Acole - Effect Level
END DATE :	<u>e[CD[1]</u> AT 170_) 				
COMMENTS :						,
					·	
		· · ·	<u> </u>		·····	
REVIEWED BY : _	G. Stull	date : <u>7</u> -	5-13	_		

New England Bioassay Reference Toxicity Test Data Sheet

NEB Test #:																					
Test Org	anism	ı:	Сур	rinodo	on var	iegati	us			_	Age):	[۱	Days						-
Facility N	lame:		New E	Englar	nd Bio	assa	<u>у</u>		<u> </u>		Tes	t Dura	tion:_	96	3	Hou	rs			<u> </u>	-
Beginning	g Dat	e:	2/19	113	Time	:	411	2			Dilution Water Source: <u>NEB Lab Synthetic</u>										
Sample I	D:	eferer	ice To	oxicar	<u>nt - S</u>	DS					Sali	nity:		ć	25	р	pt				
Conc.		Nu	Imbe	r of			Di	ssolv	/ed		Τ	Ter	nper	ature	i Carlot Bristopore			pН			Sal
(mg/L)		S: Or	urvivi nanis	ing			(Oxyg (ma/l	en ۱				(°C)							ppt
	0	24	48	72	96	0	24	48	72	96	0	24	48	72	96	0	24	48	72	96	0
ASW A	10	10	10	10	10	6.8	7.2	17.0	7.	7.1	214	1º125	20	201	070,0	7.9	8.1	18.1	8.1	7.9	25
1.5 A			10	10	10	6.8	7.1	6,9	1.7	7-6	21	19.6	20	70.0	70.7	80	82	X01	8.1	17	25
В	10		10	10	10		7.2	6.9	7-1	6.8		19,3	19	19.7	19.8	0.0	8,2	8,1	81	8.0	<u></u>
3.0 A	10	10	10	10	10	6.8	8 7.2 7.1 7.3 7.2					19.4	20	19.9	19-9	8.0	82	8.2	8:7	55	dS
6.0 A	10 10		10 Q14	RIX	11) 71×	1.4	172	$\frac{7.1}{10.5}$	11.5	10	21	19.4	20	70.7	Za 4	81	82	8.2	8.1	8.0 5.1	<i>A</i> 5
B	10		10	912	9	0.0	7.2	6,6	10.9	6.3		19.5	2P	20.3	Z0,4	0.1	8.2	8.2	8.1	8.0	~~
12.5 A	10	010%	-	,		6.8	7.3	-	-		21	19.4		~		8.1	82	·	~		22
25 A		Dist	()	-		105	7.1				21	19,4				21	8.2		-		35
B	10	O ^{lof}	1	-		0.0	6.9	-			1001	19.7		-		0.1	8,2				<i>a</i> .0
Tech Int.	PD	CW	Ċω	fo		PD	(w	KS	40	KO	PD	Cw	15	¥Ο	140	PD	(ļw	ß	Ko	Ko	
LC50				С	onfide	ence l	nterv	al			A-N	OEC			(Comp	utatio	nal M	ethoc	1	
7.5	D8	12	$\cdot loc$	99-	- 8.	5	31				3	0			Dear	m	cn				
Analyst(s)		<u>Lil</u>	<u>Un</u>	R	6	ues		5													
Clanatura	ſ	N.	D	t.		4	A		}												
orginature	-6	\succ		~~~	-	4			,												
		1				•															

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SPEARMAN-KARBER

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	95% 95%	LOWER CONF UPPER CONF	TRIM: LC50: IDENCE: IDENCE:	.00% 7.508 6.609 8.531		
CONC. g/L 1.50 3.00 6.00 12.50 25.00 THE BINOMIA SOUND CONSERV	NUMBER EXPOSED 20. 20. 20. 20. 20. L TEST SHOW	NUMBER DEAD 0. 0. 4. 20. 20. NS THAT	PERCENT DEAD .00 .00 20.00 100.00 100.00 6.00 AND	BINOMIAL PROB.(%) .9537D-04 .9537D-04 .5909D+04 .9537D-04 .9537D-04 12.50 CAN B	4 4 5 4 8E USED AS	STATISTICALLY
LEVEL ASSOCIA	ATED WITH 1	THESE LIMI	TS IS 99.	4090 PERCENT.		CONFIDENCE
WHEN THER WHICH THE PER THE MOVING AN ANY STATISCAI	E ARE LESS RCENT DEAD /ERAGE NOR LLY SOUND F	THAN TWO (IS BETWEEN THE PROBIC RESULTS.	CONCENTRAT 1 0 AND 10 1 METHOD C.	IONS AT 0, NEITHER AN GIVE		
DATE: 6/19/ SAMPLE: SDS	′13		TEST NUMB SPECIES: (ER: 13-1346 C.variegatus	DURATION:	96 h
METHOD	LC50	CON	IFIDENCE LI	IMITS		
BINOMIAL	7.538	6.000	12.500	6.500		
MAA	******	******	******	******		
PROBIT	******	*****	******	******		
SPEARMAN	7,508	6,609	8.531	1.922		
**** = LIMIT	DOES NOT	EXIST				

NEB SALTWATER SPEC.__S ACCLIMATION RECORD

Species:	Client: PSE9 Salem	Quantity:	*Mortality upon arrival
Cyprinidon Variegatis	Test ID:	460	
Source:	Lot #: CV 13AB(6-26)	Age:	ි
Aquatic Brosystems		10 days on 6-26-13	* Mortality > 10% - Notify management

Allowable Mortality: > 5% mortality = Notify management.

Allowable Acclimation: Fish = No more than 50% tank volume water change over a 12 (twelve) hour period.

Mysids = Need to be +/- 2 ppt of test dilution water.

	Wate	r Chemis	stry					Observations				
Date	D.O. (mg/L)	p.H. (SU)	Temp. (C) *	Alkal. (mg/L)	Sal. (ppt)	F	eeding	s	Behavioral observations	Do organisms look stressed?	Mortalities	Comments / Treatment type
						АМ	NOON	РМ	A = Normal, B = Erratic mov. C = Dead	Yes / No	# of dead organisms removed from tank	
ie-26-13	8.(7,4	23.9	95	23	Att.			A	_N_12	0	Acclimated to ASW. Salenity gradually adjusted to 25%.
·····			· ·	·								
	-											
	·			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · ·						
	-		-									
· · · · · · · · · · · · · · · · · · ·	-	-										

New England Bioassay

Sample#1

A division of GZA GeoEnvironmental, Inc. 77 Batson Drive Manchester, CT 06042 Phone: 860-643-9560 Fax: 860-646-7169

Chain of Custody

Company Name: <u>PSEG-Salen</u>	Report To: Sonia Foster
Project Name/#:	Address: 40 Craquiard Ad Sam Planker H2
Invoice To:PO#:	Phone: 908, 412 3142 Fax: ()
Samples Collected By (Print): A Adoms	Email:

#	SAMPLE IDENTIFICATIONS	Date Sa må d	Time Sampled	Composite	Grab	Chemical Analysis - Attach Permit Specifications
1	Influent #1 (C33-2819	634-2313	1000-1000	\mathbb{X}		
2	Effluent #1 (33-2820	1/24-25/13	1000-1000	\mathcal{X}		
3		•				
4						

ANALYSIS	1	2	3	4	ANALYSIS	1	2	3	4
SAMPLETYPE			1		VERTEBRATE/(FISH): TYPE & AGE (if applicable				
Stormwater (if yes, proceed to relinquish section)					Pimephales promelas (hours/days)				
POTW Effluent					Cyprinodon variegatus (hours/days)	\checkmark			
Groundwater					Menidia beryllina (hours/days)				
Non-Contact Cooling Water					VERTEBRATE (FISH) TEST DURATION (if applic	able		和新	
Industrial Effluent		i			24 hours				
Other					48 hours		.		
PROTOCOLTYPE					96 hours	V			
Definitive LC50	V				7 days				
Pass/Fail (Screening or NOAEL)					TEMRERAT⊍RE((fispecified)				
Chronic					20°C	V			
SINVERTEBRATE TYPE & AGE				的	25°C				
Daphnia pulex (<24 hrs)					MISCELLANEOUS (If applicable)				
Mysidopsis bahia (hours/days)					SALINITY (if saltwater testing) $_251/$ ppt	1			
Ceriodaphnia dubia (<24 hrs)				-	Dilution water HARDNESS (mg/L as CaCO ₃)				··· 7

Relinquished by: Mare Mark	Date: 125 Time: 150	Accepted by: Park Hand	Date: 0/24/13 Time: 1015				
Relinquished by:	Date:	Accepted by:	Date:				
	Time:		Time:				
Relinquished by:	Date:	Accepted by:	Date:				
	Time:		Time:				
REMARKS/NOTES: Just initiation Samples							
	•						



UPS Next Day Air UPS Worldwide Express DIMENSIONAL WEIGHT If Applicable SHIPPER RELEASE PACKAGE TING IN HIDE DATE IN SUCCESSION OF THE EXPRESS (INT'L) DOCUMENTS ONLY SATURDAY DELIVERY SHIPMENTERIO 12 1X8 364 55 1000 6354 1X836A REFERENCE NUMBE 3PY 55 7000 P35 TELEPHONE 908-412-3129 Hadler Arlams **PSEG - LAB TESTING SERVIC** 400 CRAGWOOD RD SOUTH PLAINFIELD UPSINEMADEMAN DELIVERY TO Robin Faulk 860-643-9 NEB-GZA 77 Batson Drive T Manchester CT 06042 JZ JX9 3P4 55 7000 P354 SHIPMENT U125/13 1X83 6A79 YBW 0101911202609 1/10 S United Parcel Service, Louisville, KY

Sample #2

Report To: Sonig Fosk

New England Bioassay A division of GZA GeoEnvironmental, Ing. 77 Batson Drive Manchester, CT 06042 Phone: 860-643-9560 Fax: 860-646-7169

Company Name:SEGSalem
Project Name/#:
Invoice To:PO#:
Samples Collected By (Print): Marec Ad CMS

Chain of Custody

Address: <u>40 Craywork S. Planker I</u> Phone: <u>904</u>, 413 3142 Fax: () PFBS

#	SAMPLE IDENTIFICATIONS	Date Samplei	Time Sampled	Composite	Grab	Chemical Analysis - Attach Permit Specifications
1	Influent # 2 (33-7824	1005-2113	1000	\mid		
2	Effluent # 2 033-2825	6/25-24/13	(1010)			
3.	•)] •					
4		T				

Email:

ANALYSIS	1	2	3	4	ANALYSIS	1	2	3	4
SAMPLETYPE					VERTEBRATE (FISH) TYPE & AGE (if applicable				
Stormwater (if yes, proceed to relinquish section)					Pimephales promelas (hours/days)				
POTW Effluent					Cyprinodon variegatus (1-14 hours days)	レ			
Groundwater					Menidia beryllina (hours/days)				
Non-Contact Cooling Water					VERTEBRATE (FISH) TEST DURATION (If application	able)	ра <mark>н</mark>		
Industrial Effluent					24 hours				
Other					48 hours				
PROTOGOLTYPE		k.			96 hours	V			
Definitive LC50	\checkmark				7 days				
Pass/Fail (Screening or NOAEL)					TEMPERATURE (If specified)		23		
Chronic					20°C	\checkmark			
INVERTEBRATE/TYPE & AGE					25°C				
Daphnia pulex (<24 hrs)					MISCELLANEOUS (II, applicable)				鿦
Mysidopsis bahia (hours/days)					SALINITY (if saltwater testing) ppt	/			
Ceriodaphnia dubia (<24 hrs)		"			Dilution water HARDNESS (mg/L as CaCO ₃)				

	Date:	3 Accepted by:	Date: (0/27/13 Time: 0946		
Relinquished by:	Date:	Accepted by:	Date:		
	Time:		Time:		
Relinquished by:	Date:	Accepted by:	Date:		
	Time:		Time:		
REMARKS/NOTES: Penewal Samples.					





New England Bioassay A division of GZA GeoEnvironmental, Inc.

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77 Batson Drive Manchester, CT 06042 Phone: 860-643-9560 Fax: 860-646-7169

Sample # 3 Chain of Custody

Company Name: RSEG-Salem	Report To: Sonia Foster
Project Name/#:	Address: 40 Craquella S-Plainfrela NJT
Invoice To:PO#:	Phone: (908) 413 3142 Fax: ()
Samples Collected By (Print): And rec Adams	Email:

#	SAMPLE IDENTIFICATIONS	Date Sa mjì ei	Time Sampled	Composite	Grab	Chemical Analysis - Attach Permit Specifications
1	Influent # 3033-2836	606-27/13	117170			
2	Effluent # 3 C33-2831	Elifer Elij	10017			
3			, ,			
4						

ANALYSIS	1	2	3	4	ANALYSIS	1	2	3	4
SAMPLE TYPE					VERTEBRATE (FISH) TYPE & AGE (if applicable)				調整
Stormwater (if yes, proceed to relinquish section)					Pimephales promelas (hours/days)	Ì	•		
POTW Effluent					Cyprinodon variegatus (hours/days) V				
Groundwater					Menidia beryllina (hours/days)				
Non-Contact Cooling Water					VERTEBRATE (FISH) TEST DURATION (if applicable	le)			
Industrial Effluent					24 hours				
Other					48 hours				
RHOTOCOL TYPE			3.5		96 hours				
Definitive LC50	\mathbf{V}				7 days				
Pass/Fail (Screening or NOAEL)	,				TEMPERATURE (If:specified)				
Chronic					20°C V				
SINVERTEBRATE TYPE & AGE					25°C				
Daphnia pulex (<24 hrs)					MISCELLANEOUS (if applicable)				
Mysidopsis bahia (hours/days)					SALINITY (if saltwater testing) ppt	T	Τ		
Ceriodaphnia dubia (<24 hrs)			·•• ·		Dilution water HARDNESS (mg/L as CaCO ₃)	-			

Relinquished by:	Date: 1/17-117 Time: 1530	Accepted by:	Date: (2) 28/13 Time: 1040				
Relinquished by:	Date:	Accepted by:	Date:				
	Time:		Time:				
Relinquished by:	Date:	Accepted by:	Date:				
<u>_</u>	Time:		Time:				
REMARKS/NOTES: Chalwal Samplas							

New England Bioassay A division of GZA GeoEnvironmental, Inc. 77 Batson Drive Manchester, CT 06042 Phone: 860-643-9560 Fax: 860-646-7169

Sample # 4 Chain of Custody

Company Name: PSEG-Salem	Report To: Sonia Fosk
Project Name/#:	Address: 40 Cragwood Ld S. Phinfield 41
Invoice To:PO#:	Phone: (108)412 3142 Fax: ()
Samples Collected By (Print): ACCEC Adcims	Email:

#	SAMPLE IDENTIFICATIONS	Date Samplei	Time Sampled	Composite	Grab	Chemical Analysis - Attach Permit Specifications
1	Influent # 4 (33-2838	6127-28/13	1000			
2	FG/went # 4 (33-2039	, 27-28/13	1000			
3						
4						

ANALYSIS	1	2	3	4	ANALYSIS	1	2	3	4
SAMPLE TYPE					VERTEBRATE/(FISH) TYPE'& AGE (if applicable				
Stormwater (if yes, proceed to relinquish section)					Pimephales promelas (hours/days)				
POTW Effluent					Cyprinodon variegatus (hours/days)	V			
Groundwater					Menidia beryllina (hours/days)				
Non-Contact Cooling Water					VERTEBRATE (FISH) TEST OURATION (if applic	able			
Industrial Effluent					24 hours				
Other					48 hours				
PROTOCOLITYPE	i fei				96 hours	V			
Definitive LC50	\vee	Í			7 days				
Pass/Fail (Screening or NOAEL)					TEMPERATURE (If specified)				
Chronic					20°C				
INVERTEBRATE TYPE & AGE					25°C	V			
Daphnia pulex (<24 hrs)					MISCELLANEOUS (if applicable)				なが
<i>Mysidopsis bahia</i> (hours/days)					SALINITY (if saltwater testing) ppt				
Ceriodaphnia dubia (<24 hrs)					Dilution water HARDNESS (mg/L as CaCO₃)				

Relinquished by:	Date: 6 38 13 Time: 1400	Accepted by: Bul Nanman	Date: 6/28/13 Time: /600
Relinquished by:	Date: 6/29/13	Accepted by	Date: (2)99/13 Time: 1015
Relinquished by:	Date:	Accepted by:	Date:
REMARKS/NOTES: Plalwal Sa	Time: Nyplet	<u>I</u>	Time:

LABORATORY & TESTING SERVICES

ANALYSIS REPORT

STATION : Salem Generating Station

PARAMETER	SAMPLING	SAMPLE	LAB SAMPLE	DATE				ANALYSIS			
	POINT	NO.	NO.	SAMPLED	RESULT	DATE	TIME	UNITS	BY	DILUTION	RL
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Inf.1	ANA13000355	06/25/2013	<0.100	07/05/2013	0934	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Eff. 1	ANA13000356	06/25/2013	<0.100	07/05/2013	0937	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Inf. 2	ANA13000357	06/26/2013	0.150	07/05/2013	0948	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Eff. 2	ANA13000358	06/26/2013	<0.100	07/05/2013	0952	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Inf. 3	ANA13000359	06/27/2013	<0.100	07/05/2013	0954	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Eff. 3	ANA13000360	06/27/2013	< 0.100	07/05/2013	0957	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Inf. 4	ANA13000361	06/28/2013	< 0.100	07/05/2013	1000	mg/L	SAF	1	0.100
Ammonia-N	Aqueous Sample, NJPDES DSN 485	Eff. 4	ANA13000362	06/28/2013	<0.100	07/05/2013	1003	mg/L	SAF	1	0.100

Reported By saf

Method Numbers:

Ammonia: SM4500 B&D

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مصافحا الاستاد الالتا الألال

	Test ID No. 13-1323
	Project No. 05.0044750.00
Test Species Cyprinodon variegatus	
Source Aquatic BioSystems	No. Organisms per Test Chamber 10
Lot No. <u>CV13AB (6-26)</u>	No. Organisms per Concentration 20
Age (O Days	No. Organisms per Control 20
Test Chamber Size 800 mL	Start Date/Time <u>626/13@1520</u>
Test Chamber Volume 500 mL	End Date/Time <u>630/13@1420</u>
Aeration	Required? [] Yes [X] No: Test Day:
	Test Species Cyprinodon variegatus Source Aquatic BioSystems Lot No. Cull 3 AB (b-2b) Age 10 Days Test Chamber Size 800 mL Test Chamber Volume 500 mL Ageation 500 mL

	Laboratory Control (Dilution Water)											
Day	Lot Number	Salinity ppt	Alkalinity mg/L as CaCO ₃									
0	CRI033-021	25	130									
1	CRI033-022	25	120									
2	CRI033-022	25	120									
3	CRI033-022	25	120									

LC₅₀ Hour 95% Conf. Limits NOAEC 24-h >100% 1001. to 100% >100% 100:1.±00 48-h 100% 1001. - ->100% 72-h 100% 100%. ± 00 >100% 100%. 96-h

Reviewed by:

Date:

Acute Toxicity Results

Client PSE&G	Test Start 6 26 13@1520	Test ID No. 13-1323
Sample ID Salem - Influent	Species Cyprinodon variegatus	Project No. 05.0044750.00

						Meter	Rec	ord				
		Diss	olved		Tempe	erature		þ	Н		Sal	inity
		Oxyger	n (mg/L)		(°C)		(°C) (SU)			(p	pt)	
Hour	Tech.	Old	New		Old	New		Old	New		Old	New
0	MV		19A			19 A			9	Parts of		8
24	NG	18	18	tale.	18	18	1.1	19B	193		8	8
48	ω	13	13		13	13		198	19B	N. CAN	8	8
72	MG	18	18	ALC: N	18	18		q	9	地震	8	8
96	MG	18		No.	18			9		Million	8	

Sample Salinity and pH Adjustment

		Sample	pН	Initial	Artificial	Final	pН	3N HCI	pН
Hour	Tech.	Volume	Initial	Salinity	Sea Salt	Salinity	after salting	Volume	Final
0	۸V	5000 mL	7.6	5 ppt	<i>ll5</i> g	Z5 ppt	8.0	∽ mL	8.0
24	MG	<u> </u>	7.5	4 ppt	120.8 g	24 ppt	8.1	— mL	8.1
48	CW	5000 mL	7.6	5 ppt	115 g	24 ppt	7.9	— mL	7.9
72	MG	5000 mL	7.9	4 ppt	120.8 g	24 ppt	8.2	mL	8.2
96			1. 2 1					101.25	17 3 /7

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13 Date:

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Reviewed by:

Test ID No. 13-1323 Project No. 05.0044750.00

Client PSE&G - Salem Generating Station Sample ID Influent Test Start 62413@1530

Test Species Cyprindon variegatus

[Te Date/Time	st Day 0 (0h)	Tes Date/Tim	t Day 1 (24	4 h) 8 14-25	Tes Date/Time	t Day 2 (4	8 h)	Test Day 3 (72 h) Date/Time: toladu 3 1430			
Conc. %	Test Solution	Dilution Water	Total Vol.	Test Solution	Dilution Water	Total Vol.	Test Solution	Dilution Water	Total Vol.	Test Solution	Dilution Water	Total Vol.	
Control	0	1000	1000	\bigcirc	1000	1000	0	1000	1000	0	1000	1000	
6.25%	62.5	937.5	1000	62.5	937.5	1000	62.5	937.5	1000	62.5	937.5	1000	
12.5%	125	875	(000)	65	875	1000	125	8775	1000	125	875	1000	
25%	250	750	1000	J.5D	750	100D	250	750	1060	250	750	1000	
50%	500	500	1000	500	500	1000	500	500	1000	500	500	100D	
60%	600	400	1000	(LOCO)	400	1000	600	400	1000	600	400	1000	
70%	700	300	1000	700	300	1000	700	300	1000	700	300	1000	
80%	800	200	1000	800	200	1000	800	200	1000	800	900	1000	
90%	900	100	1000	900	100	1000	900	100	1000	900	100	1000	
100%	1000	0	1000	1000	0	1000	1000	0	1000	1000	0	1000	
Sample ID No.	c33-2819	1		¢/	CRILIB-000			8KID33-D22			URIES OF		
wed by:	red by: Date: B/////////////////////////////												

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Tes Test S	Client st Start pecies	PSE&G - Sa 6 (2)6 Cyprinodon	alem Influent Test ID 2 13 (2) 15 2(1) Project a variegatus	No. <u>13-1323</u> No. <u>05.0044750.00</u>
Observ	vations	s: Hour:	24 Date: 6/27/13 Technici	an: <u>MG</u>
Conc. %	Rep.	Number Surviving	Observations/Behavior All organisms appear healthy and normal	. unless noted.
ASW	A	10	· · · · · · · · · · · · · · · · · · ·	
Cont.	В	10		
6.25%	A	9"	I dend - only a head the body found	·
	в	10		
12.5%	А	10		
	В	10		
25%	А	10		
	в	10		
50%	А	10		
	в	10		
60%	А	10		
	В	10		

7/15_ Reviewed by:

Date: _____ 18 7, lrsJ

Tes Test S	Client st Stari pecies	PSE&G - Sa Cyprinodon	lem Influent ろんの しろうん variégatus			Test ID No Project No(13-1323
Observ	ations	s: Hour:	24	Date:	6/27/13	Technician: _	MG
Conc. %	Rep.	Number Surviving			Observations/B	ehavior	
70%	A	10					
	В	10					
80%	A	10					
	в	10					
90%	А	10					
	В	D					
100%	А	1D					
	в	ID					
	A						
	в				······································		
	Α		·····				
aa	В			······································			

-/13

Reviewed by:

7/18/13 Date: ____ ſt t

Tes Test S	Client st Stari pecies	PSE&G - Sa	Iem Influent Test ID No. 13-1323 CONSAD Project No. 05.0044750.00
Obser	ations	: Hour:	48 Date: 62813 Technician: 65
Conc. %	Rep.	Number Surviving	Observations/Behavior
ASW	Å	10	All orcianisms appear healthy and normal unless noter
Cont.	в	10	
6.25%	A	19 ⁴	
	В	10	
12.5%	A	10	
	в	10	
25%	A	10	
	в	10	
50%	А	$l \heartsuit$	
	в	10	
60%	А	[]	
	В	Þ	

Reviewed by: ! [l

3 Date: ____

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Tes Test S	Client st Stari pecies	PSE&G - Sa tlolol cyprinodor	Image: Image lem Influent Test ID No. 13-1333 3.00 15.00 Project No. 05.0044750.00 Variegatus Variegatus Variegatus 05.0044750.00
Observ	/ations	s: Hour:	48 Date: <u>62813</u> Technician: <u>KS</u>
Conc. %	Rep.	Number Surviving	Observations/Behavior
70%	A	10	
	в	10	
80%	А	10	
	в	10	
90%	Α	10	
	В	10	
100%	А	qlmt	all other organisms oppeor normal
	В	10	
	А		
	в		
	А		
	в		

1/15

Reviewed by:

18/13 Date: $\overline{\nabla}$

Тос	Client	PSE&G - Sa	lem Inflyent			Test ID No. Project No.	13-1323
Test S	pecies	Cyprinodon	variegatus			FIOJECTINO.	03.0044730.00
Observ	vations	: Hour:	72	Date:	6/29/13	Technician:	MG
Conc. %	Rep.	Number Surviving	All organism	5 are	Observations/B healthy and	ehavior L normal 13M	ess noted
ASW	A	10				······	
Cont.	В	10					
6.25%	А	9					
	в	10					
12.5%	A	9 "	I denci - ho	uf of	head missing	j. All others	pormal.
	В	10					
25%	А	10					
	В	ID					
50%	А	10					
	В	10					
60%	А	10					
	В	10				· · · · · · · · · · · · · · · · · · ·	

:16 Reviewed by:

18/3 91 Date: ŀ

Tes Test S	Client st Star pecies	PSE&G - Sa t(2) cyprinodon	Test ID No. <u> 3- 3</u> 23 Project No. <u>05.0044750.00</u>	
Observ	vations	s: Hour:	Date: (13913	Technician: <u>MG</u>
Conc. %	Rep.	Number Surviving	Observations/E	3ehavior
70%	A	10		
	В	10		
80%	A	10		
	в	ID		
90%	A	10		
	В	ID		
100%	A	9		
	в	10		
	А			
	в			
	А			
	В	· · · · · ·		

-165 Reviewed by: L

18/13 Date: ____/

ClientPSE&G - Salem InfluentTest ID No.3-1Test StartU 20 1000Project No.05.0044Test SpeciesCyprinodon VariegatusProject No.05.0044							
Observ	vations	: Hour:	Date: 02013 Technician: MG				
Conc. %	Rep.	Number Surviving	Observations/Behavior All organisms a poar han litry and normal unless noted				
ASW	A	10					
Cont.	в	10					
6.25%	А	9					
	в	10					
12.5%	А	9					
	в	10					
25%	А	10					
	В	10					
50%	А	D					
	В	ID					
60%	А	ID					
	в	10					

Reviewed by:

Date: 18/13

Tes Test S	Client st Stari pecies	PSE&G - Şa (0)2011 Cyprinodoh	lem Influent 子の、らつし variegatus			Test ID No. Project No.	13-1323
Observ	vations	s: Hour:	96	Date: <u>(1</u> 30	13	Technician:	MG
Conc. %	Rep.	Number Surviving		Obser	vations/Beh	avior	
70%	A	10					
	в	10		······	·		
80%	А	10					
	в	10			, <u></u>		
90%	А	10			·····		
	в	D					
100%	A	9					
	в	1D					
	А						
	B			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
	А		· · · · · · · · · · · · · · · · · · ·				
	в				· · · · · · · · · · · · · · · · · · ·		

Reviewed by:

t

_____ Date: ______

CT-TOX: BINOMIAL, MOVING AVERAGE, PROBIT, AND SPEARMAN METHODS

MINIMUM REQUIRED TRIM IS TOO LARGE: 95.0, SO SK IS NOT CALCULABLE. SPEARMAN-KARBER

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			TRIM:	.00%	
			LC50:	.000	
			95	5% CONFIDENCE LIMITS	
			. P	RE UNRELIABLE.	
CONC.	NUMBER	NUMBER	PERCENT	BINOMIAL	
90	EXPOSED	DEAD	DEAD	PROB.(%)	
6.25	20.	1.	5.00	.2003D-02	
12.50	20.	1.	5.00	.2003D-02	
25.00	20.	Ο.	.00	.9537D-04	
50.00	20.	Ο.	.00	.9537D-04	
60.00	20.	Ο.	.00	.9537D-04	
70.00	20.	Ο.	.00	.9537D-04	
80.00	20.	Ο.	.00	.9537D-04	
90.00	20.	Ο.	.00	.9537D-04	
100.00	20.	1.	5.00	.2003D-02	

THE BINOMIAL TEST SHOWS THAT 100.00 AND +INFINITY CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS 99.9980 PERCENT. THE LC50 FOR THIS DATA SET IS GREATER THAN 100.00

THE MOVING AVERAGE METHOD CANNOT BE USED WITH THIS DATA SET BECAUSE NO SPAN WHICH PRODUCES AVERAGE ANGLES BRACKETING 45 DEGREES ALSO USES TWO PERCENT DEAD BETWEEN 0 AND 100 PERCENT.

NO CONVERGENCE IN 25 ITERATIONS. PROBIT METHOD PROBABLY CAN NOT BE USE WITH THIS SET OF DATA.

DATE: 6-26-13	TEST NUMBER:	13-1323	DURATION:	96 h
SAMPLE: Salem Influent	SPECIES: Cypi	rinodon va	riegatus	

METHOD	LC50	CON	MITS	
		LOWER	UPPER	SPAN
BINOMIAL	*****	100.000	******	******
MAA	*****	******	******	******
PROBIT	* * * * * * *	******	******	* * * * * * *
SPEARMAN	.000	******	******	* * * * * * *

NOTE: MORTALITY PROPORTIONS WERE NOT MONOTONICALLY INCREASING. ADJUSTMENTS WERE MADE PRIOR TO SPEARMAN-KARBER ESTIMATION.

**** = LIMIT DOES NOT EXIST

.

Test Start <u>626 139530</u> Species <u>Cyprinodon variegatus</u> Test ID No. <u>13-1323</u> Project No. <u>05.0044750.00</u>

	1	فخذرها متعدير فستقتله من	7		19 <u>6</u>),	1	· · · ·	1.5.8			1.82		
			Diss	olved	a constant	Temp	erature		F F	bH ·		Sal	intiy
Test			Oxyge	Oxygen (mg/L)		°) (°	°C)		('	°C)		(p	pt)
Conc.	Т	est	Rep	licate		Replicate			Rep	licate	1011	Rep	licate
%	н	our	A	В		A	В		Α	В	N. Lot.	А	В
	0 h	old	1				1.		nie Brateste Wolfer Verse				
		new	7.6			19.4			8,2			25	
	24 h	old	7.3	7,4		19.1	19.0		8.0	8.1	ful a	25	25
ASW		new	6.9			21.0		140.14	8.2			.24	_
Cont.	48 h	old	7-3	7.3		19.0	19-6		8.0	8.1		24	24
		new	7.4		1700 A	19.7			8.1			24	
	72 h	old	64	6.4		210	21.0		8.2	8.2	新安装	24	24
		new	7.2			21.0			8.4	—		24	
	96 h	old	7:2	7.1		20.5	20,8		8.2	8.2		24	24
		new											题24合于著

Tast			Diss	olved		Tempe	erature		p (s	eH	A CONTRACT	Sal.	inity
1631			Uxygei	r (mg/L)		<u> </u>	0)			.0)		()	P()
Conc.	Τe	est	Repl	Replicate		Replicate			Rep	icate		Repl	icate
%	Hour A B		В		Α	В	4	А	В	S.JP.	А	В	
	0 h	old						100 A					
		new	7.6			19.4			8.Z			25	
	24 h	old	7.3	7.3		19.0	19.1		81	8.1		25	25
		new	6.9	-		al.D	<i></i>		8.2			24	
6.25%	48 h	old	7-2	7.1		17.2	19.2		8.1	8.1		24	24
		new	7.5	-		19.8		ALL STREET	8,1	'	642 (AU	24	`
	72 h	old	6.2	63		SID	21.0		8.2	8.2	Active Sector	24	24
 -		new	71(-			- AIO		14.4	8,4	· · · · ·	1. A.	24	
	96 h	old	7.0	70		21.0	alio		8.2	8.2		24	24
		new			-								

Reviewed by:

Client PSE&G

Sample ID Salem - Influent

ills

Date:

Test ID No. 13-1323 Test Start 6 26 120 Client PSE&G Sample ID Salem - Influent Species Cyprinodon variegatus Project No. 05.0044750.00

Test		Dissolved Oxygen (mg/L)			Temperature (°C)			(°	oH C)		Sal	intiy nt)	
Cono		1		Replicate			lianto			lia ata	E.	 	lasta
Conc.		est	Кер						Кер			Кер	
%	Ho	our	A	В	利率	A	В		A	В		A	В
	0 h	old										Frank.	P
		new	7.6		-	19,3			8.2			25	
	24 h	old	7.2	7.4		19.0	19.0		8.1	8.1		25	25
		new	6.9			21.0	-		8.7	(24	1
12.5%	48 h	old	7-1	7.1	ALC: N	19.4	19.3		8.1	8.1		24	24
		new	7.5			19.8	_		81			24	
	72 h	old	65	(e.4		21.0	21.0		8.2	8.2		24	a4
		new	7.0	<u> </u>		21.0		100	83		the set	24	
	96 h	old	710	7.2		20.8	20.9		8.2	8.2	Ø,	24	24
		new		N. Alexandre	書			調査					

			Diss	olved		Temp	erature		r R	эH		Sal	inity
Test		I	Oxyger	ו (mg/L)	(B)	(°	C)	124	(S	sU)		(p	pt)
Conc.	т	est	Rep	licate		Rep	licate	7	Rep	licate		Repl	licate
%	Н	Hour A B			A	В		A	В		Α	В	
	0 h	old											
		new	7.6			19.2			8.3			25	
	24 h	old	7.4	7.4		19.0	19.0		8.2	8.2	1	25	25
		new	7.0	-		21.0			8.2	-		24	
25%	48 h	old	7.	7.		19.4	19.4		8.1	8.2		24	24
		new	7.5	-		19.7			8.1			24	
	72 h	old_	63	6.2-		210	21.0	4	8.2	8.7		-94	24
		new	7.1			210		N.O.T.	8.3			24	
	96 h	old	76	7.1		21.0	DIR		8.7	8.2		24	24
		new		No t									

<u> 1/15</u> Ð

Date:

Test Start 6 26 16a Test ID No. 13-1333 320 Sample ID Salem - Influent Species Cyprinodon variegatus Project No. 05.0044750.00

Test			Diss Oxygei	Dissolved Oxygen (mg/L)		Temperature (°C)			۲ ۹)	oH C)	Sal (p	intiy pt)
Conć.	Т	est	Rep	Replicate		Rep	licate		Rep	licate	Rep	licate
%	Н	our	A	A B		Α	В	200	Α	В	A	В
	Oh	old										
		new	7.5			19.0			8.3		25	
	24 h	old	7.3	7.4		1910	19.0		8.2	8.2	25	25
		new	7.1			21.0			8.2		24	
50%	48 h	old	6.9	7.0		19.4	19.4		8.1	8.2	25.	25
		new	7.4	2		19.7	-		8.0		25	
	72 h	old	(013	63		21.0	21.0		8.2	8.2	25	X
		new	7.0			21.0		HU	8.3		24	
	96 h	old	7.2	71		20.6	20.8		8.2	8.2	24	24
		new						19 A.				n ini 2

			Diss	Dissolved			erature		۲	ъH	1945	Sal	inity
Test			Oxygei	n (mg/L)	100	(°	'C)		(9	SU)		(p	pt)
Conc.	Т	est	Rep	Replicate		Rep	licate		Rep	licate		Rep	icate
%	Но	our	A	A B		A	В		A	В	ANK.	А	В
	0 h	old					1. 						
		new	7.6			19.0			8:3			25	
	24 h	old	7.4	7.3		19.0	19.0		8.2	8.2		35	25
		new	7.0	,	1	20.9		Sec.	8.7			રુપ	
60%	48 h	old	7-1	7-1		19.1	19-		8.2	8.2		75	75
		new	7,5			19.7	-		8.0	1		25	
	72 h	old	(0)2	(o.1 -		21:0-	21.0		-8.2	8.2		25	25
Į		new	7.0	9		21.0			8.3			ay	
	96 h	old	6.9	6.9	していた	21.0	aho		8,2	8.7		24	24
		new								i.		2 Staf	

Reviewed by:

Client PSE&G

Mille

3 Date: ____

@ 1520 Test ID No. 13-1323 h_{10} 17 Test Start Client PSE&G Sample ID Salem - Influent Project No. 05.0044750.00 Species Cyprinodon variegatus

Tant			Diss	olved		Temperature (°C)			p	оH		Sal	intiy
lest			Oxyger	Oxygen (mg/L)		<u> </u>	<u>()</u>		(`	<u>()</u>		()	pt)
Conc.	Т	est	Rep	Replicate		Replicate			Rep	licate		Rep	icate
%	На	our	А	A B		А	В		А	В		А	В
	0 h	old					S ALCONE						
		new	7.6		Sale of the second	19.2			8.3			25	
	24 h	old	7.3	7.4		19.0	19.0		8.2	8.2	17.72 (C)	වර	25
		new	7.2	-		20,6			8.2		PER S	24	
70%	48 h	old	7.0	7.		19.2	19-6		8:2	8.2		25	25
		new	7.4			7.91			0,8	~	1. S. S. S.	24	
	72 h	old	6.2	Coil		21.0	2.0		6.8	8,7		25	25
		new	6.9			21.0			83		100	24	
	96 h	old	6.8	6.8		210	21.0	1072-20 14-62 2	8.2	C'8		24	24
		new	te .										

	Test	Dissolved Oxygen (mg/L)		and the second	Temperature (°C)			ې (S	 H SU)	深意観灯	Sal (p	inity pt)		
	Conc.	Τe	est	Replicate		6.35 A.	Rep	licate		Rep	licate		Rep	icate
	%	Но	Hour A B			A	В	10.1	Α	В		A	В	
		0 h	old	II ST										
			new	7.5		1	19.2			8.3			25	
		24 h	old	7.3	7.3		19.0	19.0		8.2	8.7		æ	يلا
			new	7.2	_		20.3			8.2			24	-
	80%	48 h	old	7.0	7.1		19.2	19-		8.2	8.2		75	25
			new	74	·	Ц.	19.7			8.0)		24	-
		72 h	old '	In D	6-1 -		-01.0-	210		82	6.2		- 25	25
			new	ŇΟ			21.0			8.3		1	24	
1		96 h	old	618	6.7		21.D	aid		8.2	8,7		25	25
			new			测								

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3 Date:

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Client PSE&G	Test Start 6 26 13@ 1520	Test ID No. 13-1323
Sample ID Salem - Influent	Species Cyprinodon variegatus	Project No. 05.0044750.00

			Diss	olved	ない。	Temp	erature	1000	k	ъН	教会	Sal	intiy
Test	l		Oxygen (mg/L)			(°	<u>C)</u>		(°	'C)		(p	pt)
Conc.	Т	est	Replicate			Replicate			Rep	licate		Rep	licate
%	Ho	our	A	A B		A	В		A	В		А	В
	0 h	old								¥			Fr 3
		new	7,5			19.1			8.3			25	
	24 h	old	7.2	7.3		19.0	19.0		8.2	8.2		He	26
		new	7.2	-		20.1	-		8.1			24	
90%	48 h	old	7-1	7-1		19.Z	19.1		8.2	8.2		25	25
		new	7.4		2	19.7			8. D			24	
	72 h	old	6.2	(012	101	21.0	aho		8.2	8.2		25	24
		new	le.9			20.8			8.3			24	
	96 h	old	7.1	70		20.9	20.9	The second s	8.7	8.2		<i>a</i> 5	25
		new											

Test			Diss Oxyger	Dissolved Oxygen (mg/L)		Temperature (°C)			p (S	oH GU)	THE REPORT	Sal (p	inity pt)
Conc.	Те	est	Rep	Replicate		Replicate			Rep	licate		Rep	icate
%	На	bur	A	A B		Α	В		А	В		А	В
	0 h	old		T Sta									
		new	7.6			19.0			8.3			25	
	24 h	old	7.3	7.3		19.0	19.0		8.7	8.7	144	عل	26
		new	7,1			19:8	-	自打	8.1	-		24	1
100%	48 h	old	7.1	7.0		19.3	19-2		8.2	8.2		25	Z5
		new	7.4			19.6	-		8.0		ater.	24	
	72 h	old	60	6.2		DIG	20		82	E'S		24	24
		new	618	1		20.5		50-50X	8,2	(24	
	96 h	old	618	6.8	0.04	2.0	alid		8.2	8.2		25	25
		new						Children of the second					

77165 Date: ____

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Sample Check-In Form
Client PSE&G Test ID No. 13-1323
Sample Salem Generating Station Project No. 05.0044750.00
Sample ID No. Collection Date Description Sample Type Influent≠1 Collection Time Dob to 0005
Shipment:
Container Number 1 Type <u>Cubhainer</u> Size 10L
Preservative:
Ice Packs Ice Cubes_X
Frozen X Cool Warm/Melted
Initial Chemistry Data: Analysis Date (1/26/13 Time 105 Technician DO
Dissolved Oxygen (mg/L) δa Meter # 1 B Temperature (°C) 1.(a Meter # $8(a)S$ pH (SU) 7.(b Meter # $1B$ Conductivity (µmhos/cm) 7.(040 Meter # $1B$ Conductivity (µmhos/cm) 7.(040 Meter # 17 Salinity (ppt) 4 Meter # $(a$ Total Residual Chlorine (mg/L) Initial 40.05 Na ₂ S ₂ O ₃ added (g) Final 40.05 Hardness (mg/L as CaCO ₃) 800
Alkalinity (mg/L as CaCO ₃) <u>55</u> Meter # <u>15</u>
Description: Color light brown Odor NOAC Clarity Cloudy Other 1/9
Sample Storage: NEB Walk in Correr
Date/Time Volume Removed Purpose Approx. Volume Tech.
6/06/13 @ 1050 I PD
6/26/11/0-1355 5L SC+4p 5L MU
Final: 54 MV
Disposal:
Reviewed by: 7/18/13

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Sample Check-In Form								
Client PSE&G Test ID No. 12-1323								
Sample Salem Generating Station Project No. 05.0044750.00								
Sample ID No. $C33-2824$ Sample TypeCollection Date $6 25 13$ to $6 2b 13$ Collection Time1000to1000								
Shipment:								
Container Number Type <u>lublaire</u> Size <u>ICL</u>								
Preservative:								
Ice Packs Ice Cubes								
Frozen Cool Warm/Melted								
Initial Chemistry Data: Analysis Date <u>6/27/13</u> Time <u>0940</u> Technician <u>KS</u>								
Dissolved Oxygen (mg/L) 7.3 Meter # $1A$ Temperature (°C) 4.1 Meter # $8 (615)$ pH (SU) 7.5 Meter # $1B$ Conductivity (µmhos/cm) 75 % Meter # 3 Salinity (ppt) 4 Meter # 4 Total Residual Chlorine (mg/L) Initial Na ₂ S ₂ O ₃ added (g) Final Hardness (mg/L as CaCO ₃) 800 Alkalinity (mg/L as CaCO ₃) 55 Meter # 1°								
Clarity <u>cloudy</u> Other <u>m/a</u>								
Sample Storage: NEB Walk w coofer								
Date/Time Volume Removed Purpose Approx. Volume Tech.								
10/07/13 c 1340 5 L NG								
Final: 5L MG								
Disposai:								

<u>1115</u> Date: 7/18/13

Sample Check-In Form									
Client PSE&G	Test ID No. 3-1323								
Sample Salem Generating Station	Project No. 05.0044750.00								
Sample ID No. <u>(33 - 2830</u> Sample Type <u>Influent</u> まる	Collection Date $6/26/13$ to $6/37/13$ Collection Time 1000 to 1000								
Shipment:									
Container									
Number Type <u>Aubita</u>	ainer size 10L								
Preservative:									
Ice Packs Ice Cubes	\checkmark								
Frozen Cool	Warm/Melted								
Initial Chemistry Data: Analysis Date	e 6/18/15 Time 10 20								
lechnicia	n <u>Ks</u>								
Dissolved Oxygen (mg/L)	ا Meter #								
Temperature (°C) /, 8	Meter # _ 8(015								
pH (SU) 7.3	Meter # <u>LB</u>								
Conductivity (µmhos/cm) <u>M69c</u>	D Meter #17								
Salinity (ppt) 5	Meter #(
Total Residual Chlorine (mg/L)									
Initial $\underline{\langle 0, 0 \rangle}$									
Na ₂ S ₂ O ₃ added (g)									
Final <0.0	15								
Hardness (mg/L as CaCO ₃) 1000	 >								
Alkalinity (mg/L as CaCO ₃)	Meter # <i>t</i> ß								
Description:									
Color Lipht broch 0	odor name								
Clarity <u>cloudy</u> Of	ther h/g								
Sample Storage: ALEA 1, WOR TO TONIOL									
Date/Time Volume Removed P	urpose Approx Volume Tech								
1,178/120000	Initial: In/_ My								
4/28/13@1400 5L Test	Renerval 51 (4)								
·····									
日本(1995) 新聞語では、「1995) 新聞にからなままである。 日本(1995) 新聞語では、「1995) 新聞にからなまである。 日本(1995) 新聞語では、「1995) 「1995」 「1995」 日本(1995) 新聞語では、「1995) 「1995」 日本(1995) 新聞語では、「1995) 日本(1995) 「1995) 日本(1995) 「1995) 日本(1995)									
Disposal:									

Reviewed by:

215 Date: 7/18/13

Sample Check-In Form									
Client PSE&G Test ID No. 13-1323									
Sample Salem Generating Station Project No. 05.0044750.00									
Sample ID No. $\underline{C33} - 2\overline{C33}$ Collection Date $\underline{6} 27/13 \text{ to } 6 28/13$ Sample Type Influent $\frac{4\pi}{4}$ Collection Time $\frac{1600}{1000}$ to $\frac{1000}{1000}$									
Shipment:									
Container Number Type Ash Hatver Size IOL									
Preservative:									
Ice Packs Ice Cubes									
Frozen Cool X Warm/Melted									
Initial Chemistry Data: Analysis Date <u>(689)</u> 73 Time 1030 Technician <u>NG</u>									
Dissolved Oxygen (mg/L) 5,5 Meter # 18 Temperature (°C) 0,0 Meter # 805 pH (SU) 7,8 Meter # 9 Conductivity (µmhos/cm) 8360 Meter # 3 Salinity (ppt) 4 Meter # 0 Total Residual Chlorine (mg/L)									
Initial Na ₂ S ₂ O ₃ added (g) Final									
Description: Color Light Brown Odor None Clarity Cloudy Other									
Sample Storage: NEB Wille In Coste									
Date/Time Volume Removed Purpose Approx. Volume Tech.									
(dal) 3 107 101 MG									
Colog1131400 5L Renewal 51 MG									
Disposal:									

t

<u> ///</u> Date: <u>7/16/13</u>

Control 96-h Length and Wet Weight Measurements

Client PSE&G Salem - Influent Species Cyprinodon variegatus

4.5 mm

Test ID No. 3-1323

45

mm

Control A

ID Number	1	2	3	4	5	
Wet Weight	0.00075 9	0.00089 9	0.කොසුදු ව	0.00071 g	0.60040 g	
Total Length	3,9 mm	3.9 mm	4.0 mm	4.3 mm	4.1 mm	
F						
ID Number	6	7	8	9	10	
Wet Weight 0.0081 9		0.001239	0.00156 g	0.00076 g	0.000708 g	

4.8 mm

5.0 mm

3.9

mm

Control B

Total Length

ID Number	1	2	3	4	5						
Wet Weight	0 <i>.0</i> 0087 9	0.000le3 g	0.00104 g	0,00079 g							
Total Length	4,7 mm	3. Le mm	Uemm 4.5 mm 5.1 mm								
ID Number	6	7	8	9	10						
Wet Weight	0.00130 9	0.00117 g	0.00121 9	0.0009le g	0,000929						
Total Length	4,9 mm	4,4 mm	4,8 mm	4,5 mm	4.3 mm						
Reviewed by: Date:											

Initial Fish Measurements

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and a second second

ID Number 1 2 3 4 5 Wet Weight 0.00086 9 0.00084 9 0.00104 9 0.00083 9 0.00126 Total Length 3.4 mm 3.3 mm 3.4 mm 3.6 m ID Number 6 7 8 9 10 Wet Weight 0.00086 9 0.00113 9 0.00142 9 0.00142 Total Length 3.7 mm 3.9 mm 4.2 mm 3.8 mm 4.0 m ID Number 6 7 8 9 10 0.00142 9 0.00142 9 0.00142 10 10 Wet Weight 0.00086 9 0.00102 9 0.000178 9 0.00158 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 15 Wet Weight 0.00089 9 0.00102 9 0.00158 9 0.00145 ID Number 16	Species: Cy	prinodon variegatus	Source: Aquation	BioSystems	Lot Number: Cv I3A	в(с-гс)
Wet Weight 0.00086 9 0.00084 9 0.00104 9 0.00043 9 0.00126 Total Length 3.4 mm 3.3 mm 3.4 mm 3.3 mm 3.4 mm 3.6 m ID Number 6 7 8 9 10 Wet Weight 0.00086 9 0.00113 9 0.00142 9 0.00142 Total Length 3.7 mm 3.9 mm 4.2 mm 3.8 mm 4.0 n ID Number 11 12 13 14 15 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 m ID Number 16 17 18 19 20 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152 0.00152<	ID Number	1	2	3	4	5
Total Length 3.4 mm 3.3 mm 3.4 mm 3.3 mm 3.4 mm 3.3 mm 3.6 m ID Number 6 7 8 9 10 Wet Weight 0.00086 9 0.00113 9 0.00142 9 0.00146 9 0.00142 Total Length 3.7 mm 3.9 mm 4.2 mm 3.8 mm 4.0 m ID Number 11 12 13 14 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 m 1 ID Number 16 17 18 19 20 0.00152 9 0.00152 9 0.00152 9 0.00152 9 0.00152 9 0.00152 9 0.00152 9 0.00152 9 0.00152 9	Wet Weight	0.000 <i>8</i> 6 g	0.00084 g	0.60104 g	0.00093 9	0.001Z6 g
ID Number 6 7 8 9 10 Wet Weight 0.00086 9 0.00113 9 0.00192 9 0.00146 9 0.00142 Total Length 3.7 mm 3.9 mm 4.2 mm 3.8 mm 4.0 n ID Number 11 12 13 14 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm ID Number 16 17 18 19 20 20 Wet Weight 0.00097 9 0.00172 9 0.00154 9 0.00126 9 0.00152	Total Length	3.4 mm	3.3 mm	3,4 mm	3.3 mm	3.6 mm
Wet Weight 0.00086 9 0.00113 9 0.00192 9 0.00146 9 0.00142 Total Length 3.7 mm 3.9 mm 4.2 mm 3.8 mm 4.0 n ID Number 11 12 13 14 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00158 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 m ID Number 11 12 13 14 15 0.00145 15 Wet Weight 0.00089 9 0.00002 9 0.00098 9 0.00158 9 0.00145 ID Number 16 17 18 19 20 Wet Weight 0.00097 9 0.00172 9 0.00154 9 0.00126 9 0.00152	ID Number	6	7	8	9	10
Total Length 3.7 mm 3.9 mm 4.2 mm 3.8 mm 4.0 n ID Number 11 12 13 14 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00158 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 mm ID Number 16 17 18 19 20 0.00152 9 0.00154 9 0.00152 9	Wet Weight	0.00086 9	0.00113 g	0.00192 9	0.00146 g	0.00142 g
ID Number 11 12 13 14 15 Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00158 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 mm ID Number 16 17 18 19 20 Wet Weight 0.00097 9 0.00172 9 0.00154 9 0.00126 9 0.00152	Total Length	3.7 mm	3.9 mm	4,2 mm	3.8 mm	4.0 mm
Wet Weight 0.00089 9 0.00102 9 0.00098 9 0.00158 9 0.00145 Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 m ID Number 16 17 18 19 20 Wet Weight 0.00097 9 0.00172 9 0.00154 9 0.00126 9 0.00152	ID Number	11	12	13	14	15
Total Length 3.5 mm 3.8 mm 3.9 mm 4.1 mm 4.2 m ID Number 16 17 18 19 20 Wet Weight 0.00097 9 0.00172 9 0.00154 9 0.00126 9 0.00152	Wet Weight	0,00089 ⁹	0.00102 9	0.00098 9	0.00158 g	0.00145 9
ID Number 16 17 18 19 20 Wet Weight 0.00097 9 0.00172 9 0.00154 9 0.00126 9 0.00152	Total Length	3.5 mm	3.8 mm	3.9 mm	4,1 mm	4.Z mm
Wet Weight 0,00097 90.00122 9 0.00154 9 0.00126 9 0.00152	ID Number	16	17	18	19	20
	Wet Weight	0.00097 9	0.00122 9	0.00154 g	0.00126 g	0.00/52 9
Total Length 4,2 mm 3,9 mm 4,2 mm 4,1 mm 4,2 r	Total Length	4.2 mm	3.9 mm	4,2 mm	4.1 mm	4,2 mm.
Reviewed by: Date:						

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Client PSEG Laboratory & Testing Services		Test ID No. 13-1324
Address 40 Cragwood Road		Project No. 05.0044750.00
South Plainfield, NJ 07080		
	Test Species Cyprinodon variegatus	
Contact Mr. Christopher White	Source Aquatic BioSystems Lot No. <u>(VI3 AB (6-Ala)</u> Age <u>10</u> Days	No. Organisms per Test Chamber10No. Organisms per Concentration20No. Organisms per Control20
Sample Salem Generating Station Effluent	Test Chamber Size 800 mL	Start Date/Time <u>626/13@153</u> 0
Test Type 96-h Static Acute Renewal	Test Chamber Volume 500 mL	End Date/Time_630/13@1430

Aeration Required? [] Yes [X] No; Test Day:_____

Laboratory Control (Dilution Water)									
Day	Lot Number	Salinity ppt	Alkalinity mg/L as CaCO ₃						
0	CRI033-021	25	130						
1	CRI033-022	,25	130						
2~~	CRI033-022	25	120						
3	CRI033-022	.25	120						

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Acute Toxicity Results									
Hour	LC ₅₀	NOAEC							
24-h	>1007.	100%. ± 20	100%.						
48-h	> 100%	100%. ± 2	100%						
72-h	>100%	1001, ± 00	100%						
96-h	71001.	100%. ± ~	100%						

Reviewed by

5/ Date: 2

Client PSE&G - Salem Generating Station Sample ID Effluent Test Start 6/26/13 @ 1530

Test ID No. 13-1324 Project No. 05.0044750.00

Test Species Cyprindon variegatus

	Te: Date/Time	st Day 0 (0h) @ 12115	Tes Date/Time	t Day 1 (24	4 h) " ((20)	Test Day 2 (48 h) Date/Time: 1/28/13 の 1430			Test Day 3 (72 h) Date/Time: (01241) 3 @143		
Conc. %	Test Solution	Dilution Water	Total Vol.	Test Solution	Dilution Water	Total Vol.	Test Solution	Dilution Water	Total Vol.	Test Solution	Dilution Water	Total Vol.
Control	0	1000	1000	D	0 1000 1000 0		O	1000	1000	\bigcirc	1000	100D
6.25%	62.5	937.5	1000	62.5	9375	1000	62.5	937.5	1000	62.5	13 7.5	1000
12.5%	125	875	1000	125	875	1000	125	875	1000	65	875	1000
25%	250	750	1000	250	TD	1000	250	750	1000	250	750	1000
50%	500	500	1000	500	500	1000	500	50D	1000	500	500	1000
60%	600	400	1000	600	400	1000	600	400		600	400	1000
70%	700	300	1000	700	300	(000)	700	300	1000	700	300	1000
80%	800	200	1000 800		200	1000	800 200 10	1000	800	200	1000	
90%	900	100	1000	960	100	1000	900	100	1000	90D	100	1000
100%	1000	0	1000	1000	O	1000	[00D]	6	1000	1000	0	1000
Sample ID No.	C33- 2820	· · · · · · · · · · · · · · · · · · ·			070353		1	061033-022			0503300	
ved by:		M	_] [c	>	Date:	:	7[18	/3				

Client PSE&G	Test Start 62613	Test ID No. 13-1324
Sample ID Salem - Effluent	Species Cyprinodon vari	egatus Project No. 05.0044750.00

Meter Record												
		Diss	olved		Temperature pH Sa							inity
		Oxyger	ո (mg/L)		(°	(°C)			SU)		(p	pt)
Hour	Tech.	Old	New		Old	New	P	Old	New		Old	New
0	ΜV		19A			19A		. 4 +	9			8
24	MG	18	18		184	18	Abr. C.	19B	19B		8	8
48	aw	13	13		13	13	No.	19B	19B		8	8
72	MG	18	18		18	18		9	q		8	8
96	MG	18			18			9			8	

Sample Salinity and pH Adjustment

		Sample	pН	Initial	Artificial	Final	pН	3N HCI	pН
Hour	Tech.	Volume	Initial	Salinity	Sea Salt	Salinity	after salting	Volume	Final
0	MV	5000 mL	7.5	4 ppt	170.75 g	Z5 ppt	8.0	→ mL	80
24	MG	5000 mL	7.5	4 ppt	120.8 9	24 ppt	8.1	mL	8.1
48	Cw	6000 mL	7.3	5 ppt	115 g	24 ppt	7.9	<u> </u>	7.9
72	MG	5000 mL	7.8	4 ppt	120.8 g	25 ppt	8.2	— mL	5. 8.
96									

100-115 Date: 7/18/1

13

Client PSE&G - Salem Effluent						Test ID No.	13-1324
Test Start <u>()</u> <u>()</u> <u>()</u> <u>()</u> <u>()</u> <u>()</u> <u>()</u> <u>()</u>						Project No.	05.0044750.00
peoles	- Oypiniouoii	Vallegatus					
vations	s: Hour:	24	Date: _	6/27/13		Technician:	MG
Rep.	Number			Observatio	ns/Beh	avior	Λ
	Surviving	All organisms	appea	<u>r Nealthy</u>	and r	vormal unles	s hoted.
Α	10					1	
В	1D						
А	ID						
В	10						
А							
	IV			n an		ana ang saga ga matay sa	
в	ID					· · · · · · · · · · · · · · · · · · ·	
						a an	
A	10						
R	•						
5	10						
А	10	······································					
					tinisi Shirin semenang	in an	
В	D	· · · · · · · · · · · · · · · · · · ·					
A	10						
· · · ·							
в	10						
	Client pecies /ations Rep. A B A B A B A B A B A B A B A B A B A	Client PSE&G - Sa $I_{a} [Q] Q_{a}$ pecies Cyprinodon vations: Hour: Rep. Number Surviving A 10 B 10 A 10	Client PSE&G - Salem Effluent tot Start $u [26] 1300 \\ Cyprinodon variegatus$ vations: Hour: 24 Rep. Number Surviving All croganitoms A 10 B 10 A 10 B	Client PSE&G - Salem Effluent st Start $[a] [26] [30] [530]$ pecies Cyprinodon variegatus /ations: Hour: $[24]$ Date: Rep. Number $[30]$ Date: Rep. Number $[30]$ Date: A 10 Date: Date: B ID Date: Date: A 10 Date: Date: B ID Date: Date: B ID Date: Date: B ID Date: Date: B ID Date: Date: Date: B ID Date: Date: Date: B ID Date: Date: Date: Date: B ID Date: Date: Date: Date: Date: B ID Date: Date: Date: Date: Date: Date: B ID Date: Date: Date: Date: Date: Date:	Client PSE&G - Salem Effluent ist Start $[d_i] 2d_i [13] (20 1530)$ pecies Cyprinodon variegatus /ations: Hour: 24 Date: $(d_i [27] [3])$ Rep. Number Observatio Surviving All organitisms appear healthy A 10 B 10	Client PSE&G - Salem Effluent $Q D D C D D C D D C D D C D D C D D C D D C D D C D D C D D C D D C D D C D D D C D D D C D D D C D D D C D D D C D$	Client PSE&G - Salem Effluent Test ID No. Project No.

Reviewed by:

Date: 7/18/13

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Te: Test S	Client st Stari pecies	PSE&G - Sa (@ J.@ Cyprinodon		Test ID No. Project No.	13-1324 05.0044750.00		
Obser	vations	s: Hour:	24	Date:	6127/13	Technician:	MG
Conc. %	Rep.	Number Surviving			Observations/Be	havior	
70%	A	.10		· · · · ·			
	в	10				· · · · · · · · · · · · · · · · · · ·	
80%	А	10			· · · · ·		
	в	10			······································		
90%	А	10					
	в	D		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
100%	А	ID					
	в	ID	· · · · · · · · · · · · · · · · · · ·				
	A			<u></u>			
	в			······································			
	А			······································	· · · · · · · · · · · · · · · · · · ·		
	В						

-]] < Reviewed by:

3 18 Date:

Client	PSE&G - Salem Effluent			
Test Start	6/24/12@ 1530			
Test Species	Cyprihodon variegatus			

Test ID No. 13-1324 Project No. 05.0044750.00

2

Observations: Hour: 48 Date: 6/28/13 Technician: 45

Observations/Behavior Conc. Rep. Number % Surviving All organisms appear healthy and normal unless noted Α 10 ASW Cont. В 10 Α 10 6.25% в D Α 10 12.5% в 10 А 10 25% В 10 Α 10 50% в 10 А 10 60% В 10

Reviewed by:

Date: 7/18/13

Client	PSE&G - Salem Effluent				
Test Start	6/26/12/2/1530				
Test Species Cyprinodon variegatus					

Test ID No. <u>13-13 24</u> Project No. <u>05.0044750.00</u>

Observ	rations	:: Hour:	Date:	Technician:
Conc. %	Rep.	Number Surviving	Obse	rvations/Behavior
70%	А	10		
	В	10		
80%	А	10		
	в	10		
90%	А	10		
·	в	10		
100%	А	91%	one organism de	all others appear norma
	в	10		
	A			
	в			
	A			
	в			

7 | B 1 1 Reviewed by:

Date:

Tes Test S	Client st Start	PSE&G - Sa	alem Effluent 3@1530			Test ID No. Project No.	13-1324
Observ	vations	: Hour:		Date: (0	29/13_	Technician:	_MG
Conc. %	Rep.	Number Surviving	All organisms	Obse 3 appear	rvations/Be healthy	havior and Norm	al unless noted
ASW	A	10		· · · · · · · · · · · · · · · · · · ·	J		
Cont.	в	10					
6.25%	A	10					
	в	10				<u></u>	
12.5%	А	0)		· · · · · · · · · · · · · · · · · · ·			
	в	D					
25%	А	10		· · · · · · · · · · · · · · · · · · ·			
	в	D			······································		
50%	Α	10		······································			
	в	10			· · · · · · · · · · · · · · · · · · ·		
60%	Α	١D					
	В	10					······································

Reviewed by:

21/15 Date: 7/18/13

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Client PSE&G - Salem Effluent Test Start 6 26 130 Test Species Cyprinodon variegatus						Test ID No. <u>3</u> Project No. <u>05.00</u> -			
Observ	vations	:: Hour:	72	Date: _	6/29/13	Technician: _	MG		
Conc. %	Rep.	Number Surviving			Observations/B	ehavior			
70%	A	10							
	В	10							
80%	А	D				·			
	B	10							
90%	А	10							
	в	D							
100%	А	9							
	в	Ю							
	А			· · ·					
	в								
	А								
	в								

Reviewed by:

7/18/13

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ClientPSE&G - Salem EffluentTest ID No.13-1324Test Start10 24 13 2530Project No.05.0044750Test SpeciesCyprinodon Variegatus05.0044750							
Obser	vations	: Hour:	96	Date: 0313	Technician: <u>MG</u>		
Conc. %	Rep.	Number Surviving	All organisms	Observation	ns/Behavior y amed normal unless noted		
ASW	A	10			<u> </u>		
Cont.	В	10.		· · · · · · · · · · · · · · · · · · ·			
6.25%	А	10					
	в	10					
12.5%	A	1D		·			
	в	10					
25%	A	ID					
	В	\mathcal{O}					
50%	А	10					
	В	\mathcal{D}					
60%	А	ID			· · · · · · · · · · · · · · · · · · ·		
	В	1D	· · · · · · · · · · · · · · · · · · ·				

Reviewed by: Z

-16 Date: 7/18/13

Tes Test S	Client PSE&G - Salem Effluent Test Start					Test ID No. <u>3-1324</u> Project No. <u>05.0044750.00</u>
Observ	ations	: Hour:	96	Date: 61	30/13	Technician: MG
Conc. %	Rep.	Number Surviving		Obs	servations/Be	havior
70%	A	10			·····	
	В	10				
80%	А	(D		·····	••	
	в	10				
90%	А	10				
	в	10	· · · · · · · · · · · · · · · · · · ·			
100%	Α	9				
	в	<u>I</u> D				
	А		·····			· · · · · · · · · · · · · · · · · · ·
	в					
	А				·····	
	в					
				1.		

Reviewed by:

4 1_

_____ Date: _____7/18/13___

CT-TOX: BINOMIAL, MOVING AVERAGE, PROBIT, AND SPEARMAN METHODS

MINIMUM REQUIRED TRIM IS TOO LARGE: 95.0, SO SK IS NOT CALCULABLE. SPEARMAN-KARBER

TRIM: .00% LC50: .000 95% CONFIDENCE LIMITS ARE UNRELIABLE.

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CONC.	NUMBER	NUMBER	PERCENT	BINOMIAL
9	EXPOSED	DEAD	DEAD	PROB.(%)
6.25	20.	Ο.	.00	.9537D-04
12.50	20.	Ο.	.00	.9537D-04
25.00	20.	Ο.	.00	.9537D-04
50.00	20.	Ο.	.00	.9537D-04
60.00	20.	Ο.	.00	.9537D-04
70.00	20.	Ο.	.00	.9537D-04
80.00	20.	Ο.	.00	.9537D-04
90.00	20.	Ο.	.00	.9537D-04
100.00	20.	1.	5.00	.2003D-02

THE BINOMIAL TEST SHOWS THAT 100.00 AND +INFINITY CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS 99.9980 PERCENT. THE LC50 FOR THIS DATA SET IS GREATER THAN 100.00

WHEN THERE ARE LESS THAN TWO CONCENTRATIONS AT WHICH THE PERCENT DEAD IS BETWEEN 0 AND 100, NEITHER THE MOVING AVERAGE NOR THE PROBIT METHOD CAN GIVE ANY STATISCALLY SOUND RESULTS.

DATE: 6-26-13	TEST NUMBER: 13-1324 DURATION: 96 h
SAMPLE: Salem Effluent	SPECIES: Cyprinodon variegatus

METHOD	LC50	COL	NFIDENCE LI	MITS
		LOWER	UPPER	SPAN
BINOMIAL	* * * * * * *	100.000	******	******
MAA	******	******	*****	******
PROBIT	* * * * * * *	******	******	******
SPEARMAN	.000	******	******	******

**** = LIMIT DOES NOT EXIST

Test ID No. 13-1324 Project No. 05.0044750.00

1010 Dissolved Temperature pН Salintiy Test (°C) (°C) Oxygen (mg/L) (ppt) Conc. Replicate Test Replicate Replicate Replicate % Hour Α Α В Α В Α в в 0 h old 21,0 6.8 8.1 25 new 8.2 7.1 7.6 19.1 8.2 24 h 19:0 25 old 25 10.9 8.2 aliO 24 ASW new -----19. 140 7.2 \$9.0 8.2 8.2 24 Zr Cont. 48 h old 8,1 20.1 ~ 24 7.1 new ----65 8.1 8.2 24 24 65 21.0 21.0 72 h old 69 8.4 24 21.0 \sim new 8.2 24 20.5 20,5 8.2 24 7.1 2.2 96 h old 證款 new

Tast			Diss	olved	時代を見た	Temperature		THE REAL PROPERTY.	pH (SU)			Sal	inity nt)
1630			Oxygei	i (ing/L)		(\	0)		<u>(``</u>	,0,	100	1P	P()
Conc.	Te Te	∋st	Rep	icate		Rep	licate		Rep	licate	2. 2.	Rep	icate
%	Но	our	A	В		Α	В		A	В		A	В
	0 h	old											
		new	6.8			Z1.0			8.2		10.10	25	
	24 h	old	7,0	7.1	1.12	19.1	19.0		8.2	8.2	H. NA	25	25
		new	6.9	-		21.0	·	N.Y.	8.2	—		24	_
6.25%	48 h	old	7.1	7-1		19.0	19.0		8.2	8.2		24	24
		new	7.1	_		19.9			8.1			24	- /
	72 h	old	614	64		20.9	20.8		8,2	8.2		24	24
	• • • •	new	7.0			210			8.4			24	
[96 h	old	7.1	7.1		20.4	20.4		8.2	8.9		24	24
		new			発表				ing to have been				

Reviewed by:

Wills.

Date: _

Test Start <u>6 26 13@ 1530</u> Species Cyprinodon variegatus

Client PSE&G	Test Start 626136 530	Test ID No. 13-1324	<u>_</u>
Sample ID Salem - Effluent	Species Cyprinodon variegatus	Project No. 05.0044750.0	0

			Diss	olved		Temp	erature		F	oH	調査	Sal	intiy
Test	1		Oxyge	n (mg/L)		(°	'C)		(°	(°C)		(p	pt)
Conc.	Te	est	Rep	licate		Rep	licate		Rep	licate		Rep	licate
%	На	our	A	В	語	Α	В		Α	В		A	В
	0 h	old					Ē						教理 2
		new	6.7			21,0			812			25	
	24 h	old	0.7	7.1		19.1	19.1		8.2	8.2		25	25
		new	(2, 9)	(210	~		8.2			24	
12.5%	48 h	old	7.0	7.1		12.0	19.0	10.02	8.2	8.2		24	24
		new	7.1		Start Start	19.8		A STATE	8.1			24	
	72 h	old	6.5	614		20.6	20,10		8.2	8.2		ay	зų
		new	7.0			210		短期	8.4			24	
	96 h	old	70	7.1	Total States	20.4	20.4		8.2	8.7		24	a4
		new									語言		

			Diss	olved	100	Temp	erature		þ	н	100 A 100	Sal	inity
Test			Oxyger	n (mg/L)	100	(°	C)	55	(SU)			(p	pt)
Conc.	Te	est	Repl	icate		Repl	icate		Rep	icate		Repl	icate
%	Но	bur	А	В		A	В		А	В		A	В
	0 h	old											
		new	6.8			21.0			8.2			25	
	24 h	old	7.0	7.0	T-T-T-T-	19.1	19.1		8.2	8.2		25	25
		new	(e.q	~	調査	21.0			8.2	-		24	·
25%	48 h	old	7.1	7-1	a the	19-6	19.1		8.2	8.2		75	25
		new	7.1	ļ		19.7	1		8.0		6.11.7.1 2.22 F	24	-
	72 h	old_	6.4	(a4 -		-20,5	20:4		.8.2-	8.2.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	24	24
		new	7.0	-		2110			8.4	/	N.	24	
	96 h	old	7 7.1	7.1		20.3	20.2	1	6.8	8.2	1.00	24	24
		new		·F. A.	1.00								

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Client PSE&G	Test Start 6 26 13@ 1530	Test ID No.	13-1324
Sample ID Salem - Effluent	Species Cyprinodon variegatus	Project No.	05.0044750.00

Test			Diss Oxygei	Dissolved Oxygen (mg/L)		Temperature (°C)			۲ ۲)	oH C)	Sal (p	intiy pt)
Conc.	Т	est	Rep	licate		Rep	licate		Rep	licate	Rep	licate
%	Но	our	A	В		Α	В		А	В	A	В
	0 h	old										
		new	7.6			70.0			812		25	
	24 h	old	7.1	7.2	24 24	19.0	19.0	教会	8.2	8.2	25	25
		new	7.5	-		20.D			8.1		24	
90%	48 h	old	7.0	7-2	E .	12.0	19.0		8.2	8.2	75	25
		new	7.3			19.5	<u> </u>	1	7.9		24	
	72 h	old	65	6.5		20.7	20.7		8.2	8.2	25	25
		new	7,2			20.8		a series	8,3	(25	
	96 h	old	7.2	7.2		20,2	20.4		82	8.2	25	25
		new	新 村之前									

			Diss	olved		Temp	erature		p	н		Sal	inity
Test	l		Oxyger	n (mg/L)		(°	C)		(SU)			(p	pt)
Conc.	Т	est	Rep	icate	10.00	Rep	licate		Rep	licate		Rep	icate
%	На	our	А	В		A	В		A	В		A	В
	0 h	old			E.								
		new	7.9			19.8			8,2			25	
	24 h	old	7.1	7.1		19.0	19.0		8.2	8.2		25	25
		new	7.7	-		19.8	<i></i>	家語	8.1			24	·
100%	48 h	old	7.2	7-2		19.0	19.0		8.2	8.2		25	25
		new	7,4	K		19.5			7,9			24	
· -	72 h	old	·674	63		20:7	20:6		8:2	8.2	1000	25	25
		new	7.4	-		2014	(5.3			25	1
	96 h	old	7.0	\$70		20.5	20.4		8:2	8.1		25	25
		new		14 - 14									

Mills

	Sam	ple Check-In	Form		
Client PS	SE&G		·······	Test ID No. 3	-1324
Sample Sa	alem Generating Station			Project No. 05.0	044750.00
Sample ID Sample T	No. <u>C33-2870</u> ype <u>Effluent # </u>	Colle	ection Da ection Tir	ate <u>6 24 13 to</u> me <u>1006 to</u>	6253
Shipment:					
Cor N	ntainer umber Type	Cubtamer	Size	101	
Preservative:					
lce	Packs Ice	Cubes X			
I	Frozen <u>X</u>	Cool	Warm/N	leited	
Initial Chemis	stry Data: Anal	ysis Date	如为	Time105	
	Т	echnician <u>P</u>	Q		
Dis	solved Oxygen (mg/L)	8.0	Meter #_	B	
	Temperature (°C)	1.8	Meter #_	<u>Folois</u>	
	pH (SU) pH (SU)	1.5	Meter #_ Motor #_		
	Salinity (printosicin)	1.040	Meter #		
Total Re	sidual Chlorine (mg/L)		-		
	Initial	20.05			
	$Na_2S_2O_3$ added (g)				
	Final	<0.05			
Hardr	ness (mg/L as CaCO ₃)	900			
Alka	linity (mg/L as CaCO ₃)	55	Meter #	B	
			-		
Description:	· · ·				
Color	light brown	Odor	nc	me	
Clarity	<u>vcloudy</u>	Other	n/a	- <u></u>	
Comple O(1 120 0 1				
Sample Stora	ge: NEB WA	LE UN COTTE	<u> </u>	Annroy Volume	Tash
Date/Hme	volume Kemoved	Purpose	। स्टिन्स् अस्ति ।	Approx. volume	Direcn.
(100 10 000 000 000		setun		er	IN IN
6164115(15)		<u></u>		<u> </u>	
	·第三世代学科的主义子			inal: 5L	MU
Disposal:				فالمتحادث والمرجع بتراري والمتحد والمحاد	
				1	

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Reviewed by:

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Sample Che	CK-IN FORM
Client PSE&G	Test ID No. 13-1324
Sample Salem Generating Station	Project No. 05.0044750.00
Sample ID No. C33-2825	Collection Date 6 25/13 to 6 26/13
Sample Type Fffluent # 2	Collection Time 1000 to 1000
Shipmont:	
Simplifent.	
Container	0: 151
Number Type <u>Cubta</u>	ner Size 10L
Preservative:	
Ice Packs Ice Cubes	¥
Frozen <u>Y</u> Cool	Warm/Melted
Initial Chemistry Data: Analysis Date	e (1/27/13 Time 0940
Techniciar	$\gamma = \frac{1}{\sqrt{2}}$
Dissolved Oxygen (mg/L) 8.1	Meter #) へ
Temperature (°C) 4	Meter # Stalf
nH (SII) 7.3	Meter # - 1B
Conductivity (umbos/cm) bs up	Motor # Motor #
Conductivity (printos/cm) <u>7545</u>	
Salinity (ppt) 4	
I otal Residual Chlorine (mg/L)	25
Initial $\frac{\langle O, O \rangle}{\langle O, O \rangle}$	<u> </u>
Na ₂ S ₂ O ₃ added (g)	
Final <0.0	5
Hardness (mg/L as CaCO ₃)	<u>, </u>
Alkalinity (mg/L as $CaCO_{2}$) $= 5$	Meter # 1B
Analising (sing) L as $Oabob _3 / \underline{-2^2}$	
Description:	
Color brown grey O	dor none
Clarity Claudy Of	ther to / St
)	
Sample Storage: NEB Walk In	Cooler
Date/Time Volume Removed P	urpose Approx. Volume Tech.
6/27/3/09UD	Initial: TO L
6/27/13e 1342 5L Re	newal 52 MG
L	
Diamagel	Final: 5L MG
uisposai:	

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_____ Date: _____7/18/13

Sample Che	ck-In Form
Client PSE&G	Test ID No. 13-1324
Sample Salem Generating Station	Project No. 05.0044750.00
Sample ID No. <u>(33-283)</u> Sample Type <u>Effluent ± 3</u>	Collection Date 6/26/13 to 6/27/13 Collection Time 1000 to 1000
Shipment:	
Container Number <u>I</u> Type <u>Cubitc</u>	ther size 10L
Preservative:	
Ice Packs Ice Cubes _	
Frozen <u> </u>	Warm/Melted
Initial Chemistry Data: Analysis Date Technician	<u>6/28/13</u> Time 1020 KS
Dissolved Oxygen (mg/L) $& \& \circ & & \\ & Temperature (°C) & & & & \\ & & & & \\ & & & & \\ & & & & $	$ \begin{array}{c} Meter # 1 A \\ Meter # 81015 \\ Meter # 1B \\ Meter # 17 \\ Meter # 6 \end{array} $
Alkalinity (mg/L as CaCO ₃) $\frac{75000}{55}$	Meter # <i>LB</i>
Description:	
Color <u>light brown</u> Oc Clarity <u>eloudy</u> Ott	lor <u>non-e</u> ner <u>n/α</u>
Sample Storage: NEB WOR IN COOLER	
Date/Time Volume Removed Pu	Irpose Approx. Volume Tech.
Glesh 301000	Initial: LOL AV
6/28/13 Q1410 5L Test K	enewal 51 Cen
Disposal:	

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<u>_____</u>Date: _____ 18 (3 1

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Client PSE&G Test ID No. 13-134+ Sample Salem Generating Station Project No. 05.0044750.00 Sample ID No. C33-28:39 Collection Date 10 20 10 20 10 Sample Type Effluent#4 Collection Time 1000 to 1000 Shipment: Container Number Type 0004 Preservative: Ice Cubes X Frozen Cool Dissolved Oxygen (mg/L) 0.0 PH (SU) 77 Meter # 18 Temperature (°C) 0.8 Salinity (pp) 4 Meter # 3 Solinity (pp) 4 Meter # 3 Dissolved Oxygen (mg/L) 0.0 Dissolved Oxygen (mg/L) 0.0 Na 250, added (g) 77 Meter # 3 Salinity (pp) 4 Meter # 3 Na 250, added (g) 10, 05 Final 40, 05 Mady 20, added (g) 1000 Alkalinity (mg/L as CaCO ₃) 55 Meter # 9 Description: Color Color	Sample Check-In Form
Sample Salem Generating Station Project No. 05.0044750.00 Sample ID No. C33 - 2839 Collection Date (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b	Client PSE&G Test ID No. 13-132-
Sample ID No. C33-2839 Collection Date (a) (3) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b	Sample Salem Generating Station Project No. 05.0044750.00
Shipment: Container Type Wbifatrue Size IDL	Sample ID No. $\underline{C33} \cdot \underline{2839}$ Collection Date $\underline{62113}$ to $\underline{62813}$ Sample Type Effluent ± 4 Collection Time $\underline{1000}$ to $\underline{1000}$
Container Number Type WbHatwer Size ID Preservative: Ice Packs Ice Cubes X Frozen Cool X Warm/Melted Initial Chemistry Data: Analysis Date (a)(2)(1/3) Time Date Dissolved Oxygen (mg/L) (a) Meter # 18 Dissolved Oxygen (mg/L) (a) Meter # 18 Dissolved Oxygen (mg/L) (a) Meter # 9 Conductivity (umhos/cm) 8(a) Meter # 9 Conductivity (umhos/cm) 8(a) Meter # 3 Satinity (ppt) 4 Meter # 3 Total Residual Chlorine (mg/L) 10.05 Meter # 6 Initial 20.05 Meter # 9 Na ₂ S ₂ O ₃ added (g) 55 Meter # 9 Final 20.05 Meter # 9 Description: Color 0dor 1000 Color 185 Walk-WC Cabler 51 Date/Time Volume Removed Purpose Approx. Volume Tech. Mathand	Shipment:
Preservative: Ice Packs Ice Cubes X Frozen Cool X Warm/Melted Initial Chemistry Data: Analysis Date(a)20[13	Container Number Type <u>Wbifather</u> Size <u>ID</u>
Ice Packs Ice Cubes X Frozen Cool X Warm/Melted Initial Chemistry Data: Analysis Date (ol@(II3) Time 1030) Technician Meter # 18 Dissolved Oxygen (mg/L) 0.02 Meter # 18 Dissolved Oxygen (mg/L) 0.02 Meter # 18 Dissolved Oxygen (mg/L) 0.02 Meter # 18 Conductivity (µmhos/cm) %00 Meter # 9 Conductivity (µmhos/cm) %00 Meter # 9 Salinity (ppt) 4 Meter # 6 Total Residual Chlorine (mg/L) 10,105 Meter # 9 Initial 40,105 Meter # 9 Mater # 6 0.05 Meter # 9 Hardness (mg/L as CaCO3) 55 Meter # 9 Description: Color Light Parson Odor None 0dor None Clarity Charder 0ther	Preservative:
Frozen Cool X Warm/Melted Initial Chemistry Data: Analysis Date [0]20[13 Time [0]20 Technician M(2) Meter # 18 Dissolved Oxygen (mg/L) (a) 2 Meter # 18 Temperature (°C) 0.8 Meter # 18 Conductivity (µmhos/cm) 8(a) 5 Meter # 3 Salinity (ppt) 4 Meter # 3 Total Residual Chlorine (mg/L) 10 15 Na2s203 added (g) 10 15 Final 40 160 Hardness (mg/L as CaCO3) 1000 Meter # Description: Color 1000 55 Color Light Brissing 0ther - Sample Storage: Disb 10 10 Sample Storage: Disb 10 10 Mater Time Volume Removed Purpose Approx. Volume Metar 51 MG 10 10 Mater 10 10 10 10 10 Sample Storage:	Ice Packs Ice Cubes
Initial Chemistry Data: Analysis Date(p[2]]]_3 TimeDQD Technician	FrozenCool_XWarm/Melted
Dissolved Oxygen (mg/L) <u>Lor</u> Meter # 18 Temperature (°C) <u>0.8</u> Meter # <u>805</u> pH (SU) <u>77</u> Meter # <u>9</u> Conductivity (µmhos/cm) <u>800</u> Meter # <u>9</u> Meter # <u>9</u> Meter # <u>3</u> Meter # <u>9</u> Meter # <u>18</u> Meter # <u>9</u> Meter # <u>9</u> Description: Color <u>1917 Bruch</u> Odor <u>1000</u> Alkalinity (mg/L as CaCO ₃) <u>55</u> Meter # <u>9</u> Description: Color <u>1917 Bruch</u> Odor <u>1000</u> Clarity <u>Cloudy</u> Other <u>-</u> Sample Storage: <u>MEB Walk W Crobler</u> Date/Time Volume Removed <u>Purpose Approx Volume</u> Tech. <u>(a)2013 bi77</u> <u>Meter # 18</u> Meter # <u>9</u> Final: <u>51 MG</u>	Initial Chemistry Data: Analysis Date <u>60013</u> Time 020 Technician <u>NG</u>
Description: Color <u>Light Brun</u> Clarity <u>Coundry</u> Sample Storage: <u>NEB Walk-w coller</u> Date/Time Volume Removed Purpose <u>Approx. Volume</u> <u>Tech.</u> (a)2013 1017 Volume Removed <u>Purpose</u> <u>Approx. Volume</u> <u>Tech.</u> (a)2013 1017 Volume Removed <u>Purpose</u> <u>Approx. Volume</u> <u>Tech.</u> (a)2013 1017 Volume <u>Final</u> : <u>5</u> L <u>MG</u> <u>Planeach</u>	Dissolved Oxygen (mg/L) (g, ∂) Meter # 18 Temperature (°C) 0.8 Meter # 18 pH (SU) 7.7 Meter # 9 Conductivity (µmhos/cm) 8050 Meter # 3 Salinity (ppt) 4 Meter # 3 Salinity (ppt) 4 Meter # 6 Total Residual Chlorine (mg/L) Initial $20, 05$ Hardness (mg/L as CaCO ₃) 1000 Alkalinity (mg/L as CaCO ₃) 55 Meter # 9
Sample Storage: NFB Wilk-W Covler Date/Time Volume Removed Purpose Approx. Volume Tech. (1)20(13) 1017 (1)20(13) 1400 5L Kenewal 5L MG Final: 5L MG	Description: Color <u>Light Brown</u> Odor <u>None</u> Clarity <u>Cloudy</u> Other
Date/Time Volume Removed Purpose Approx. Volume Tech. (1)20/13 1017 (1)27/13 1400 DL Venewal 5L MG Final: 5L MG	Sample Storage: NFB Walk-UN Couler
Calarlia 1017 Initial: 10L MG Calarlia 1400 5L Kenewal 5L MG	Date/Time Volume Removed Purpose Approx. Volume Tech.
robaliz 1400 5L Kenewal 5L MG Final: 5L MG	698/13 1017 MG
Final: 56 MG	10137/13 1400 5L Kenewal 5L MG
Final: 52 MG	
Final: 52 MG	
Final: 5L MG	
uisposai:	Disposal:

Reviewed by:

7/15 Date: 7/18/13

Control 96-h Length and Wet Weight Measurements

Client PSE&G Salem - Effluent Species Cyprinodon variegatus Test ID No. 13-1334

Control A

ID Number	1	2	3	4	5
Wet Weight	0,00087	0.00127 9	0.00072 g	0.00104 g	0.00097 g
Total Length	3, 8 mm	4.2 mm	3.8 mm	닉·(mm	4.3 mm

ID Number	6	7	8	9	10
Wet Weight	0.00164	g 0.000960g	0.00112 9	0.00147 g	0.0007(0g
Total Length	5.0 mn	4.6 mm	4,7 mm	4.7 mm	4.0 mm

Control B

ID Number	1	2	3	4	5
Wet Weight	0.00135 9	0. <i>රං</i> ගරිහි g	0.00108 g	0.00097 g	0.00091 g
Total Length	4,7 mm	4,3 mm	4,3 mm	4,4 mm	4,3 mm

ID Number	6	7	8	9	10
Wet Weight	0.00123 g	0.00111 9	0.00119 g	0.00154g	0,00042 g
Total Length	4.5 mm	4,5 mm	4.7 mm	5.1 mm	3,5 mm
1x - Thek					

Reviewed by: αp

Date: 1 18/1 2