

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

NPDES PERMIT MODIFICATION



issued to

Location Address:

US Naval Submarine Base New London Environmental Division Box 400 439 Tautog Avenue, Room 104 Groton, CT 06349-5400 Corner of Route 12 and Crystal Lake Road Groton, CT 06349-5400

Attention: Richard D. Conant, Environmental Division Director

Facility ID: 059-036

Permit ID: CT0003921

Permit Expires: September 26, 2011

This permit modification is issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), section 22a-430-4(p)(5) of the Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, as amended 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a N.P.D.E.S. permit program.

The Commissioner of Energy and Environmental Protection ("the Commissioner") has made a final determination on this permit modification and found that such discharges will not cause pollution of any of the waters of the state and the proposed systems to treat such discharges will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 201005868 and the administrative record established in the processing of that application. This permit modification also includes determinations regarding section 316(a) of the federal Water Pollution Control Act 33 U.S.C. § 1326(a), and compliance with this permit is sufficient to assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on the receiving waters.

US Naval Submarine Base New London, ("Permittee"), shall comply with all conditions of Permit No. CT0003921 issued on September 27, 2006 with the following modification:

- 1. Section 5(A) of the existing permit is hereby amended to include the attached new Tables F, G, H, I, J, K, L, M, N, and O.
- 2. Section 6(A)(3) is hereby revised and superceded. See below:
 - (3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Tables A, B, E, F, G, H, I, J, K, L, M, N, and O. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Oxidants, total residual	20.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Silver	2.0 ug/L

PERMIT # CT0003921

Page 1 (Printed on Recycled Paper) 79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/dep An Equal Opportunity Employer

Zinc

20.0 ug/L

3. Permit No. CT0003921 is hereby amended to include the following compliance schedule:

SECTION 9: COMPLIANCE SCHEDULE

- (A) The Permittee shall conduct wastewater analyses for Discharge Serial Numbers (DSN) 006, 009, and 011 and submit for the Commissioner's review a completed "Attachment O, Part B Form" from the permit application for these wastewater discharges on or before sixty (60) days after the respective discharges have been initiated. Specifically the following analyses from Attachment O, Part B, shall be conducted as follows; all parameters in Table 1, the toxic metals, cyanides and phenols, volatiles, acid and base/neutral compounds section of Table 2, and any other substances listed in Tables 3 and 4 that are known or suspected to be present. All samples shall be collected and analyzed using methods specified under 40 CFR 136 or as otherwise approved by the Commissioner. All results shall be generated from representative samples obtained from each respective discharge.
- (B) On or before 960 days after the discharge DSN 009 has been initiated, the Permittee shall conduct a study and submit for the Commissioner's review and written approval an engineering report which summarizes effluent data for total suspended solids (TSS), 5-day Biochemical Oxygen Demand (BOD5), total copper, aluminum, nickel, zinc, and silver for DSN 009 over a two year period to confirm that the discharges of TSS, BOD5, total copper, aluminum, nickel, zinc, and silver Quality Standards (WQS). The report shall include, but not be limited to the following: 1) a discussion of the comparability of the intake water and discharge analytical results for TSS, BOD5, total copper, aluminum, nickel, zinc, and silver for DSN 009 and 2) a recommendation on whether effluent limitations for TSS, BOD5, total copper, aluminum, nickel, zinc, and silver for DSN 009 and 2) are commendation on whether effluent limitations for TSS, BOD5, total copper, aluminum, nickel, zinc, and silver for DSN 009 and 2) are commendation on whether effluent limitations for TSS, BOD5, total copper, aluminum, nickel, zinc, and silver for DSN 009 and 2) are commendation on whether effluent limitations for TSS, BOD5, total copper, aluminum, nickel, zinc, and silver for DSN 009 are necessary for protection of the waters of the state.
- (C) The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit modification in a complete and approvable form. If the Commissioner notified the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner's notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this Section of the permit modification. Nothing in this paragraph shall excuse noncompliance or delay.
- (D) <u>Dates</u>. The date of submission to the Commissioner of any document required by this section of the permit modification shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit modification, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit modification, the word "day" as used in this section of the permit modification means calendar day. Any document or action which is required by this section of the permit modification to be submitted, or performed, by a date which falls on, Saturday, Sunday, or a Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or Connecticut or federal holiday.
- (E) <u>Notice to Commissioner of changes</u>. Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this section of the permit modification, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the Commissioner.

PERMIT # CT0003921

				Table F					
Discharge Serial Number: 005-1					Mo	nitoring Locatio	n: 1		
Wastewater Description: Potable w	ater to pre	vent freezin	g of water pipe	s supplying potable v	vater to vessels at	t piers (October 1	– April 30) to the Th	ames River	
Monitoring Location Description:	Bleed val	ve, south sid	e of Pier 12						
Allocated Zone of Influence (ZOI)	: 350,00	0 gph		In-	stream Waste C	oncentration (I)	VC): 1.0%		
	FLOW/TIME BASED MONITORING INSTANTANEOUS MONITORING								Minimum Level
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported	Test ³
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA	>20 %	Annual ⁶	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA	>20 %	Annual ⁶	Grab	
Chlorine, Total Residual	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	*
Copper, Total	mg/l	NA	NA	NR	NA	0,24	Monthly ⁵	Grab	*
Flow, Maximum During 24 hr Period ¹	gpd	NA	201,600	Daily	Total Flow	NA	NR	NA	
Flow Total (Day of Sample)	gpd	NA	201,600	Monthly ⁵	Total Flow	NA	NR	NA	
Lead, Total	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	*
pH (Day of Sample)	S.U.	NA	NA	NR	NA	6.0 - 9.0	Monthly ⁵	Grab	
Zinc, Total	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	*
Table F Footnotes and Remarks:									

Table F Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of sample collection and shall report the Maximum Daily Flow for each month.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency' is the same as the 'Sample Frequency' is monthly.

³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴ The results of the Toxicity Tests shall be recorded in % survival on the DMR. ⁵ Monthly monitoring is required only during **December through March**.

⁶ "Annual" means the sample must be collected in the month of December.

PERMIT # CT0026972

Page 4

Table G Discharge Serial Number: 006-1

Wastewater Description: Auxiliary seawater system - Once through non-contact cooling water for hosted vessels, and pressurization of dry dock fire main systems to the Thames River.

Monitoring Location: 1

Monitoring Location Description: Shippingport ASW discharge pipe (north side of Pier 15)

Sinpping	sport rate of a	usonarge pipe (norm side of 1 for 157					
		FLOW/TIM	E BASED MONITORI	NG	INSTAN	TANEOUS MONIT	ORING	
UNITS	Average	Maximum	Sample/Reporting	Sample Type	Instantaneous	Sample/Reporting	Sample Type	Minimum
				or	limit or	Frequency ²	or	Level Test ³
	Limit	Ĩ	1 1	Measurement	required		measurement	Level Test
				to be reported	range		to be	
							reported	
%	NA	NA	NR	NA	≥ 90%	Semi-annual	Grab	
%	NA	NA	NR	NA	≥90%	Semi-annual	Grab	
mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
MGD	NA	1.44	Daily/Semi-annual	Total Flow	NA	NR	NA	
MGD	NA	1.44	Semi-annual	Total Flow	NA	NR	NA	
mg/l	NA	NA	NR	NA		Semi-annual	Grab	
mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
mg/l	NA		NR	NA	·	Semi-annual	Grab	
mg/l	NA		NR	NA		Semi-annual	Grab	
mg/l	NA		NR	NA	-	Semi-annual	Grab	
S.U.	NA	NA	NR	NA	6.0 - 9.0	Semi-annual	Grab	
°F	NA	NA	NR	NA	90	Daily/Semi-	Instantaneous	
						annual		
°F	NA	NA	NR	NA	80	• .	Instantaneous	
						annual		
mg/l	NA				· • • • • • • • • • • • • • • • • • • •			
mg/l	NA	NA	NR	NA		Semi-annual	Grab	· *
mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
	UNITS % % mg/l MGD MGD mg/l mg/l mg/l mg/l mg/l S.U. °F °F °F mg/l mg/l	UNITS Average Monthly Limit % NA % NA % NA mg/l NA	FLOW/TIMIUNITSAverage Monthly LimitMaximum Daily Limit%NANA%NANA%NANA%NANAMGDNA1.44MGDNA1.44MGDNA1.44mg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNAmg/lNAmg/lNA%NANA%NANA%FNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANAmg/lNANA	UNITSAverage Monthly LimitMaximum Daily Limit Daily Limit Monthly LimitSample/Reporting Frequency 2%NANANR%NANANR%NANANR%NANANRmg/1NANANRMGDNA1.44Daily/Semi-annualMGDNA1.44Semi-annualmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANRmg/1NANRmg/1NANRmg/1NANANR°FNANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANRmg/1NANANR	FLOW/TIME BASED MONITORINGUNITSAverage Monthly LimitMaximum Daily Limit Daily LimitSample/Reporting Frequency 2Sample Type or Measurement to be reported%NANANRNA%NANANRNA%NANANRNA%NANANRNAMGDNA1.44Daily/Semi-annualTotal FlowMGDNA1.44Semi-annualTotal FlowMGDNANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANRNAmg/1NANRNAmg/1NANRNAmg/1NANRNAmg/1NANRNAmg/1NANRNAmg/1NANANRNA%FNANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1 <td>UNITSFLOW/TIME BASED MONITORINGINSTAN<math>AverageMonthlyLimitMaximumDaily LimitSample/ReportingFrequency 2Sample TypeorMeasurementto be reportedInstantaneouslimit orrequiredrange$\%$NANANRNA$\geq 90\%$$\%$NANANRNA$\geq 90\%$$\%$NANANRNA$\geq 90\%$$mg/1$NANANRNA$\geq 90\%$MGDNA1.44Daily/Semi-annualTotal FlowNAMGDNA1.44Semi-annualTotal FlowNAMGDNANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANRNAmg/1NANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNA80mg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNA</math></td> <td>INITSINSTANTANEOUS MONITORINGUNITSAverage Monthly LimitMaximum Daily Limit LimitSample/Reporting Frequency 2Sample Type or Measurement to be reportedInstantaneous Imit or required rangeSample/Reporting Frequency 2%NANANRNA$\geq 90\%$Semi-annual%NANANRNA$\geq 90\%$Semi-annualmg/lNANANRNA$\geq 90\%$Semi-annualmg/lNANANRNA$\geq 90\%$Semi-annualmg/lNANANRNA$\geq 90\%$Semi-annualmg/lNANANRNA$\geq 90\%$Semi-annualmg/lNANANRNANRmg/lNANANRNANRmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNA</td> <td>UNITSFLOW/TIME BASED MONITORIESINSTATABECUS MONITORIESINSTATABECUS MONITORIESINSTATABECUS MONITORIESSample/Reporting or measurement to be reportedInstantaneous Instantaneous Initi or required rageSample/Reporting or measurement to be reportedSample/Reporting or measurement to be reportedSample/Reporting or measurement to be reportedSample/Reporting or required rageSample/Reporting prequency 2Sample/Reporting or measurement to be reported%NANANRNA$\geq 90\%$Semi-annualGrab%NANANRNA$\geq 90\%$Semi-annualGrabmg/1NANANRNA$==$Semi-annualGrabMGDNA1.44Daily/Semi-annualTotal FlowNANRNAMGDNA1.44Semi-annualTotal FlowNANRNAMGDNA1.44Semi-annualTotal FlowNANRNAMg/1NANANRNASemi-annualGrabmg/1NANANRNASemi-annualGrabmg/1NANRNASemi-annualGrabmg/1NANANRNASemi-annualGrabmg/1NANANRNA<</td>	UNITSFLOW/TIME BASED MONITORINGINSTAN $AverageMonthlyLimitMaximumDaily LimitSample/ReportingFrequency 2Sample TypeorMeasurementto be reportedInstantaneouslimit orrequiredrange\%NANANRNA\geq 90\%\%NANANRNA\geq 90\%\%NANANRNA\geq 90\%mg/1NANANRNA\geq 90\%MGDNA1.44Daily/Semi-annualTotal FlowNAMGDNA1.44Semi-annualTotal FlowNAMGDNANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANRNAmg/1NANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNA80mg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNAmg/1NANANRNA$	INITSINSTANTANEOUS MONITORINGUNITSAverage Monthly LimitMaximum Daily Limit LimitSample/Reporting Frequency 2Sample Type or Measurement to be reportedInstantaneous Imit or required rangeSample/Reporting Frequency 2%NANANRNA $\geq 90\%$ Semi-annual%NANANRNA $\geq 90\%$ Semi-annualmg/lNANANRNA $\geq 90\%$ Semi-annualmg/lNANANRNA $\geq 90\%$ Semi-annualmg/lNANANRNA $\geq 90\%$ Semi-annualmg/lNANANRNA $\geq 90\%$ Semi-annualmg/lNANANRNANRmg/lNANANRNANRmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNANANRNASemi-annualmg/lNA	UNITSFLOW/TIME BASED MONITORIESINSTATABECUS MONITORIESINSTATABECUS MONITORIESINSTATABECUS MONITORIESSample/Reporting or measurement to be reportedInstantaneous Instantaneous Initi or required rageSample/Reporting or measurement to be reportedSample/Reporting or measurement to be reportedSample/Reporting or measurement to be reportedSample/Reporting or required rageSample/Reporting prequency 2Sample/Reporting or measurement to be reported%NANANRNA $\geq 90\%$ Semi-annualGrab%NANANRNA $\geq 90\%$ Semi-annualGrabmg/1NANANRNA $==$ Semi-annualGrabMGDNA1.44Daily/Semi-annualTotal FlowNANRNAMGDNA1.44Semi-annualTotal FlowNANRNAMGDNA1.44Semi-annualTotal FlowNANRNAMg/1NANANRNASemi-annualGrabmg/1NANANRNASemi-annualGrabmg/1NANRNASemi-annualGrabmg/1NANANRNASemi-annualGrabmg/1NANANRNA<

Table G Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each semi-annual period.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'. ³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴ The results of the toxicity tests shall be recorded in % survival on the DMR.

Remarks:

"Semi-Annual" means that a representative sample of the discharge shall be collected at any time during each of the following periods: January-June and July-December. Analytical results shall be reported in the June and December DMRs.

				Table H					
Discharge Serial Number: 009-1					M	onitoring Locati	on: 1		
Wastewater Description: Floating	dry dock b	allast water t	o the Thames l	River					
Monitoring Location Description:	Dry dock	Shippingport	ballast tanks						
Allocated Zone of Influence (ZOI)	: 15,650,00	0 gph		In	stream waste c	oncentration (IV	VC): 13.8%		
	UNITS		FLOW/TIME	E BASED MONITORI	NG	INSTAN	TANEOUS MONIT	TORING	Minimum Level
PARAMETER		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported	Test ³
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	>41%	Quarterly	Composite	>41%	NR	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	>41%	Quarterly	Composite	>41%	NR	Grab	
Aluminum, Total	mg/l	NA	·	Quarterly	Composite	NA	NR	Grab	
BOD ₅	mg/l	NA		Quarterly	Composite	NA	NR	Grab	
Oxidants, Total Residual	mg/l	NA	NA	NR	NA		Quarterly	Grab	*
Copper, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	*
Flow, Maximum During 24 hr Period ¹	MGD	NA	5.0	Daily/Quarterly	Total Flow	NA	NR	NA	
Flow Total (Day of Sample)	MGD	NA	5.0	Quarterly	Total Flow	NA	NR	NA	
Iron, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	
Lead, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	*
Nickel, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	*
Nitrogen, Ammonia (total as N)	mg/l	NA		Quarterly	Composite	NA	NR	Grab	
Nitrogen, Nitrate (total as N)	mg/l	NA		Quarterly	Composite	NA	NR	Grab	· · · · ·
Nitrogen, Nitrite (total as N)	mg/l	NA		Quarterly	Composite	NA	NR	Grab	
Oil and Grease, Total	mg/l	NA	10	Quarterly	GSA	NA	NR	NA	
pH (Day of Sample)	S.U.	NA	NA	NR	NA	6.0 - 9.0	Quarterly	Grab	
Silver, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	*
Tin, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	
Total Suspended Solids	mg/l	NA		Quarterly	Composite	NA	NR	Grab	
Zinc, Total	mg/l	NA		Quarterly	Composite	NA	NR	Grab	*

Page 6

Table H Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each quarter period.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴ The results of toxicity tests shall be recorded in % survival on the DMR.

<u>Remarks:</u>

"Composite" shall consist of grab samples collected from six ballast tanks (3 from each side of the dry dock) and combined into one sample. A single grab sample shall be collected and tested for total residual Oxidants and pH.

"Grab Sample Average (GSA)" shall consist of grab samples collected from six ballast tanks (3 from each side of the dry dock) with the reported concentration consisting of the arithmetic average of all grab sample analyses.

"Quarterly" means that a representative sample of the discharge shall be collected at any time during each of the following periods: January-March; April-June, July-September, and October-December. Analytical results shall be reported in the March, June, September, and December DMRs."

				Tabl	eľ	·				
Discharge Serial Number: 011	-1				Mo	nitoring Locatio	on: 1			
Wastewater Description: Stor	mwater ru	unoff from	the floating d	ry dock pontoon de	ck to the Thames	River when a ho	sted vessel is docked	1		
Monitoring Location Description										
				1E BASED MONITO		INSTAN	INSTANTANEOUS MONITORING			
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported	Test ³	
Aluminum, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab		
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab		
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab		
Cadmium, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Chemical Oxygen Demand	mg/l	NA	NA	NR	NA		Semi-annual	Grab		
Chromium, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Copper, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Flow, Maximum During 24 hr Period ¹	gpd	NA		Daily/Semi- annual	Total Flow	NA	NR	NA		
Flow Total (Day of Sample)	gpd	NA		Semi-annual	Total Flow	NA	NR	NA		
Iron, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab		
Lead, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Nickel, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Nitrogen, Nitrate (total as N)	mg/l	NA	NA	NR	NA		Semi-annual	Grab		
Nitrogen, Total Kjeldahl	mg/l	NA	NA	NR	NA		Semi-annual	Grab		
Oil and Grease, Total	mg/l	NA	NA	NR	NA	·	Semi-annual	Grab		
pH (Day of Sample)	S.U.	NA	NA	NR	NA		Semi-annual	Grab		
Phosphorus, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab		
Silver, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Rainfall Duration	hr/day	NA		Semi-annual	Total (Hours)	NA	NR	NA		
Rainfall	in	NA		Semi-annual	Total (Inches)	NA	NR	NA		
Tin, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*	
Total Suspended Solids	mg/l	NA	NA	NR	NA		Semi-annual	Grab		

PERMIT # CT0003921

Page 8

age o

Zinc, Total	mg/l	NA	NA	NR	NA	*****	Semi-annual	Grab	*
Table I Footnotes and Remarks	5:								
Footnotes:									
¹ For this parameter, the Permitte semi-annual period.	e shall mai	ntain at the f	acility a reco	rd of the total flow	for each day of samp	le collection an	d shall report the Maxi	mum Daily Flow	v for each
² The first entry in this column is then the 'Reporting Frequency' is Frequency'.									
³ Minimum Level Test refers to r	evised Sect	ion 6(A)(3)	of this permit	modification.					
⁴ The results of toxicity tests shal	l be record	ed in % on t	he DMR.						
Remarks:				·					
"Semi-Annual" "means that a rep Analytical results shall be reported				shall be collected a	at any time during eacl	n of the followi	ng periods: January-Ju	ne and July-Dec	ember.
Semi-Annual samples shall be c previous storm event of 0.1 inch shall be used for all monitoring. Samples shall be taken at the out	or greater. Collectio	Runoff even n of grab sa	nts resulting f imples shall i	rom snow or ice m begin during the fi	nelt cannot be used to irst 30 minutes of a s	meet the minim torm event disc	num annual monitoring charge and shall be co	requirements. ompleted as soon	Grab samples 1 as possible.

			-	Table J					
Discharge Serial Number: 012-1						toring Location:			
Wastewater Description: Utility tr	ench dew	atering was	tewaters (stor	mwater, groundwate	er, steam condens	sate and pipe con	ndensate) to the Tha	mes River	
Monitoring Location Description:	Building 3	332 sump ef	fluent						
	UNITS	****	FLOW/TIME	BASED MONITO	RING	INSTAI	NTANEOUS MONI	TORING	Minimum Level
PARAMETER	UNIIS	Average	Maximum	Sample/Reporting	Sample Type	Instantaneous	Sample/Reporting	Sample Type	Test ³
		Monthly	Daily Limit	Frequency ²	or	limit or	Frequency ²	or	
		Limit			Measurement	required		measurement	
					to be reported	range		to be reported	
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab	
Copper, Total	mg/l	NA	NA	NR	NA	****	Semi-annual	Grab	*
Cyclohexylamine	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Flow, Maximum During 24 hr Period	gpd	NA		Daily	Total Flow	NA	NR	NA	
Flow, Day of sampling	gpd	NA		Semi-annual	Total Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Semi-annual	Grab	
pH, Day of sampling	S.U.	NA	NA	NR	NA	6.0-9.0	Semi-annual	Grab	
Surfactants (MBAS)	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Zinc, Total	mg/l	NA	NA	NR	NA	*=+++	Semi-annual	Grab	*

Table J Footnotes and Remarks:

Footnotes:

^TFor this parameter the Respondent shall maintain at the facility a record of the total flow for each day of sample collection and shall report the Maximum Daily Flow for each semiannual period.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency' ³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴ The results of toxicity tests shall be recorded in % on the DMR.

Remarks:

"Semi -annual" in the context of a sampling frequency, means the sample must be collected in the months of June and December.

				Table K					
Discharge Serial Number: 013-1					Monit	toring Location:	1		
Wastewater Description: Utility t	rench dev	vatering wa	stewaters (stor	mwater, groundwate	er, steam condens	sate and pipe con	ndensate) to the Tha	mes River	
Monitoring Location Description:	Building	434 sump e	ffluent						
•	UNITS		FLOW/TIME	BASED MONITOR	ING	INSTAN	NTANEOUS MOŅI	FORING	Minimum Level Test ³
PARAMETER		Average	Maximum	Sample/Reporting	Sample Type	Instantaneous	Sample/Reporting	Sample Type	
		Monthly	Daily Limit	Frequency ²	or	limit or	Frequency ²	or	
		Limit			Measurement	required		measurement	
					to be reported	range	· ·	to be reported	
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab	
Copper, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
Cyclohexylamine	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Flow, Maximum During 24 hr Period ¹	gpd	NA		Daily	Total Flow	NA	NR	NA	
Flow, Day of sampling	gpd	NA		Semi-annual	Total Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Semi-annual	Grab	
pH, Day of sampling	S.U.	NA	NA	NR	NA	6.0 - 9.0	Semi-annual	Grab	
Surfactants (MBAS)	mg/l	NA	NA	NR.	NA		Semi-annual	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Zinc, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*

Table K Footnotes and Remarks:

Footnotes:

¹ For this parameter the Respondent shall maintain at the facility a record of the total flow for each day of sample collection and shall report the Maximum Daily Flow for each semiannual period.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'

³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴ The results of toxicity tests shall be recorded in % on the DMR.

<u>Remarks:</u>

"Semi Annual" in the context of a sampling frequency, means the sample must be collected in the months of June and December.

				Table L	· · · · · · · · · · · · · · · · · · ·				
Discharge Serial Number: 014-1					Moni	toring Location:	1		
Wastewater Description: Utility t	rench dew	atering was	tewaters (stor	mwater, groundwate	er, steam condens	sate and pipe con	ndensate) to the T	hames River	
Monitoring Location Description:	Building 7	17 sump effl	uent	· .					
	UNITS		FLOW/TIME	BASED MONITO	RING	INSTAN	TANEOUS MON	ITORING	Minimum Level Test ³
PARAMETER	UNIIS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporti ng Frequency ²	Sample Type or measurement to be reported	
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA		Semi-annual	Grab	
Copper, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
Cyclohexylamine	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Flow, Maximum During 24 hr Period ¹	gpd	NA		Daily	Total Flow	NA	NR	NA	
Flow, Day of sampling	gpd	NA		Semi-annual	Total Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NÁ		Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Semi-annual	Grab	
pH, Day of sampling	S.U.	NA	NA	NR	NA	6.0 - 9.0	Semi-annual	Grab	[
Surfactants (MBAS)	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA		Semi-annual	Grab	
Zinc, Total	mg/l	NA	NA	NR	NA		Semi-annual	Grab	*

Table L Footnotes and Remarks:

Footnotes:

¹ For this parameter the Respondent shall maintain at the facility a record of the total flow for each day of sample collection and shall report the Maximum Daily Flow for each semiannual period.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency' ³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴ The results of toxicity tests shall be recorded in % on the DMR.

Remarks:

"Semi Annual" in the context of a sampling frequency, means the sample must be collected in the months of June and December.

Discharge	Serial	Numb	ber:	016-1

Table M

Monitoring Location: 1

Wastewater Description: Submarine lock-out trunk testing wastewaters to the Thames River

Monitoring Location Description: At the effluent from auxiliary tank #3. Allocated Zone of Influence (ZOI): 225,000 gph

In-stream Waste Concentration (IWC): 1%

	LINUTED	FLOW/TIME BASED MONITORING				INSTA	NTANEOUS MONI				
PARAMETER	UNITS	Average	Maximum	Sample/Reporting	Sample Type or	Instantaneous	Sample/Reporting	Sample Type	Test ³		
		Monthly	Daily	Frequency ²	Measurement to	limit or	Frequency ²	or			
		Limit	Limit		be reported	required		measurement			
						range		to be reported			
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA	LC50>20%	Semi-Annual	Grab			
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA	LC50>20%	Semi-Annual	Grab			
Aluminum, Total	mg/l	NA	NA	NR	NA		Semi-Annual	Grab	*		
Copper, Total	mg/l	NA	NA	NR	NA		Semi-Annual	Grab	*		
Flow, Maximum During 24 hr Period ¹	gpd	NA	25,000	Daily/Semi-annual	Total Flow	NA	NR	NA			
Flow Total (Day of Sample)	gpd	NA	25,000	Semi-annual	Total Flow	NA	NR	NA			
Iron, Total	mg/l	NA	NA	NR	NA		Semi-Annual	Grab			
Lead, Total	mg/l	NA	NA	NR	NA		Semi-Annual	Grab	*		
Nickel, Total	mg/l	NA	NA	NR	NA		Semi-Annual	Grab	*		
pH (Day of Sample)	S.U.	NA	NA	NR	NA	6.0-9.0	Semi-Annual	Grab			
Chlorine, Total Residual	mg/l	NA	NA	NR	NA	0.61	Daily ⁵	RDM	*		
Zinc, Total	mg/l	NA	NA	NR	• NA		Semi-Annual	Grab	*		
71.1.1. N.C. 17							-				

Table M Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each semi-annual period.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequency' is morthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency' ⁽¹⁾

³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴The results of toxicity tests shall be recorded in % on the DMR.

⁵ The Permittee shall attach a written summary of these daily sampling results to the Discharge Monitoring Report (DMR) for the months of June and December.

<u>Remarks</u>

"Semi-Annual" means that a representative sample of the discharge shall be collected at any time during each of the following periods: January-June and July-December. Analytical results shall be reported in the June and December DMRs.

				Table N					
Discharge Serial Number: 017-1					M	onitoring Locatio	on: 1		
Wastewater Description: Steam cond	lensate from	n steam reti	ırn tank overf	lows (includes DSN0	18 from the applica	tion) to the Thame	es River		
Monitoring Location Description: A	t the samp	e port at the	e pit in Buildin	ıg 29					
	UNITS		FLOW/TIN	1E BASED MONITOI	RING	INSTAN	TANEOUS MONIT	ORING	Minimum Level
PARAMETER	UNIIS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported	Test ³
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA		Monthly ⁵	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA		Monthly ⁵	Grab	
Copper, Total	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	*
Cyclohexylamine	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	
Flow, Maximum During 24 hr Period ¹	gpd	NA		Daily	Total Flow	NA	NR	NA	
Flow Total (Day of Sample)	gpd	NA	÷	Monthly ⁵	Total Flow	NA	NR	NA	
Duration of discharge (Day of Sample)	hr	NA		Monthly ⁵	Total (Hours)	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	
Lead, Total	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	*
Nickel, Total	mg/l	NA	NA	NR	NA	*****	Monthly ⁵	Grab	*
pH (Day of Sample)	S.U.	NA	NA	NR	NA	6.0 - 9.0	Monthly ⁵	Grab	
Temperature	°F	NA	NA	NR	NA		Monthly ⁵	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA		Monthly⁵	Grab	
Zinc, Total	mg/l	NA	NA	NR	NA		Monthly ⁵	Grab	*

Table N Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each sampling month. ² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency' ³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴The results of toxicity tests shall be recorded in % on the DMR.

⁵ Monthly monitoring is required **only during September through March**. In the event that a discharge occurs during April through August, the Permittee shall attach a written summary of these discharges indicating the dates of discharge to the Discharge Monitoring Report (DMR) for the month of September.

				Table	0		· .		
Discharge Serial Number: 019-1			Monitoring Location: 1						
Wastewater Description: Fire hyd	rant test	wastewaters	and intermitter	it leaks to the Thames	River				
Monitoring Location Description:	Represe	ntative samp	ole of effluent	from fire hydrant 5-1	2 at buildings 409/4	10	<u></u>		
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ³
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported	
LC50 Static 48Hr Acute M. bahia ⁴	%	NA	NA	NR	NA		Annual	Grab	
LC50 Static 96Hr Acute Menidia ⁴	%	NA	NA	NR	NA		Annual	Grab	
Chlorine, Total Residual	mg/l	NA	NA	NR	NA	0.61	Annual	Grab	*
Copper, Total	mg/l	NA	NA	NR	NA	*****	Annual	Grab	*
Flow, Maximum During 24 hr Period ¹	gpd	NA		Daily/Annual	Total Flow	NA	NR	NA	
Flow Total (Day of Sample)	gpd	NA		Annual	Total Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA		Annual	Grab	-
Lead, Total	mg/l	NA	NA	NR	NA		Annual	Grab	*
Nickel, Total	mg/l	NA	NA	NR	NA		Annual	Grab	*
pH (Day of Sample)	S.U.	NA	NA	NR	NA	6.0 - 9.0	Annual	Grab	
Zinc, Total	mg/l	NA	NA	NR	NA		Annual	Grab	*

Table O Footnotes and Remarks:

Footnotes:

¹ For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of sample collection and shall report the Maximum Daily Flow for each year.

² The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency' is the same as the 'Sample Frequency' is monthly.

³ Minimum Level Test refers to revised Section 6(A)(3) of this permit modification.

⁴The results of the Toxicity Tests shall be recorded in % survival on the DMR.

Remarks:

"Annual" means that a representative sample of the discharge shall be collected at any time during January - December. Analytical results shall be reported in the December DMR.

Submission of documents. Any document, other than a discharge monitoring report, required to be (F) submitted to the Commissioner under this section of the permit modification shall, unless otherwise specified in writing by the Commissioner, be directed to:

Enna Wilson Sanitary Engineer Department of Energy and Environmental Protection Bureau of Materials Management and Compliance Assurance Water Permitting and Enforcement Division 79 Elm Street Hartford, CT 06106 5127

The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit modification, Permit No. CT0003921, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions that may be authorized under the Clean Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified under this paragraph may also contain any other requirements of the Clean Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

All other terms and conditions of Permit No. CT0003921 issued on September 27, 2006 shall continue in full force and effect.

FaDaniel C. Esty, Commissioner Robert E. Kaliszawski, Directory Planaling Program Developmu

DCE/EW Permit No. CT0003921 Sent RRR

PERMIT # CT0003921

This permit modification is hereby issued on July 28, 2011.