NPDES PERMIT

issued to

Electric Boat Corporation
75 Eastern Point Road
Groton, CT 06340

Location Address:
75 Eastern Point Rd
Groton

Facility ID: 059-012

Permit ID: CT0003824

Receiving Stream: Thames River

Permit Expires: July 4, 2011

SECTION 1: GENERAL PROVISIONS

(A) This permit is reissued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and 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 an N.P.D.E.S. permit program.

(B) Electric Boat Corporation ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3 General Conditions

(a)Definitions
(b)General
(c)Inspection and Entry
(d)Effect of a Permit
(e)Duty
(f)Proper Operation and Maintenance
(g)Sludge Disposal
(h)Duty to Mitigate
(i)Facility Modifications; Notification
(j)Monitoring, Records and Reporting Requirements
(k)Bypass
(l)Conditions Applicable to POTWs
(m)Effluent Limitation Violations (Upsets)
(n)Enforcement
(o)Resource Conservation
(p)Spill Prevention and Control
(q)Instrumentation, Alarms, Flow Recorders
(r)Equalization

Section 22a-430-4 Procedures and Criteria

(a)Duty to Apply
(b)Duty to Reapply
(c)Application Requirements
(d)Preliminary Review
(e)Tentative Determination
(f)Draft Permits, Fact Sheets
(g)Public Notice, Notice of Hearing
(h)Public Comments
(i)Final Determination
(j)Public Hearings
(k)Submission of Plans and Specifications. Approval.
(l)Establishing Effluent Limitations and Conditions
(m)Case by Case Determinations
(n)Permit issuance or renewal
(o)Permit Transfer
(p)Permit revocation, denial or modification
(q)Variances
(r)Secondary Treatment Requirements
(s)Treatment Requirements for Metals and Cyanide
(t)Discharges to POTWs - Prohibitions

(C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.

(D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.

(E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Environmental Protection ("Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least 30 days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure, by the transferee, to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.

(F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.

(I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal

Management Act (section 22a-92 of the Connecticut General Statutes).

SECTION 2: DEFINITIONS

(A) The definitions of the terms used in this permit shall be the same as the definitions contained in section 22a-423 of the CGS and section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No Observable Acute Effect Level (NOAEL)" which is redefined below.

(B) In addition to the above, the following definitions shall apply to this permit:

"-----" in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR

"Annual" in the context of any sampling frequency found in Section 5, shall mean the sample must be collected in the month of January, or the first month following the month of January if a discharge did not occur in January.

"Average Monthly Limit"; means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in section 22a-430-3(a) of the RCSA.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Instantaneous Limit" for concentration and flow based parameters, means the highest allowable value of a substance as measured by a grab sample. For pH this limit can have the approved range and for the Toxicity parameter the limit is the minimum acceptable value.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Maximum Daily Limit", means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l); otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA. For the Toxicity parameter, this value is the minimum value, in percent, that represents a passed test.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA demonstrating greater than 50% survival of test organisms in 100% (undiluted) effluent and 90% or greater survival of test organisms at the CTC.

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of January, April, July, and October or the first month following each of these months if a discharge did not occur in the prescribed months.

"Range During Sampling" ("RDS"), as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of; 1) a Composite Sample, or, 2) a Grab Sample Average. For those Permittees with continuous monitoring and recording pH meters, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"Range During Month" ("RDM"), as a sample type, means the lowest and the highest values of all of the monitoring data for the reporting month.

"Seasonal", as a monitoring frequency, shall mean sampling for the months of December, January, February, and March.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner, has issued a final determination and found that continuance of the existing discharges will not cause pollution of the waters of the state, and the proposed system to treat a new discharge will protect the waters of the state from pollution. The Commissioner's decision is based on **Application No. 200204316** for permit reissuance received on December 17, 2002 and the administrative record established in the processing of that application.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or the Commisioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

(C) 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 which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

(A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.

(B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.

(C) The temperature of any discharge shall not increase the temperature of the receiving stream above 83°F, or, in any case, raise the temperature of the receiving stream by more than 4°F. The incremental temperature increase in coastal and marine waters is limited to 1.5^{o}F during the period including July, August and September.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below:

Table A

Discharge Serial Number: 001-1 | **Monitoring Location: 1-outfall #16**

Wastewater Description: Graving dock #1 and Graving Dock 2 dewatering, Diesel Engine non-contact cooling, Nuclear reactor auxiliary Sea Water System, River water seepage and rainwater, Ballast Tank Rinse Water, Hull Washwater, Sonar Sphere Draining, Antifouling, Cathodic protection, and Barge 17 operations including Boiler Blowdown, Boiler draining, Condensate and Non-Contact Cooling Water.

Monitoring Location Description: Discharges monitored at internal locations. See individual discharges in Tables B through F for monitoring schedule.

DISCHARGES	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Diesel Engine Non-Contact Cooling Water	mgd	0.9	1.5	NA	NR	NA	NR	NA	NA
Nuclear Reactor Auxiliary Sea Water System	mgd	0.9	3.5	NA	NR	NA	NR	NA	NA
River Water Seepage and Rainwater	mgd	0.3	NA	NA	NR	NA	NR	NA	NA
Ballast Tank Rinse Water	gpd	8,300	NA	NA	NR	NA	NR	NA	NA
Hull Washwater	gpd	9,600	NA	NA	NR	NA	NR	NA	NA
Sonar Sphere Draining	gpd	115,230	NA	NA	NR	NA	NR	NA	NA
Barge 17 Boiler Blowdown	gpd	3,428	5,142	NA	NR	NA	NR	NA	NA
Barge 17 Boiler Draining and Condensate	mgd	0.328	0.392	NA	NR	NA	NR	NA	NA
Barge 17 Non-Contact Cooling	gpd	4,320	NA	NA	NR	NA	NR	NA	NA
Anti-Fouling / Cathodic Protection	gpd	22,000	157,000	NA	NR	NA	NR	NA	NA
Graving Dock #1 dewatering	mgd	NA	12.0	NA	NR	NA	NR	NA	NA
Graving Dock #2 dewatering	mgd	NA	18.0	NA	NR	NA	NR	NA	NA

Table B

Discharge Serial Number: 001A (Graving Dock #1 dewatering only after vessel has been received) | **Monitoring Location: 1 outfall # 16**

Wastewater Description: Graving Dock #1, Graving Dock Dewatering

Monitoring Location Description: at Outfall # 16, Graving Dock #1

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 3
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus[4, 5] NOAEL=100	%	NA	Survival≥90% 55	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Monthly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Monthly	Grab	*
Copper, Total	ug/l	48.0	96.0	Monthly	Daily Composite	145.0	NR	NA	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	60,000	Monthly	Instantaneous	
Flow, Maximum Daily 1	mgd	NA	12.0	Daily	Daily Flow	NA	NR	NA	
PH	S.U.	NA	NA	NR	NA	6-9.5	Monthly	RDS	
Oil and Grease, Total	mg/l	NA	10.0	Monthly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	
Zinc, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*

Table Footnotes:

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 month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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 Section 6 Paragraph A of this permit.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table C

Discharge Serial Number: 001B (Graving Dock #1 opening gate prior to vessel launch) | **Monitoring Location: 1 Graving Dock #1**

Wastewater Description: Graving Dock 1, Graving Dock Dewatering

Monitoring Location Description: inside Graving Dock #1 prior to opening gate to launch vessel.

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia4, 5 NOAEL=100	%	NA	Survival≥90%5	Quarterly	Daily Composite	Survival≥90%5	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus4, 5 NOAEL=100	%	NA	Survival≥90% 55	Quarterly	Daily Composite	Survival≥90%5	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Monthly	Grab	
Oxidant, Free Available	ug/l	NA	NA	NR	NA	200.0	Monthly	Grab	*
Copper, Total	ug/l	48.0	96.0	Monthly	Daily Composite	145.0	NR	GRab	*
Chromium, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Lead, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Monthly	Instantaneous	
Flow, Maximum Daily4	mgd	NA	12.0	Daily	Daily Flow	NA	NR	NA	
PH	S.U.	NA	NA	NR	NA	6-9.5	Monthly	RDS	
Oil and Grease, Total	mg/l	NA	10.0	Monthly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	
Zinc, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*

Table Footnotes and Remarks:

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

[2] Minimum Level Test refers to Section 6 Paragraph A of this permit.

[3] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[4] 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 month.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table D

Discharge Serial Number: 001C (Graving Dock #2 dewatering only after vessel has been received) | **Monitoring Location: 1 (outfall # 16)**

Wastewater Description: Graving Dock #2, Graving Dock Dewatering

Monitoring Location Description: at Outfall # 16, Graving Dock #2

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia4, 5 NOAEL=100	%	NA	Survival≥90%5	Quarterly	Daily Composite	Survival≥90%5	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus4, 5 NOAEL=100	%	NA	Survival≥90%5	Quarterly	Daily Composite	Survival≥90%5	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Monthly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Monthly	Grab	*
Copper, Total	ug/l	48.0	96.0	Monthly	Daily Composite	145.0	NR	Grab	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	60,000	Monthly	Instantaneous	
Flow, Maximum Daily3	mgd	NA	18.0	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Monthly	RDS	
Oil and Grease, Total	mg/l	NA	10.0	Monthly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	
Zinc, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*

Table Footnotes:

1 The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

2 Minimum Level Test refers to Section 6 Paragraph A of this permit.

3 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 month.

4 Toxicity Testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the Toxicity sample shall be analyzed for all chemical parameters listed above.

5 The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table E

Discharge Serial Number: 001D(Graving Dock #2 opening gate prior to vessel launch) | **Monitoring Location: 1 Graving Dock #2**

Wastewater Description: Graving Dock 2, Graving Dock Dewatering

Monitoring Location Description: inside Graving Dock #2 prior to opening gate to launch vessel.

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Monthly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Monthly	Grab	*
Copper, Total	ug/l	48.0	96.0	Monthly	Daily Composite	145.0	NR	Grab	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Monthly	Instantaneous	
Chromium, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Lead, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Flow, Maximum Daily[3]	mgd	NA	18.0	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Monthly	RDS	
Oil and Grease, Total	mg/l	NA	10.0	Monthly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	
Zinc, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*

Table Footnotes and Remarks:

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

[2] Minimum Level Test refers to Section 6 Paragraph A of this permit.

[3] 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 month.

[4] Toxicity Testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the Toxicity sample shall be analyzed for all chemical parameters listed above.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table F

Discharge Serial Number: 001E | **Monitoring Location: 1 (outfall # 16)**

Wastewater Description: Graving Dock 1 and 2, Dry Dock Dewatering | **Monitoring Location Description: Outfall # 16 (stripper pumps)**

Allocated Zone of Influence: 842,337 gph | **Instream Waste Concentration (IWC): 9.5%**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test
		Average Monthly Limit	Maximum Daily Limit	Sample/ Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or req.'d range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[4, 5] NOAEL=63%	%	NA	Survival≥90%[5]	Monthly	Daily Composite	LC50>63%[5]	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus[4, 5] NOAEL=63%	%	NA	Survival≥90%[5]	Monthly	Daily Composite	LC50>63%[5]	NR	Grab	
Aquatic Toxicity, Mysidopsis bahia[4,5] Survival in 100%	%	NA	Survival≥50%[5]	NR	NA	NA	NR	NA	
Aquatic Toxicity, Cyprinodon variegatus[4,5] Survival in 100%	%	NA	Survival≥50%[5]	NR	NA	NA	NR	NA	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Weekly	Grab	*
Chromium, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	*
Copper, Total	ug/l	-----	-----	Weekly	Daily Composite	72.0	NR	Grab	*
Copper, Total	kg/d	0.0964	0.193	Weekly	Daily Composite	NA	NR	NA	
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Weekly	Instantaneous	
Lead, Total	ug/l	-----	-----	Weekly	Daily Composite	210.0	NR	Grab	*
Lead, Total	kg/d	0.535	1.07	Weekly	Daily Composite	NA	NR	NA	
Flow, Average	mgd	2.128	NA	Daily	Daily Flow	NA	NR	NA	
Flow, Maximum Daily[1]	mgd	NA	2.4	Daily	Daily Flow	NA	NR	NA	
Mercury, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Nickel, Total	ug/l	NA	-----	Annually	Daily Composite	NA	NR	NA	
Nitrogen, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Weekly	RDS	
Oil and Grease, Total	mg/l	-----	10.0	Weekly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Temperature ^0F	^0F	NA	NA	NR	NA	-----	Weekly	Instantaneous	

Zinc, Total	ug/l	-----	-----	Weekly	Daily Composite	1400.0	NR	NA	*
Zinc, Total	kg/d	3.8	7.6	Weekly	Daily Composite	NA	NR	NA	*
Ethylbenzene	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	
Xylene	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	

Table F - 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 Average and Maximum Daily Flow for each month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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 Section 6 Paragraph A of this permit.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above. In addition, in any month when a ship is launched, toxicity testing, with associated chemical parameters, must be done within 48 hours of flooding the dry dock.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table G

Discharge Serial Number: 001F	**Monitoring Location: 1 Graving Docks 1&2**
Wastewater Description: Graving Docks 1&2, Dry Dock Construction Dewatering	**Monitoring Location Description: effluent to treatment system.**
Allocated Zone of Influence: 187500 gph	**Instream Waste Concentration (IWC): 10.0%**

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 Frequency2	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia4, 5 NOAEL=63%	%	NA	Survival≥90%5	Monthly	Daily Composite	LC50>63%5	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus4, 5 NOAEL=63%	%	NA	Survival≥90%5	Monthly	Daily Composite	LC50>63%5	NR	Grab	
Aquatic Toxicity, Mysidopsis bahia4,5 Survival in 100%	%	NA	Survival≥50%5	NR	NA	NA	NR	NA	
Aquatic Toxicity, Cyprinodon variegatus4,5 Survival in 100%	%	NA	Survival≥50%5	NR	NA	NA	NR	NA	
BOD_5	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Aluminum, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Weekly	Grab	*
Arsenic, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	*
Cadmium, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Chromium, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Copper, Total	ug/l	-----	24.0	Weekly	Daily Composite	NA	NR	NA	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Weekly	Instantaneous	
Iron, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Lead, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	*
Flow, Average Daily1	mgd	0.3	NA	Daily	Daily Flow	NA	NR	NA	
Flow, Maximum Daily1	mgd	NA	0.6	Daily	Daily Flow	NA	NR	NA	
Nickel, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Nitrate	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9	Weekly	RDS	
Phosphorus	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Oil and Grease, Total	mg/l	-----	10.0	Weekly	Grab Sample Average	15.0	NR	Grab	

Strontium, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Suspended Solids, Total	mg/l	-----	20.0	Weekly	Daily Composite	30.0	NR	Grab	
Titanium, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Zinc, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	*

Table G - 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 Average Daily Flow and Maximum Daily Flow for each month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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 Section 6 Paragraph A of this permit.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table H

Discharge Serial Number: 002-1 | **Monitoring Location: 1-Graving Dock 3**

Wastewater Description: Graving dock #3 dewatering, Diesel Engine non-contact cooling, Nuclear reactor auxiliary Sea Water System, River water seepage and rainwater, Ballast Tank Rinse Water, Hull Washwater, Sonar Sphere Draining, Antifouling, Cathodic protection, and Barge 17 operations including Boiler Blowdown, Boiler draindown, Condensate and Non-Contact Cooling Water.

Monitoring Location Description: Discharges monitored at internal locations. See individual discharges in Tables H through J for monitoring schedule.

DISCHARGES	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency[1]	Sample Type or measurement to be reported	
Diesel Engine Non-Contact Cooling Water	mpd	0.9	1.5	NA	NR	NA	NR	NA	NA
Nuclear Reactor Auxiliary Sea Water System	mgd	0.9	3.5	NA	NR	NA	NR	NA	NA
River Water Seepage and Rainwater	mgd	0.3	NA	NA	NR	NA	NR	NA	NA
Ballast Tank Rinse Water	gpd	8,300	NA	NA	NR	NA	NR	NA	NA
Hull Washwater	gpd	9,600	NA	NA	NR	NA	NR	NA	NA
Sonar Sphere Draining	gpd	115,230	NA	NA	NR	NA	NR	NA	NA
Barge 17 Boiler Blowdown	gpd	3428	5142	NA	NR	NA	NR	NA	NA
Barge 17 Boiler Draindown and Condensate	mgd	0.328	0.392	NA	NR	NA	NR	NA	NA
Barge 17 Non-Contact Cooling	gpd	4,320	NA	NA	NR	NA	NR	NA	NA
Anti-Fouling / Cathodic Protection	gpd	22,000	157,000	NA	NR	NA	NR	NA	NA

Graving Dock #3 dewatering	mgd	NA	8.25	NA	NR	NA	NR	NA	NA
Pontoon Rinse Water	mgd	NA	2.0	NA	NR	NA	NR	NA	NA

Table I

Discharge Serial Number: 002A (Graving Dock #3 opening gate prior to vessel launch) | **Monitoring Location: 1 Graving Dock #3**

Wastewater Description: Graving Dock #3, Graving Dock Dewatering

Monitoring Location Description: inside Graving Dock #3 prior to opening gate of flooded graving dock to launch vessel.

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia4, 5 NOAEL=100	%	NA	Survival≥90%5	Quarterly	Daily Composite	Survival≥90%5	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus4, 5 NOAEL=100	%	NA	Survival≥90%5	Quarterly	Daily Composite	Survival≥90%5	NR	Grab	
Chlorine produced Oxidants	ug/l	NA	NA	NR	NA	-----	Monthly	Grab	
Chlorine, Free Available	ug/l	NA	NA	NR	NA	200.0	Monthly	Grab	*
Copper, Total	ug/l	48.0	96.0	Monthly	Daily Composite	145.0	NR	Grab	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Monthly	Instantaneous	
Chromium, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Lead, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*
Flow, Maximum Daily3	mgd	NA	33.0	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Monthly	RDS	
Oil and Grease, Total	mg/l	NA	10.0	Monthly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	
Zinc, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*

Table Footnotes and Remarks:

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

[2] Minimum Level Test refers to Section 6 Paragraph A of this permit.

[3] 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 month.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table J

Discharge Serial Number: 002B (Graving Dock Dewatering only after vessel has been received) | **Monitoring Location: 1 Graving Dock #3**

Wastewater Description: Graving Dock #3 Dewatering

Monitoring Location Description: inside Graving Dock #3 after vessel has been received

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Monthly	Grab	
Oxidants, Free Residual	ug/l	NA	NA	NR	NA	200.0	Monthly	Grab	*
Copper, Total	ug/l	48.0	96.0	Monthly	Daily Composite	145.0	NR	Grab	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Monthly	Instantaneous	
Flow, Maximum Daily[3]	mgd	NA	8.25	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Monthly	RDS	
Oil and Grease, Total	mg/l	NA	10.0	Monthly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	
Zinc, Total	ug/l	NA	-----	Monthly	Daily Composite	NA	NR	NA	*

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

[2] Minimum Level Test refers to Section 6 Paragraph A of this permit.

[3] 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 month.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table K

Discharge Serial Number: 002C	Monitoring Location: 1 Graving Dock #3
Wastewater Description: Graving Dock 3, Dry Dock Dewatering (stripper pump)	Monitoring Location Description: Pump Wet Well
Allocated Zone of Influence: 847,337 gph	Instream Waste Concentration (IWC): 9.5%

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 Frequency2	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia4, 5 NOAEL=63%	%	NA	Survival≥90%5	Monthly	Daily Composite	LC50>63%5	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus4, 5 NOAEL=63%	%	NA	Survival≥90%5	Monthly	Daily Composite	LC50>63%5	NR	Grab	
Aquatic Toxicity, Mysidopsis bahia4, 5 Survival in 100%	%	NA	Survival≥50%5	NR	NA	NA	NR	NA	
Aquatic Toxicity, Cyprinodon variegatus4, 5 Survival in 100%	%	NA	Survival≥50%5	NR	NA	NA	NR	NA	
BOD_5	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Weekly	Grab	*
Chromium, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	*
Copper, Total	ug/l	-----	-----	Weekly	Daily Composite	72.0	NR	NA	*
Copper, Total	Kg/d	0.0964	0.193	Weekly	Daily Composite	NA	NR	Grab	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	-----	Weekly	Instantaneous	
Lead, Total	ug/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	*
Flow, Average Daily1	mgd	2.128	NA	Daily	Daily Flow	NA	NR	NA	
Flow, Maximum Daily1	mgd	NA	2.4	Daily	Daily Flow	NA	NR	NA	
Nickel, Total	ug/l	NA	-----	Annual	Daily Composite	NA	NR	NA	
PH	S.U.	NA	NA	NR	NA	6-9.5	Weekly	RDS	
Oil and Grease, Total	mg/l	-----	10.0	Weekly	Grab Sample Average	15.0	NR	Grab	
Suspended Solids, Total	mg/l	-----	-----	Weekly	Daily Composite	NA	NR	NA	
Temperature	^0F	NA	NA	NR	NA	-----	Weekly	Instantaneous	
Zinc, Total	ug/l	-----	-----	Weekly	Daily Composite	1400.0	NR	Grab	*
Zinc, Total	kg/d	3.8	7.6	Weekly	Daily Composite	NA	NR	NA	*

Table K - Footnotes and Remarks:

[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 Average Daily Flow and Maximum Daily Flow for each month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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 Section 6 Paragraph A of this permit.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above. In addition, in any month when a ship is launched, toxicity testing, with associated chemical parameters, must be done within 48 hours of flooding the dry dock.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table L

Discharge Serial Number: 003 | **Monitoring Location: 1 Building 260**

Wastewater Description: Non contact cooling water, pump test waters (sea water)

Monitoring Location Description: submarine discharge inside Building # 260

Allocated Zone of Influence: 237,000 gph | **Instream Waste Concentration: 15.4%**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test[3]
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	120.0	Quarterly	Grab	*
Copper, Total	ug/l	NA	32.0	Quarterly	Daily Composite	48.0	NR	Grab	*
Lead, Total	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	*
Flow, Average Daily[1]	mgd	1.037	NA	Daily	Daily Flow	NA	NR	NA	
Flow, Maximum Daily[1]	mgd	NA	1.741	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Quarterly	RDS	
Temperature ^{0}F	^{0}F	NA	NR	NA	NA	-----	Quarterly	Instantaneous	
Zinc, Total	mg/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	*

Table 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 Average Daily Flow and the Maximum Daily Flow for each month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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 Section 6 Paragraph A of this permit.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table M

Discharge Serial Number: 004 | **Monitoring Location: 1 Building 263**

Wastewater Description: Non contact cooling water, pump test waters

Monitoring Location Description: submarine discharge inside Building # 263

Allocated Zone of Influence: 237,000 gph | **Instream Waste Concentration: 15.4%**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test[3]
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Aquatic Toxicity Cyprinodon variegatus[4, 5] NOAEL=100	%	NA	Survival≥90%[5]	Quarterly	Daily Composite	Survival≥90%[5]	NR	Grab	
Oxidants, Total Residual	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	120.0	Quarterly	Grab	*
Copper, Total	ug/l	NA	32.0	Quarterly	Daily Composite	48.0	NR	NA	*
Lead, Total	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	*
Flow, Average Daily[1]	mgd	1.037	NA	Daily	Daily Flow	NA	NR	NA	
Flow, Maximum Daily[1]	mgd	NA	1.741	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Quarterly	RDS	
Temperature ^0F	^0F	NA	NR	NA	NA	-----	Quarterly	Instantaneous	
Zinc, Total	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	*

Table 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 Average Daily Flow and the Maximum Daily Flow for each month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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 Section 6 Paragraph A of this permit.

[4] Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above

[5] The toxicity results shall be reported as percent survival on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit..

Table N

Discharge Serial Number:007A | **Monitoring Location: 1**

Wastewater Description: General Yard Area potable water line freeze protection bleed water

Monitoring Location Description: Sample from freeze protection bleed-off

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency	Sample Type or Measurement to be reported	Instantaneous limitor required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[3,5] LC_{50}	%	NA	≥20%	Annual/Annual	Composite[1]	LC50>20%	NR	Grab	
Aquatic Toxicity, Cyprinodon variegatus[3,5] LC_{50}	%	NA	≥20%	Annual/Annual	Composite[1]	LC50>20%	NR	Grab	
Chlorine, Total Residual	mg/l	NA	-----	Seasonal/Monthly	NA	NA	NR	Grab	*
Copper, Total	mg/l	NA	-----	Seasonal/Monthly	NA	NA	NR	Grab	*
Lead, Total	mg/l	NA	-----	Seasonal/Monthly	NA	NA	NR	Grab	*
Zinc, Total	mg/l	NA	-----	SeasonalMonthly	NA	NA	NR	Grab	*
pH	S.U	NA	NA	NR	NA	6-9.5	Seasonal/ Monthly	Grab	
Flow, Average Daily[4] (NON-DMR)	gpd	6000	NA	Daily/Annual	Daily Flow	NA	NR	NA	

Footnotes:

[1]The Composite sample will be comprised of grab samples of equal amounts of bleed water from 3 different discharge points.

[2] Minimum Level Test refers to Section 6 Paragraph A of this permit.

[3]Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above.

[4]Flow from pipe freeze protection activities shall be monitored and quantified on a daily basis. On or before June 1st of each year, a report shall be submitted indicating the days that the freeze protection discharge occurred in the past 12 months, the location of each discharge, the daily flow and the Average Daily Flow for each discharge.

[5]The toxicity results shall be reported as the LC_{50} value on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table O

Discharge Serial Number:007B | **Monitoring Location: 1**

Wastewater Description: General Yard Area steam condensate and steam condensate purge water.

Monitoring Location Description: Sample from steam condensate purge water.

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency	Sample Type or Measurement to be reported	Instantaneous limitor required range	Sample// Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, Mysidopsis bahia[3, 4] LC_{50}	%	NA	≥20%	Annual/Annual	Composite[1]	LC50>20%	NR	Grab	
Aquatic Toxicity, Cyprinodon variegatus[3, 4] LC_{50}	%	NA	≥20%	Annual/Annual	Composite[1]	LC50>20%	NR	Grab	
Chlorine, Total Residual	mg/l	NA	-----	Seasonal/Monthly	Composite[1]	NA	NR	Grab	*
Copper, Total	mg/l	NA	-----	Seasonal/Monthly	Composite[1]	NA	NR	Grab	*
Lead, Total	mg/l	NA	-----	Seasonal/Monthly	Composite[1]	NA	NR	Grab	*
Zinc, Total	mg/l	NA	-----	Seasonal/Monthly	Composite[1]	NA	NR	Grab	*
pH	S.U	NA	NA	NR	NA	6-9.5	Seasonal/ Monthly	Grab	
Iron, Total	mg/l	NA	-----	Seasonal/Monthly	Composite[1]	NA	NR	NA	
Oil and Grease, Total	mg/l	NA	-----	Seasonal/Monthly	Grab Sample Average	NA	NR	NA	
Suspended Solids, Total	mg/l	NA	-----	Seasonal/Monthly	Composite[1]	NA	NR	NA	

Footnotes:

[1]The Composite sample will be comprised of equal amounts of condensate purge water from 3 different discharge points.

[2] Minimum Level Test refers to Section 6 Paragraph A of this permit.

[3]Toxicity testing shall be performed on the same sample that is collected for the chemical parameter analysis. If that can not be done, the toxicity sample shall be analyzed for all chemical parameters listed above

[4]The toxicity results shall be reported as LC_{50} value on the DMR form. The reported values shall be considered in compliance if they are equal to or greater than the value listed as a limit.

Table P

Discharge Serial Number: 012 | **Monitoring Location: 1**

Wastewater Description: Research and Development Test Tank

Monitoring Location Description: Building # 15 at effluent from test tank

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test 2
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency 1	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency1	Sample Type or measurement to be reported	
Oxidants, Free Available	ug/l	NA	NA	NR	NA	200.0	Weekly	Grab	*
Copper, Total	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	*
Lead, Total	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	*
Flow, Maximum Daily3	gpd	NA	24,000	Daily	Daily Flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6-9.5	Weekly	Grab	
Zinc, Total	ug/l	NA	NA	NR	NA	-----	Weekly	Grab	*

Table Footnotes and Remarks:

1 The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry 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'.

2 Minimum Level Test refers to Section 6 Paragraph A of this permit.

3 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 month.

(1) All samples shall be comprised of only the wastewater described in these tables. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.

(2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.

(3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

(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 B thru F and H thru N. Analyses for these parameters must include check standards within twenty percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Copper	5.0 ug/l
Lead	5.0 ug/l
Chromium	5.0 ug/l
Chlorine, Total Residual	30.0 ug/l
Oxidant, Total Residual	30.0 ug/l
Mercury	0.5 ug/l
Zinc	20.0 ug/l

(4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.

(5) Effluent analyses for which quantification was verified during the analysis at or below the

minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

(6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(7) Analysis for Total Residual Oxidants and Free Available Oxidants shall be conducted by Hach methods 8167 and 8021 respectively.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 0-6 degrees Centigrade until Aquatic Toxicity testing is initiated.

(b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Section 5 Table(s) B thru F and H thru O shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, pH, specific conductance, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. If Total Residual Chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination. Salinity shall be measured in each test concentration at the beginning of the test and at test termination.

(d) Tests for Aquatic Toxicity shall be initiated within 36 hours of sample collection.

(2) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Mysidopsis bahia (1-5 days old with no more than 24-hours range in age)

(3) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Cyprinodon variegatus (1-14 days old with no more than 24-hours range in age).

(4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) Definitive (multi-concentration) testing, with LC50 as the endpoint, shall be conducted to determine compliance with instantaneous limits on Aquatic Toxicity and monitoring conditions and shall incorporate, at a minimum, the following effluent concentrations:

(i) For Aquatic Toxicity Limits expressed as LC50 values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%

(ii) For Aquatic Toxicity Limits expressed as LC50 values between 15% and 33% and for monitoring only conditions: 100%, 50%, 25%, 12.5%, and 6.25%

(iii) For Aquatic Toxicity Limits expressed as LC50 values of 15% or less: 100%, 50%, 25%, 12.5%, 6.25%, and 3%

(b) For Aquatic Toxicity Limits expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit, or 100% in the case of monitoring only conditions, as prescribed in section 22A-430-3(j)(7)(A)(I) of the Regulations of Connecticut State Agencies, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.

(c) Mysids shall be fed during the tests.

(d) Aquatic toxicity tests with saltwater organisms shall be conducted at the same final salinity, plus or minus 2 parts per thousand, as the effluent.

(i) Sodium lauryl sulfate or sodium dodecyl sulfate shall be used as the reference toxicant.

(ii) Synthetic seawater for use as dilution water or controls shall be prepared with deionized water and artificial sea salts as described in EPA/821-R-02-012.

(iii) If the salinity of the effluent is more that 5 parts per thousand higher, or lower than the culture water used for rearing the organisms, a second set of controls matching the salinity of the culture water shall be added to the test series. Test validity shall be determined using the controls adjusted to match the source water salinity.

(iv) For Table N and O salinity adjustment that may be required in tests with saltwater organisms shall utilize the minimum amount of synthetic sea salt necessary to achieve the required salinity (26-30 ppt).

(v) For tests with saltwater organisms that require salinity adjustment of the effluent, chemical analyses for Tables N and O shall be conducted on an aliquot of the effluent sample collected for Aquatic Toxicity testing and on an aliquot of the effluent following salinity adjustment. Both sets of results shall be reported on the Aquatic Toxicity Monitoring Report (ATMR).

(5) Compliance with limits on Aquatic Toxicity shall be determined as follows:

(a) For limits expressed as a minimum LC50 value, compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC50 value for the test is greater than the Aquatic Toxicity Limit.

(b) For limits expressed as an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is greater than 50% survival in the undiluted effluent and 90% or greater survival in the effluent at the specified CTC.

(C) The Permittee shall annually monitor the chronic toxicity of the DSN001-E and DSN 002-C in accordance with the following specifications.

(1) Chronic toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.

(2) Chronic toxicity testing shall be performed on the discharge in accordance with the test methodology established in "Short term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms" (EPA-821-R-02-014) as referenced in 40CFR 136 for Mysidopsis bahia survival, growth and fecundity and Cyprinodon variegatus larval survival and growth.

(3) Chronic toxicity tests shall utilize a minimum of five effluent dilutions prepared using a dilution factor of 0.5 (100% effluent, 50% effluent, 25 % effluent, 12.5 % effluent, 6.25 % effluent, 0 % effluent).

(4) Thames River water collected immediately upstream of the area influenced by the discharge shall be used as site water control (0% effluent) and dilution water in the toxicity tests.

(5) A laboratory water control consisting of synthetic Saltwater prepared in accordance with EPA-821-R-02-014 shall be included in the test protocol in addition to the site-water control.

(6) Daily composite samples of the discharge and grab samples of the Thames River for use as site water control and dilution water shall be collected on: day 0, for test solution renewal on day 1 and day 2 of the test; day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal on day 5, 6, and 7 of the test. Samples shall not be dechlorinated, pH or hardness adjusted, or chemically altered in any way.

(7) All samples of the discharge and the Thames River water used in the chronic toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in section 6(A) of this permit for the following parameters:

pH	Copper (Total recoverable and dissolved)
Hardness	Nickel (Total recoverable and dissolved)
Alkalinity	Nitrogen, Ammonia (total as N)
Conductivity	Nitrogen, Nitrate (Total as N)
Oxidant, (Total residual)	Solids, Total Suspended
Oil and Grease	Zinc, (Total recoverable and dissolved)
Salinity	Lead (Total recoverable and dissolved)

SECTION 7: REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) at the following address. The report

shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing)
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC50 values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the day of sample collection, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Materials Management and Compliance Assurance at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, Ct 06106-5127

(C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, as scheduled, indicating "NO DISCHARGE". For those Permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

(A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.

(B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Materials Management and Compliance Assurance (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.

(C) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

SECTION 9: COMPLIANCE SCHEDULE

(A) A complete and thorough report of the results of the chronic toxicity monitoring specified in Section 6 (C) shall be prepared as outlined in section 10 of EPA-821-R-02-014 and submitted to the Department for review within 60 days of test completion to the address specified in Section 7(B) of this permit.

(B) On or before 6 months after the issuance date of this permit, the Permittee shall submit, for review and written approval of the Commissioner, a report on the alternative methods for flow monitoring on DSN 002C. Such report shall include a proposed selected alternative and provide a proposed schedule for the purchase and installation of the selected equipment. The Permittee shall implement the approved alternative no later than 365 days from the issuance date of this permit.

(C) On or before 6 months after issuance of this permit, the Permittee shall submit for review and written approval of the Commissioner a report describing; the practice of discharging potable water during the winter for freeze protection of exposed water lines, the alternatives to this practice, ways to minimize this practice (water conservation), and verify the area of chlorine impacts, in the receiving stream, associated with this practice. Such report shall include a schedule for the implementation of any recommendations made in this report regarding alternatives. The Permittee shall implement the approved alternative no later than 720 days from the issuance date of this permit.

(D) On or before 30 days prior to discharging from DSN001F the Permittee shall submit, for review and written approval of the Commissioner, detailed plans of the system proposed to treat the construction dewatering wastewaters to be discharged at this location. Upon approval the Permittee shall construct the proposed system and then certify to the Commissioner that the system has been installed as approved. The discharge shall not commence until the system is installed as approved.

(E) The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit 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. Nothing in this paragraph shall excuse noncompliance or delay.

(F) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this section of the permit, 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, the word "day" as used in this section of the permit means calendar day. Any document or action which is required by this section only of the permit, 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.

(G) Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates

that may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

(H) Notice to Commissioner of changes. 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, 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.

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

Gary L. Leavitt, Sanitary Engineer III
Department of Environmental Protection
Bureau of Materials Management and Compliance Assurance
79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on 7/5/06.

/s/GINA MCCARTHY
Gina McCarthy
Commissioner

GM/GLL

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Electric Boat Corporation PAMS Company ID: 103125

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0003824 APPLICATION #: 200204316 FACILITY ID. 059-012

Mailing Address:						**Location Address:**					
Street:	75 Eastern Point Road					**Street:**	75 Eastern Point Rd.				
City:	Groton	**ST:**	**CT**	**Zip:**	06340	**City:**	Groton	**ST:**	**CT**	**Zip:**	06340
Contact Name:	Daniel Alfieri					**DMR Contact**	Same				
Phone No.:	860-433-6534					**Phone No.:**	Same				

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR __ 30 YEAR __

TYPE New __ Reissuance X Modification __

CATEGORIZATION POINT (X) NON-POINT ( ) GIS # _

NPDES (X) PRETREAT () GROUND WATER(UIC) ( ) GROUND WATER (OTHER) ( )

NPDES MAJOR (MA) X
NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) ___
NPDES or PRETREATMENT MINOR (MI) ___

PRETREAT SIGNIFICANT INDUS USER (SIU) __
PRETREAT CATEGORICAL (CIU) __
Note: If it's a CIU then check off SIU

POLLUTION PREVENTION MANDATE _ ENVIRONMENTAL EQUITY ISSUE __

COMPLIANCE ISSUES

COMPLIANCE SCHEDULE YES X NO

POLLUTION PREVENTION __ TREATMENT REQUIREMENT____WATER CONSERVATION___

WATER QUALITY REQUIREMENT __ REMEDIATION __ OTHER

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO X YES __

OWNERSHIP CODE

Private X Federal __ State __ Municipal (town only) __ Other public _

DEP STAFF ENGINEER G Leavitt

PERMIT FEES

Discharge Code	DSN	Annual Fee
101057Z	DSN001, 002, 003	$8,175
102000B	DSN003, 004,	$8,175
121000	DSN012, 007	$2,040

FOR NPDES DISCHARGES

Drainage basin Code: 3000 Present/Future Water Quality Standard: SB/SB

NATURE OF BUSINESS GENERATING DISCHARGE

This company is a manufacturer of submarines for the Navy

PROCESS AND TREATMENT DESCRIPTION (by DSN)

There is no treatment required for any of the discharges.

RESOURCES USED TO DRAFT PERMIT

__ Federal Effluent Limitation Guideline 40CFR
name of category

__ Performance Standards

__ Federal Development Document _____
name of category

__ Treatability Manual

X Department File Information

X Connecticut Water Quality Standards

X Anti-degradation Policy

X Coastal Management Consistency Review Form

__ Other - Explain

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

X Case-by-Case Determination (See Other Comments)

_ Section 22a-430-4(s) of the Regulations of Connecticut State Agencies

X In order to meet in-stream water quality (See General Comments)
X Anti-degradation policy

GENERAL COMMENTS

Water quality based discharge limitations were included in this permit for consistency with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Each parameter was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the zone of influence allocated to the facility where appropriate. The statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the limits. The most restrictive of the water quality limitations, aquatic life acute, aquatic life chronic, and human health, was compared with limitations developed according to State and Federal Best Available Technology (BAT). Where the water quality based limitations were more restrictive than BAT, the water quality based limitation was included in the permit as a mass limit in addition to the BAT concentration limit.

OTHER COMMENTS

The following discussion highlights the major changes that were incorporated into the new permit.

DSN 001-1
The flows from the different discharges to outfall #16 are noted as in last permit. At the company's request, the Nuclear Reactor Main Sea Water System Flow was removed from this outfall because it will not discharge in the graving dock. The Barge 17 Boiler Blowdown flow was changed to a per day flow instead of per event (previously noted flows divided by 21 days).
DSN 001-A
The temperature and nitrogen monitoring requirements were removed because the discharge represents a filling and pump down of a flooded dry dock to bring a submarine into dry dock. There will be a cooling water discharge while the vessel is being docked but in this situation the water within the dry dock will be primarily river water and expected to be ambient temperature. In addition, since no work has been done on the submarine at the time of dewatering, there should be no significant chemical constituents in the discharge. Therefore, tin, and chromium are parameters that were removed from the monitoring schedule because they were non-detect over the last three events. The requirement to sample has also been re-written to apply only to the dewatering operation following accepting a vessel into the dry dock and not leaving the dock.
DSN 001-B
This discharge was retained in the permit. This DSN was written to cover the act of dropping the dry dock to let a ship out after the dry dock had been flooded. Monitoring over the last 2 years shows insignificant levels of pollutants with chlorine, lead and total chromium being non-detect. Copper was a maximum of 66 ug/l and zinc was a maximum of 495 ug/l over this same time period.
DSN 001-C
The same changes as DSN 001-A.
DSN 001-D
This discharge was retained in the permit for the same reasons as DSN 001B. The maximum levels of copper and zinc were 25 and 37 ug/l respectively with non-detects on chromium, lead, and chlorine.

DSN 001E

This discharge is the daily dewatering of dry dock 1 and 2 and includes primarily storm water, dry dock leaks, and cooling water associated with submarines in dry dock. The previous permit had several constituents, with required monitoring, that have not been detected over the last 2 years. These were arsenic, cadmium, selenium, and tin. Of this group, all except tin were annual sampling only, therefore, monitoring requirements were removed from the permit for these parameters. In addition, the previous permit required BOD sampling on a weekly basis, however, the levels indicated by monitoring over the last 5 years showed insignificant levels (< 4 mg/l average over 104 samples). Therefore the BOD sampling requirement was removed from this permit.

DSN 001F

This discharge has been added to the permit to cover anticipated construction dewatering wastewaters from the reconstruction of dry docks #1 and #2.

DSN 002-1

The flows from the different discharges from dry dock #3 are noted as in last permit. The Nuclear Reactor Main Sea Water System Flow was removed at the Company's request (Ed Guffy, Environmental Engineer) because it will not discharge in the graving dock. The Barge 17 Boiler Blowdown flow was changed to a per day flow instead of per event (previously noted flows divided by 21 days).

DSN 002-A

This discharge is the same as DSN 001B and D and is retained in the permit. This is the removal of the dry dock wall on graving dock #3. Six out of 10 chemical parameters were non-detect during the only event to occur during the last 2 years.

DSN 002-B

This discharge is the equivalent of DSN001-A and C and the same changes were made to this monitoring schedule. The flow for this discharge was also decreased to reflect the maximum daily discharge instead of the per event flow in the previous permit.

DSN 002-C

This discharge is the equivalent of DSN001E but serves Graving Dock #3 therefore the same modifications to the monitoring schedule were made. The BOD effluent concentrations over 68 samples averaged only 5.28 mg/l so it was removed from the sampling list. This discharge was non-detect for the same list of constituents that were non-detect in the other graving docks discharge and those were removed from the monitoring requirements. The ZOI for this discharge was increased to the same as DSN 001E.

DSN 003-1 and DSN 004-1

Zinc monitoring has been added to the monitoring requirements because of the extent of the use of Zinc for sacrificial anodes in the dry dock and on the vessels. The ZOI previously allocated to DSN002C has been given to this discharge

DSN 005 and DSN 006

Both of these discharges were deleted from the permit because the discharges are not generated by Electric Boat but are the responsibility of the Navy.

DSN 007

There were significant changes made to this discharge monitoring pipe. The last permit utilized this DSN designation to 'register' several non-descript discharges, some of which where not anticipated to discharge. Therefore, the following changes are noted. Hydrostatic testing wastewater is removed from this DSN because it can be covered by a general permit. Freeze protection bleed water was addressed as a new DSN 007A with monitoring because of the discharge of chlorinated water to the river. Based on the Average Daily flow of 6000 gpd a permit limit for Acute Toxicity was established at LC50>20% which represents 100:1 dilution.

Steam condensate and steam condensate purge water is a discharge to the river at several locations and is addressed in the permit as DSN007B which includes monitoring. Potable water leakage from pipes and valves has been deleted because this is not a planned discharge but represented the unexpected discharge due to a malfunction which would be corrected. Fire hose testing was removed from the description because it is part of hydrostatic testing.

DSN 008-A,B and C

These three discharges were deleted as required by the compliance schedule in the last permit. They were, however, not deleted from the permit and appear in DSN 001 and DSN 002 as discharges to the graving docks.

DSN 009-A&B

Both of these discharges have been deleted at the request of the applicant.

DSN 010-1

This discharge has been removed from the permit for the same reasons stated above in DSN 005 and 006.

DSN 011-1

This discharge has been eliminated as required by the schedule in the previous permit.

DSN 012-1

The chemical constituents to be monitored for this discharge remain the same but flow monitoring was added.

Compliance Schedule

In addition to the standard reporting requirement of the annual chronic toxicity report, this permit requires the submission of a report on flow monitoring alternatives for DSN 002C and the study of potable water discharges for winter freeze protection on un-insulated potable water lines in and around the dry docks. It also requires the submittal of plans for the construction dewatering treatment system associated with DSN 001F discharge.