

NPDES PERMIT MODIFICATION

issued to

Permittee:

Electric Boat Corporation
75 Eastern Point Road
Groton, CT 06340
Attention: Edwin Guffy

Location Address:

75 Eastern Point Road
Groton

Facility ID: 059-012

Permit ID: CT0003824

Permit Modification Expires: July 4, 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 Environmental Protection ("the Commissioner") has made a final determination on this permit modification and found that continuance of the existing discharge would not cause pollution of the waters of the state. Further, continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 200702359 for permit modification received on October 1, 2007 and the administrative record established in the processing of that application.

Electric Boat Corporation, ("Permittee"), shall comply with all conditions of NPDES Permit No. CT0003824 issued on July 5, 2006 with the following modification:

1. Table G, DSN 001F; the average daily and maximum daily flow limits are changed from 300,000 gallons per day (gpd) and 600,000 gpd respectively, to 1,500,000 gpd. See attached revised Table G.
2. Table J, DSN 002B; the maximum daily flow is changed from 8.25 million gallons per day to 33 million gallons per day. See attached revised Table J.

The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit modification, NPDES Permit No. CT0003824, 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. CT0003824 issued on July 5, 2007 shall continue in full force and effect. This modification is hereby issued on April 17, 2008.

/s/ GINA MCCARTHY

Gina McCarthy
Commissioner

GM/GLL

Permit No. CT0003824

Sent:RRR

Table G (revisions highlighted)

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	TIME BASED MONITORING				FLOW			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			
Aquatic Toxicity, Mysidopsis bahia ^{4,5} NOAEL= 81 %	%	NA	Survival \geq 90% ⁵	Monthly	Daily Composite	LC50> 81 % ⁵	NR	Grab			
Aquatic Toxicity Cyprinodon variegatus ^{4,5} NOAEL= 81 %	%	NA	Survival \geq 90% ⁵	Monthly	Daily Composite	LC50> 81 % ⁵	NR	Grab			
Aquatic Toxicity, Mysidopsis bahia ^{4,5} Survival in 100%	%	NA	Survival \geq 50% ⁵	NR	NA	NA	NR	NA			
Aquatic Toxicity, Cyprinodon variegatus ^{4,5} Survival in 100%	%	NA	Survival \geq 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 Daily ¹	mgd	1.5	NA	Daily	Daily Flow	NA	NR	NA			
Flow, Maximum Daily ¹	mgd	NA	1.5	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 J (revisions highlighted)

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	TIME BASED MONITORING				FLOW	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		
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	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	*	

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.

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Electric Boat Corporation

PAMS Company ID: 103125

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0003824

APPLICATION #: 200702359

FACILITY ID. 059-012

<u>Mailing Address:</u>					<u>Location Address:</u>						
Street:	75 Eastern Point Road				Street:	75 Eastern Point Rd.					
City:	Groton	ST:	CT	Zip:	06340	City:	Groton	ST:	CT	Zip:	06340
Contact Name:	Edwin Guffy				DMR Contact	Same					
Phone No.:	860-433-5751				Phone No.:	Same					

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR ___ 30 YEAR ___

TYPE New ___ Reissuance ___ Modification X

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 NO X

POLLUTION PREVENTION ___ TREATMENT REQUIREMENT ___ WATER CONSERVATION

WATER QUALITY REQUIREMENT ___ REMEDIATION ___ OTHER ___

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO ___ YES Y
(CFE has filed intent to sue company)

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)

The only discharge requiring treatment is DSN 001F. This discharge is required to settle out solids and adjust pH if necessary.

RESOURCES USED TO DRAFT PERMIT

- Federal Effluent Limitation Guideline 40CFR
name of category
- Performance Standards
- Federal Development Document
name of category
- Treatability Manual
- Department File Information
- Connecticut Water Quality Standards
- Anti-degradation Policy
- Coastal Management Consistency Review Form
- Other - Explain

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

- Case-by-Case Determination (See Other Comments)
- Section 22a-430-4(s) of the Regulations of Connecticut State Agencies
- In order to meet in-stream water quality (See General Comments)
- 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.

The purpose of this modification is to address flow violations on two of the discharge pipes. DSN 002B flow monitoring indicates that the flow limit has been exceeded recently. The permittee has changed the length of time required to dewater Dry Dock #3 because of change of use of the dock. When the permit was reissued last year the permittee indicated the dock could be dewatered over several days thus the present permit was written to authorize 8.25 mgd instead of 33 mgd in the previous permit. The permittee now has the need to dewater the dock in one day, as the past permit allowed, therefore, this modification is to reauthorize 33 mgd from this discharge. DSN 001F is a temporary discharge pipe associated with the discharge of dewatering wastewaters from the reconstruction of dry docks 1 and 2. When the permit was reissued in 2006 certain assumptions were made about the amount of water that may be discharged. As construction progressed it has become apparent that the cofferdam, constructed of sheet piles, leaked more than anticipated, causing higher dewatering flows. For this DSN there was also a corresponding decrease in the toxicity limit from NOAEL=63% to NOAEL=81% to ensure the increased flow will not result in the discharge of additional toxins.