

## NPDES PERMIT

issued to

The Thames Shipyard & Repair Company  
2 Ferry Street  
New London, CT 06320

**Location Address:**  
50 Farnsworth Street  
New London, CT 06320

**Facility ID:** 095-074

**Permit ID:** CT0030333

**Receiving Stream:** Thames River  
**Stream Segment I.D. No.:** CT-E1\_014-SB

**Permit Expires:** September 27, 2014

### SECTION 1: GENERAL PROVISIONS

- (A) This permit is issued 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) **The Thames Shipyard & Repair Company**, ("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 section of the 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, 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.

"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.

"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.

"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.

"mg/l" means milligrams per liter.

"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.

### **SECTION 3: COMMISSIONER'S DECISION**

(A) The Commissioner has issued a final determination and found that such discharge will not cause pollution of any of the waters of the state. The Commissioner's decision is based on Application No. 200003194 for permit issuance, received on November 28, 2000 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 Commissioner'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. The discharges shall not cause foaming in the receiving stream beyond the 600 foot zone of influence.
- (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 4oF. The incremental temperature increase in coastal and marine waters is limited to 1.5 °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: 101-1** | **Monitoring Location: 1**  
**Wastewater Description:** Pumped water from the (20) ballast tanks at the large dry dock  
**Monitoring Location Description:** At the discharge of the ballast water pumps  
**Allocated Zone of Influence (ZOI): 20,241,666** | **In stream waste concentration (IWC): 5.2 %**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test <sup>3</sup>
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency <sup>2</sup>	Sample Type or measurement to be reported	
Aquatic Toxicity, M. bahia <sup>4</sup>	%	NA	LC <sub>50</sub> >100%	Monthly <sup>9</sup>	Composite <sup>6</sup>	LC <sub>50</sub> >33%	NR	Grab	
Aquatic Toxicity, M. beryllina <sup>4</sup>	%	NA	LC <sub>50</sub> >100%	Monthly <sup>9</sup>	Composite <sup>6</sup>	LC <sub>50</sub> >33%	NR	Grab	
BOD <sub>5</sub> <sup>5</sup>	mg/l	NA	---	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Copper, Total <sup>5</sup>	mg/l	NA	---	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	*
Flow, Maximum <sup>1</sup>	mgd	NA	6.700	Monthly <sup>9</sup>	Daily Flow	NA	NR	NA	
Iron, Total <sup>5</sup>	mg/l	NA	----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Nitrogen, Nitrate (total as N) <sup>5</sup>	mg/l	NA	----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Oil and Grease, Total	mg/l	10.0	20.0	Monthly <sup>9</sup>	See Footnote 8	20.0	NR	See Footnote 8	
Oxidants, Total Residual <sup>5</sup>	mg/l	NA	NA	NR	NA	---	Monthly <sup>9</sup>	Grab	*
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly <sup>9</sup>	Grab	
Silver, Total <sup>5</sup>	mg/l	NA	---	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	*
Sulfates <sup>5</sup>	mg/l	NA	---	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Total Suspended Solids <sup>5</sup>	mg/l	NA	---	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Visible Foam <sup>7</sup>	Yes/ No	NA	---	Monthly <sup>9</sup>	See Footnote 7	NA	NR	NA	
Zinc, Total <sup>5</sup>	mg/l	0.8	1.6	Monthly <sup>9</sup>	Composite <sup>6</sup>	1.6	NR	See Footnote 6	*

**Table A Footnotes:**

- <sup>1</sup> For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each sampling month.
- <sup>2</sup> The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.
- <sup>3</sup> Minimum Level Test refers to Section 6(A)(3) of this permit.
- <sup>4</sup> Record the LC<sub>50</sub> value result on the DMR.
- <sup>5</sup> Indicates that testing for this parameter shall be performed on the same sample used for aquatic toxicity testing.
- <sup>6</sup> "Composite" shall consist of grab samples collected from six pumps (3 from each side of the dry dock) and combined into one sample. A single grab sample shall be collected and tested for total residual Oxidants and pH.
- <sup>7</sup> For this parameter, the Permittee shall record and report the presence of persistent foaming existing for more than 30 minutes in the ZOI and when the foam depth exceeds two (2) inches.
- <sup>8</sup> Grab samples shall be collected from six pumps (3 from each side of the dry dock) and analyzed for oil and grease using EPA Method 1664A, including the alternative procedures specified in Section 8.3 of that method.
- <sup>9</sup> Monthly monitoring is required only during **February through June**. In the event that a discharge occurs during July through January, the Permittee shall attach a written summary of these discharges indicating the dates of discharge to the Discharge Monitoring Report (DMR) for the month of February.

**Table A Remark:**

- 1. If a ballast water intake sample indicates an exceedance of an effluent limit for oil, grease or zinc, the Permittee is allowed to discharge these pollutants at levels up to 1.10 times the influent levels on the day of sample.

**Table B**

**Discharge Serial Number: 102-1**

**Monitoring Location: 1**

**Wastewater Description:** Pumped water from the (8) ballast tanks at the small dry dock

**Monitoring Location Description:** At the discharge of the ballast water pumps

**Allocated Zone of Influence (ZOI): 4,833,333**

**In stream waste concentration (IWC): 5.2 %**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test <sup>3</sup>
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported <sup>6</sup>	Instantaneous limit or required range	Sample/Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity, M. bahia <sup>4</sup>	%	NA	LC <sub>50</sub> >100%	Monthly <sup>9</sup>	Composite <sup>6</sup>	LC <sub>50</sub> >33%	NR	Grab	
Aquatic Toxicity, M. beryllina <sup>4</sup>	%	NA	LC <sub>50</sub> >100%	Monthly <sup>9</sup>	Composite <sup>6</sup>	LC <sub>50</sub> >33%	NR	Grab	
BOD <sub>5</sub> <sup>5</sup>	mg/l	NA	----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Copper, Total <sup>5</sup>	mg/l	NA	---	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	*
Flow, Maximum <sup>1</sup>	mgd	NA	0.900	Monthly <sup>9</sup>	Daily Flow	NA	NR	NA	
Iron, Total <sup>5</sup>	mg/l	NA	-----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Nitrogen, Nitrate (total as N) <sup>5</sup>	mg/l	NA	-----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Oil and Grease, Total	mg/l	10.0	20.0	Monthly <sup>9</sup>	See Footnote 8	20.0	NR	See Footnote 8	
Oxidants, Total Residual <sup>5</sup>	mg/l	NA	NA	NR	NA	---	Monthly <sup>9</sup>	Grab	*
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly <sup>9</sup>	Grab	
Silver, Total <sup>5</sup>	mg/l	NA	----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	*
Sulfates <sup>5</sup>	mg/l	NA	----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Total Suspended Solids <sup>5</sup>	mg/l	NA	----	Monthly <sup>9</sup>	Composite <sup>6</sup>	NA	NR	Grab	
Visual Appearance <sup>7</sup>	Yes/ No	NA	----	Monthly <sup>9</sup>	See Footnote 7	NA	NR	NA	
Zinc, Total <sup>5</sup>	mg/l	0.8	1.6	Monthly <sup>9</sup>	Composite <sup>6</sup>	1.6	NR	See Footnote 6	*

**Table B Footnotes :**

<sup>1</sup> For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each sampling month.

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

<sup>3</sup> Minimum Level Test refers to Section 6(A)(3) of this permit.

<sup>4</sup> Record the LC<sub>50</sub> value result on the DMR.

<sup>5</sup> Indicates that testing for this parameter shall be performed on the same sample used for aquatic toxicity testing.

<sup>6</sup> “Composite” shall consist of grab samples collected from six pumps (3 from each side of the dry dock) and combined into one sample. A single grab sample shall be collected and tested for total residual Oxidants and pH.

<sup>7</sup> For this parameter, the Permittee shall record and report the presence of persistent foaming existing for more than 30 minutes in the ZOI and when the foam depth exceeds two (2) inches.

<sup>8</sup> Grab samples shall be collected from six pumps (3 from each side of the dry dock) and analyzed for oil and grease using EPA Method 1664A, including the alternative procedures specified in Section 8.3 of that method.

<sup>9</sup> Monthly monitoring is required only during **February through June**. In the event that a discharge occurs during July through January, the Permittee shall attach a written summary of these discharges indicating the dates of discharge to the Discharge Monitoring Report (DMR) for the month of February.

**Table B Remark:**

1. If a ballast water intake sample indicates an exceedance of an effluent limit for oil, grease or zinc, the Permittee is allowed to discharge these pollutants at levels up to 1.10 times the influent levels on the day of sample.

- (1) All samples shall be comprised of only the wastewater described in this table. 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 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 A and B. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<u>Parameter</u>	<u>Minimum Level</u>
Oxidants, total residual	50.0 ug/L
Copper	20.0 ug/L
Silver	20.0 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.

(B) 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 4 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 Tables A and B shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.
    - (i) At a minimum, pH, specific conductance, salinity, total alkalinity, total hardness, and total residual Oxidants 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 Oxidants 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) in Table A and B 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) in Table A and B above shall be conducted for 48-hours utilizing larval Menidia beryllina (9-14 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 LC<sub>50</sub> as the endpoint, shall be conducted to determine compliance with limits on Aquatic Toxicity and monitoring conditions and shall incorporate, at a minimum, the following effluent concentrations:
    - (i) For Aquatic Toxicity Limits expressed as LC<sub>50</sub> values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%
  - (b) Mysidopsis bahia be fed during the tests.
  - (c) Aquatic toxicity tests with saltwater organisms shall be conducted at a salinity of 25 parts per thousand, plus or minus 2 parts per thousand.



- (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 source water is more than 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.
- (5) Compliance with limits on Aquatic Toxicity shall be determined as follows:
- (a) For limits expressed, as a minimum LC<sub>50</sub> value compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC<sub>50</sub> value for the test is greater than the Aquatic Toxicity Limit.

## **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  
Water Permitting and Enforcement Division (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, LC<sub>50</sub> 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 Water Protection and Land Reuse 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 Water Protection and Land Reuse (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) On or before 60 days after the date of issuance of this permit, the Permittee shall retain one or more qualified consultants acceptable to the Commissioner to prepare the documents and implement or oversee the actions required by this section of the permit and shall, by that date, notify the Commissioner in writing of the identity of such consultants. The Permittee shall retain one or more qualified consultants acceptable to the Commissioner until the actions required by this section of the permit have been completed, and within ten days after retaining any consultant other than one originally identified under this paragraph, Permittee shall notify the Commissioner in writing of the identity of such other consultant. The consultant retained to perform the studies and oversee any remedial measures required to achieve compliance with Section 5 shall be a qualified professional engineer licensed to practice in Connecticut acceptable to the Commissioner. The Permittee shall submit to the Commissioner a description of a consultant's education, experience and training that is relevant to the work required by this permit within ten days after a request for such a description. Nothing in this paragraph shall preclude the Commissioner from finding a previously acceptable consultant unacceptable.
- (B) On or before 790 days after the date of issuance of this permit, the Permittee shall conduct a study and submit for the Commissioner's review and written approval an engineering report which summarizes effluent data for total suspended solids (TSS), 5-day Biochemical Oxygen Demand ( $BO_{D5}$ ), copper, and silver for DSN 101 and DSN 102 over the eight quarters after permit issuance to confirm that the discharges of TSS,  $BO_{D5}$ , copper, and silver are protective of the waters of the state and consistent with Connecticut Water Quality Standards (WQS). The report shall include, but not be limited to the following: 1) a discussion of the comparability of the intake water and effluent data discharge analytical results for TSS,  $BO_{D5}$ , copper, and silver, and 2) a recommendation on whether effluent limitations for TSS,  $BO_{D5}$ , copper, and silver are necessary for protection of the waters of the state.
- (C) The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit in a complete and approvable form. If the Commissioner notifies 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.

- (D) 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 legal Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or legal Connecticut or federal holiday.
- (F) 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.
- (G) 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.
- (H) 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:

Enna Herrera  
Sanitary Engineer  
Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division  
79 Elm Street  
Hartford, CT 06106 5127

This permit is hereby issued on September 28, 2009

/s/ AMEY W. MARRELLA  
Amey W. Marrella  
Commissioner

AM/EH



DEP STAFF ENGINEER Enna Herrera

**PERMIT FEES**

<i>Discharge Code</i>	<i>DSN Number</i>	<i>Annual Fee</i>
<i>101057R</i>	<i>101-102</i>	<i>\$ 5,477. 25</i>

*Note: Application and annual permit fees have been reduced by 33%.*

**FOR NPDES DISCHARGES**

*Drainage basin Code: 3000*

*Present/Future Water Quality Standard: SC/SB*

**NATURE OF BUSINESS GENERATING DISCHARGE**

*The Thames Shipyard & Repair Company provides repair, construction and refurbishing services for various marine vessels, including passenger and car ferries, commercial workboats, fishing vessels, and other watercraft. To conduct some of the shipbuilding activities, it is necessary to remove the vessel from the water. This is accomplished with a "floating dry dock" which is a vessel that can be raised and lowered in the water by controlled flooding of the dry dock ballast tanks. Thames River water is used as "ballast" to adjust the depth of the dry dock in the water. This is achieved by letting river water into or pumping river water out of the ballast tanks of the dry docks. Currently, the water is returned to the river without treatment.*

**PROCESS AND TREATMENT DESCRIPTION (by DSN)**

*DSN 101-1: No treatment is necessary*

*DSN 102-1: No treatment is necessary*

**RESOURCES USED TO DRAFT PERMIT**

- Federal Effluent Limitation Guideline* 40 CFR  
*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*  
*The Applicant filed the appropriate CMCR form and demonstrated consistency with applicable statutory goals and policies.*
- Other – Explain (See General Comments)*

**BASIS FOR LIMITATIONS, STANDARDS, OR CONDITIONS**

- X Case-by-Case Determination and Best Professional Judgment (See General Comments)  
DSN 101-1: BOD<sub>5</sub>, copper, iron, nitrate, oil and grease, pH, sulfates, total residual oxidants, silver, and TSS  
DSN 102-1: BOD<sub>5</sub>, copper, iron, nitrate, oil and grease, pH, sulfates, total residual oxidants, silver, and TSS
- X In order to meet in-stream water quality (See General Comments)  
DSN 101-1: LC<sub>50</sub>, zinc  
DSN 102-1: LC<sub>50</sub>, zinc

## **GENERAL COMMENTS**

*The need to include water quality based discharge limitations in this permit was evaluated consistent 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) 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 Toxic Control (EPA/505/2-90-001) were employed to calculate these limits. The calculated limits were then compared to the available effluent data. A comparison of the calculated limits to the effluent data suggests a statistical probability of exceeding such limits. Therefore, water quality based limits were included in this permit issuance for zinc.*

*Aquatic toxicity (LC50) limits for each discharge were included in the permit to protect against chronic effects to aquatic life in the Thames River. The oil and grease limits established in this permit issuance are based on a case-by-case determination using criteria of best professional judgment. Section 22a-430-4(s) of the RCSA was used as guidance in establishing limitations for total oil and grease. Best practicable control technology (BPT), best conventional pollutant control technology (BCT), and 40 CFR 133 Secondary Treatment Regulation were used as guidance in establishing limitations for pH. The sampling analyses submitted as part of the application for DSN 101-1 and DSN 102-1 indicated that the Permittee will meet these limits.*

*This permit includes a compliance schedule, which requires Thames Shipyard conduct a study and submit an engineering report which summarizes effluent data for total suspended solids (TSS), 5-day Biochemical Oxygen Demand (BOD<sub>5</sub>), copper, and silver for DSN 101 and DSN 102 over the eight quarters after permit issuance to confirm that the discharges of TSS, BOD<sub>5</sub>, copper, and silver are protective of the waters of the state and consistent with Connecticut Water Quality Standards (WQS). The report shall include, but not be limited to the following: 1) a discussion of the comparability of the intake water and effluent data discharge analytical results for TSS, BOD<sub>5</sub>, copper, and silver and 2) a recommendation on whether effluent limitations for TSS, BOD<sub>5</sub>, copper, and silver are necessary for protection of the waters of the state. The Permittee is of the opinion that future wastewater discharge testing will demonstrate that their operations are not changing the background river water quality. Upon verification of this point, the Permittee intends to request the permit be modified to reduce the frequency of monitoring.*

*Thames Shipyard's normal operations involve using dry docks to allow for ship maintenance. Dry dock operations require pumping of significant quantities of seawater out of the dock when the ship is inside. This pumping entrains air, which can lead to foaming in and out the dry docks. The DEP staff is recommending that a Zone of Influence (ZOI) be allowed for foaming for this discharge. The proposed ZOI extends 600 ft radially around any dry dock in use during pumping. Also, the Permittee shall be required to do a visual inspection of the ZOI of the discharges. The Permittee shall record and report for DSN101 and DSN102 the presence of persistent foaming existing for more than 30 minutes in the ZOI and when the foam depth exceeds two (2) inches.*

*The DEP "on site" sampling analysis for DSN 101-1 indicated that silver is present at level of concern. Therefore, a monthly monitoring requirement for this parameter is recommended in this permit issuance.*

*Total oil and grease grab samples collected from six pumps (3 from each side of the dry dock) will be analyzed using Section 8.3 of EPA Method 1664A for oil and grease. Tables A and B include these monitoring requirements.*

*Based on the historical records of discharges provided by the Applicant for both the large and small dry dock in the past three years, most discharges occur during February through June. DEP staff is recommending monthly monitoring only during February through June. This requirement does not preclude the Permittee from discharging during July to January. In the event that a discharge occurs during July through January, the Permittee shall attach a written summary of these discharges indicating dates of discharge to the Discharge Monitoring Report (DMR) for the month of February.*

*The Applicant has developed an intake sampling protocol that includes collecting three intake samples (shallow, mid-level, deep) consisting of samples collected from six locations spaced around the dry dock - three on each side of the dry dock. These 18 samples are then combined to form a single composite sample. The Applicant is performing this sampling to confirm background river water quality.*

*The company is presently operating under a stipulated judgment that was issued on February 13, 2008.*

*On January 19, 2007, the Department received a letter from The Thames Shipyard requesting a reduction of its permit fees. On June 16, 2008, the Department granted a 33% reduction of The Thames Shipyard's permit fees out of recognition that Thames Shipyard does not really fit into the shipbuilding category. The Permittee agreed with this reduction.*