

**NPDES PERMIT**

**issued to**

Exeter Energy, L.P.  
10 Exeter Drive  
P.O Box 188  
Sterling, CT 06377

**Location Address:**  
10 Exeter Drive  
Sterling, CT 06377

**Facility ID:** 136-006

**Permit ID:** CT0026972

**Receiving Stream:** Moosup River

**Permit Expires:** January 30, 2012

**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) **Exeter Energy, L.P.** ("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.

**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.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"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.

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

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

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of January, April, July, and October. In the event that the discharge does not occur in any of these sampling months, the Permittee shall sample during the next discharge event. The Permittee is required to sample the discharge four times a year.

"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.

"Semi-Annual" in the context of a sampling frequency, means the sample must be collected in the months of April and October.

"mg/l" means milligrams per liter.

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

(A) The Commissioner has issued a final decision and found that modification of the existing system or installation of a new system would protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 199601526 for permit reissuance, received on May 19, 1996 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 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 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F.

**SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

- (A) The discharge shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharge is restricted by, and shall be monitored in accordance with, the table(s) below:

**Table A. The Permittee shall comply with Table A from permit issuance until 1,094 days (Interim Period)**

Discharge Serial Number: 001-1 Monitoring Location : 1

Wastewater Description: Treated parking lot material storage areas and roof drain stormwater.

Monitoring Location Description: Settling pond effluent at weir.

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	
Aluminum	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Barium	mg/l	NA	NA	NR	NA	---	Twice/Year	Grab	
Cadmium	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Chromium-Total	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Copper	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Flow, Rate <sup>1</sup>		NA	---	Daily/Monthly	Daily Flow	---	NR	NA	
Flow, Maximum Daily <sup>1</sup>	gpd	NA	---	Daily/Monthly	Daily Flow	NA	NR	NA	
Flow, Day of Sampling	gpd	NA	---	Monthly	Daily Flow	NA	NR	NA	
Duration of Daily Discharge	Hours	NA	---	Monthly	Total Hours	NA	NR	NA	
Iron	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	
Lead	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Manganese	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	
Nickel	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
pH	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	Grab	
Zinc	mg/l	NA	NA	NR	NA	---	Monthly	Grab	
Total Oil & Grease (EPA Method 1664) gpm	mg/l	NA	NA	NR	NA	10	Quarterly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	---	Monthly	Grab	

**Table Footnotes and Remarks:**

**Footnotes:**

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Maximum Daily Flow Rate for each month. The Permittee is authorized to calculate the gallons per minute flow rate (gpm) during the interim period by dividing Total Daily Flow (gal) by the Duration of Daily Discharge in minutes.

<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.

**Remarks:**

All samples shall be taken within 30 minutes after the start of the discharge from the storm event.

**Table B. 1,095 days after permit issuance until permit expiration, the Permittee shall comply with the following final limits:**

		FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test <sup>3</sup>
PARAMETER	UNITS	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	
Aluminum	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Barium	mg/l	NA	NA	NR	NA	---	Twice/Year	Grab	
Cadmium	mg/l	NA	NA	NR	NA	0.007	Quarterly	Grab	*
Chromium-Total	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
Copper	mg/l	NA	NA	NR	NA	0.076	Quarterly	Grab	*
Flow, Rate <sup>1</sup>		NA	---	Daily/Monthly	Daily Flow	---	NR	NA	
Flow, Maximum Daily <sup>1</sup>	gpd	NA	---	Daily/Monthly	Daily Flow	NA	NR	NA	
Flow, Day of Sampling	gpd	NA	---	Monthly	Daily Flow	NA	NR	NA	
Duration of Daily Discharge	Hours	NA	---	Monthly	Total Hours	NA	NR	NA	
Iron	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	
Lead	mg/l	NA	NA	NR	NA	0.098	Quarterly	Grab	*
Manganese	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	
Nickel gpm	mg/l	NA	NA	NR	NA	---	Quarterly	Grab	*
pH	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	Grab	
Zinc	mg/l	NA	NA	NR	NA	0.212	Monthly	Grab	
Total Oil & Grease (EPA Method 1664)	mg/l	NA	NA	NR	NA	10	Quarterly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	100	Monthly	Grab	

**Table Footnotes and Remarks:**

**Footnotes:**

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Maximum Daily Flow Rate for each 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.

**Remarks:**

All samples shall be taken within 30 minutes after the start of the discharge from the storm event and contain stormwater from the first 1.5 inches of rain.

**Table C. The Permittee shall comply with Table C from permit issuance until 1,094 days (Interim Period)**

Discharge Serial Number (DSN): <b>001-1</b>			Monitoring Location: <b>T</b>		
Wastewater Description: Treated parking lot, material storage areas, and roof drain stormwater.					
Monitoring Location Description: Settling Pond effluent at weir.					
Allocated Zone of Influence (ZOI): 109,597 gph			In stream Waste Concentration (IWC): <b>15.3 %</b>		
PARAMETER	Units	Instantaneous limit	Sampling Frequency	Sample Type	Minimum Level Analysis See Section 6
Aquatic Toxicity, <i>Daphnia pulex</i> LC <sub>50</sub> <sup>1</sup>	%	> 50	Quarterly	Grab	
Aquatic Toxicity, <i>Pimephales promelas</i> LC <sub>50</sub> <sup>1</sup>	%	> 50	Quarterly	Grab	
Aluminum	mg/l	----	Quarterly	Grab	*
Barium	mg/l	----	Twice/Year	Grab	
Cadmium, Total	mg/l	----	Quarterly	Grab	*
Chromium, Total	mg/l	----	Quarterly	Grab	*
Chlorine, Total Residual	mg/l	----	Quarterly	Grab	
Copper, Total	mg/l	----	Quarterly	Grab	*
Iron	mg/l	----	Quarterly	Grab	
Manganese	mg/l	----	Quarterly	Grab	
Lead, Total	mg/l	----	Quarterly	Grab	*
Nickel, Total	mg/l	----	Quarterly	Grab	*
Nitrogen, Ammonia (total as N)	mg/l	----	Quarterly	Grab	
Nitrogen, Nitrate, (total as N)	mg/l	----	Quarterly	Grab	
Zinc, Total	mg/l	----	Quarterly	Grab	
Total Suspended Solids	mg/l	----	Quarterly	Grab	

**Table Footnotes and Remarks:**

**Footnotes:**

<sup>1</sup> Record the LC<sub>50</sub> value result on the DMR.

**Remarks:**

All samples shall be taken within 30 minutes after the start of the discharge from the storm event. All analysis shall be on the same sample.

**Table D. 1,095 days after permit issuance until permit expiration, the Permittee shall comply with the following final limits:**

Discharge Serial Number (DSN): <b>001-1</b>	Monitoring Location: <b>T</b>
Wastewater Description: Treated parking lot, material storage areas, and roof drain stormwater.	
Monitoring Location Description: Settling Pond effluent at weir.	
Allocated Zone of Influence (ZOI): 109,597 gph	In stream Waste Concentration (IWC): <b>15.3 %</b>

PARAMETER	Units	Instantaneous limit	Sampling Frequency	Sample Type	Minimum Level Analysis See Section 6
Aquatic Toxicity, <i>Daphnia pulex</i> LC <sub>50</sub> <sup>1</sup>	%	> 50	Quarterly	Grab	
Aquatic Toxicity, <i>Pimephales promelas</i> LC <sub>50</sub> <sup>1</sup>	%	> 50	Quarterly	Grab	
Aluminum	mg/l	----	Quarterly	Grab	*
Barium	mg/l	----	Twice/Year	Grab	
Cadmium, Total	mg/l	0.007	Quarterly	Grab	*
Chromium, Total	mg/l	----	Quarterly	Grab	*
Chlorine, Total Residual	mg/l	----	Quarterly	Grab	
Copper, Total	mg/l	0.076	Quarterly	Grab	*
Iron	mg/l	----	Quarterly	Grab	
Manganese	mg/l	----	Quarterly	Grab	
Lead, Total	mg/l	0.098	Quarterly	Grab	*
Nickel, Total	mg/l	----	Quarterly	Grab	*
Nitrogen, Ammonia (total as N)	mg/l	----	Quarterly	Grab	
Nitrogen, Nitrate, (total as N)	mg/l	----	Quarterly	Grab	
Zinc, Total	mg/l	0.212	Quarterly	Grab	
Total Suspended Solids	mg/l	100	Quarterly	Grab	

**Table Footnotes and Remarks:**

**Footnotes:**

<sup>1</sup> Record the LC<sub>50</sub> value result on the DMR.

**Remarks:**

All samples shall be taken within 30 minutes after the start of the discharge from the storm event and contain stormwater from the first 1.5 inches of rain.  
All analysis shall be on the same sample.

**Table E. From permit issuance to permit expiration**

Discharge Serial Number: 001-A				Monitoring Location: G	
Description: Parking lot material storage areas and roof drain stormwater before oil separator treatment.					
Monitoring Location Description: Settling Pond Influent at the catch basin (CB-3) for the main line					
PARAMETER	UNITS	INSTANTANEOUS MONITORING			Minimum Level Test <sup>3</sup>
		Instantaneous limit or required range	Sample/Reporting Frequency <sup>2</sup>	Sample Type or measurement to be reported	
Aluminum	mg/l	----	Quarterly	Grab	*
Barium	mg/l	-----	Twice/Year	Grab	
Cadmium	mg/l	-----	Quarterly	Grab	*
Chromium-Total	mg/l	-----	Quarterly	Grab	*
Copper	mg/l	-----	Quarterly	Grab	*
Iron	mg/l	-----	Quarterly	Grab	
Lead	mg/l	-----	Quarterly	Grab	*
Manganese	mg/l	-----	Quarterly	Grab	
Nickel	mg/l	-----	Quarterly	Grab	*
Precipitation Volume <sup>1</sup>	In/day	-----	Monthly	NA	
pH	S.U.	-----	Monthly	Grab	
Zinc	mg/l	-----	Monthly	Grab	
Total Oil & Grease (EPA Method 1664)	mg/l	-----	Quarterly	Grab	
Total Suspended Solids	mg/l	-----	Monthly	Grab	

**Table Footnotes and Remarks:**

**Footnotes:**

<sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the total precipitation for each day of discharge and shall report the Maximum Daily Precipitation for each 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, Paragraph A of this permit.

**Remarks:**

All samples shall be taken within 30 minutes after the start of the discharge from the storm event.

- (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 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 Table(s) A, B, C, D, E. 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>
Aluminum	10.0 ug/L
Cadmium	0.5 ug/L
Chromium	5.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 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) 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) 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 Table(s) A and B 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. 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.
  - (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 Daphnia pulex (less than 24-hours old)
- (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 Pimephales promelas (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 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%
  - (b) Organisms shall not be fed during the tests.
  - (c) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.
  - (d) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L

(plus or minus 5 mg/L) as CaCO<sub>3</sub> shall be used as dilution water in tests with freshwater organisms.

- (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 30 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 Street  
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 Toxicity, 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) The Permittee shall achieve compliance with the final effluent limitations in Section 5, Table **B** and **D** as soon as possible, subject to section 22a-430-4(l)(4)(A)(xxiii) of the RCSA, but in no event later than **1,095** days after the date of issuance of this permit in accordance with the following:
  - (1) On or before **30** 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, the 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 limitations 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.
  - (2) On or before **210** days after the date of issuance of this permit, the Permittee shall submit for the Commissioner's review and written approval a scope of study for evaluating and implementing treatment alternatives, including, but not limited to modification(s) to the operation of the treatment system and/or installation of new treatment equipment, to provide pretreatment of the first 1.5 inches of stormwater runoff from any given storm before overflowing the settling pond, as may be required to meet final effluent limitations for DSN 001-1. The scope of study shall include, but not be limited to, the following:
    - a) Detailed description(s) and qualification(s) of the individual(s) performing the study.
    - b) The scope of study shall include a substantive plan and schedule, for the Commissioner's review and written approval, for conducting the treatment evaluation, reporting to the Commissioner on the results of such evaluation, and implementation of the preferred treatment alternative.
    - c) A detailed description of the procedures that will be followed to comply with an adequate retention time at the settling pond for DSN 001-1.

- (3) On or before **450** days after the date of issuance of this permit, the Permittee shall submit for the Commissioner's review and written approval a comprehensive and thorough report, in accordance with the approval of the scope of study specified in Section 9 (A)(2) above. The report shall include, but not be limited to, the following:
- a) Discussion and formal presentation of the procedures, results, summary and conclusion of the alternative treatment evaluation performed to identify optimum treatment proposed to be used in the respective treatment system;
  - b) A detailed description of proposed treatment alternatives, including, but not limited to modification(s) to the operation of the treatment system and/or installation of new treatment equipment, to provide pretreatment of the first 1.5 inches of stormwater runoff from any given storm before overflowing the settling pond, as may be required to optimize the treatment system's ability to remove pollutants from DSN 001-1. This description shall include a detailed schedule to implement all proposed modifications or new treatment equipment required by the preferred alternative, including, but not limited to a schedule for: submission of engineering plans and specifications on any internal and/or end of pipe treatment facilities; start and completion dates of any such actions; and applying for and obtaining all permits and approvals required for such actions.
  - d) A detailed description of proposed procedures to operate the settling pond to comply with an adequate retention time at the settling pond for DSN 001-1.
- (4) On or before **1,640** days after the date of issuance of this permit, the Permittee shall submit a summary of historical effluent data (previous 4.5 years) for total suspended solids and total zinc for DSN 001-1.
- (B) The Permittee shall submit to the Commissioner quarterly status reports beginning sixty (60) days after the date of approval of the report referenced in Section 9(A)(3) above. Status reports shall include, but not be limited to, a summary of all effluent monitoring data collected by the Permittee during the previous 90 day period and a detailed description of progress made by the Permittee in performing actions required by this section of the permit in accordance with the approved schedule including, but not limited to, development of engineering plans and specifications, construction activity, contract bidding, operational changes, preparation and submittal of permit applications, and any other actions specified in the program approved pursuant to paragraph (A)(3) of this section.
- (C) The Permittee shall perform the approved actions in accordance with the approved schedule, but in no event shall the approved actions be completed later than 1,095 days after the date of issuance of this permit. Within fifteen days after completing such actions, the Permittee shall certify to the Commissioner in writing that the actions have been completed as approved.
- (D) 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.
- (E) 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.

- (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 Brown  
Sanitary Engineer  
Department of Environmental Protection  
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 JANUARY 31, 2007.

FOR /s/AMEY MARRELLA  
Gina McCarthy  
Commissioner

GM/EB

# DATA TRACKING AND TECHNICAL FACT SHEET

Permittee : Exeter Energy, L.P.

PAMS Company ID: 100651

**PERMIT, ADDRESS, AND FACILITY DATA**

PERMIT #: CT0026972      APPLICATION #: 199601526      FACILITY ID 136-006

<p><b><u>Mailing Address:</u></b>                  Street: 10 Exeter Drive, P.O Box 188                  City: Sterling                      ST: CT   Zip: 06377  <hr/>                 Contact Name: Kenneth N. Wycherley                  Phone No.: (860) 564-7000</p>	<p><b><u>Location Address:</u></b>                  Street: 10 Exeter Drive                  City: Sterling                      <u>ST</u> CT   Zip: 06377  <hr/>                 DMR Contact Marsal Martin                  Phone No.: (860 ) 230-2034</p>
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**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) \_\_\_

NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) X

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    (If yes check off what it is in relation to.)

POLLUTION PREVENTION \_\_\_ TREATMENT REQUIREMENT X 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 Enna Brown

**PERMIT FEES**

<i>Discharge Code</i>	<i>DSN Number</i>	<i>Annual Fee</i>
1080000	001-1	\$ 2,662.50

**FOR NPDES DISCHARGES**

*Drainage basin Code: 3500*

*Present/Future Water Quality Standard: C/Bc*

**NATURE OF BUSINESS GENERATING DISCHARGE**

*Waste to energy facility that burns whole tires as a fuel source.*

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

*The process generates high-pressure steam that is used to generate electrical power. Stormwater from the site receives treatment in a settling pond before discharge to the Moosup River.*

**RESOURCES USED TO DRAFT PERMIT**

- X     *Treatability Manual*
- X     *Department File Information*
- X     *Connecticut Water Quality Standards*
- X     *Other*

**BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS**

- X     *Best Professional Judgment (See Other Comments)*  
*DSN 001-1: LC<sub>50</sub>, Oil/grease, and TSS*
- X     *Case-by-Case Determination (See Other Comments)*  
*DSN 001-1: LC<sub>50</sub>, Oil/grease, and TSS*
- X     *In order to meet in-stream water quality (See General Comments)*  
*DSN 001-1 : Cadmium, Copper, Lead, pH, and Zinc*

**GENERAL COMMENTS**

*The need for inclusion of 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 Toxics Control (EPA/505/2-90-001) were employed to calculate the need for such limits. Comparison of monitoring data and its inherent variability with the calculated water quality based limits indicates a statistical probability of exceeding such limits. Therefore, water quality based limits were included in the permit.*

#### **OTHER COMMENTS**

*The facility has implemented significant improvements to their Best Management Practices. Improvements include: constructing buildings to house the storage areas; berming areas which have the potential to contain pollutants; providing additional street sweeping; and installing storm drain socks. The facility is also required to clean out the outfall pipe where (DSN 001-1) samples are taken on a regular basis, at a minimum once per month.*

*A Notice of Tentative Determination regarding this permit was initially published in the Norwich Bulletin on October 5, 2005. The draft permit that was the subject of the first notice contained a maximum daily flow rate of 125 gpm and included a compliance schedule of 365 days after permit issuance to meet final effluent limitations for total suspended solids and total zinc. In addition, influent monitoring before treatment at the settling pond was included in the permit to evaluate the settling pond performance.*

*In response to comments from the Permittee, the Department is giving a second Notice of Tentative Determination of a revised draft permit. The Department is proposing to revise the draft permit to remove the maximum daily flow rate of 125 gpm and require "monitoring only" for all listed parameters in Section 5, Table A, except oil/grease and pH. Effective upon issuance, the original draft permit had water quality based maximum instantaneous limits for cadmium, copper, lead, zinc, and total suspended solids based on a stormwater flow rate of 125 gpm. As with any stormwater discharge, the ability of the Permittee to collect and effectively treat stormwater is dependent on 1) the size of the treatment system, 2) the size of the storm event, and 3) the size of the drainage area. After further review, DEP technical staff agreed that the Permittee will need to install additional treatment before being able to meet lower water quality based limits at higher flows. Therefore, this revised draft permit includes a three-year compliance schedule, which requires Exeter Energy, L.P., to modify its existing stormwater treatment system to provide additional treatment of the first 1.5 inches of stormwater runoff before the runoff enters the settling pond. This requirement is consistent with the hydrologic sizing criteria for stormwater treatment practices in Connecticut. The revised draft permit also imposes more stringent final effluent limitations in Section 5, Table B. The Department is now seeking public comment on this tentative determination, specifically limited to these proposed changes.*

*The referenced second Notice of Tentative Determination was published in the Norwich Bulletin on December 12, 2006. The Department did not receive written comments on the proposed action and recommends issuance of this permit.*