Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

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MINOR NPDES/SPDES PERMIT MODIFICATION

issued to

Devon Power LLC
(an asset of NRG Energy, Inc.)
734 Naugatuck Avenue
Milford, Connecticut 06461

Location Address:

Devon Power LLC
734 Naugatuck Avenue
Milford, Connecticut 06461

Facility ID: 084-007

Permit ID: CT0003107
SP0002444

Receiving Water Body: Housatonic River
Groundwater

Permit Modification Expires: February 28, 2017

Receiving Water Body ID: CT-C1_020-SB (Housatonic River)

This minor 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 NPDES permit program.

DEVON POWER LLC ("Permittee") shall comply with all conditions of Permit Nos. CT0003107/SP0002444 issued on February 12, 2012 with the following modifications:

1. A new footnote (i.e., Footnote 4) is added to Table A in order to clarify the months in which the acute toxicity sampling is to be conducted and also to clarify that if sampling for acute toxicity cannot be conducted in the required months because there is no effluent flow, then sampling shall be conducted in the next month in which an acute toxicity sample can be collected. Table A is hereby revised and superseded and attached hereto.

2. A new remark (i.e., Remark 5) is added to Table A which modifies the definition of "Grab Sample Average"; this modified definition is meant to address the particular operating/staffing issues at the facility. Table A is hereby revised and superseded and attached hereto.

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 Nos. CT0003107/SP0002444 issued on February 29, 2012 shall continue in full force and effect.

This minor modification is hereby issued on Jan. 17, 2013

Kim E. Hudak

KIM E. HUDAK, Assistant Director
Bureau of Materials Management and Compliance Assurance

KEH:CMG

Table A

Discharge Serial Number: **DSN 002-1** | Monitoring Location: **1**

Wastewater Description: **Jet Turbine Engine Wastewater; Lubrication Oil Cooling Water Leakage; Chiller Coil Condensate; Heating Water Leakage; Cooling Tower Blowdown; Equipment Leakage/Drainage; Maintenance Washwaters; Compressed Air Tank Condensate and System Blowdown; Wastewater Treatment System Wastestreams; Regeneration Wastewater; Laboratory Wastewater; Stormwater; Groundwater**

Monitoring Location Description: **Discharge access chamber immediately upstream of the discharge flow monitoring flume**

Discharge is to: **Housatonic River** | Dilution Factor: **39:1** | In-stream Waste Concentration: **2.6%**

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level[3]	Monitoring Required with Toxicity Testing
		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		
Acute Toxicity, *Mysidopsis bahia* [See Remark 2]	%	NA	LC_{50} ≥100%	Semi-annual[4]	Daily Composite	LC_{50} ≥33%	NR	Grab		
Acute Toxicity, *Cyprinodon variegatus* [See Remark 2]	%	NA	LC_{50} ≥100%	Semi-annual[4]	Daily Composite	LC_{50} ≥33%	NR	Grab		
Chronic Toxicity, *Mysidopsis bahia* [See Remark 3]	%	NA	---	Annually[5]	Daily Composite	NA	NR	NA		
Chronic Toxicity, *Cyprinodon variegatus* [See Remark 3]	%	NA	---	Annually[5]	Daily Composite	NA	NR	NA		
Aluminum, Total	mg/L	---	---	Monthly	Daily Composite	NA	NR	NA	0.01	✓
Ammonia (as N)	mg/L	NA	---	Monthly	Daily Composite	NA	NR	NA		✓
Chlorine, Total Residual	mg/L	0.201	0.541	Weekly	Grab Sample Average	0.811	NR	Grab	0.020	✓
Copper, Total	µg/L	---	25	Weekly	Daily Composite	NA	NR	NA	3	✓
Duration of Discharge	days/mth	NA	---	Continuous	Flow	NA	NR	NA		
Flow Rate (Average Daily)[2]	gpd	216,000	NA	Continuous	Flow	NA	NR	NA		
Flow, Maximum during 24 hour period[2]	gpd	NA	432,000	Continuous	Flow	NA	NR	NA		
Flow (Day of Sampling)	gpd	NA	432,000	Weekly	Flow	NA	NR	NA		
Iron, Total	mg/L	---	---	Monthly	Daily Composite	NA	NR	NA		✓
Kjeldahl Nitrogen, Total (as N)	mg/L	NA	---	Monthly	Daily Composite	NA	NR	NA		✓
Lead, Total	mg/L	---	---	Monthly	Daily Composite	NA	NR	NA	0.005	✓
Nickel, Total	µg/L	73	157	Weekly	Daily Composite	235	NR	Grab	5	✓
Nickel, Total	gm/day	60	128	Weekly	Daily Composite	NA	NR	NA		
Nitrate (as N)	mg/L	NA	---	Monthly	Daily Composite	NA	NR	NA		✓
Nitrite (as N)	mg/L	NA	---	Monthly	Daily Composite	NA	NR	NA		✓
Nitrogen, Total [See Remark 4]	lbs/day	NA	---	Monthly	Calculated	NA	NR	NA		
Oil & Grease, Total	mg/L	---	---	Monthly	Grab Sample Average	NA	NR	NA		✓
Oxygen, Dissolved	mg/L	NA	NA	NR	NA	---	Weekly	Grab		✓
pH, Minimum	SU	NA	NA	NR	NA	6.0	Continuous	Continuous		
pH, Maximum	SU	NA	NA	NR	NA	9.0	Continuous	Continuous		
pH, Day of Sampling	SU	NA	NA	NR	NA	6.0-9.0	Weekly	RDS		✓
Propylene Glycol	mg/L	---	---	Monthly	Grab Sample Average	NA	NR	NA		✓
Total Suspended Solids	mg/L	---	---	Monthly	Daily Composite	NA	NR	NA		✓
Zinc, Total	mg/L	---	---	Monthly	Daily Composite	NA	NR	NA	0.01	✓

TABLE A FOOTNOTES AND REMARKS:

Footnotes:

[1] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample Frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

[2] For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day and shall submit the record of the total flow for each day and shall record the Average Daily Flow and the Maximum Daily Flow for each month.

[3] Minimum Level refers to Section 6(A)(4) of this permit.

[4] **"Semi-annual" shall mean in the months of "February" and "August". The Permittee shall make best efforts to collect the sample in February and August. However, if a sample cannot be collected in either February or August, the Permittee shall collect a sample during the next month when there is sufficient wastewater for sample collection. A sample must be collected at least twice in a calendar year.**

[5] "Annually" shall mean in the month of August. The Permittee shall make best efforts to collect the sample in August. However, if a sample cannot be collected in August, the Permittee shall collect a sample during a month when there is sufficient wastewater for sample collection. A sample must be collected at least once in a calendar year.

Remarks:

1. Abbreviations used for units are as follows: gpd means gallons per day; days/mth means days per month that there is a discharge; mg/L means milligrams/liter; µg/l means micrograms/liter; gm/day means grams/day; lbs/day means pounds per day; SU means Standard Units. Other abbreviations are as follows: NA means Not Applicable; ND means Non-Detectable; NR means Not Reportable; RDS means Range During Sampling.

2. The duration of the acute testing is 48 hours. The LC_{50} results for the acute toxicity testing shall be reported on the DMR.

3. The duration of the chronic testing is 7 days. The C-NOEC (Chronic-No Observed Effect Concentration) results for the chronic toxicity testing shall be reported on the DMR. The C-NOEC is defined as the highest concentration of effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the results exhibit a linear dose-response relationship.

4. Total nitrogen = Ammonia + Organic nitrogen (Kjeldahl Nitrogen - Ammonia) + Nitrate + Nitrite. The calculated monthly mass loading of total nitrogen shall be reported in lbs/day.

5. "Grab Sample Average" means the arithmetic average of all grab sample analyses. For the purposes of this permit, for those parameters in this table whose sample type is "Grab Sample Average", a minimum of only three grab samples shall be required to be collected from this discharge over a 24-hour discharge period.