

PRETREATMENT PERMIT

issued to

Beacon Industries
549 Cedar Street
Newington, CT 06111

Location Address:

549 Cedar Street
Newington, CT

Permit ID: SP0000624

Permit Expires: _____

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 a modified Memorandum of Agreement dated June 3, 1981, by the Administrator of the United States Environmental Protection Agency ("EPA") which authorizes the State of Connecticut to administer a Pretreatment Program pursuant to 40 CFR Part 403 (Title 40 of the Code of Federal Regulations, Part 403).
- (B) Beacon Industries ("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 subsections (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(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, penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA. Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.
- (D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.
- (E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Energy and Environmental Protection ("the Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner at least thirty (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) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (G) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the RCSA.

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 sections 22a-430-3(a) and 22a-430-6 of the RCSA.
- (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 Discharge Monitoring Report ("DMR").

"Annually", in the context of a sampling frequency, means the sample must be collected in the month of December.

"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 generated during an operating day.

"Grab Sample Average ("GSA")" means the arithmetic average of all grab samples. Grab samples shall be collected just prior to discharge from each tank over a full operating day for as long as a discharge exists on that day (minimum of two grab samples per day).

"gpd" means gallons per 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.

"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".

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of March, June, September and December.

"Range During Sampling" or "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 shall mean the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"Semi-Annually", in the context of a sampling frequency, means the sample must be collected in the months of June and December.

"S.U." means Standard Units.

"Twice per Month" when used as a sample frequency shall mean two samples per calendar month collected no less than twelve (12) days apart.

SECTION 3: COMMISSIONER'S FINAL DETERMINATION

- (A) The Commissioner has made a final determination and found that the continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 201305681 for permit reissuance received on November 8, 2013 and the administrative record established in the processing of that application.
- (B) (1) From the issuance of this permit through and including [LAST DAY OF MONTH, MONTH OF PERMIT REISSUANCE], the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. SP0000624, issued by the Commissioner to the Permittee on May 8, 2009, the previous application submitted by the Permittee on December 6, 2006, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with, Permit No. SP0000624, issued by the Commissioner to the Permittee on May 8, 2009.
- (2) From [FIRST DAY OF MONTH, MONTH FOLLOWING PERMIT REISSUANCE] until this permit expires or is modified or revoked, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. SP0000624, issued by the Commissioner to the Permittee on [DATE OF PERMIT ISSUANCE], Application No. 201305681 received by the Department on November 8, 2013, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with, Permit No. SP0000624, issued by the Commissioner to the Permittee on [DATE OF PERMIT ISSUANCE].
- (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 that 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: 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: DSN 001-1 | **Monitoring Location: 1**
Wastewater Description: Metal finishing wastewaters generated by etching, anodizing, cleaning; boiler blowdown; wastewater from wet scrubber, lab sinks and eye wash/safety shower
Monitoring Location Description: After final pH adjustment tank
Discharge is to: The Mattabassett District Publicly Owned Treatment Works (“POTW”) via the town of Newington sanitary sewer system

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported
Aluminum, Total	mg/l	NA	----	Semi-Annually	Daily Composite	NA	NR	Grab
Cadmium, Total	mg/l	0.07	0.11	Annually	Daily Composite	0.16	NR	Grab
Chromium, Total	mg/l	1.0	2.0	Twice per month	Daily Composite	3.0	NR	Grab
Copper, Total	mg/l	1.0	2.0	Semi-Annually	Daily Composite	3.0	NR	Grab
Cyanide, Total	mg/l	0.65	1.2	Annually	GSA	1.8	NR	Grab
Flow Rate (Average Daily) ¹	gpd	3,400	NA	Continuously	Daily Flow	NA	NR	NA
Flow, Maximum during 24 hr period ¹	gpd	NA	7,000	Continuously	Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	NA	7,000	Twice per month	Daily Flow	NA	NR	NA
Fluoride, Total	mg/l	20.0	30.0	Twice per month	Daily Composite	45.0	NR	Grab
Lead, Total	mg/l	0.1	0.5	Annually	Daily Composite	0.75	NR	Grab
Nickel, Total	mg/l	1.0	2.0	Twice per month	Daily Composite	3.0	NR	Grab
Oil Petroleum, Total Recoverable ³	mg/l	NA	100	Semi-Annually	GSA	150	NR	Grab
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0-10.0	Twice per month	RDS
pH, Minimum	S.U.	NA	NA	NR	NA	6.0	Continuously	Grab
pH, Maximum	S.U.	NA	NA	NR	NA	10.0	Continuously	Grab
Phosphorus, Total	mg/l	NA	NA	NR	NA	----	Semi-Annually	Grab
Silver, Total	mg/l	0.1	0.43	Annually	Daily Composite	0.64	NR	Grab
Total Suspended Solids	mg/l	NA	100	Quarterly	Daily Composite	150	NR	Grab
Total Toxic Organics (“TTOs”)	mg/l	NA	NA	NR	NA	0.75	Twice per month	Grab
Zinc, Total	mg/l	1.0	2.0	Semi-Annually	Daily Composite	3.0	NR	Grab

Footnotes:
¹ 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 Average Daily Flow and the Maximum Daily Flow for each sampling month.
² 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’.
³ Previously, total recoverable oil petroleum was generally referred to as oil & grease, hydrocarbon fraction.

Table B

Discharge Serial Number: DSN 002-1 | **Monitoring Location: 1**
Wastewater Description: Metal finishing wastewaters generated by degreasing, tumbling, fluorescent penetrant inspection, cleaning; air conditioner condensate; eye wash/safety shower
Monitoring Location Description: After final ultrafiltration
Discharge is to: The Mattabassett District Publicly Owned Treatment Works (“POTW”) via the town of Newington sanitary sewer system

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ²	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ²	Sample Type or measurement to be reported
Aluminum, Total	mg/l	NA	----	Semi-Annually	Daily Composite	NA	NR	Grab
Cadmium, Total	mg/l	0.07	0.11	Annually	Daily Composite	0.16	NR	Grab
Chromium, Total	mg/l	1.0	2.0	Annually	Daily Composite	3.0	NR	Grab
Copper, Total	mg/l	1.0	2.0	Semi-Annually	Daily Composite	3.0	NR	Grab
Cyanide, Total	mg/l	0.65	1.2	Annually	GSA	1.8	NR	Grab
Flow Rate (Average Daily) ¹	gpd	6,500	NA	Continuously	Daily Flow	NA	NR	NA
Flow, Maximum during 24 hr period ¹	gpd	NA	11,000	Continuously	Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	NA	11,000	Twice per month	Daily Flow	NA	NR	NA
Lead, Total	mg/l	0.1	0.5	Annually	Daily Composite	0.75	NR	Grab
Nickel, Total	mg/l	1.0	2.0	Semi-Annually	Daily Composite	3.0	NR	Grab
Oil Petroleum, Total Recoverable ³	mg/l	NA	100	Monthly	GSA	150	NR	Grab
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0-10.0	Twice per month	RDS
pH, Minimum	S.U.	NA	NA	NR	NA	6.0	Continuously	Continuously/ Monthly
pH, Maximum	S.U.	NA	NA	NR	NA	10.0	Continuously	Continuously/ Monthly
Phosphorus, Total	mg/l	NA	NA	NR	NA	----	Monthly	Grab
Silver, Total	mg/l	0.1	0.43	Annually	Daily Composite	0.64	NR	Grab
Total Suspended Solids	mg/l	NA	100	Twice per month	Daily Composite	150	NR	Grab
Total Toxic Organics (“TTOs”)	mg/l	NA	NA	NR	NA	0.75	Twice per month	Grab
Zinc, Total	mg/l	1.0	2.0	Semi-Annually	Daily Composite	3.0	NR	Grab

Footnotes:

¹ 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 Average Daily Flow and the Maximum Daily Flow for each sampling month.

² 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’.

³ Previously, total recoverable oil petroleum was generally referred to as oil & grease, hydrocarbon fraction.

- (B) All samples shall be comprised of only those wastewaters described in this schedule. Therefore, samples shall be taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable. All samples taken shall be representative of the discharge during standard operating conditions.
- (C) In cases where limits and sample type are specified but sampling is not required, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Energy and Environmental Protection personnel, the Permittee, or other parties.

SECTION 5: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES AND REPORTING REQUIREMENTS

- (A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved by the EPA pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 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.
- (B) All metals analyses identified in this permit shall refer to analyses for total recoverable metal as defined in 40 CFR 136 unless otherwise specified.
- (C) The results of chemical analysis required above shall be entered on the DMR, provided by this office, and reported to the Water Permitting and Enforcement Division at the address below. Except for continuous monitoring, any monitoring required more frequently than monthly shall be reported on an attachment to the DMR, and any additional monitoring conducted in accordance with 40 CFR 136 or other methods approved by the Commissioner shall also be included on the DMR, or as an attachment, if necessary. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at the address below by the last day of the month following the month in which samples are taken.

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

- (D) If this permit requires monitoring of a discharge on a calendar basis (e.g., monthly, quarterly) but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR 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.
- (E) NetDMR Reporting Requirements
 - 1. Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit DMRs and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit, the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR, and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

- a. Submittal of *NetDMR Subscriber Agreement*

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's DMRs ("Signatory Authority") as described in section 22a-430-3(b)(2) of the RCSA shall contact the Department at deep.netdmr@ct.gov and initiate the NetDMR subscription process for electronic submission of DMR information. Information on NetDMR is available on the Department's website at www.ct.gov/deep/netdmr. On or before ninety (90) days after issuance of this permit, the Permittee shall submit a signed and notarized copy of the **Connecticut DEEP NetDMR Subscriber Agreement** to the Department.

- b. Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall begin electronically submitting

DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of section 5(C) of this permit.

DMRs shall be submitted electronically to the Department no later than the thirtieth (30th) day of the month following the completed reporting period. All reports required under the permit, including any monitoring conducted more frequently than monthly or any additional monitoring conducted in accordance with 40 CFR 136, shall be submitted to the Department as an electronic attachment to the DMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to the Department. The Permittee shall also electronically file any written report of non-compliance described in section 6 of this permit as an attachment in NetDMR. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

c. Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the Commissioner may approve the submission of DMRs and other required reports in hard copy form (“opt-out request”). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date the Permittee would be required under this permit to begin filing DMRs and other reports using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department’s approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at deep.netdmr@ct.gov:

Attn: NetDMR Coordinator
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

- (F) Copies of all DMRs shall be submitted concurrently to the Mattabassett District POTW.
- (G) For total toxic organics (“TTOs”) monitoring, in accordance with section 22a-430-4(l) of the RCSA and 40 CFR 433 (Metal Finishing Point Source Category), the Permittee may, in lieu of analyzing for TTOs, include a statement on each DMR certifying compliance with its approved Solvent Management Plan. This certification statement shall be as follows:

“Based on my inquiry of the person or persons responsible for managing compliance with the permit limitation for Total Toxic Organics (“TTO”), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report which required such certification. I further certify that this facility is implementing the solvent management plan approved by the Commissioner.”

SECTION 6: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any sample analysis indicates that an effluent limitation specified in section 4 of this permit has been exceeded, a second sample of the effluent shall be collected and analyzed for the parameter(s) in question and the results reported to the Water Permitting and Enforcement Division (Attn: DMR Processing) within thirty (30) days of the exceedance.
- (B) The Permittee shall immediately notify the Water Permitting and Enforcement Division and the Mattabassett District POTW of all discharges that could cause problems to the POTW, including but not limited to slug loadings of pollutants which may cause a violation of the POTW’s NPDES permit, or which may inhibit or disrupt the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- (C) In addition to the notification requirements specified in section 1B of this permit, if any sampling and analysis of the discharge performed by the Permittee indicates a violation of limits specified in section 4 of this permit, the Permittee shall notify the Water Permitting and Enforcement Division within twenty-four (24) hours of becoming aware of the violation.

SECTION 7: COMPLIANCE CONDITIONS

In accordance with 40 CFR 403.8(f)(2)(viii), the Commissioner may provide public notification, in a newspaper of general circulation in the area of the respective POTW, of permittees that at any time in the previous twelve (12) months were in significant noncompliance with the provisions of this permit. For the purposes of this provision, a permittee that is a Significant Industrial User is in significant noncompliance if its violation(s) meet(s) one or more of the following criteria:

- **Chronic violations:** Those in which sixty-six percent (66%) or more of all measurements taken for the same pollutant parameter during a six (6) month period exceed (by any magnitude) the Average Monthly, Maximum Daily or Maximum Instantaneous Limit(s).
- **Technical Review Criteria violations:** Those in which thirty-three percent (33%) or more of all of the measurements taken for the same pollutant parameter during a six (6) month period equal or exceed the Average Monthly, Maximum Daily or Maximum Instantaneous Limit(s) multiplied by 1.4 for biochemical oxygen demand, total suspended solids, or fats, oil, and grease, or 1.2 for all other pollutants except pH.
- **Monitoring Reports:** Failure to provide, within forty-five (45) days after the due date, required reports such as DMRs.
- **Compliance Schedule:** Failure to meet within ninety (90) days after the schedule date, a compliance schedule milestone contained in or linked to a respective permit for starting construction, completing construction or attaining final compliance.
- **Noncompliance Reporting:** Failure to accurately report noncompliance in accordance with the provisions identified in Section 6 of this permit.
- **Discretionary:** Any other violation of an effluent limit that the Department determines has caused, alone or in combination with other discharges, a violation of the POTW's NPDES permit, inhibition or disruption of the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- **Imminent Endangerment:** Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the Department's exercise of its emergency authority under 40 CFR 403.8(f)(1)(vi)(B) to halt or prevent such a discharge.
- **Best Management Practices ("BMPs"):** Any other violation or group of violations, which may include a violation of BMPs, which the Department determines will adversely affect the operation or implementation of the pretreatment program.

This permit is hereby issued on

Macky McCleary
Deputy Commissioner
Department of Energy and Environmental Protection

MM/MVM

cc: Mattabassett District Publicly Owned Treatment Works

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Beacon Industries

PERMIT, ADDRESS, AND FACILITY DATA

Permit No. SP0000624

Application No. 201305681

<u>Mailing Address:</u> Street: 549 Cedar Street City: Newington ST: CT Zip: 06111 Contact Name: William Callahan Phone No.: (860) 594-5214 Email: wcallahan@beacongp.com	<u>Location Address:</u> Street: 549 Cedar Street City: Newington ST: CT DMR Contact William Callahan Phone No.: (860) 594-5214 Email: wcallahan@beacongp.com
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Permit Information

Duration	5 Year <input checked="" type="checkbox"/>	10 Year <input type="checkbox"/>	30 Year <input type="checkbox"/>
Type	New <input type="checkbox"/>	Reissuance <input checked="" type="checkbox"/>	Modification <input type="checkbox"/>
Categorization	Point (X)	Non-Point ()	GIS No. <input type="checkbox"/>
NPDES ()	Pretreatment (X)	Groundwater (UIC) ()	Groundwater (Other) ()
	NPDES Major (MA)		
	NPDES Significant Minor or Pretreatment SIU (SI)		<input checked="" type="checkbox"/>
	NPDES or Pretreatment Minor (MI)		
	Pretreatment Significant Industrial User (SIU)		<input checked="" type="checkbox"/>
	Pretreatment Categorical (CIU)		<input checked="" type="checkbox"/>

Standard Industrial Classification (“SIC”) Code: 3724 – Aircraft Engines and Engine Parts

Solvent Management Plan

Is the facility operating under an approved solvent management plan? Yes No
Approved on: February 26, 2014.

Compliance Issues

Compliance Schedule	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the permittee subject to a pending enforcement action?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Ownership Code

Private Federal State Municipal (town only) Other

DEEP Staff Engineer Mariana Miller

Permit Fees

Discharge Code	DSN Numbers	Annual Fee
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501035Z	001-1 and 002-1	\$8,425.00
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For Sewer Discharges

The discharge is to the Mattabasset District POTW via the Town of Newington sanitary sewer system. The facility I.D. number of the POTW is 003-001.

Nature of Business Generating Discharge

Beacon Industries manufactures aerospace parts, including jet engine components. Wastewaters are discharged from two outfalls, DSN 001-1 and DSN 002-1.

The wastewaters discharged from DSN 001-1 are generated primarily by etching, sulfuric acid anodizing, alkaline parts cleaning, pressure blasting and ultrasonic cleaning operations. Auxiliary operations generating wastewater include a wet scrubber, lab sinks and an eye wash/safety shower. Boiler blowdown is also discharged through DSN 001-1.

The wastewaters discharged from DSN 002-1 are generated by aqueous degreasing, tumbling, fluorescent penetrant inspection, magnetic particle inspection, deburring and parts cleaning operations. Wastewaters also include air conditioner condensate, eye wash/safety shower wastewater, and water-based machine coolants treated by ultrafiltration.

Process and Treatment Description (by Discharge Serial Number (“DSN”))

DSN 001-1: A maximum of 7,000 gallons per day is discharged from this outfall. Treatment consists of chemical precipitation, flocculation, clarification, filtration, solids dewatering and final neutralization.

DSN 002-1: A maximum of 11,000 gallons per day is discharged from this outfall. Treatment consists of ultrafiltration (for water based coolants) and solids dewatering.

Resources Used to Draft Permit

- Federal Effluent Limitation Guideline 40 CFR 433
Metal Finishing Point Source Category
- Performance Standards
- Federal Development Document
- Treatability Manual
- Department File Information
- Connecticut Water Quality Standards
- Anti-degradation Policy
- Coastal Management Consistency Review Form
- Other

Basis for Limitations, Standards or Conditions

- Pretreatment Standards for New Sources (“PSNS”) – 40 CFR 433.17
- Case-by-Case using Best Professional Judgment (“BPJ”) (See *Other Comments*)
- Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (“RCSA”)

Outfall	Parameter	Basis for Limits		
		PSNS	BPJ	RCSA
001-1	Cadmium, Total; AML, MDL			X
	Cadmium, Total; MIL		X	
	Chromium, Total; AML, MDL, MIL			X
	Copper, Total; AML, MDL, MIL			X
	Cyanide, Total; AML, MDL			X
	Cyanide, Total; MIL		X	
	Fluoride, Total; AML, MDL, MIL			X
	Lead, Total; AML, MDL, MIL			X
	Nickel, Total; AML, MDL, MIL			X
	Oil Petroleum, Total Recoverable; AML, MDL, MIL		X	
	pH		X	
	Silver, Total; AML			X
	Silver, Total; MDL	X		
	Silver, Total; MIL		X	
	Total Suspended Solids; AML, MDL, MIL		X	
	Total Toxic Organics (TTO)		X	
Zinc, Total; AML, MDL, MIL			X	

AML: Average Monthly Limit; MDL: Maximum Daily Limit; MIL: Maximum Instantaneous Limit

Outfall	Parameter	Basis for Limits		
		PSNS	BPJ	RCSA
002-1	Cadmium, Total; AML, MDL			X
	Cadmium, Total; MIL		X	
	Chromium, Total; AML, MDL, MIL			X
	Copper, Total; AML, MDL, MIL			X
	Cyanide, Total; AML, MDL			X
	Cyanide, Total; MIL		X	
	Lead, Total; AML, MDL, MIL			X
	Nickel, Total; AML, MDL, MIL			X
	Oil Petroleum, Total Recoverable; AML, MDL, MIL		X	
	pH		X	
	Silver, Total; AML			X
	Silver, Total, MDL	X		
	Silver, Total, MIL		X	
	Total Suspended Solids; AML, MDL, MIL		X	
	Total Toxic Organics (TTO)		X	
Zinc, Total; AML, MDL, MIL			X	

AML: Average Monthly Limit; MDL: Maximum Daily Limit; MIL: Maximum Instantaneous Limit

General Comments

In developing the permit's concentration limits, EPA Metal Finishing Categorical Limits (40 CFR Part 433) and section 22a-430-4(s)(2) of the RCSA limits were compared. The Connecticut limits were found to be more stringent, except as noted above and thus incorporated in the permit.

Other Comments

The Department approved a permit transfer from Turbine Engine Components Technologies Corporation to Beacon Industries ("Beacon") on March 6, 2012.

Beacon is a "job shop", as defined in 40 CFR 433.11(c), because the company owns less than fifty percent (50%) of the parts undergoing metal finishing. Beacon is also subject to regulation under the PSNS in 40 CFR 433.17 because the discharges from DSN 001-1 and DSN 002-1 have been ongoing since 1992 and 1999, respectively, after the PSNS went into effect (August 31, 1982). Therefore, these are classified as new discharges.

The monitoring requirement for aluminum has been carried over from the previous permit. In addition, effluent limits for the following parameters have been retained from the previous permit: oil petroleum, total recoverable; total suspended solids; total toxic organics. Note: In the past, total recoverable oil petroleum was generally referred to as oil and grease, hydrocarbon fraction.

Previously, the AML, MDL and MIL for cadmium were 0.1 mg/l, 0.5 mg/l and 0.75 mg/l, respectively. The

cadmium AML and MDL of 0.07 mg/l and 0.11 mg/l, respectively, apply to discharges subject to the PSNS, in accordance with section 22a-430-4(s)(2)(1) of the RCSA. The new MIL was calculated by multiplying the MDL by a factor of 1.5, consistent with what has recently been done in other permits. In order to remain conservative, the calculated value was rounded to 0.16 mg/l.

There is no MIL listed for total cyanide in section 22a-430-4(s)(2) of the RCSA. By multiplying the MDL by 1.5, the MIL of 1.8 mg/l was calculated. This is consistent with what has been done in other pretreatment permits.

The MIL value for silver was calculated by multiplying the MDL by a factor of 1.5. In order to remain conservative, the value was rounded to 0.64 mg/l. This is consistent with what has been done in other pretreatment permits.

The pH limits of 6.0-10.0 S.U. are considered to be protective of sanitary sewer systems.

A phosphorus monitoring requirement has been added to tables A and B of this permit. Phosphorus has been identified as a pollutant of concern at various POTWs throughout Connecticut. Monitoring each facility for phosphorus will allow for the development of numerical limits, as well as the oversight of influent phosphorus concentration to each POTW. Based on information provided in Application No. 201305681, semi-annually and monthly monitoring frequencies were included in this permit for DSNs 001-1 and 002-1, respectively.

A review of Beacon's effluent performance data from 2011 to the present revealed that cadmium, total cyanide, lead, total recoverable oil petroleum, silver and titanium have not been detected in the DSN 001-1 discharge. Because of this, titanium has been eliminated from monitoring table A of the permit. In addition, the monitoring frequency for total recoverable oil petroleum has been reduced from quarterly to semi-annually, and the monitoring frequencies for cadmium, total cyanide, lead and silver have been reduced from semi-annually to annually.

The data also revealed that cadmium, chromium, total cyanide, lead and silver have not been detected in the DSN 002-1 discharge. Because of this, the monitoring frequencies for cadmium, total cyanide, lead and silver have been reduced from semi-annually to annually.

In accordance with the PSNS, limits and monitoring requirements for cadmium, total cyanide, lead and silver are required to remain in the permit.

On November 26, 2013, Beacon reported a total suspended solids ("TSS") exceedance. The sample results showed a concentration of 121 mg/l at DSN 002-1, violating the permitted limit of 100 mg/l. This was believed to be a rare spike, and the company took remedial action by cleaning the ultrafiltration membrane tubes in wastewater treatment system. Beacon has increased the frequency of cleaning the ultrafiltration membrane tubes at DSN 002-1 and has replaced some of the older ultrafiltration membrane tubes. During a site visit on February 20, 2014, Beacon personnel explained that subsequent samples showed that the concentration of TSS was well below the permit limit. Two follow-up samples showed TSS concentrations of 12 mg/l and 3 mg/l.

A Turbomecca Cleaning Line was installed at the facility, but has not been operated. During the above mentioned site visit, Beacon personnel explained that the line is still present, but not in use. In the event that Beacon chooses to discharge wastewater from the cleaning line to the treatment system, this would cause an increase in flow and require a modification to the permit.

The Mattabassett District POTW confirmed its approval with the permit conditions on April 29, 2014.



**NOTICE OF TENTATIVE DECISION OF
INTENT TO RENEW A STATE PERMIT
FOR THE FOLLOWING DISCHARGES INTO THE WATERS OF THE STATE OF
CONNECTICUT**

TENTATIVE DECISION

The Commissioner of Energy and Environmental Protection (“the Commissioner”) hereby gives notice of a tentative decision to renew a permit based on an application submitted by **Beacon Industries** (“the applicant”) under section 22a-430 of the Connecticut General Statutes (“CGS”) for a permit to discharge into the waters of the state.

In accordance with applicable federal and state law, the Commissioner has made a tentative decision that continuance of the existing system to treat the discharge would protect the waters of the state from pollution, and the Commissioner proposes to renew a permit for the discharge to the Mattabassett District Publicly Owned Treatment Works (“POTW”) via the Town of Newington sanitary sewer system.

The proposed permit, if issued by the Commissioner, will require that all wastewater be treated to meet the applicable effluent limitations.

APPLICANT'S PROPOSAL

Beacon Industries presently discharges a maximum of 18,000 gallons per day of treated process wastewaters to the Mattabassett District POTW from metal finishing operations at a job shop.

The name and mailing address of the permit applicant are: **Beacon Industries, 549 Cedar Street, Newington, CT 06111.**

The activity takes place at 549 Cedar Street, Newington, CT.

REGULATORY CONDITIONS

Type of Treatment

DSN 001-1: Chemical precipitation, flocculation, clarification, filtration, solids dewatering and final neutralization.

DSN 002-1: Ultrafiltration and solids dewatering.

Effluent Limitations

This permit contains effluent limitations consistent with a case-by-case determination using the criteria of best professional judgment, Pretreatment Standards for New Sources under the Federal Metal Finishing Point Source Category (40 CFR 433.17), and section 22a-430-4(s) of the Regulations of Connecticut State Agencies ("RCSA"), which will protect the waters of the state from pollution when all the conditions of this permit have been met.

In accordance with section 22a-430-4(l) of the RCSA, the permit contains effluent limitations for the following types of toxic substances: heavy metals, cyanides, and total toxic organic compounds.

COMMISSIONER'S AUTHORITY

The Commissioner is authorized to approve or deny such permits pursuant to section 22a-430 of the CGS and the Water Discharge Permit Regulations (sections 22a-430-3 and 4 of the RCSA).

INFORMATION REQUESTS

The application has been assigned the following numbers by the Department of Energy and Environmental Protection. Please use these numbers when corresponding with this office regarding this application.

APPLICATION NO. 201305681

PERMIT ID NO. SP0000624

Interested persons may obtain copies of the application from Bill Callahan, Beacon Industries, 549 Cedar Street, Newington, CT, 06111. (860) 594-5214.

The application is available for inspection by contacting Mariana Miller, (860) 424-3025, at the Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 from 8:30-4:30, Monday through Friday.

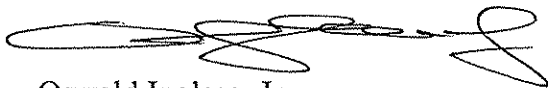
Any interested person may request in writing that his or her name be put on a mailing list to receive notice of intent to issue any permit to discharge to the surface waters of the state. Such request may be for the entire state or any geographic area of the state and shall clearly state in writing the name and mailing address of the interested person and the area for which notices are requested.

PUBLIC COMMENT

Prior to making a final determination to approve or deny any application, the Commissioner shall consider written comments on the application from interested persons that are received within thirty (30) days of this public notice. Written comments should be directed to Mariana Miller, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127. The Commissioner may hold a public hearing prior to approving or denying an application if in the Commissioner's discretion the public interest will be best served thereby, and shall hold a hearing upon receipt of a petition signed by at least twenty-five (25) persons. Notice of any public hearing shall be published at least thirty (30) days prior to the hearing.

Petitions for a hearing should include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original petitions must be *mailed or delivered* to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT, 06106-5127. Petitions cannot be sent by fax or email. Additional information can be found at www.ct.gov/deep/adjudications.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation contact us at (860) 418-5910 or deep.accommodations@ct.gov.



Oswald Inglese, Jr.
Director
Water Permitting and Enforcement Division
Bureau of Materials Management and Compliance Assurance

Dated:

JUN 18 2014