

PRETREATMENT PERMIT

issued to

ENTHONE INC.  
350 Frontage Road  
West Haven, CT 06516

Location Address:

350 Frontage Road  
West Haven, CT

**Permit ID:** SP0001123

**Permit Expires:** DRAFT

**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 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) ENTHONE INC., ("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 (\$25,000) 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.
- (H) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the CGS).

**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").

"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.

"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 January, April, July and October.

"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.

"Range During Month" or "RDM", as a sample type, means the lowest and the highest values of all of the monitoring data for the reporting month.

"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 final determination is based on Application No. 201301118 for permit reissuance received on February 28, 2013 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit as follows:
  - (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. SP0001123, issued by the Commissioner to the Permittee on August 28, 2008, the previous application submitted by the Permittee on May 5, 2000, 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. SP0001123, issued by the Commissioner to the Permittee on August 28, 2008.
  - (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. SP0001123, issued by the Commissioner to the Permittee on [DATE OF PERMIT ISSUANCE], Application No. 201301118 received by the Department on February 28, 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. SP0001123, 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 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 below.

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**Table A**

|                                    |              | <b>FLOW/TIME BASED MONITORING</b> |                     |   |   | <b>INSTANTANEOUS MONITORING</b>       |   |   |
|------------------------------------|--------------|-----------------------------------|---------------------|---|---|---------------------------------------|---|---|
| <b>PARAMETER</b>                   | <b>UNITS</b> | 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 |
|                                    |              | Cadmium, Total                    | mg/l                | 0.1                                     | 0.5                                       | Quarterly                             | Daily Composite                         | 0.75                                      |
| Chromium, Total                    | mg/l         | 1.0                               | 2.0                 | Monthly                                 | Daily Composite                           | 3.0                                   | NR                                      | Grab                                      |
| Chromium, Hexavalent               | mg/l         | 0.1                               | 0.2                 | Quarterly                               | Daily Composite                           | 0.3                                   | NR                                      | Grab                                      |
| Copper, Total                      | mg/l         | 1.0                               | 2.0                 | Twice Per Month                         | Daily Composite                           | 3.0                                   | NR                                      | Grab                                      |
| Cyanide, Total                     | mg/l         | 0.65                              | 1.2                 | Quarterly                               | Grab Sample Average                       | 1.8                                   | NR                                      | Grab                                      |
| Flow, Average Daily <sup>1</sup>   | gpd          | 8,000                             | NA                  | Continuous/Monthly                      | Daily Flow                                | NA                                    | NR                                      | NA  |
| Flow, Maximum Daily <sup>1</sup>   | gpd          | NA                                | 10,000              | Continuous/Monthly                      | Daily Flow                                | NA                                    | NR                                      | NA  |
| Flow, Day of Sampling              | gpd          | -----                             | 10,000              | Twice Per Month                         | Daily Flow                                | NA                                    | NR                                      | NA  |
| Fluoride                           | mg/l         | 20.0                              | 30.0                | Monthly                                 | Daily Composite                           | 45.0                                  | NR                                      | Grab                                      |
| Iron, Total                        | mg/l         | -----                             | -----               | Twice Per Month                         | Daily Composite                           | NA                                    | NR                                      | NA  |
| Lead, Total                        | mg/l         | 0.1                               | 0.5                 | Quarterly                               | 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   | mg/l         | 50.0                              | 100.0               | Monthly                                 | Grab Sample Average                       | 150.0                                 | NR                                      | Grab                                      |
| pH, Minimum                        | S.U.         | NA                                | NA                  | NR                                      | NA  | 6.0                                   | Continuous                              | Continuous                                |
| pH, Maximum                        | S.U.         | NA                                | NA                  | NR                                      | NA  | 10.0                                  | Continuous                              | Continuous                                |
| pH, Day of Sampling                | S.U.         | NA                                | NA                  | NR                                      | NA  | 6.0 – 10.0                            | Twice Per Month                         | RDS                                       |
| Silver, Total                      | mg/l         | 0.1                               | 0.43                | Twice Per Month                         | Daily Composite                           | 0.64                                  | NR                                      | Grab                                      |
| Suspended Solids, Total            | mg/l         | 30.0                              | 50.0                | Twice Per Month                         | Daily Composite                           | 75.0                                  | NR                                      | Grab                                      |
| Tin, Total                         | mg/l         | 2.0                               | 4.0                 | Twice Per Month                         | Daily Composite                           | 6.0                                   | NR                                      | Grab                                      |
| Toxic Organics, Total <sup>3</sup> | mg/l         | NA                                | NA                  | NR                                      | NA  | 2.13                                  | Monthly                                 | Grab                                      |
| Zinc, Total                        | mg/l         | 1.0                               | 2.0                 | Twice Per Month                         | Daily Composite                           | 3.0                                   | NR                                      | Grab                                      |

**Table Footnotes:**

**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 Average Daily Flow and the Maximum Daily Flow 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> See Section 5, paragraph G of this permit.

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- (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 Environmental Protection Agency 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](mailto: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](http://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 (30<sup>th</sup>) 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](mailto: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 West Haven Publicly Owned Treatment Works (“POTW”).
- (G) For Total Toxic Organics (TTO) 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 TTO, 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 West Haven POTW of all discharges that could 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 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 failure to implement and follow BMPs, which the Department determines will adversely affect the operation or implementation of the pretreatment program.

This permit is hereby issued on

DRAFT  
Michael Sullivan  
Deputy Commissioner  
Department of Energy and Environmental Protection

MS/EMW

cc: West Haven POTW

**FACT SHEET**

**WPED PRETREATMENT PERMIT REISSUANCE**

|   |  |
|---|--|
| <b>APPLICANT</b>                          | ENTHONE INC.   |
| <b>PERMIT NO.</b>                         | SP0001123  |
| <b>APPLICATION NO.</b>                    | 201301118  |
| <b>DATE APPLICATION RECEIVED</b>          | February 28, 2013  |
| <b>FACILITY ID.</b>                       | 156-025  |
| <b>LOCATION ADDRESS</b>                   | 350 Frontage Road, West Haven, CT 06516  |
| <b>FACILITY CONTACT</b>                   | Robert Weber (203) 932-8627<br><a href="mailto:rweber@enthone.com">rweber@enthone.com</a>  |
| <b>MAILING ADDRESS</b>                    | 350 Frontage Road, West Haven, CT 06516  |
| <b>DMR CONTACT</b>                        | Robert Weber   |
| <b>PERMIT TERM</b>                        | 5 Years  |
| <b>PERMIT CATEGORY</b>                    | PRETREATMENT SIGNIFICANT INDUSTRIAL USER (SIU)<br>PRETREATMENT CATEGORICAL (CIU)   |
| <b>SIC CODE(S)</b>                        | 2899, 2819, 2869   |
| <b>PERMIT TYPE</b>                        | Reissuance   |
| <b>OWNERSHIP</b>                          | Private  |
| <b>POTW THAT RECEIVES THE DISCHARGE</b>   | Discharge to the City of West Haven Publicly Owned Treatment Works ("POTW")  |
| <b>DEEP STAFF ENGINEER</b>                | Ewa Wozniak  |
| <b>TENTATIVE DECISION FACT SHEET DATE</b> | July 2, 2015<br><i>When preparing a final version of this, change the language to<br/>DATE FACT SHEET PREPARED FOR PERMIT ISSUANCE</i> |

**SOLVENT MANAGEMENT PLAN (If applicable)**

Is the facility operating under an approved solvent management plan (SMP)? Yes X No   

If yes, indicate date issued: February 20, 2015

**PERMIT FEES**

*Application Filing Fee: \$1,300.00*

*Application Processing Fee: \$6,300.00*

*Annual Fee:*

| DISCHARGE CODE | WASTEWATER CATEGORY<br>(per 22a-430-7) | MAXIMUM GPD or CATEGORY | DSN | ANNUAL FEE<br>(per 22a-430-7) |
|----------------|--|-------------------------|-----|-------------------------------|
| 501035Y        | Metal Finishing                        | 10,0000                 | 001 | \$4,337.50                    |
| <b>TOTAL</b>   |  |                         |     | \$4,337.50                    |

**I. APPLICANT**

ENTHONE INC. (“ENTHONE”) in West Haven is seeking to renew its SPDES permit (Permit No. SP0001123, issued August 28, 2008) for authorization of the discharge of treated wastewater associated with its metal finishing operations. On February 28, 2013, the Department of Energy and Environmental Protection (“Department”) received an application (Application No. 201301118) for the subject SPDES permit renewal. In a letter dated April 25, 2013, ENTHONE was informed that Application No. 201301118 was insufficient. Supplemental documentation from ENTHONE was received on July 24, 2013. On August 2, 2013, the application was determined to be administratively sufficient.

**NATURE OF THE BUSINESS GENERATING THE DISCHARGE**

ENTHONE is in the business of manufacturing proprietary chemicals for use in the metal finishing, printed circuit board and semi-conductor industries. Research and quality control operations also occur on-site.

The applicant seeks authorization for the following:

| DSN | PROPOSED AVERAGE MONTHLY FLOW (gpd) | PROPOSED MAXIMUM DAILY FLOW (gpd) | PROPOSED WASTESTREAMS   | TREATMENT TYPE                            | DISCHARGE TO            |
|-----|-------------------------------------|-----------------------------------|---|---|-------------------------|
| 001 | 8,000                               | 10,000                            | Treated wastewaters from the Technical Services Labs, Applications Lab and the EPOCH and SMT areas. | Equalization, pH adjustment, ion exchange | City of West Haven POTW |

**II. RECEIVING BODY INFORMATION**

**FOR SEWER DISCHARGES**

Discharge to the City of West Haven POTW.

**III. BACKGROUND/PERMIT HISTORY**

Compliance/Enforcement

Is the Permittee subject to an ongoing enforcement action?  Yes  No  
 If yes, provide a brief explanation; include discussions of any issues relevant to the activities regulated under the permit.

Does the Permit contain a compliance schedule?  Yes  No

If yes, please check all that apply.

- Pollution Prevention  Water Conservation  Remediation  
 Water Quality Requirement  Treatment Requirement  Other

Effluent Violations

| MONTH/YEAR  | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE             |
|---|-----|---------------|-----------------------------------|----------------------|------------------------|
| January 2010  | 001 | Nickel, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 6.36 mg/L<br>25.0 mg/L |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input checked="" type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |               |                                   |                      |                        |
| REASON: Operator did not perform the scheduled back flushing of the ion exchange unit, which caused residual metals captured within the column resin to be stripped and allowed to enter the discharge wastewater.  |     |               |                                   |                      |                        |

| MONTH/YEAR  | DSN | PARAMETER   | TYPE OF LIMIT  | PERMITTED LIMIT | EXCEEDENCE |
|---|-----|-------------|----------------|-----------------|------------|
| January 2010  | 001 | Zinc, Total | Maximum, Daily | 2.0 mg/L        | 2.8 mg/L   |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input checked="" type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |             |                |                 |            |
| REASON: Operator did not perform the scheduled back flushing of the ion exchange unit, which caused residual metals captured within the column resin to be stripped and allowed to enter the discharge wastewater.  |     |             |                |                 |            |

| MONTH/YEAR  | DSN | PARAMETER | TYPE OF LIMIT         | PERMITTED LIMIT | EXCEEDENCE |
|---|-----|-----------|-----------------------|-----------------|------------|
| July 2011   | 001 | pH        | Minimum Instantaneous | 6.0 S.U.        | 5.15 S.U.  |
| <b>REASON:</b> <input checked="" type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |           |                       |                 |            |
| REASON: The pH control system slightly overdosed the final mixing tank with excess acid.  |     |           |                       |                 |            |

| MONTH/YEAR  | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE            |
|---|-----|---------------|-----------------------------------|----------------------|-----------------------|
| October 2011  | 001 | Nickel, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 2.98 mg/L<br>9.0 mg/L |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input checked="" type="checkbox"/> Other |     |               |                                   |                      |                       |
| REASON: Levels of nickel plating, within the Plating Shop, were higher than usual. The treatment system was unable to compensate for the increased concentration of nickel.   |     |               |                                   |                      |                       |

| MONTH/YEAR  | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE             |
|---|-----|---------------|-----------------------------------|----------------------|------------------------|
| November 2011   | 001 | Nickel, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 4.97 mg/L<br>17.0 mg/L |
| <b>REASON:</b> <input checked="" type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |               |                                   |                      |                        |
| REASON: Ion exchange resin did not effectively remove nickel ions. The resin was replaced in December 2011.   |     |               |                                   |                      |                        |

| MONTH/YEAR  | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE            |
|---|-----|---------------|-----------------------------------|----------------------|-----------------------|
| April 2012  | 001 | Nickel, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 1.14 mg/L<br>2.3 mg/L |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input checked="" type="checkbox"/> Other |     |               |                                   |                      |                       |
| REASON: Approximately 500 mL of nickel plating bath solution was disposed of in the wastewater treatment system, rather than drumming the solution for off-site disposal as protocol dictates.                      |     |               |                                   |                      |                       |

| MONTH/YEAR  | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT       | EXCEEDENCE             |
|---|-----|---------------|-----------------------------------|-----------------------|------------------------|
| May 2012  | 001 | Silver, Total | Average Monthly<br>Maximum, Daily | 0.1 mg/L<br>0.43 mg/L | 0.39 mg/L<br>1.05 mg/L |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input checked="" type="checkbox"/> Other               |     |               |                                   |                       |                        |
| REASON: Approximately 85 mL of silver bearing rinsewater was discharged to the wastewater treatment system where insufficient removal of the metal occurred. The ion exchange resin being used did not efficiently remove silver. |     |               |                                   |                       |                        |

| MONTH/YEAR  | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE            |
|---|-----|---------------|-----------------------------------|----------------------|-----------------------|
| November 2012   | 001 | Nickel, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 1.36 mg/L<br>4.5 mg/L |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |               |                                   |                      |                       |
| REASON: Unknown.  |     |               |                                   |                      |                       |

| MONTH/YEAR  | DSN | PARAMETER              | TYPE OF LIMIT                     | PERMITTED LIMIT        | EXCEEDENCE             |
|---|-----|------------------------|-----------------------------------|------------------------|------------------------|
| August 2013   | 001 | Total Suspended Solids | Average Monthly<br>Maximum, Daily | 30.0 mg/L<br>50.0 mg/L | 40.0 mg/L<br>81.0 mg/L |
| <b>REASON:</b> <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> None provided <input type="checkbox"/> Other |     |                        |                                   |                        |                        |
| REASON: Unknown.  |     |                        |                                   |                        |                        |

| MONTH/YEAR   | DSN | PARAMETER | TYPE OF LIMIT                                  | PERMITTED LIMIT       | EXCEEDENCE             |
|--|-----|-----------|--|-----------------------|------------------------|
| October 2013   | 001 | pH        | Minimum Instantaneous<br>Maximum Instantaneous | 6.0 S.U.<br>10.0 S.U. | 3.05 S.U.<br>10.4 S.U. |
| REASON: <input type="checkbox"/> Equipment Related <input checked="" type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |           |  |                       |                        |
| REASON: Operator error.  |     |           |  |                       |                        |

| MONTH/YEAR   | DSN | PARAMETER     | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE            |
|--|-----|---------------|-----------------------------------|----------------------|-----------------------|
| October 2013   | 001 | Nickel, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 8.6 mg/L<br>19.0 mg/L |
| REASON: <input checked="" type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |               |                                   |                      |                       |
| REASON: Depletion of the ion exchange resin.   |     |               |                                   |                      |                       |

| MONTH/YEAR   | DSN | PARAMETER   | TYPE OF LIMIT                     | PERMITTED LIMIT      | EXCEEDENCE            |
|--|-----|-------------|-----------------------------------|----------------------|-----------------------|
| October 2013   | 001 | Zinc, Total | Average Monthly<br>Maximum, Daily | 1.0 mg/L<br>2.0 mg/L | 2.55 mg/L<br>5.4 mg/L |
| REASON: <input checked="" type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |             |                                   |                      |                       |
| REASON: Depletion of the ion exchange resin.   |     |             |                                   |                      |                       |

| MONTH/YEAR   | DSN | PARAMETER     | TYPE OF LIMIT   | PERMITTED LIMIT | EXCEEDENCE |
|--|-----|---------------|-----------------|-----------------|------------|
| March 2014   | 001 | Copper, Total | Average Monthly | 1.0 mg/L        | 1.15 mg/L  |
| REASON: <input type="checkbox"/> Equipment Related <input type="checkbox"/> Operator Error <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> None provided <input type="checkbox"/> Other |     |               |                 |                 |            |
| REASON: Unknown  |     |               |                 |                 |            |

Modifications

Within the last five years, have there been any permit modifications?  Yes  No  
 If yes, provide the date(s) of the modification(s) as well as a brief explanation of what was modified.

Other

N/A

**IV. THE ON-SITE WASTEWATER SOURCES AND WASTEWATER TREATMENT SYSTEM**

ENTHONE manufactures industrial chemicals for use in the metal finishing industry and printed circuit board manufacturing industry. The existing sources of wastewater at the facility can be broken down into four areas.

Specialty Chemical Production

Three chemical manufacturing areas generate a total of approximately 500 gallons of wastewater per day. These areas are the SCCu area, Activator area and Precious Metals area. Wastewaters from these areas are generated through washing of tanks, general wash downs of the production areas, rinsing of raw material containers and the changing of solutions in the pollution control equipment. This wastewater, along with the concentrated solutions, is collected in segregated containers and shipped to a licensed Treatment, Storage, and Disposal Facility (“TSDF”).

### Technical Service Department

The technical service department operates a pilot plating and metal finishing facility. Plating of parts is on a very small scale (tanks are approximately 25 gallons in volume), but encompasses a wide variety of finishes including immersion and electroless copper and/or nickel, acid and alkaline zinc, aluminum pretreatment, and hexavalent and/or trivalent chromium. Cyanide solution tanks are stagnant and are not plumbed to the wastewater treatment system. All wastewaters from cyanide and/or chromium solution tanks are containerized and disposed of offsite at a licensed TSDF.

On average, approximately 2,000 gallons of rinsewater is generated per day. Concentrated spent acids and plating solutions are pumped into drums and transported to the waste storage area in production for offsite disposal at a licensed TSDF.

All rinse tanks are fitted with flow control valves which are set at approximately one gallon per minute flow. Rinsewater is generated through rinsing of glassware discharged to the lab sinks, which are plumbed to the technical services outside sump ("TSOS"), which discharges to the wastewater treatment system.

### Research and Quality Control Laboratories

Research and quality control laboratories are used for advanced electronics research and quality control. Normal lab rinsing, equipment wash downs and cleanups generate up to 400 gallons per day of rinse water. This rinsewater combines with the technical service department rinsewater in the TSOS, which discharges to the wastewater treatment system. All spent concentrated solutions used in these laboratories are collected in segregated containers which are then transported to the production waste storage area, logged in, labeled and ultimately shipped offsite at a licensed TSDF.

### Alternative Final Finishes Area

This area is used to plate and test printed wiring boards using several pieces of equipment (an EPOCH conveyor for printed wiring board processing and an ESPEC temperature/humidity chamber). The rinsewaters associated with this area are generated by laboratory sinks used for cleaning laboratory glassware and are plumbed to a 350 gallon sump. From the sump, the rinsewaters are pumped to the wastewater treatment system. Concentrated solutions are collected in segregated containers and are shipped offsite at a licensed TSDF.

## ON-SITE WASTEWATER TREATMENT SYSTEM

Laboratory wastewaters (from TSOS and EPOCH/OM sumps) are first collected in the primary pH adjustment tank (T-7001) and pH adjusted to between 1.0 and 1.5 S.U. to break any chelating bonds. The wastewater then overflows into the secondary pH adjustment tank (T-7002) and pH adjusted to between 3.5 and 5.0 S.U. to achieve the optimum pH range for the ion exchange resin. Wastewater then overflows into an ion exchange feed tank (T-7003) that feeds one of two pumps set to deliver 20-25 gallons per minute through the ion exchange resin beds. The wastewater is pumped through one of two bag filters (5µm) used to collect any solids. The wastewater then passes through a granular activated carbon bed ("GAC"), and then through two selective ion exchange ("SIX") beds, set up in series, to remove metal contaminants.

Following the SIX beds, the wastewater passes through a 10 µm bag filter. The treated wastewater is then pH adjusted to within permit limits in the final pH adjustment tank (T-7004) and discharged to the sanitary sewer. Flow, sampling and final pH are measured in a horizontal run of 4 inch diameter pipe between T-7004 and the connecting pipe to the sanitary sewer. An in-line, real-time trace metals analyzer is installed to measure copper, nickel, zinc and silver concentrations in T-7001 and T-7004, and configured with audible and visual alarms which trigger if permit limit exceedances are found.

## **V. SPILL HISTORY**

There have been no spills at the facility within the last five years.

## VI. EFFLUENT GUIDELINES

ENTHONE is in the business of manufacturing proprietary chemicals, both organic and inorganic, for use in the metal finishing, printed circuit board and semi-conductor industries. The existing sources of wastewater can be broken down into four (4) areas: specialty chemical production, technical service department, research and quality control laboratories and alternative final finishes area. Wastewaters directly related to chemical manufacturing and the alternative final finishes area are containerized and shipped off-site. Wastewaters associated with research and testing activities and custom plating areas are discharged to the on-site wastewater treatment system. These wastewaters are subject to effluent limitations set forth in section 22a-430-4(s)(2) of the Regulations of Connecticut State Agencies (“RCSA”) and 40 CFR Part 433.15, Metal Finishing Point Source Category, Pretreatment Standards for Existing Sources (“PSES”).

## VII. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| BASIS FOR LIMITS, STANDARDS OR CONDITIONS |   | REGULATION  | DISCHARGE POINT(S) |
|---|---|---|--------------------|
| <input type="checkbox"/>                  | Federal Effluent Limitation Guideline (ELG)   |   |                    |
| <input checked="" type="checkbox"/>       | Pretreatment Standards for Existing Sources (PSES)  | 40 CFR Part 433-Metal Finishing Point Source Category | DSN 001            |
| <input type="checkbox"/>                  | Pretreatment Standards for New Sources (PSNS)   |   |                    |
| <input type="checkbox"/>                  | Performance Standards   |   |                    |
| <input checked="" type="checkbox"/>       | Section 22a-430-4(s) of the Regulations of Connecticut State Agencies                       |   | DSN 001            |
| <input checked="" type="checkbox"/>       | Case-by-Case Determination using Best Professional Judgment (BPJ)                           |   | DSN 001            |
| <input type="checkbox"/>                  | Other (i.e. Department File Information, Treatability Manual, Federal Development Document) |   |                    |

### A. MONITORING PARAMETERS & LIMITS:

The discharge, DSN 001, is subject to the limits specified in section 22a-430-4(s) of the RCSA and the PSES in 40 CFR Part 433.15. Where more than one limit applied, the most stringent of the limits was selected as the permit limit and is highlighted in yellow in the table below.

#### DSN 001

| PARAMETER                                     | 40 CFR 433.15          |                      | BPJ               | RCSA 22a-430-4(s)(2) |                        |                      |
|---|------------------------|----------------------|-------------------|----------------------|------------------------|----------------------|
|   | Average Monthly (mg/L) | Maximum Daily (mg/L) |                   | Instantaneous (mg/L) | Average Monthly (mg/L) | Maximum Daily (mg/L) |
| Cadmium, Total                                | 0.26                   | 0.69                 |                   | 0.1 <sup>1</sup>     | 0.5 <sup>1</sup>       | 0.75 <sup>1</sup>    |
| Chromium, Total                               | 1.71                   | 2.77                 |                   | 1.0 <sup>1</sup>     | 2.0 <sup>1</sup>       | 3.0 <sup>1</sup>     |
| Chromium, Hexavalent                          |                        |                      |                   | 0.1 <sup>1</sup>     | 0.2 <sup>1</sup>       | 0.3 <sup>1</sup>     |
| Copper, Total                                 | 2.07                   | 3.38                 |                   | 1.0 <sup>1</sup>     | 2.0 <sup>1</sup>       | 3.0 <sup>1</sup>     |
| Cyanide, Total                                | 0.65                   | 1.20                 | 1.8               | 0.65                 | 1.2                    |                      |
| Fluoride                                      |                        |                      |                   | 20.0 <sup>1</sup>    | 30.0 <sup>1</sup>      | 45.0 <sup>1</sup>    |
| Iron, Total <sup>2</sup>                      |                        |                      |                   |                      |                        |                      |
| Lead, Total                                   | 0.43                   | 0.69                 |                   | 0.1 <sup>1</sup>     | 0.5 <sup>1</sup>       | 0.75 <sup>1</sup>    |
| Nickel, Total                                 | 2.38                   | 3.98                 |                   | 1.0 <sup>1</sup>     | 2.0 <sup>1</sup>       | 3.0 <sup>1</sup>     |
| Oil Petroleum, Total Recoverable <sup>1</sup> |                        |                      |                   |                      |                        |                      |
| Silver Total                                  | 0.24                   | 0.43 <sup>1</sup>    | 0.64              | 0.1 <sup>1</sup>     | 0.5                    | 0.75 <sup>1</sup>    |
| Suspended Solids, Total <sup>1</sup>          |                        |                      |                   |                      |                        |                      |
| Tin, Total                                    |                        |                      |                   | 2.0 <sup>1</sup>     | 4.0 <sup>1</sup>       | 6.0 <sup>1</sup>     |
| Toxic Organics, Total (“TTO”)                 |                        |                      | 2.13 <sup>1</sup> |                      |                        |                      |
| Zinc, Total                                   | 1.48                   | 2.61                 |                   | 1.0 <sup>1</sup>     | 2.0 <sup>1</sup>       | 3.0 <sup>1</sup>     |

#### Table Footnotes:

1 Limit retained from previous permit

2 No limits – monitoring only

Comments on specific parameters:

- The pH limits of 6.0 to 10.0 S.U. from the previous permit will be retained. These limits are considered to be protective of sanitary sewer systems.
- The TTO maximum daily limit of 2.13 mg/l, listed in 40 CFR Part 433.15 (PSES), was applied as the instantaneous maximum limit, based on BPJ.
- Quarterly monitoring for total cyanide is retained from the previous permit. All cyanide related solutions used onsite are containerized and shipped off-site. Monitoring for this parameter is based on a case-by-case determination using BPJ. The 2008 permit did not include limits for total cyanide. Average monthly and maximum daily limits have been included in this permit, in accordance with 40 CFR 433.15 and section 22a-430-4(s)(2) of the RCSA. The maximum instantaneous limit (1.5 x the maximum daily limit of 1.2 mg/l = 1.8 mg/l) is based on a case-by-case determination using BPJ.
- Monitoring for total iron is retained from the previous permit. Monitoring for this parameter is based on a case-by-case determination using BPJ. Even though section 22a-430-4(s) of the RCSA specifies average monthly and maximum daily limits for total iron, they are not applied during this permit reissuance as ENTHONE's historical effluent data indicates that the average monthly and maximum daily concentrations of total iron are much lower than the limits indicated in section 22a-430-4(s) of the RCSA.
- Limits for oil petroleum, total recoverable (average monthly limit – 50.0 mg/l; maximum daily limit – 100.0 mg/l; maximum instantaneous limit – 150.0 mg/l) and total suspended solids (average monthly limit – 30.0 mg/l; maximum daily limit – 50.0 mg/l; maximum instantaneous limit – 75.0 mg/l) are retained from the previous permit. Limits for these parameters are based on a case-by-case determination using BPJ.
- Limits for the following parameters are retained from the previous permit: total cadmium, total chromium, hexavalent chromium, total copper, total lead, total nickel, total silver, total tin and total zinc. Except for the maximum daily limit for total silver, these limits are based on section 22a-430-4(s) of the RCSA. The maximum daily limit for total silver is based on 40 CFR 433.15.

#### **B. MONITORING FREQUENCY:**

The *Monitoring Schedule* set forth in section 22a-430-3 of the RCSA prescribes a minimum frequency of monitoring, based on the category of the wastewater discharge and the permitted average daily flow (in gallons per day (“gpd”). Since ENTHONE's permitted average daily flow, for DSN 001, is 8,000 gpd and the wastewaters are generated from metal finishing operations, staff determined that the discharge falls in the “y” subcategory (5,000 – 10,000 gpd) of the “Metal Finishing” category of discharge. Therefore, the parameters that are expected to be found in ENTHONE's metal finishing wastewaters will be monitored twice per month. These parameters are: total copper, total iron, total nickel, total silver, total suspended solids, total tin and total zinc.

Monitoring for total chromium, total fluoride and oil petroleum, total recoverable is changed from weekly to monthly. ENTHONE's historical effluent data shows that the concentrations of these parameters in the effluent are much lower than the permitted limits.

Monitoring for hexavalent chromium, total cadmium and total lead is changed from weekly to quarterly. Hexavalent chromium and total cadmium are not expected to be present in ENTHONE's discharge. Further, ENTHONE's historical effluent data indicates that the total lead average monthly and maximum daily concentrations were 0.012 mg/l and 0.058 mg/l, respectively. These concentrations are much lower than the permitted limits. The Department decided to lower the monitoring frequency as hexavalent chromium, total lead and total cadmium are not pollutants of concern.

Monitoring for amenable cyanide, total selenium and volatile organics are removed during this permit reissuance. Both amenable cyanide and total selenium are believed absent in the effluent. Monitoring for volatile organics is being addressed by having ENTHONE monitor for TTOs. In addition, ENTHONE is currently operating under an approved Solvent Management Plan. Based on review of monitoring data, the concentrations of these three pollutants in the discharge have consistently been much lower than permitted limits.

### **VIII. MISCELLANEOUS**

ENTHONE is subject to the terms and conditions of the following general permit:



- General Permit for the Discharge of Stormwater Associated with Industrial Activity (GSI000826)
- General Permit for the Discharge of Water Treatment Wastewater (GWT000005)

**IX. SITE & RESOURCE INFORMATION**

**A. INDIAN LAND**

Based on the information provided in the permit application, the site is not located on federally-recognized Indian land.

**B. COASTAL BOUNDARY**

The subject site is not located within the coastal boundary as delineated on Department approved coastal boundary maps.

**C. ENDANGERED OR THREATENED SPECIES**

The subject site is not located within an area identified as a habitat for endangered, threatened or special concern species as identified on the “State and Federal Listed Species and Natural Communities Map.”

**D. AQUIFER PROTECTION AREAS**

The subject site is not located within a town that is required to establish Aquifer Protection Areas.

**E. CONSERVATION OR PRESERVATION RESTRICTION**

The property on which the subject site is located is not subject to a conservation or preservation restriction.

**F. MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)**

The application does not include stormwater discharges to a MS4.

**G. PUBLIC WATER SUPPLY WATERSHED**

The subject site is not located within a public water supply watershed.

**X. COMMENTS RELATED TO THE PUBLIC NOTICE**

Notice of Tentative Decision was published in \_\_\_\_ on \_\_\_\_\_. The comment period ended on \_\_\_\_\_. The Department has received [no] [the following] written comments on the proposed action: **Pick the one that applies.**

Comments If Any

Water Permitting and Enforcement Division staff has reviewed the written comments and does not feel that the tentative decision should be modified. Provide Reasons

Water Permitting and Enforcement Division staff has reviewed the written comments and recommends the following changes in the [tentative decision] [draft permit]. **Pick the one that applies.**

**(NOTE: Staff needs to ensure that the language in this section matches what is in the Final Determination Memo)**

**If there is a 15 Day Notice – provide the date it was signed.**



**NOTICE OF TENTATIVE DECISION OF  
INTENT TO RENEW A STATE PERMIT  
FOR THE FOLLOWING DISCHARGE  
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 **ENTHONE INC.** ("the applicant") under section 22a-430 of the Connecticut General Statutes 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 West Haven Water Pollution Control Facility ("WPCF").

The proposed permit, if issued by the Commissioner, will require that all wastewater be treated to meet the applicable effluent limitations and periodic monitoring to demonstrate that the discharge will not cause pollution.

**APPLICANT'S PROPOSAL**

ENTHONE INC. proposes to continue discharging up to 10,000 gallons per day of laboratory and metal finishing wastewaters to the West Haven WPCF from operations at a chemical manufacturing facility.

The name and mailing address of the permit applicant are: ENTHONE INC., 350 Frontage Road, West Haven, CT 06516

The activity takes place at: 350 Frontage Road, West Haven, CT.

The proposed activity is within the coastal area as defined in section 22a-94 of the Connecticut General Statutes. Pursuant to section 22a-98 of the Connecticut General Statutes, the applicant must demonstrate that the activities are consistent with all applicable goals and policies in section 22a-92 of the Connecticut General Statutes, and that such activities incorporate all reasonable measures mitigating any adverse impacts on coastal resources and future water-dependent development activities.

**REGULATORY CONDITIONS**

Type of Treatment

DSN 001: Equalization, ion exchange, bag filtration, activated carbon beds and pH adjustment.

Effluent Limitations

This permit contains effluent limitations consistent with a Case-by-Case Determination using the criteria of Best Professional Judgement, Pretreatment Standards for Existing Sources ("PSES") under EPA's Metal Finishing Point Source Category, 40 CFR 433 (Title 40 of the Code of Federal Regulations, Part 433) and section 22a-430-4(s) of the Regulations of Connecticut State Agencies, and 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 Regulations of Connecticut State Agencies, the permit contains effluent limitations for the following types of toxic substances: heavy metals, cyanides and volatile organic compounds.

**COMMISSIONER'S AUTHORITY**

The Commissioner is authorized to approve or deny such permits pursuant to section 22a-430 of the Connecticut General Statutes and the Water Discharge Permit Regulations (sections 22a-430-3 and 4 of the Regulations of Connecticut State

Agencies).

### 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. 201301118

PERMIT ID NO. SP0001123

Interested persons may obtain copies of the application from Robert Weber, ENTHONE INC., 350 Frontage Road, West Haven, CT 06516, (203) 932-8627.

The application is available for inspection by contacting Ewa Wozniak (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 Ewa Wozniak, 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, 3<sup>rd</sup> floor, Hartford, CT, 06106-5127. Petitions cannot be sent by fax or email. Additional information can be found at [www.ct.gov/deep/adjudications](http://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](mailto:deep.accommodations@ct.gov).**



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

Dated:

**AUG 05 2015**