

## Pretreatment Permit Reissuance Fact Sheet

|  |   |
|--|---|
| <b>APPLICANT</b>   | Leed - Himmel Industries, Inc.  |
| <b>PERMIT NO.</b>  | SP0000082   |
| <b>APPLICATION NO.</b>   | 202309142   |
| <b>DATE APPLICATION RECEIVED</b>   | December 1, 2023  |
| <b>LOCATION ADDRESS</b>  | 75 Leeder Hill Drive<br>Hamden, CT, 06517   |
| <b>FACILITY CONTACT</b>  | Scott Oberg, Plant Manager<br>Office Phone: (203) 288 – 8484 x 141<br>Email: <a href="mailto:soberg@leed-himmel.com">soberg@leed-himmel.com</a>   |
| <b>MAILING ADDRESS</b>   | 75 Leeder Hill Drive<br>Hamden, CT, 06517   |
| <b>DMR CONTACT</b>   | Scott Oberg, Plant Manager<br>Office Phone: (203) 288 – 8484 x 141<br>Email: <a href="mailto:soberg@leed-himmel.com">soberg@leed-himmel.com</a>   |
| <b>PERMIT TERM</b>   | 5 Years   |
| <b>PERMIT CATEGORY</b>   | Pretreatment Significant Industrial User (SIU)<br>Pretreatment Categorical (CIU)  |
| <b>SIC CODE</b>  | 3446  |
| <b>NAICS CODE</b>  | 331315  |
| <b>PERMIT TYPE</b>   | Reissuance  |
| <b>OWNERSHIP</b>   | Private   |
| <b>PUBLICLY OWNED TREATMENT WORKS (“POTW”) THAT RECEIVES THE DISCHARGE</b> | Discharge to Greater New Haven Water Pollution Control Authority (“GNHWPCA”) via Town of Hamden and its collection system. NPDES Permit No. CT0100366 discharges to the New Haven Harbor. |
| <b>DEEP STAFF ENGINEER</b>   | Name: Ryan Bellucci<br>Office Phone: (860) 424 - 3741<br>Email: <a href="mailto:ryan.bellucci@ct.gov">ryan.bellucci@ct.gov</a>  |

**DATE APPLICATION PUBLIC NOTICED/ NAME OF PAPER** November 15, 2023 / The New Haven Register

**DATE SUFFICIENCY REVIEW COMPLETED** April 24, 2023

**APPLICATION TIMELY AND SUFFICIENT** ☒ Yes ☐ No

**TENTATIVE DETERMINATION FACT SHEET DATE** April 16, 2025

## SECTION 1.0 PERMIT FEES

### *Application Fee:*

|                |                   |                       |
|----------------|-------------------|-----------------------|
| Filing Fee     | Cost: \$1,300.00  | Date Paid: 12/4/2023  |
| Processing Fee | Cost: \$13,650.00 | Date Paid: 01/06/2024 |

### *Annual Fee:*

|              | WASTEWATER CATEGORY<br>(per RCSA Sec. 22a-430-7) | FLOW<br>CATEGORY | DSN   | ANNUAL<br>FEE<br>(per<br>RCSA<br>Sec. 22a-<br>430-7 and<br>CGS Sec.<br>22a-6f) |
|--------------|--|------------------|-------|--|
|              | <i>Metal Finishing (to POTWs)</i>                | >10,000 gpd      | 001-1 | \$8,425.00   |
| <b>TOTAL</b> |  |                  |       | \$8,425.00   |

## SECTION 2.0 DESCRIPTION OF WASTE STREAMS

The applicant seeks authorization for the following:

| DSN   | PROPOSED<br>AVERAGE<br>DAILY<br>FLOW<br>(gpd) | PROPOSED<br>MAXIMUM<br>DAILY<br>FLOW<br>(gpd) | PROPOSED<br>WASTESTREAMS                                     | TREATMENT<br>TYPE                                | DISCHARGE<br>TO           |
|-------|---|---|--|--|---------------------------|
| 001-1 | 27,386  | 60,000  | Treated metal finishing<br>wastewater and boiler<br>blowdown | Neutralization,<br>clarification,<br>coagulation | Greater New<br>Haven WPCA |

## SECTION 3.0 FACILITY BACKGROUND & PERMIT HISTORY

Leed – Himmel Industries, Inc. is a business that manufactures architectural aluminum products and components. The treatment system is used to treat wastewater from metal cleaning, anodizing, coating, and coloring.

The Operation and Maintenance (O&M) Plan was last revised on 08/14/2023.

### 3.1 Solvent Management Plan

Is the facility operating under an approved solvent management plan (SMP)?

☒ Yes   ☐ No   ☐ N/A

### 3.2 Compliance & Enforcement

#### 3.2.1 Reported Effluent Violations:

##### **DSN 001-1**

| Monitoring Period End Date | Parameter          | Reporting Type | Permit Limit | DMR Value | Units |
|----------------------------|--------------------|----------------|--------------|-----------|-------|
| 09/30/2019                 | pH, minimum        | INST MIN       | 6.0          | 2.0       | SU    |
| 10/31/2019                 | pH, maximum        | INST MAX       | 10.0         | 10.1      | SU    |
| 03/31/2020                 | pH                 | INST MIN       | 6.0          | 4.2       | SU    |
| 03/31/2020                 | pH, minimum        | INST MIN       | 6.0          | 4.2       | SU    |
| 02/28/2021                 | pH, maximum        | INST MAX       | 10.0         | 10.6      | SU    |
| 05/31/2021                 | pH, maximum        | INST MAX       | 10.0         | 10.3      | SU    |
| 05/31/2021                 | pH, minimum        | INST MIN       | 6.0          | 5.2       | SU    |
| 01/31/2022                 | pH                 | INST MAX       | 10.0         | 10.4      | SU    |
| 01/31/2022                 | pH                 | INST MIN       | 6.0          | 4.5       | SU    |
| 01/31/2022                 | pH, maximum        | INST MAX       | 10.0         | 10.4      | SU    |
| 01/31/2022                 | pH, minimum        | INST MIN       | 6.0          | 4.5       | SU    |
| 01/31/2022                 | Tin, total [as Sn] | DAILY MX       | 4.0          | 4.60      | mg/L  |
| 02/28/2022                 | pH                 | INST MIN       | 6.0          | 4.0       | SU    |
| 02/28/2022                 | pH, maximum        | INST MAX       | 10.0         | 11.6      | SU    |
| 02/28/2022                 | pH, minimum        | INST MIN       | 6.0          | 3.20      | SU    |
| 03/31/2022                 | pH                 | INST MAX       | 10.0         | 12.15     | SU    |
| 03/31/2022                 | pH                 | INST MIN       | 6.0          | 2.65      | SU    |
| 03/31/2022                 | pH, maximum        | INST MAX       | 10.0         | 12.15     | SU    |
| 03/31/2022                 | pH, minimum        | INST MIN       | 6.0          | 2.65      | SU    |
| 04/30/2022                 | pH                 | INST MAX       | 10.0         | 12.09     | SU    |
| 04/30/2022                 | pH                 | INST MIN       | 6.0          | 5.55      | SU    |
| 04/30/2022                 | pH, maximum        | INST MAX       | 10.0         | 12.4      | SU    |
| 04/30/2022                 | pH, minimum        | INST MIN       | 6.0          | 2.0       | SU    |
| 04/30/2022                 | Tin, total [as Sn] | DAILY MX       | 4.0          | 7.0       | mg/L  |
| 04/30/2022                 | Tin, total [as Sn] | MO AVG         | 2.0          | 2.95      | mg/L  |
| 05/31/2022                 | pH                 | INST MIN       | 6.0          | 5.7       | SU    |
| 05/31/2022                 | pH, maximum        | INST MAX       | 10.0         | 10.4      | SU    |
| 05/31/2022                 | pH, minimum        | INST MIN       | 6.0          | 1.0       | SU    |

| Monitoring Period End Date | Parameter                         | Reporting Type | Permit Limit | DMR Value | Units |
|----------------------------|-----------------------------------|----------------|--------------|-----------|-------|
| 05/31/2022                 | Tin, total [as Sn]                | DAILY MX       | 4.0          | 18.0      | mg/L  |
| 05/31/2022                 | Tin, total [as Sn]                | MO AVG         | 2.0          | 4.66      | mg/L  |
| 06/30/2022                 | pH                                | INST MIN       | 6.0          | 4.16      | SU    |
| 06/30/2022                 | pH, maximum                       | INST MAX       | 10.0         | 14.0      | SU    |
| 06/30/2022                 | pH, minimum                       | INST MIN       | 6.0          | 0.0       | SU    |
| 07/31/2022                 | pH, maximum                       | INST MAX       | 10.0         | 10.2      | SU    |
| 07/31/2022                 | pH, minimum                       | INST MIN       | 6.0          | 3.83      | SU    |
| 08/31/2022                 | pH                                | INST MAX       | 10.0         | 11.1      | SU    |
| 08/31/2022                 | pH                                | INST MIN       | 6.0          | 3.49      | SU    |
| 08/31/2022                 | pH, maximum                       | INST MAX       | 10.0         | 13.37     | SU    |
| 08/31/2022                 | pH, minimum                       | INST MIN       | 6.0          | 0.0       | SU    |
| 09/30/2022                 | Flow, maximum during 24 hr period | DAILY MX       | 60,000.00    | 60,915.00 | gal/d |
| 11/30/2022                 | pH                                | INST MIN       | 6.0          | 5.4       | SU    |
| 11/30/2022                 | pH, maximum                       | INST MAX       | 10.0         | 10.95     | SU    |
| 11/30/2022                 | pH, minimum                       | INST MIN       | 6.0          | 4.9       | SU    |
| 01/31/2023                 | Tin, total [as Sn]                | DAILY MX       | 4.0          | 5.7       | mg/L  |
| 01/31/2023                 | Tin, total [as Sn]                | MO AVG         | 2.0          | 2.8       | mg/L  |
| 04/30/2023                 | Tin, total [as Sn]                | DAILY MX       | 4.0          | 7.0       | mg/L  |
| 04/30/2023                 | Tin, total [as Sn]                | MO AVG         | 2.0          | 3.7       | mg/L  |
| 10/31/2023                 | Tin, total [as Sn]                | DAILY MX       | 4.0          | 5.8       | mg/L  |
| 10/31/2024                 | Tin, total [as Sn]                | DAILY MX       | 4.0          | 5.9       | mg/L  |

3.2.2 Is the Permittee subject to an ongoing enforcement action?

☐ Yes

☒ No

3.2.3 Closed Enforcement Actions

NOVWRIN20002

Issued: 03/05/2020

Closed: 05/25/2021

Reason for Notice of Violation ("NOV"):

1. Violated the effluent limitations for pH for DSN 001-1 of Permit No. SP0000082.
2. Maintained incomplete records of facility monitoring information in violation of Section 22a-430-3(j)(9)(A) of the Regulations of the Connecticut State Agencies ("RCSA") by not recording the results of pH calibrations on the "Record Sheet" found in Section 5.0, "Calibration and Testing", of the Permittee's Operation and Maintenance Plan.
3. Maintained incomplete records of facility monitoring information in violation of Section 22a-430-3(j)(9)(A) of the RCSA by not signing pH circular monitoring charts.
4. Discharged contact cooling water associated with an aluminum extrusion process to the sanitary sewer without a permit in violation of Section 22a-430 of the Connecticut General Statutes ("CGS").
5. Violated sample collection, preservation, handling, and/or analytical techniques required by Section 22a-430-3(j)(7) of the RCSA for DSN 001-1 of Permit No. SP0000082, which requires total cyanide to be collected as a grab sample average. The Permittee has been collecting total cyanide as a composite sample.

NOVWRIN22034

Issued: 12/12/2022

Closed: 09/28/2023

## Reason for NOV:

1. Violated the effluent limitations for pH, tin, and maximum flow in DSN 001-1 of Permit No. SP0000082.
2. Failed to notify the Director of permit violations as required by section 6 of Permit No. SP0000082.
3. Failed to maintain an operation and maintenance manual for the treatment system as required by Section 22a-430-3(f)(2) of the RCSA.
4. Failed to properly operate and maintain all facilities and systems and parts thereof for wastewater collection, storage, treatment and control which are installed or used to achieve compliance with the terms and conditions of the permit in accordance with Section 22a-430-3(f)(1) of the RCSA.

NOVWRIN24002

Issued: 10/03/2023

Closed: 11/28/2023

## Reason for NOV:

1. Violated the effluent limitations of DSN 001-1 of Permit No. SP0000082 for the following parameters on the following dates:

| Monitoring Period End Date | Parameter          | Reporting Type | Permit Limit | DMR Value | Units |
|----------------------------|--------------------|----------------|--------------|-----------|-------|
| 01/31/2023                 | Tin, total [as Sn] | DAILY MX       | 4.0          | 5.7       | mg/L  |
| 01/31/2023                 | Tin, total [as Sn] | MO AVG         | 2.0          | 2.8       | mg/L  |
| 04/30/2023                 | Tin, total [as Sn] | DAILY MX       | 4.0          | 7.0       | mg/L  |
| 04/30/2023                 | Tin, total [as Sn] | MO AVG         | 2.0          | 3.7       | mg/L  |

These violations put Leed-Himmel Industries, Inc. is in the status of significant noncompliance ("SNC") in quarter 3 of fiscal year 2023. Compliance actions were completed and there have been no violations of the total tin limit since October 2023.

## 3.2.4 Does the Permit contain a compliance schedule (CS)?

☒ Yes ☐ No

*If yes, please check all that apply.*

☐ Pollution Prevention
 ☐ Water Conservation
 ☐ Remediation  
☒ Water Quality Requirement
 ☐ Treatment Requirement
 ☒ Other

DEEP is acquiring per- and polyfluoroalkyl substances' ("PFAS") concentration data for specific dischargers to support further regulatory evaluation regarding the identification of contributing sources of such substances to the state's publicly owned treatment works

("POTWs"). As such, this permit contains a compliance schedule which requires the Permittee to develop and implement a PFAS Sampling Plan for its discharge.

Additionally, DEEP is requiring the Permittee to develop a report which describes and evaluates alternative actions which may be taken to achieve compliance with total suspended solids (TSS) limits that become active two years following the permit effective date in order to prevent buildup of solid or viscous waste that may cause or threaten obstruction of flow in the sewers to prevent interference in accordance with RCSA Section 22a-430-4(t)(2)(C) and 40 CFR 403.5(b)(3). As such, this permit contains a compliance schedule which requires the Permittee to develop a plan to meet TSS limits and characterize, remove, and monitor sludge buildup within the sewer connection to the GNHWPCA.

### 3.3 Permit Modifications

During last permit term, have there been any permit modifications?

☒ Yes ☐ No

Application No. 202302563

Approval Date: 4/21/2023

Summary: Authorization to replace the ABB pH probes/controllers with HACH pH probes/controllers, to install air-actuated solenoid controls for the two gate valves, and to install a SCADA panel for electronic data recording and alarm capabilities for the treatment system associated with DSN 001-1. The electronic recording will replace the wheel chart recorders for permit compliance monitoring. These modifications were made in accordance with Section 22a-430-3(i)(3) of the RCSA. These changes have been implemented at the facility following approval.

### 3.4 Permits for other Discharges

Does the facility have wastewater permits for other discharges?

☐ Yes ☒ No

## **SECTION 4.0 THE ON-SITE WASTEWATER TREATMENT SYSTEM**

The Wastewater Treatment System ("WWTS") consists of a waste neutralization tank, a mixing pit, and a clarifier. The WWTS is designed to automatically adjust pH and precipitate solids. The Supervisory Control and Data Acquisition ("SCADA") system monitors the WWTS, adjusts pH, provides data logging capabilities and real-time alarm notifications, and controls air-actuated gate valves to prevent wastewater that is out of specification for pH from discharging to the sanitary sewer system.

The portion of the facility that houses the anodizing and etching lines consists of 25 tanks (23 used actively). These tanks are used for anodizing, coloring, etching, sealing, rinsing, and waste treatment. The wastewater treatment system receives wastewater through overflow or draining from 7 rinse tanks (Tanks B, C, 5, 10, 12, 17A and 17C). These tanks range in size from 5,345 gallons to 5,695 gallons. During operational periods, the rinse tanks discharge via overflow to drainage troughs surrounding the tanks at a rate of approximately 10 gallons per minute. Tanks 5, 10, 12, 17A, and 17C are also periodically

drained for cleaning and/or preventative maintenance. The frequency of draining varies from weekly to every few months, as needed. Once the rinse water exits the rinse tanks and enters the trough system, water is directed by gravity to a 960-gallon sub-grade mixing pit, where pH monitoring and adjustment occurs.

The WWTS also receives neutralized waste acid solutions from Tank 20, which has a capacity of 11,318 gallons. Tank 20 receives waste acid solutions from either Tank 16 or Tank 18, which is neutralized using sodium hydroxide. Once the waste solution is neutralized, it is pumped via a submersible pump to the sub-grade mixing pit at a rate of approximately 29 gpm.

The mixing pit is equipped with a pH probe, two motor-driven mixers, a backup air mixer, a level alarm, and an automated gate valve. This pit receives wastewater from the seven tanks as well as the waste acid/caustic solution from Tank 20. The pH probe and controller monitor the pH of the wastewater and relay this information to the SCADA system, which automatically controls two, independent chemical feed pumps to add either sulfuric acid or sodium hydroxide to maintain the pH of the wastewater within permitted limits of 6.0-10.0 S.U. Chemical addition is triggered when the pH falls below 7.5 S.U. or above 8.5 S.U. The mixing pit is also equipped with a ProMinent gamma/L metering pump that adds Hubbard Hall's Aquapure I-300 and Aquapure Low Cation Polymer Resin to promote coagulation and settling of solids prior to discharge to the clarifier.

Two digital screens located in the anodizing department display the pH of the wastewater from both the mixing pit's and clarifier's pH probes. An audio-visual alarm is connected to the pH probe controllers that can also be viewed from the anodizing department. When this alarm sounds, the automatic gate valves close.

Treated wastewater flows by gravity from the sub-grade mixing pit to an eight-chamber sub-grade clarifier located outside of the facility adjacent to the boiler room and anodizing/etching line. The clarifier allows for solids to settle from the wastewater prior to discharge to the sanitary sewer system.

See Attachment A for a diagram of the Wastewater Treatment System.

## SECTION 5.0 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### 5.1 Basis for Permit Limits and Conditions

Leed – Himmel Industries, Inc. initiated this discharge prior to August 31, 1982, the metal finishing regulations proposal date. Therefore, the facility is an existing source, subject to the Pretreatment Standards for Existing Sources (PSES) in 40 CFR 433.15.

| BASIS FOR LIMITS, STANDARDS OR CONDITIONS |   | DISCHARGE POINT(S) |
|---|---|--------------------|
| <input checked="" type="checkbox"/>       | Federal Effluent Limitation Guideline (“ELG”) – 40 CFR 403  | DSN 001-1          |
| <input checked="" type="checkbox"/>       | Pretreatment Standards for Existing Sources (“PSES”) 40 CFR 433.15  | DSN 001-1          |
| <input type="checkbox"/>                  | Pretreatment Standards for New Sources (“PSNS”)   |                    |
| <input checked="" type="checkbox"/>       | Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (“RCSA”)  | DSN 001-1          |
| <input checked="" type="checkbox"/>       | Case-by-Case Determination using Best Professional Judgment (“BPJ”) RCSA Sections 22a-430-4(l)(4)(D)(iii) and 22a-430-4(m)  | DSN 001-1          |
| <input checked="" type="checkbox"/>       | Anti-Backsliding – RCSA Section 22a-430-4(l)(4)(D)(vi)  | DSN 001-1          |
| <input type="checkbox"/>                  | Other (i.e. Department File Information, Treatability Manual, Federal Development Document, “Treatability of Oil and Grease Discharged to Publicly Owned Treatment Works”, USEPA, 1975-628-875) |                    |

### 5.2 Local Limits

The Department of Energy and Environmental Protection (“DEEP”) is authorized by the Environmental Protection Agency (“EPA”) to administer the federal pretreatment program at the state-level as allowed by 40 CFR 403.10(e), as both the approval and control authority. EPA provides DEEP that authorization via a modified Memorandum of Agreement (“MOA”) dated June 3, 1981.

In Connecticut, all discharges must comply, at a minimum, with the general and specific prohibitions of the federal pretreatment standards and Section 22a-430-4(t) of the RCSA. To assure such compliance is achieved, state-issued pretreatment permits apply federal categorical and state regulatory standards and effluent limitations. DEEP may also apply additional or more stringent effluent limitations based on Best Professional Judgment pursuant to RCSA Section 22a-430-4(m), including local limits if such local limits were technically based, to mitigate the risk for a pollutant discharge to negatively impact receiving waters and/or the POTW’s operations, including sludge handling or disposal, worker health or safety, or otherwise interfere with the POTW’s ability to comply with its own NPDES permit.

In accordance with 40 CFR 403.5(c)(2), POTWs shall develop and enforce specific effluent limits for industrial users (“IUs”) to both prevent pass through and interference, and to keep



the POTW in compliance with their NPDES permit or sludge use or disposal practices. In the State's MOA with the EPA, the State must "assure that [the] development of specific limits for discharges of prohibited pollutants under 40 CFR 403.5(c) is at least as extensive as would have been required if these POTWs had developed local programs." To comply with this agreement, the State will only utilize local limits developed technically [40 CFR 122.44(j)(2)(ii)] in accordance with EPA's July 2004 Local Limits Development Guidance (EPA 833-R-04-002A) in a state permit. Local limits not incorporated into state pretreatment permits remain enforceable by the municipality as allowed by the local sewer use ordinance.

### 5.3 Slug Loading

Connecticut discharge regulations do not allow what is defined as a "slug loading" in 40 CFR 403.8(f)(2)(vi). The items listed in the definition are regulated as a spill or unplanned release under Section 22a-449 of the RCSA and/or as an unpermitted discharge under Section 22a-430 of the RCSA. The Department's practice of applying instantaneous limits in permits further regulates slug loading. The Department's various standard regulatory requirements governing including, but not limited to, proper operation and maintenance (RCSA Section 22a-430-3(f)); sludge disposal (RCSA Section 22a-430-3(g)); duty to mitigate (RCSA Section 22a-430-3(h)); facility modification and notification (RCSA Section 22a-430-3(i)); monitoring records and reporting requirements (RCSA Section 22a-430-3(j)); bypass (RCSA Section 22a-430-3(k)); effluent limitation violations (RCSA Section 22a-430-3(m)); resource conservation (RCSA Section 22a-430-3(o)); spill prevention and control (RCSA Section 22a-430-3(p)); instrumentation, alarm, flow recorders (RCSA Section 22a-430-3(q)); equalization (RCSA Section 22a-430-3(r)); and the practice of applying monitoring requirements and instantaneous limits in permits further regulate slug loading.

## 5.4 Applicable Effluent Limits Comparison

The following table compares required federal, state, and local limits with those developed using best professional judgement.

### DSN 001-1

| Parameter   | Units | 40 CFR 433.15   |               |               | RCSA Section 22a-430-4(s)(2) |               |               | CWF (Dilution Factor = 0.999) |               |               | BPJ             |               |               |
|---|-------|-----------------|---------------|---------------|------------------------------|---------------|---------------|-------------------------------|---------------|---------------|-----------------|---------------|---------------|
|   |       | Average Monthly | Maximum Daily | Instantaneous | Average Monthly              | Maximum Daily | Instantaneous | Average Monthly               | Maximum Daily | Instantaneous | Average Monthly | Maximum Daily | Instantaneous |
| Aluminum, Total   | mg/L  | NA              | NA            | NA            | NA                           | NA            | NA            | NA                            | NA            | NA            | ----            | ----          | NA            |
| Cadmium, Total  | mg/L  | 0.26            | 0.69          | NA            | 0.1                          | 0.5           | 0.75          | 0.26                          | 0.69          | NA            | NA              | NA            | 0.5           |
| Chromium, Total   | mg/L  | 1.71            | 2.77          | NA            | 1.0                          | 2.0           | 3.0           | 1.71                          | 2.77          | NA            | NA              | NA            | NA            |
| Copper, Total   | mg/L  | 2.07            | 3.38          | NA            | 1.0                          | 2.0           | 3.0           | 2.07                          | 3.38          | NA            | NA              | NA            | NA            |
| Cyanide, Total  | mg/L  | 0.65            | 1.20          | NA            | 0.65                         | 1.20          | NA            | 0.65                          | 1.20          | NA            | NA              | NA            | 1.20          |
| Flow, Day of Sampling   | gpd   | NA              | NA            | NA            | NA                           | NA            | NA            | NA                            | NA            | NA            | ----            | 60,000        | NA            |
| Fluoride  | mg/L  | NA              | NA            | NA            | 20.0                         | 30.0          | 45.0          | NA                            | NA            | NA            | NA              | NA            | 40.0          |
| Lead, Total   | mg/L  | 0.43            | 0.69          | NA            | 0.1                          | 0.5           | 0.75          | 0.43                          | 0.69          | NA            | NA              | NA            | 0.5           |
| Nickel, Total   | mg/L  | 2.38            | 3.98          | NA            | 1.0                          | 2.0           | 3.0           | 2.38                          | 3.98          | NA            | NA              | NA            | NA            |
| pH, Day of Sampling   | S.U.  | NA              | NA            | NA            | NA                           | NA            | NA            | NA                            | NA            | NA            | NA              | NA            | 6.0 - 10.0    |
| Silver, Total   | mg/L  | 0.24            | 0.43          | NA            | 0.1                          | 0.5           | 0.75          | 0.24                          | 0.43          | NA            | NA              | NA            | 0.43          |
| Tin, Total  | mg/L  | NA              | NA            | NA            | 2.0                          | 4.0           | 6.0           | NA                            | NA            | NA            | NA              | NA            | NA            |
| Total Suspended Solids<br>Applies first two years<br>of permit term   | mg/L  | NA              | NA            | NA            | NA                           | NA            | NA            | NA                            | NA            | NA            | ----            | ----          | NA            |
| Total Suspended Solids<br>Applies two years after<br>permit effective date<br>and for remainder of<br>permit term | mg/L  | NA              | NA            | NA            | NA                           | NA            | NA            | NA                            | NA            | NA            | ----            | 100.0         | 150.0         |
| Total Toxic Organics  | mg/L  | NA              | 2.13          | NA            | NA                           | NA            | NA            | NA                            | 2.13          | NA            | NA              | NA            | 2.13          |
| Zinc, Total   | mg/L  | 1.48            | 2.61          | NA            | 1.0                          | 2.0           | 3.0           | 1.48                          | 2.61          | NA            | NA              | NA            | NA            |

**Note:** See Attachment B for the combined waste stream formula (“CWF”) calculations used to adjust limits in 40 CFR 433.15 to account for non-metal finishing wastewaters (boiler blowdown) in accordance with 40 CFR 403.6(e).

If “----” is noted in the limit’s column in the table, this means a limit is not specified but a value must be reported on the Discharge Monitoring Report (“DMR”). If “NA” is noted, this means there is no limit or monitoring required for the associated regulation.

## 5.5 Monitoring Requirements

Generally, monitoring frequencies for parameters are based on the Monitoring Schedule referenced in RCSA Section 22a-430-3(j)(2), which are based on the discharge category and the volume being discharged. However, based on engineering judgment, alternative monitoring frequencies can be determined based on waste stream and process variability, pollutants discharged, effluent limits, discharge frequency, and receiving POTW information. A minimum frequency of semi-annual is used for parameters sampled due to regulatory requirements, but determined not present in the discharge based on the information provided by the applicant, in accordance with 40 CFR 403.12(e)(1).

Sample collection methods are based on the variability of the discharge and parameter being monitored in accordance with RCSA Section 22a-430-3(j)(7).

The following tables provide the sample types, sampling frequencies and additional monitoring rationale for each DSN.

### DSN 001-1

| Sample Type      | Sample Frequency | Parameter              | Comment   |
|------------------|------------------|------------------------|---|
| Composite Sample | Weekly           | Aluminum, Total        | Present in the effluent during the last permit term. Expected source is aluminum forming and extrusion in metal finishing operations.         |
|                  |                  | Chromium, Total        | Present in the effluent during the last permit term. Expected source is use of non-electrolytic chrome acid dip for painting.                 |
|                  |                  | Copper, Total          | Present in the effluent during the last permit term. Expected source is trace presence in aluminum alloys used in metal finishing operations. |
|                  |                  | Fluoride               | Present in the effluent during the last permit term. Expected source is the use of hydrofluoric acid in the desmutting rinse water.           |
|                  |                  | Nickel, Total          | Present in the effluent during the last permit term. Expected source is coating operations using a nickel sealer.                             |
|                  |                  | Tin, Total             | Present in the effluent during the last permit term. Expected source is use of an electrolytic tin coloring dip.                              |
|                  |                  | Total Suspended Solids | Present in the effluent during the last permit term. Expected source is incomplete settling of particulate matter in the clarifier.           |
|                  |                  | Zinc, Total            | Present in the effluent during the last permit term. Expected source is trace presence in aluminum alloys used in metal finishing operations. |
|                  | Semi-annually    | Cadmium, Total         | Monitoring required by 40 CFR 433. Non-detect during the previous permit term.  |
|                  |                  | Lead, Total            | Monitoring required by 40 CFR 433. Non-detect during the previous permit term.  |

| Sample Type         | Sample Frequency | Parameter            | Comment   |
|---------------------|------------------|----------------------|---|
|                     |                  | Silver, Total        | Monitoring required by 40 CFR 433. Non-detect during the previous permit term.  |
| Grab Sample         | Monthly          | Total Toxic Organics | Requirement to either monitor for TTOs or have an approved SMP in accordance with 40 CFR 433. Monitoring waived last permit cycle |
| Grab Sample Average | Semi-annually    | Cyanide, Total       | Monitoring required by 40 CFR 433. Non-detect during the previous permit term.  |

## 5.6 Permit Limits and Monitoring Requirements Development

### **DSN 001-1**

Aluminum, Total: Aluminum monitoring will be carried forward from the previous permit. Aluminum was present in the effluent during the last permit term. There are no applicable limits for aluminum in 40 CFR 433.15 or RCSA Section 22a-430-4(s). Therefore, monitoring only is required.

Total Toxic Organics (TTOs): The maximum daily limit (“MDL”) is applied as the maximum instantaneous limit (“MIL”) in accordance with EPA’s recommendation when a pollutant concentration is not anticipated to have variability. The monitoring frequency of monthly is carried forward in permit reissuance in accordance with RCSA Sections 22a-430-4(l)(4)(D)(iii) and 22a-430-4(m).

## 5.7 Summary of Changes with Reissuance

Removal of DSN 002-1: During the last permit term, DSN 002-1 was permitted to discharge 7,000 gpd of wastewater from hexavalent chromium rinse water batch treatment. However, the Permittee never implemented this process into their operational procedures. As such, no discharges occurred under DSN 002-1 during the last permit term. The continuance of this discharge was not requested during the pretreatment permit reissuance. Therefore, the DSN 002-1 has been removed in permit reissuance in accordance with RCSA Sections 22a-430-4(l)(4)(D)(iii) and 22a-430-4(m).

Compliance Schedule: The reissued permit contains a schedule to achieve compliance with the prohibitions in RCSA Section 22a-430-4(t)(2)(C) and 40 CFR 403.5(b)(3) relating to solids buildup causing interference within the sewer connection to the Greater New Haven Water Pollution Control Authority (“GNHWPCA”). As a part of this compliance schedule, the Permittee will be required to meet total suspended solids limits defined in Section 4, Table A of the permit on or before two years following the effective date of the permit. This change is made in accordance with RCSA Sections 22a-430-4(l)(4)(D)(iii) and 22a-430-4(m) following correspondence and site inspections alongside the GNHWPCA. The WPCA provided a response to the Technical Review Kickoff Letter detailing concerns regarding the accumulation of solids within the sewer collection system connection to the GNHWPCA.

Cadmium, Total: Cadmium was non-detect during the last permit term. In the permit reissuance, the MDL is applied as the MIL in accordance with EPA’s recommendation when a pollutant concentration is not anticipated to have variability. During the last permit

term, the MIL for cadmium was 0.75 mg/L. The updated MIL for cadmium upon permit reissuance is 0.5 mg/L.

Copper, Total: The monitoring frequency for copper has been changed to weekly in the permit reissuance in accordance with the monitoring schedule in RCSA Section 22a-430-3. During the last permit term, the monitoring frequency was semi-annually. Copper was detectable in the effluent during the last permit term.

Cyanide, Total: Cyanide was non-detect during the last permit term. The MDL is applied as the MIL in accordance with EPA's recommendation when a pollutant concentration is not anticipated to have variability. The sample type for cyanide has been updated to a grab sample average from a grab. The use of a grab sample average will yield monitoring results that are more representative of effluent quality than that of a single grab sample.

Fluoride: The monitoring frequency for fluoride has been changed to weekly in the permit reissuance in accordance with the monitoring schedule in RCSA Section 22a-430-3. During the last permit term, the monitoring frequency was semi-annually. Fluoride was detectable in the effluent during the last permit term. The MIL of 40.0 mg/L is carried forward from the previous permit issuance in accordance with anti-backsliding regulations, Section 22a-430-4(1)(4)(D)(vi) of the RCSA.

Lead, Total: Lead was non-detect during the last permit term. In the permit reissuance, the MDL is applied as the MIL in accordance with EPA's recommendation when a pollutant concentration is not anticipated to have variability. During the last permit term, the MIL for lead was 0.75 mg/L. The updated MIL for lead upon permit reissuance is 0.5 mg/L.

Silver, Total: Silver was non-detect during the last permit term. In the permit reissuance, the MDL is applied as the MIL in accordance with EPA's recommendation when a pollutant concentration is not anticipated to have variability. During the last permit term, the MIL for silver was 0.64 mg/L. The updated MIL for silver upon permit reissuance is 0.43 mg/L.

Total Suspended Solids (TSS): Total suspended solids monitoring will be carried forward from the previous permit. Additionally, the Permittee will be required to meet a maximum daily limit of 100.0 mg/L and an instantaneous limit of 150.0 mg/L for TSS on or before two (2) years following the effective date of the permit. These limits align with the TSS limits applied to other metal finishing discharges to prevent solid or viscous waste from causing or threatening obstruction of flow in the sanitary sewer collection system and prevent interference in accordance with RCSA Section 22a-430-4(t)(2)(C) and 40 CFR 403.5(b)(3).

Zinc, Total: The monitoring frequency for zinc has been changed to weekly in the permit reissuance in accordance with the monitoring schedule in RCSA Section 22a-430-3. During the last permit term, the monitoring frequency was semi-annually. Zinc was detectable in the effluent during the last permit term.

## SECTION 6.0 E-REPORTING

The Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR, in satisfaction of the DMR submission requirement of Section 5(D) of this permit.

DMRs shall be submitted electronically no later than the last day of the month following the required sampling 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. 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: <https://npdes-ereporting.epa.gov/net-netdmr>.

## SECTION 7.0 PUBLIC PARTICIPATION PROCEDURES

### 7.1 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 Ryan Bellucci, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106 5127 or [ryan.bellucci@ct.gov](mailto:ryan.bellucci@ct.gov) and [DEEP.Pretreatment@ct.gov](mailto:DEEP.Pretreatment@ct.gov). 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.

### 7.2 PETITIONS FOR HEARING

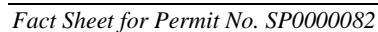
Petitions for a hearing shall be submitted within thirty (30) days from the date of publication of this public notice and should include the application number noted above and also identify a contact person to receive notifications. Petitions should also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. The Office of Adjudications will accept electronically-filed petitions for hearing in addition to those submitted by mail or hand-delivered. Petitions with required signatures may be sent to [deep.adjudications@ct.gov](mailto:deep.adjudications@ct.gov); those mailed or delivered should go to the DEEP Office of Adjudications, 79 Elm Street, Hartford, CT 06106. If the signed original petition is only in an electronic format, the petition must be submitted with a statement signed by the petitioner that the petition exists only in that form. Original petitions that were filed electronically must also be mailed or delivered to the Office of Adjudications within 30 days of electronic submittal. Additional information at [www.ct.gov/deep/adjudications](http://www.ct.gov/deep/adjudications).

The Connecticut Department of Energy and Environmental Protection is an Affirmative

Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). If you are seeking a communication aid or service, have limited proficiency in English, wish to file an ADA or Title VI discrimination complaint, or require some other accommodation, including equipment to facilitate virtual participation, please contact the DEEP Office of Diversity and Equity at 860-418-5910 or by email at [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov). Any person needing an accommodation for hearing impairment may call the State of Connecticut relay number - 711. In order to facilitate efforts to provide accommodation, please request all accommodations as soon as possible following notice of any agency hearing, meeting, program, or event.

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## Attachment B: Combined Waste Stream Formula

| Discharge Source                   | Average Categorical Flow (gpd) | Average Non-Categorical Flow (gpd) |
|------------------------------------|--------------------------------|------------------------------------|
| Caustic Cleaning [40 CFR 433]      | 4,150                          | 0                                  |
| Acid Anodizing [40 CFR 433]        | 4,150                          | 0                                  |
| Tin Coloring [40 CFR 433]          | 4,150                          | 0                                  |
| Nickel Sealing [40 CFR 433]        | 4,150                          | 0                                  |
| Contact Cooling Water [40 CFR 433] | 300                            | 0                                  |
| Boiler Blowdown                    | 0                              | 15                                 |
| Assumed Total Average Flow         | 16,915                         |                                    |
| Dilution Factor                    | 0.999                          |                                    |

The Combined Waste Stream Formula (“CWF”) was applied to determine limits in DSN 001-1 in accordance with 40 CFR 403.6(e). The formula accounts for the comingling of categorical and non-categorical waste sources prior to the sampling location. The CWF is based on normal daily operations where all flows are assumed to be at their daily average.