

**PRETREATMENT PERMIT**  
issued to

UniMetal Surface Finishing, LLC  
135 South Main Street  
Thomaston, Connecticut 06787

**Location Address:**

135 South Main Street  
Thomaston, Connecticut 06787

Facility ID: **140-033**

Permit ID: **SP0002461**

Permit Expires: **DRAFT**

**SECTION 1: GENERAL PROVISIONS**

- (A) This permit is issued 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 (“MOA”) 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.
- (B) **UNIMETAL SURFACE FINISHING, LLC** (“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, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA. Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.
- (D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under Section 22a-438 or 22a-131a of the CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.
- (E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Energy and Environmental Protection (“the Commissioner”). To request such approval, the Permittee and proposed Transferee shall register such proposed transfer with the Commissioner at least 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 or more restrictive 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 Regulations of Connecticut State Agencies.

## **SECTION 2: DEFINITIONS**

- (A) The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the CGS and Section 22a-430-3(a) and 22a-430-6 of the RCSA.
- (B) In addition to the above the following definitions shall apply to this permit:
- “---” in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR.
- “Average Monthly Limit” means the maximum allowable “Average Monthly Concentration” as defined in Section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g., mg/l). Otherwise, it means “Average Monthly Discharge Limitation” as defined in Section 22a-430-3(a) of the RCSA.
- “Daily Concentration” means the concentration of a substance as measured in a daily composite sample, or the arithmetic average of all grab sample results defining a grab sample average.

“Daily Quantity” means the quantity of waste generated during an operating day.

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

“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.

“Range During Sampling” or “RDS”, as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of: 1) a Composite Sample, or 2) a Grab Sample Average. For those permittees with continuous monitoring and recording pH meters, Range During Sampling shall mean the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

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

### **SECTION 3: COMMISSIONER'S FINAL DETERMINATION**

- (A) The Commissioner has made a final determination and found that the system installed for the treatment of the discharge, will protect the waters of the state from pollution. The Commissioner's final determination is based on Application No. 201207428 for permit issuance received on December 5, 2012 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.
- (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 Connecticut General Statutes 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 Connecticut General Statutes or regulations adopted thereunder which are then applicable.

### **SECTION 4: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

- (A) The discharges shall not exceed and shall otherwise conform to specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below.
- (B) All samples shall be comprised of only those wastewaters identified in the tables. 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.

**Table A**

**Discharge Serial Number:** 201-1

**Monitoring Location:** 1

**Wastewater Description:** Tumbling wastewaters from Departments 1, 2, 3, and 4; Brite dip rinsewaters from Department 1

**Monitoring Location Description:** Sampling from the Final Discharge Tank; Flow measured from meter on the effluent discharge pipe

**Discharge is to:** Town of Thomaston Water Pollution Control Facility

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		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
Arsenic, Total	mg/L	---	---	Monthly	Daily Composite	NA	NR	Grab
Cadmium, Total	mg/L	0.022	0.044	Semi-annually	Daily Composite	0.066	NR	Grab
Chromium, Total	mg/L	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab
Copper, Total	mg/L	0.46	0.93	Weekly	Daily Composite	1.4	NR	Grab
Cyanide, Amenable	mg/L	0.1	0.2	Weekly	Grab Sample Average	0.3	NR	Grab
Cyanide, Total	mg/L	0.65	1.20	Weekly	Grab Sample Average	1.80	NR	Grab
Flow Rate (Average Daily) <sup>1</sup>	gpd	28,000	NA	Continuous	Total Daily Flow	NA	NR	NA
Flow, Maximum during 24 hour period <sup>1</sup>	gpd	NA	30,000	Continuous	Total Daily Flow	NA	NR	NA
Flow (Day of Sampling)	gpd	---	30,000	Weekly	Total Daily Flow	NA	NR	NA
Lead, Total	mg/L	0.1	0.5	Weekly	Daily Composite	0.75	NR	Grab
Nickel, Total	mg/L	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab
Oil & Grease	mg/L	---	---	Monthly	Grab Sample Average	NA	NR	Grab
pH, Day of Sampling	SU	NA	NA	NR	NA	6.0 to 10.0	Weekly	RDS
pH, Minimum	SU	NA	NA	NR	NA	6.0	Continuous	Continuous
pH, Maximum	SU	NA	NA	NR	NA	10.0	Continuous	Continuous
Phosphorus, Total	mg/L	---	---	Monthly	Daily Composite	NA	NR	NA
Silver, Total	mg/L	0.10	0.29	Semi-annually	Daily Composite	0.44	NR	Grab
Tin, Total	mg/L	2.0	4.0	Weekly	Daily Composite	6.0	NR	Grab
Total Suspended Solids	mg/L	---	---	Monthly	Daily Composite	NA	NR	Grab
Total Toxic Organics <sup>3</sup>	mg/L	NA	2.13	Semi-annually	Grab Sample Average	3.20	NR	Grab
Zinc, Total	mg/L	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab

**Table A 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> Monitoring for Total Toxic Organics shall be performed in accordance with Paragraph 5(G) of this permit.

**Table A Remark:**

1. Abbreviations used for units are as follows: gpd means gallons per day; mg/L means milligrams per liter; SU means Standard Units. Other abbreviations are as follows: NA means “Not Applicable”; NR means “Not Reportable” (unless sampling is conducted per Paragraph 4(C)); RDS means “Range During Sampling”.

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## 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 Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance at the following address. 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 this address by the last day of the month following the month in which samples are taken.

Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division (Attn: DMR Processing)  
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, etc.) 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: 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 discharge monitoring reports (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:
  - (1) *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 discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department to initiate the NETDMR subscription process for electronic submission of Discharge Monitoring Report (DMR) information. A copy of the NetDMR subscriber form is available on the Department's website. 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.
  - (2) *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 electronically submit 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 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>.

- (3) 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 a 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.
- (4) 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)

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

- (F) Copies of all DMRs shall be submitted concurrently to the local Water Pollution Control Authority (“WPCA”) involved in the treatment and collection of the permitted discharge.
- (G) For Total Toxic Organics (TTO) monitoring, in accordance with 22a-430-4(l) of the RCSA and 40 CFR 433 (Metal Finishing), 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 Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) within 30 days of the exceedance.
- (B) The Permittee shall immediately notify the Bureau of Materials Management and Compliance Assurance and the local WPCA of all discharges that could cause problems to the Publicly Owned Treatment Works (“POTW”), including but not limited to slug loadings of pollutants which may cause a violation of the POTW’s NPDES permit, or which may inhibit or disrupt the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- (C) In addition to the notification requirements specified in Section 1B of this permit, if any sampling and analysis of the discharge performed by the Permittee indicates a violation of limits specified in Section 4 of

this permit, the Permittee shall notify the Bureau of Materials Management and Compliance Assurance within 24 hours of becoming aware of the violation.

## SECTION 7: COMPLIANCE CONDITIONS

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 months were in significant noncompliance with the provisions of this permit. For the purposes of this provision, a Permittee is in significant noncompliance if its violation(s) meet(s) one or more of the following criteria:

- **Chronic violations:** Those in which sixty-six (66%) percent or more of all measurements taken for the same pollutant parameter during a six-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 (33%) or more of all of the measurements taken for the same pollutant parameter during a six-month period equal or exceed the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s) multiplied by 1.4 for BOD, TSS, fats, oil, and grease, or 1.2 for all other pollutants except pH.
- **Monitoring Reports:** Failure to provide, within 45 days after the due date, required reports such as DMRs.
- **Compliance Schedule:** Failure to meet within 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.
- **BMPs:** Any other violation or group of violations, which may include a violation of Best Management Practices, which the Department determines will adversely affect the operation or implementation of the pretreatment program.

## SECTION 8: SPECIAL CONDITION

- (A) On or before ninety (90) days after issuance of this permit, the Permittee shall: *1) collect a representative sample of the DSN 201-1 effluent from the approved sampling location; 2) have the effluent analyzed by a Connecticut-certified laboratory for all pollutants listed in Tables 1 and 2 of Attachment O of the Permit Application for Wastewater Discharges and for any pollutants listed in Tables 3 and 4 of Attachment O of the Permit Application for Wastewater Discharges which are known or suspected present in the effluent; 3) submit to the Commissioner, a complete and certified Attachment O of the Permit Application for Wastewater Discharges which shall include the results for all pollutants listed in Tables 1 and 2 and for any pollutants listed in Tables 3 and 4 which are known or suspected present in the wastewater. Any and all laboratory data shall also be submitted with the completed/certified Attachment O. The test methods used to analyze the subject parameters shall be approved under 40 CFR 136 and shall be methods which will allow for the lowest reasonable detection limits. Based on the data provided on the Attachment O, this permit may be modified in accordance with RCSA Section 22a-430-4(p)(5)(B).*
- (B) **Dates.** The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the

Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this section of the permit means calendar day. Any document or action which is required by this section of the permit to be submitted, or performed, by a date which falls on, Saturday, Sunday, or a Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or Connecticut or federal holiday.

- (C) **Notification of noncompliance.** In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates, which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.
- (D) **Notice to Commissioner of changes.** Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.
- (E) **Submission of documents.** Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Christine Gleason, Sanitary Engineer  
Department of Energy and Environmental Protection  
Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division  
79 Elm Street  
Hartford, CT 06106-5127

This permit is hereby issued on

**DRAFT**

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MACKY MCCLEARY  
Deputy Commissioner

MM:CMG  
copy: Town of Thomaston WPCF

**FACT SHEET**  
**SPDES PERMIT ISSUANCE**  
**OCTOBER 2013**

<b>APPLICANT</b>	<i>UNIMETAL SURFACE FINISHING, LLC</i>
<b>SPDES PERMIT NO.</b>	<i>SP0002461</i>
<b>APPLICATION NO.</b>	<i>201207428</i>
<b>DATE APPLICATION RECEIVED</b>	<i>December 5, 2012</i>
<b>FACILITY ID.</b>	<i>140-033</i>
<b>LOCATION ADDRESS</b>	<i>135 South Main Street Thomaston, Connecticut 06787</i>
<b>FACILITY CONTACT</b>	<i>Jim Murphy, Corporate Environmental Manager Office Phone: (860) 283-0271 x 250 FAX: (860) 283-8589 <a href="mailto:jmurphy@UniMetal.com">jmurphy@UniMetal.com</a></i>
<b>MAILING ADDRESS</b>	<i>P.O. Box 902 Thomaston, Connecticut 06787</i>
<b>DMR CONTACT</b>	<i>Jim Murphy</i>
<b>BILLING CONTACT</b>	<i>Jim Murphy</i>
<b>PERMIT TERM</b>	<i>5 years</i>
<b>PERMIT CATEGORY</b>	<i>Significant Industrial User:</i> <input checked="" type="checkbox"/> <i>Subject to Categorical Pretreatment Standard(s):</i> <b><u>40 CFR 433</u></b> OR <input type="checkbox"/> <i>Discharges an average of 25,000 gpd or more of process wastewater</i> <input type="checkbox"/> <i>Contributes 5% or more of the hydraulic/organic capacity of the POTW</i> <input type="checkbox"/> <i>Designated as SIU on the basis of its operations</i>
<b>SIC CODE(S)</b>	<i>3471 (Electroplating, Plating, Polishing, Anodizing &amp; Coloring)</i>
<b>PERMIT TYPE</b>	<i>Issuance</i>
<b>OWNERSHIP</b>	<i>Private</i>
<b>POTW THAT RECEIVES THE DISCHARGE</b>	<i>Town of Thomaston Water Pollution Control Facility [Naugatuck River]</i>
<b>DEP STAFF ENGINEER</b>	<i>Christine Gleason (860/424-3278) <a href="mailto:christine.gleason@ct.gov">christine.gleason@ct.gov</a></i>

**PERMIT FEES**

*Application Filing Fee: \$1,300. Paid on December 5, 2012*

*Application Processing Fee: \$13,650 (Invoice 217530). Paid on November 1, 2013*

**Annual Fee:**

DISCHARGE CODE	WASTEWATER CATEGORY (per 22a-430-7)	MAXIMUM GPD or CATEGORY	DSN	ANNUAL FEE (per 22a-430-7)
501035Z	<i>Metal Finishing to POTW (Tumbling wastewaters from Department 1, 2, 3 and 4; Brite dip rinsewaters from Department 1)</i>	>10,000	201-1	8,425.00
<b>TOTAL</b>				<b>\$8,425.00</b>

## I. APPLICANT

On December 5, 2012, the Department of Energy and Environmental Protection (“Department”) received an application (Application No. 201207428) from UniMetal Surface Finishing, LLC (“UniMetal”, “Applicant”) in Thomaston seeking a SPDES permit for the authorization of the discharge of treated metal finishing wastewater. This application was noticed in the *Republican-American* on December 10, 2012. On January 17, 2013, the application was determined to be administratively sufficient.

The applicant seeks authorization for the following:

DSN	PROPOSED AVERAGE MONTHLY FLOW (gpd)	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE	DISCHARGE TO
201-1	20,000	30,000	Tumbling wastewaters from Department 1, 2, 3 and 4; Brite dip rinsewaters from Department 1	Equalization, Precipitation, Flocculation, Clarification, pH Adjustment	Town of Thomaston WPCF

## II. BACKGROUND

UniMetal is a job shop that is engaged in various types of metal finishing operations. It has historically discharged its treated metal finishing wastewater into the Naugatuck River by way of a NPDES permit (CT0025305)<sup>1</sup>. UniMetal now intends to re-direct some of its metal finishing wastewater (i.e., wastewater from Departments 1, 2, 3, and 4) into a separate wastewater treatment system and direct the treated effluent from the system into the sanitary sewer. This effluent will be discharged through one sewer connection point Discharge Serial Number (“DSN”) 201-1 to the Town of Thomaston’s Water Pollution Control Facility by way of Sewer Discharge Permit No. SP0002461.

## III. SITE ISSUES RELATED TO THE APPLICATION

### A. FEDERALLY-RECOGNIZED INDIAN LAND

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

### B. COASTAL AREA/COASTAL BOUNDARY

The activity is not located within a coastal boundary as defined in CGS 22a-94(b).

### C. ENDANGERED SPECIES

The June 2012 Natural Diversity Database map indicates that the project site is not located within an area identified as a habitat for extant populations of federal or state Endangered, Threatened or Special-Concern Species.

### D. AQUIFER PROTECTION AREAS

The project site is located within a town required to establish Aquifer Protection Areas, but the site is not located within a protected area identified on a Level A or B map (October 30, 2012 map).

### E. CONSERVATION OR PRESERVATION RESTRICTION

As provided in the permit application, the property is not subject to a conservation or preservation restriction.

<sup>1</sup> In 1985, UniMetal, then known as Quality Rolling and Deburring, received a permit from the Department to discharge its cleaning and tumbling wastewaters and boiler blowdown into the sanitary sewer. In 1992, these wastewaters were directed out of the sewer discharge permit and into the NPDES permit.

**F. MS4**

The application does not include stormwater discharges to a Medium Municipal Separate Storm Sewer System (MS4).

**G. PUBLIC WATER SUPPLY SHED**

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

**IV. NATURE OF THE BUSINESS GENERATING THE DISCHARGE**

UniMetal is in the business of metal finishing. The SIC code, as provided by the applicant, is 3471 (Electroplating, Plating, Polishing, Anodizing & Coloring)

**V. FACILITY DESCRIPTION**

UniMetal is located in a mixed commercial/industrial area on the Naugatuck River in Thomaston. Its operations are conducted in leased space in the Seth Thomas Clock Building. [See Attachments 1-3 for site detail]. This property is owned by GLC Associates One, L.L.C. Until 2011, UniMetal had been known as Quality Rolling and Deburring Company (“QRD”). As the result of a merger between QRD and Donham Craft, QRD changed its name to UniMetal Surface Finishing, LLC. UniMetal’s operations and activities at the site are generally the same as those of QRD’s.

UniMetal is a metal finishing job shop. It performs metal finishing of machined parts for the aerospace, automotive, telecommunications, cosmetics, defense, electronics, marine, and medical industries. The primary basis metals processed on-site include steel and brass; smaller amounts of other metals, including aluminum, copper, and specialized alloys, are also finished on-site. Water used in the on-site operations is either city water or groundwater supplied by one on-site production well. UniMetal’s metal finishing operations on-site include: cleaning, degreasing, stripping, passivation, deburring, electroplating (i.e., chromium, copper, nickel, tin, gold, and silver), brite dipping, black oxide, and phosphating. Currently all wastewaters from UniMetal’s metal finishing operations are directed into a treatment system and discharged into the Naugatuck River by way of a NPDES permit. However, UniMetal now intends to direct the wastewaters from Departments 1, 2, 3 and 4 into a separate wastewater treatment system and convey those treated wastewaters into the sanitary sewer. The wastewaters associated with these departments include the following:

- **Department 1** (Copper-Brass Brite Dip): This department includes a Brite Dip line, a tumbling operation, and a line for applying a rust preventative. The wastewaters associated with the Brite Dip and tumbling operations will be directed into the SPDES treatment system. Any wastewaters associated with the rust preventative line are containerized and shipped off-site.
- **Department 2** (Tumbling, Cleaning, Wet Rolling): This department includes a barrel tumbling operation and a rust preventative operation. The wastewaters associated with the tumbling operation will be directed into the SPDES treatment system. Any wastewaters associated with the rust preventative line are containerized and shipped off-site.
- **Department 3** (Dedicated Nickel Gem Line): This department includes a nickel plating line and a barrel tumbling operation. The wastewaters associated with the barrel tumbling operation will be directed into the SPDES treatment system. The wastewaters associated with the nickel plating line will continue to be directed into the NPDES treatment system.
- **Department 4** (Tumbling, Cleaning): The department includes a barrel tumbling operation. The wastewaters associated with this operation will be directed into the SPDES treatment system.

[See Attachments 4-8 for the line diagram and process schematics].

## VI. THE ON-SITE WASTEWATER TREATMENT SYSTEM

The wastewaters from Departments 1, 2, and 4 drain by gravity to a collection pit (Pit #2) at the south end of their common room. Wastewater from Department 3 drains by gravity to a collection sump at the south end of its room. The wastewaters from these sumps are conveyed into the SPDES treatment system and treated as follows:

**Equalization:** The equalization tank (TK-1S) is designed to allow the wastewaters to combine together so that the waste stream characteristics are uniformly distributed.

**Pretreatment:** Following equalization, the wastewater is directed to a Pretreatment tank (TK-2S) where it is treated with calcium chloride, ferrous sulfate, and lime.

**Neutralization:** The pretreated wastewater flows to the Neutralization Tank (TK-3S) where the pH of the wastewater is raised in order to precipitate the metal hydroxides from the wastewater.

**Flocculation:** The pH adjusted wastewater flows to the Flocculation Tank (TK-4S) where a polymer (CP-9900) is added to the wastewater in order to agglomerate the precipitated metal hydroxide into larger particles.

**Clarifier:** The wastewater from the flocculation tank flows to the Clarifier (TK-5S) where the solids are allowed to settle out of the wastewater. The solids that accumulate on the bottom of the clarifier are conveyed to a Sludge Collection Tank (TK-8S), and then to two Sludge Holding Tanks (TK-9SA and TK-9SB) which feed a filter press.

**Final pH Adjustment:** The overflow from the Clarifier is directed to a Final pH Adjustment Tank (TK-6S) where the pH of the effluent is adjusted to meet the permit limits. If necessary, a defoamer (Omega SAF-10) will be added to the wastewater in the Final pH Adjustment Tank. Wastewater from the Final pH Adjustment Tank is conveyed to a Final Discharge Tank (TK-7S). Prior to discharge to the sanitary sewer, the effluent is sampled and the flow is measured.

The wastewater treatment system is a continuous flow system that will operate 6 days per week during first and second shift. The maximum operating hours per day will be 18. The permitted average monthly flow will be 20,000 gpd and the permitted maximum daily flow will be 30,000 gpd. The design flow of the treatment system is 60 gpm; it is expected that the system will be run at an average flow rate of 30 gpm. There will be a discharge from the system approximately 8 hours per day.

[See Attachment 9 for a schematic of the wastewater treatment system].

## VII. EFFLUENT QUALITY DATA

This is a new discharge so no monitoring data exists. The Permittee has had some bench scale analysis performed relative to the new treatment system in order to project what the effluent quality will be. See Attachment 10 for these projections.

## VIII. EFFLUENT & REPORTING VIOLATIONS

None. This is a new discharge.

## IX. OUTSTANDING ENFORCEMENT (RELATED TO WASTEWATER DISCHARGES):

None. This is a new discharge.

## X. SPILL HISTORY

No spills in the last five years.

**XI. EFFLUENT GUIDELINES**

UniMetal is a job shop that has been, and is currently engaged in, electroplating and other metal finishing operations. Because it performs the “core” and “ancillary” operations identified in 40 CFR 433.10, its discharge is regulated as a metal finishing discharge under 40 CFR 433. Numerous changes have been made to the facility over the years, including those related to the process wastewaters that are the subject of this permit. A facility’s operations meet the definition of a new source if it has made changes to the configuration and capabilities of its operations (i.e., it installed new lines, rebuilt or moved lines, converted existing lines to do new operations, etc.). Because UniMetal made changes to its operation after the deadline date of August 31, 1982, the Pretreatment Standards for New Sources (PSNS) at 40 CFR 433 (Metal Finishing) apply to the discharge, DSN 201-1.

**XII. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

RESOURCES USED TO DRAFT PERMIT			DISCHARGE POINT(S)
<input checked="" type="checkbox"/>	Federal Effluent Limitation Guideline (ELG)	40 CFR 433 (Metal Finishing)	DSN 201-1
<input type="checkbox"/>	Performance Standards		
<input type="checkbox"/>	Federal Development Document		
<input type="checkbox"/>	Treatability Manual		
<input type="checkbox"/>	Department File Information		
<input checked="" type="checkbox"/>	Other	40 CFR 403.3(m) “UniMetal Local Limits Study”, Aug 2013	DSN 201-1

BASIS FOR LIMITS, STANDARDS OR CONDITIONS		REGULATION/SOURCE	DISCHARGE POINT(S)
<input type="checkbox"/>	Pretreatment Standards for Existing Sources (PSES)		
<input checked="" type="checkbox"/>	Pretreatment Standards for New Sources (PSNS)	40 CFR 433.17	DSN 201-1
<input checked="" type="checkbox"/>	Case-by-Case Determination using Best Professional Judgment (BPJ)	40 CFR 403 RCSA 22a-430-4(s)(2) “UniMetal Local Limits Study”, Aug 2013	DSN 201-1

**A. WASTESTREAMS AUTHORIZED FOR DISCHARGE UNDER DSN 201-1:** Tumbling wastewaters from Department 1, 2, 3 and 4; Brite dip rinsewaters from Department 1

**B. MONITORING PARAMETERS & LIMITS:** The discharge, DSN 201-1, is subject to the limits at 40 CFR 433.17 and RCSA Section 22a-430-4(s)(2). The limits at 40 CFR 433.17 apply to process wastewaters. Because the discharge consists of only process wastewaters, the limits at 40 CFR 433.17 and RCSA 22a-430-4(s) require no adjustment for non-process wastewaters.

In March 2013, the Town of Thomaston (“Thomaston”) indicated that inclusion of the federal/state metal finishing permit limits in UniMetal’s SPDES permit would cause the Thomaston Water Pollution Control Facility to exceed its permit limits. Thomaston then undertook a study in May/June 2013 designed to evaluate the pollutant levels under which its facility could accept UniMetal’s discharge while still meeting its NPDES permit limits. A draft report summarizing the results of the study was provided to the Department in June 2013. On August 20, 2013, the Department sent a letter to Thomaston identifying several deficiencies in the draft report. [See Attachment 11]. A final version of this study was submitted in August 2013 entitled, “UniMetal Local Limits Study”, August 2013 (“Study”). The items noted in the Department’s August 20, 2013 letter were not addressed in the final Study or in a subsequent submission. Therefore, the information provided in the Study, although incomplete, was used to determine if any user-specific limits would need to be incorporated into the permit. [See Attachment 12].

Below is a summary of the limits applicable to UniMetal’s discharge, DSN 201-1. The table below also includes a summary of the limits determined from the Study:

**DSN 201-1**

PARAMETER	REASON FOR INCLUSION	40 CFR 433.17		RCSA 22a-430-4(s)(2)		BPJ (Derived from Data Provided in the Town's Study)	
		Average Monthly (mg/L)	Maximum Daily (mg/L)	Average Monthly (mg/L)	Maximum Daily (mg/L)	Average Monthly (mg/L)	Maximum Daily (mg/L)
Arsenic, Total	EXPECTED IN DISCHARGE						
Cadmium, Total	METAL FINISHING	0.07	0.11	0.07	0.11	0.022	0.044
Chromium, Total	METAL FINISHING	1.71	2.77	1.0	2.0		19.3
Copper, Total	METAL FINISHING	2.07	3.38	1.0	2.0	0.46	0.93
Cyanide, Total	METAL FINISHING	0.65	1.20	0.65	1.2		2.67
Cyanide, Amenable	METAL FINISHING	0.32	0.86	0.1	0.2		
Lead, Total	METAL FINISHING	0.43	0.69	0.1	0.5	0.10	0.50
Nickel, Total	METAL FINISHING	2.38	3.98	1.0	2.0		3.04
Oil & Grease, Total	EXPECTED IN DISCHARGE						
Phosphorus, Total	EXPECTED IN DISCHARGE						
Silver, Total	METAL FINISHING	0.24	0.43	0.1	0.5	0.14	0.29
Tin, Total	EXPECTED IN DISCHARGE			2.0	4.0		
Total Suspended Solids	EXPECTED IN DISCHARGE						
Total Toxic Organics	METAL FINISHING		2.13				
Zinc, Total	METAL FINISHING	1.48	2.61	1.0	2.0		44.6

NOTES: 1) Instantaneous limits in the permit are 1.5 times the maximum daily limit; 2) Average Monthly limits for cadmium, copper, and silver were determined using the multipliers in Table 5-2 of the Technical Support Document for Water Quality Based Toxics Control, 1991 using a CV=0.6 and n=4. Using the values in this table, the maximum daily limit is multiplied by 0.498 to get the average monthly limit.

Where more than one limit applies, the more stringent of the limits was selected as the permit limit.

- C. **MONITORING FREQUENCY:** The *Monitoring Schedule* set forth in RCSA 22a-430-3 prescribes a frequency of “weekly” for DSN 201-1 based on the category of discharge (“Metal Finishing”) and the average permitted monthly flow (>10,000 gpd). Therefore, the metal finishing monitoring parameters that are expected to be present in the discharge will be monitored weekly; monitoring for the other parameters is determined on a case-by-case basis.

**XIII. SPECIAL CONDITION**

DSN 201-1 is a new discharge. Consequently, UniMetal has provided Attachment O data based on “projected” effluent quality. Within ninety days of permit issuance, UniMetal must provide Attachment O data based on actual effluent quality. The specific requirements regarding the collection, analysis, and submission of this effluent data is included in Paragraph 8 of the permit.



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

**TENTATIVE DETERMINATION**

The Commissioner of Energy and Environmental Protection hereby gives notice of a tentative decision to issue a permit based on an application submitted by **UNIMETAL SURFACE FINISHING, LLC** ("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 the proposed system to treat the discharge will protect the waters of the state from pollution and the Commissioner proposes to issue a permit for the discharge to the sanitary sewer.

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

**APPLICANT'S PROPOSAL**

UniMetal Surface Finishing, LLC will be authorized to discharge up to 30,000 gallons per day of wastewater associated with its metal finishing operations into the Town of Thomaston's Water Pollution Control Facility.

The name and mailing address of the permit applicant are: UniMetal Surface Finishing, LLC, P.O. Box 902, Thomaston, Connecticut 06787.

The activity takes place at: 135 South Main Street, Thomaston, Connecticut.

**REGULATORY CONDITIONS**

Types of Treatment

*DSN 201-1*: Equalization; Chemical Precipitation; Flocculation; Clarification; Neutralization

Effluent Limitations

This permit contains effluent limitations consistent with: 1) Federal Pretreatment Standards for New Sources; 2) Section 22a-430-4(s) of the Regulations of Connecticut State Agencies; 3) a Case-by-Case determination using the criteria of Best Professional Judgement.

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 substances: metals, cyanide, volatile/semi-volatile organics (as Total Toxic Organics).

**COMMISSIONER'S AUTHORITY**

The Commissioner of Energy and Environmental Protection 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. 201207428

PERMIT ID NO. SP0002461

FACILITY ID NO. 140-033

Interested persons may obtain copies of the application from Jim Murphy, Corporate Environmental Manager, UniMetal Surface Finishing LLC, 135 South Main Street, Thomaston, Connecticut (Phone: 860-283-0271 x250).

The application is available for inspection by contacting Christine Gleason at (860) 424-3278 at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 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 decision to approve or deny any application, the Commissioner shall consider written comments on the application from interested persons that are received within 30 days of this public notice. Written comments should be directed to Christine Gleason, 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 persons. Notice of any public hearing shall be published at least 30 days prior to the hearing.

Petitions for a hearing should include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original petitions must be *mailed or delivered* to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, 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 INGLESE, JR., Director  
Water Permitting and Enforcement Division  
Bureau of Materials Management and Compliance Assurance

Dated:

**DEC 24 2013**