



Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

Environmental Permitting Fact Sheet

General Permit for the Discharge of Wastewaters from Categorical Industrial Users to a Publicly Owned Treatment Works (POTW)

Permit Overview

This general permit is issued under the authority of, and administered by the Department of Energy and Environmental Protection's (DEEP's) Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division. The DEEP uses both individual and general permits to regulate wastewater discharge activities. Individual permits are issued directly to an applicant, whereas general permits are issued to authorize similar activities by one or more applicants throughout a prescribed geographic area. Authorization of an activity under a general permit is governed by that general permit. A general permit sets terms and conditions for conducting an activity which, when complied with, are protective of the environment. General permits represent a streamlined process to permit specific activities and are more cost-effective for both the DEEP and the registrant.

This general permit applies to discharges of metal finishing wastewaters (as defined therein), either discharged directly to Publicly Owned Treatment Works (POTWs) or hauled there.

"POTW" means publicly owned treatment works as defined by section 22a-430-3(a) of the Regulations of Connecticut State Agencies.

"Metal Finishing Wastewater" means wastewater subject to the provisions of 40 CFR 413 (Electroplating Point Source Category) or 40 CFR 433 (Metal Finishing Point Source Category).

Authorizing Statutes

Section 22a-430b of the General Statutes.

Discharges authorized by this general permit?

Any person who initiates, originates, creates, or maintains a discharge of metal finishing wastewater to a POTW either directly by a properly licensed transporter in accordance with Section 5(e)(4) of the general permit or via sanitary sewer and, in accordance with Section 4 of this general permit, submits a completed registration and fee and

- (1) in accordance with Section 4(g) of this general permit, receives an Approval of Registration from the DEEP; and
- (2) such activity is consistent with all applicable goals and policies in section 22a-92 of the General Statutes, and will not cause adverse impacts to

coastal resources as defined in section 22a-93 of the General Statutes;

- (3) such activity does not threaten the continued existence of any species listed pursuant to section 26-306 of the General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species; and
- (4) the registrant has certified in writing to the commissioner that a completed copy of the registration has been submitted to the applicable POTW Authority and the registrant has received an approval for connection to the respective POTW from such authority.

Consistent with 40 CFR 403.8(f)(2), a general permit may not be utilized for any metal finishing discharge whose limits are based on a Combined Wastestream Formula. Utilization of a Combined Wastestream Formula is necessary when a federal categorical discharge is mixed with discharges other than those covered by the respective category prior to an appropriate compliance monitoring location. Therefore, facilities with boiler blowdown, non-contact cooling water, water treatment wastewater and other non-metal finishing wastewaters that combine with metal finishing wastewaters prior to an appropriate compliance monitoring location shall not be authorized by this general permit.

Required Documents and Professional Engineer Certifications

A Permit Application Transmittal Form (DEP-APP-001) and General Permit Registration Form for the Discharge of Wastewaters from Categorical Industrial Users to a Publicly Owned Treatment Works (POTW) (DEP-XXX) shall be submitted for review and approval.

A Qualified Professional Engineer, as defined in the general permit, shall :

- Review general permit requirements relating to the subject facility;
- Make an affirmative determination that the Operation and Maintenance Plan, the Spill Prevention and Control Plan and the Solvent Management Plan, if applicable, are adequate to assure that the activity authorized under this general permit will comply with the terms and conditions of such general permit;
- Provide a certification regarding such affirmative determination.

Fees

A registration fee of \$6,250 and \$3,125, established in accordance with section 22a-6f of the General Statutes, shall be submitted for discharges greater than or equal to 10,000 gallons per day and less than 10,000 gallons per day, respectively.

Fees associated with this general permit shall be paid by certified check or money order payable to the Department of Energy and Environmental Protection.

Consistent with 40 CFR 403.5(b), the following limits apply to all metal finishing wastewater discharged under the authority of this general permit:

Effluent Limits

- (1) Shall not contain pollutants which create a fire or explosion hazard in the receiving POTW;
- (2) Shall not cause corrosive structural damage to the receiving POTW;
- (3) Shall not contain solid or viscous pollutants in amounts which will cause obstruction of flow in the sanitary sewer system or receiving POTW;
- (4) Shall not contain heat in amounts which will inhibit biological activity in the receiving POTW;
- (5) Shall not result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health or safety problems; and
- (6) Shall not contain either singly or in combination with other discharges any pollutant in sufficient amounts to cause acute worker health and safety problems, problems in the collection system or pass through or interference with the receiving POTW;

To ensure protection of the receiving POTW and the waters of the state from pollution, the following limits apply to all metal finishing wastewater discharged under the authority of this general permit:

- (1) Shall not cause foaming of the receiving POTW's effluent; and
- (2) Shall not contain either singly or in combination with other discharges flow in excess of the hydraulic capacity of the receiving POTW's conveyance system.

Metal finishing discharge limits contained in 40 CFR 413, 40 CFR 433 and section 22a-430-4(s) of the Regulations of Connecticut State Agencies were compared and the following limits were found to be consistent with the most stringent of the three regulatory requirements and thus incorporated into this general permit:

Table I : Federal and State Regulated Pollutants				
Pollutant	Unit	Average Monthly Concentration	Maximum Daily Concentration	Maximum Instantaneous Concentration
Barium, Total	mg/l	2.0	4.0	6.0
Cadmium, Total	mg/l	0.07	0.11	0.75
Chromium, Hexavalent ²	mg/l	0.1	0.2	0.3
Chromium, Total	mg/l	1.0	2.0	3.0
Copper, Total	mg/l	1.0	2.0	3.0
Cyanide, Amenable ²	mg/l	0.1	0.2	0.3
Cyanide, Total	mg/l	0.65	1.2	1.8
Fluoride	mg/l	20	30	45
Gold, Total	mg/l	0.1	0.5	0.75

Lead, Total	mg/l	0.1	0.5	0.75
Nickel, Total	mg/l	1.0	2.0	3.0
Organics, Total Toxic ¹	mg/l	----	2.13	3.20
Silver, Total	mg/l	0.1	0.43	0.75
Tin, Total	mg/l	2.0	4.0	6.0
Zinc, Total	mg/l	1.0	2.0	3.0
Footnotes: 1 As defined by Sections 40 CFR 413 and 433 of the federal regulations. 2 The limits for hexavalent chromium and amenable cyanide apply at the chromium reduction and cyanide destruction systems, respectively. Monitoring for these pollutants must be prior to combination with any dissimilar discharges.				

The following limits were developed from reported analytical data from individually permitted metal finishing discharges and incorporated into this general permit, consistent with section 22a-430-4(m) of the Regulations of Connecticut State Agencies:

Pollutant	Unit	Average Monthly Concentration	Maximum Daily Concentration	Maximum Instantaneous Concentration
Aluminum, Total	mg/l	2.0	3.0	4.5
Antimony, Total	mg/l	0.07	0.12	0.18
Cobalt, Total	mg/l	0.14	0.24	0.36
Iron, Total	mg/l	4.5	11	16.5
Titanium, Total	mg/l	0.35	0.58	0.87

Mercury is a potent neurotoxin that poses risks to human health. Exposure to this toxic metal occurs through the consumption of fish that contain mercury's most toxic form, methyl-mercury. Consistent with the spirit of the "Northeast Regional Mercury Total Maximum Daily Load" issued October 2007, this general permit establishes limits for mercury at its minimum level of 0.2 ug/l.

Other Conditions

The loading of nutrients, principally phosphorous and nitrogen, into the waters of the state must be maintained below a threshold level to ensure any surface water body shall not exceed that which supports maintenance or attainment of the designated uses for such water body. Metal finishing wastewater discharges are capable of maintaining a reasonable potential to contribute significant quantities of phosphorous and nitrogen into receiving POTWs. Therefore, monitoring of these chemical pollutants is a requirement of this general permit.

The loading of oil and grease, hydrocarbon fraction must be maintained below a threshold level to ensure protection of receiving POTWs and subsequent surface waters. Metal finishing wastewater discharges are capable of maintaining a reasonable potential to contribute significant quantities of oil and grease,

hydrocarbon fraction into receiving POTWs. A maximum daily limit of 100 mg/l has been established for this pollutant.

The DEEP assessed potential pollutant pass-through by comparing historical POTW effluent results to theoretical water quality-based limits (TWQBLs). Those POTWs with effluent results that were currently and/or chronically above TWQBLs for any pollutant associated with this general permit are considered “Challenged POTWs”. Limits, for affected pollutants only, have been applied to “Challenged POTWs”, consistent with section 22a-430-4(m) of the Regulations of Connecticut State Agencies. These limits are more stringent than those listed in Table I and are included within Appendix V of the general permit.

Consistent with current individual permit application requirements associated with metal finishing discharges, representative sampling of the effluent for analyses of: General pollutants, Toxic Metals, Cyanides, Phenols, Pesticides, as well as Volatile, Acid and Base/Neutral Organic compounds shall be performed and submitted as part of an appropriate registration.

Unless a monitoring waiver is provided by the Department for specific pollutant(s) in accordance with 40 CFR 403.12(e)(2), periodic monitoring for all pollutants is required throughout the term of the general permit.

Effluent Monitoring

Monitoring Frequency

Each metal finishing discharge covered by this general permit shall be monitored at a frequency consistent with the minimum frequency of monitoring for metal finishing facilities listed in section 22a-430-3 of the Regulations of Connecticut State Agencies. The frequencies are based on maximum daily flows and are as follows:

Max. Daily Flow	< 5,000 gpd	5,000 – 10,000 gpd	10,000 gpd
Min. Monitoring Freq.	Monthly	Twice per Month	Weekly

Treatment

Treatment shall be required for any pollutant capable of exceeding the limits listed in this general permit.

Permit Duration

In accordance with 40 CFR 403.8(f)(1)(iii)(B), this general permit shall be valid for a period of five years from the date of issuance. To renew a permit, the permittee must submit a new registration form and fee prior to the permit expiration date.

Modified Registrations

A permittee shall submit a modified registration:

- (A) To correct inaccurate or misleading information previously submitted to the Department, in accordance with Section 6(g) of this general permit;

(B) Prior to any significant facility modifications, as described in Section 5(e)(3)(A) of this general permit.

Transfer

This general permit may be transferred in accordance with section 22a-6o of the General Statutes and section 22a-430-4(o) of the Regulations of Connecticut State Agencies.

Other Elements

The issuance of this general permit is also partly responsive to Section 22a-6p(a)(1) of the General Statutes, which requires DEEP to propose a pilot expedited permit program for not less than two hundred representative manufacturing or other industrial facilities. The DEEP estimates that 50 to 100 facilities previously permitted under an individual pretreatment wastewater permit (which required annual fees and a more cumbersome registration process) will be able to permit their metal finishing wastewaters under this general permit.

Contact Address

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This overview is designed to answer general questions and provide basic information. You should refer to the appropriate statutes and regulations for the specific regulatory language of the different permit programs. This document should not be relied upon to determine whether or not an environmental permit is required. It is *your* responsibility to ensure that all required permits have been obtained.