

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

# General Permit for the Discharge of Wastewaters from Significant Industrial Users (SIU)

# **Discharges Covered:**

- Metal Finishing Wastewaters
- Process and Non-process Wastewaters

Issuance Date: TBD Effective Date: October 31, 2020 Expiration Date: October 30, 2025

# General Permit for the Discharge of Wastewaters from Significant Industrial Users (SIU)

# **Table of Contents**

Section 1.	Authority	4
Section 2.	Definitions	4
Section 3.	Authorization Under This General Permit.         (a) Eligible Activities         (b) Requirements for Authorization         (c) Geographic Area         (d) Effective Date and Expiration Date of this General Permit.         (e) Effective Date of Authorization         (f) Transition to and from an Individual Permit. <b>Registration Requirements</b> (a) Who Must File a Registration         (b) Scope of Registration         (c) Contents of Registration         (d) Contents of a Modified Registration         (e) Where to File a Registration or Modified Registration         (f) Additional Information	4 10 10 11 11 12 12 12 12 12 12 12 13 18
Section 5. Section 5A.	<ul> <li>Conditions of this General Permit Applicable to All Discharges</li></ul>	19 19 21 22 23 28 28 30
Section 5B.	<ul> <li>Conditions of this General Permit Applicable to Process and Non-process</li> <li>Wastewaters that are not Subject to Categorical Pretreatment Standards</li></ul>	35 36 ss
Section 6.	<ul> <li>General Conditions</li></ul>	53 53

	(d)	Certification of Documents	53
	(e)	Date of Filing	53
	(f)	False Statements	54
	(g)	Correction of Inaccuracies	54
	(h)	Transfer of Authorization	54
	(i)	Other Applicable Law	54
	(j)	Other Rights	54
Section 7.	Con	ımissioner's Powers	54
	(a)	Abatement of Violations	54
	(b)	General Permit Revocation, Suspension, or Modification	
	(c)	Public Notice of Facilities in Significant Noncompliance	
	(d)	Filing of an Individual Permit Application	
	(e)	Audits	
Appendix A	A: Ge	neral Definitions	56
		eration and Maintenance Plan	
		ill Prevention And Control Plan	
		vent Management Plan	
		onitoring Waiver	
Appendix I	F1: P(	OTW-Specific Effluent Limits	76
Appendix I	F2: R	eceiving POTWs for Which Phosphorus Monitoring is Required	78
Appendix (	G: Cl	<b>F POTWs Approved to Accept Transported, Non-domestic Wastewaters</b>	79
Appendix I	H: Se	ction 22a-430-4 RCSA, Appendix B, Tables II, III, V and Appendix D	80

# General Permit for the Discharge of Wastewaters from Significant Industrial Users (SIU)

#### Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the Connecticut General Statutes.

#### Section 2. Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the Connecticut General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. Additional definitions associated with this general permit are included in Appendix A.

# Section 3. Authorization Under This General Permit

#### (a) Eligible Activities

Provided the requirements of Section 3(b) of this general permit are satisfied, this general permit authorizes the following indirect discharges from a Significant Industrial User, as defined in this general permit, to a Publicly Owned Treatment Works (POTW) via sanitary sewer or through transport by a licensed waste hauler in accordance with Section 5(e)(4) of this general permit:

- (1) Metal finishing wastewater, as defined in this general permit; and/or
- (2) Process and non-process wastewater that is not subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, subchapter N.

Any discharge of water, substance or material into the waters of the state other than those specified in this section is not authorized by this general permit, and any person which initiates, creates, originates or maintains such a discharge shall apply for and obtain authorization under section 22a-430 of the Connecticut General Statutes prior to the occurrence of such discharge.

#### (b) Requirements for Authorization

This general permit authorizes the activity listed in Section 3(a) of this general permit provided:

(1) Registration

A complete and sufficient registration with respect to such activity has been filed with the commissioner and the commissioner has issued an Approval of Registration with respect to such activity.

(2) The discharge from such activity is in compliance with all terms and conditions of this general permit including, but not limited to, the prohibitions described in

Section 5(a)(2) of this general permit.

#### (3) Coastal Area Management and Permitting

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 or if such activity is located, wholly or in part, waterward of the coastal jurisdiction line in tidal, coastal or navigable waters of the State or in tidal wetlands, the activity is authorized pursuant to sections 22a-359 through 22a-363f, inclusive, or 22a-28 through 22a-35, inclusive.

(4) Endangered and Threatened Species

Such activity does not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species.

(5) Aquifer Protection

Such discharge, if it is located within an aquifer protection area as mapped under section 22a-354b of the Connecticut General Statutes, complies with regulations adopted pursuant to section 22a-354i of the Connecticut General Statutes.

(6) Conservation and Preservation Restrictions

Such activity, if located within a conservation or preservation restriction area, complies with section 47-42d of the Connecticut General Statutes, by providing the following documentation to the commissioner: proof of written notice to the holder of such restriction of the proposed activity's registration pursuant to this general permit or a letter from the holder of such restriction verifying that the proposed activity is in compliance with the terms of the restriction.

- (7) Such discharge is released to a POTW either directly via a sanitary sewer or by a properly licensed transporter in accordance with Section 5(e)(4) of this general permit.
- (8) 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.
- (9) Certification Requirements for Qualified Professional Engineers or Qualified Certified Hazardous Materials Managers

The registrant has submitted to the commissioner a written certification which, at a minimum, complies with the following requirements:

 (A) i) For SIUs that discharge Metal Finishing Wastewater, such certification was signed by a Qualified Professional Engineer as defined in this general permit; or

ii) For all other SIUs eligible to be covered under this general permit, such certification was signed by:

- a) a Qualified Professional Engineer as defined in this general permit; or
- b) a Qualified Certified Hazardous Materials Manager, as defined in this general permit, if the discharge requires no treatment or the treatment consists solely of pre-engineered silver recovery systems for treating printing and photoprocessing wastewater or preengineered oil/water separators for treating air compressor condensate and blowdown, cutting and grinding wastewater, food processing wastewater, or vehicle maintenance wastewater.
- (B) such certification is not the subject of an audit as described under Section 22a-430b of the Connecticut General Statutes;
- (C) the Qualified Professional Engineer or Qualified Certified Hazardous Materials Manager signing the certification has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under such general permit: (i) all registration information provided in accordance with Section 4(c)(2) of such general permit, (ii) the facility, based on a visual site inspection, (iii) compliance records, (iv) the Operation and Maintenance Plan, (v) the Spill Prevention and Control Plan, (vi) the Solvent Management Plan, if applicable, and (vii) all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any Department approvals regarding such wastewater collection and treatment systems and monitoring equipment;
- (D) (i) the Qualified Professional Engineer signing the certification has made an affirmative determination, based on the review described in Section 3(b)(9)(C) of this general permit that: (i) the Operation and Maintenance Plan, the Spill Prevention and Control Plan and the Solvent Management Plan, if applicable, which have been prepared in accordance with this general permit are adequate to assure that the activity authorized under this general permit, if implemented in accordance with such plans, will comply with the terms and conditions of such general permit; and (ii) all wastewater collection and treatment systems and monitoring equipment: (aa) have been designed and installed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable; (bb) will function properly as designed based on visual inspection, compliance and operating records

and implementation of the Operation and Maintenance Plan; and (cc) are adequate to ensure compliance with the terms and conditions of this general permit;

(ii) the Qualified Certified Hazardous Materials Manager signing the certification has made an affirmative determination, based on the review described in section 3(b)(9)(C) of this general permit, that: (i) the Operation and Maintenance Plan and the Spill Prevention and Control Plan, which have been prepared in accordance with this general permit, are adequate to assure that the activity authorized under this general permit, if implemented in accordance with such plans, will comply with the terms and conditions of such general permit; and (ii) all wastewater collection and treatment systems and monitoring equipment: (aa) have been installed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable; (bb) will function properly based on visual inspection, compliance and operating records and implementation of the Operation and Maintenance Plan; and (cc) are adequate to ensure compliance with the terms and conditions of this general permit;

(E) (i) the Qualified Professional Engineer certifies, provided it is true and accurate, to the following statement: "I hereby certify that I am a Oualified Professional Engineer as defined in the General Permit for the Discharge of Wastewaters from Significant Industrial Users. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF **REGISTRANT** for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including, but not limited to, all information described in Section 3(b)(9)(C) of this general permit and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination required in accordance with Section 3(b)(9)(D)(i) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination. I understand that this certification may be subject to an audit by the commissioner in accordance with Section 22a-430b of the Connecticut General Statutes, and I agree to cooperate with the commissioner should such an audit be required, including, but not limited to providing information as may be requested in writing by the commissioner in connection with any such audit. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

(ii) the Qualified Certified Hazardous Materials Manager certifies, provided it is true and accurate, to the following statement: "I hereby certify that I am a Qualified Certified Hazardous Materials Manager as defined in the General Permit for the Discharge of Wastewaters from Significant Industrial Users. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(9)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination required in accordance with Section 3(b)(9)(D)(ii) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination. I understand that this certification may be subject to an audit by the commissioner in accordance with Section 22a-430b of the Connecticut General Statutes, and I agree to cooperate with the commissioner should such an audit be required, including, but not limited to providing information as may be requested in writing by the commissioner in connection with any such audit. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(10) Certification Requirements for Registrants and other Individuals

As part of the registration for this general permit, the registrant and any other individual or individuals responsible for preparing the registration submits to the commissioner a written certification which, at a minimum, complies with the following requirements:

(A) the registrant and any other individual or individuals responsible for preparing the registration and signing the certification has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be covered under such general permit: (i) all registration information provided in accordance with Section 4(c)(2) of such general permit, (ii) the facility, based on a visual site inspection, (iii) compliance records, (iv) the Operation and Maintenance Plan, (v) the Spill Prevention and Control Plan, (vi) the Solvent Management Plan, if applicable, (vii) the Monitoring Waiver Request Form completed in accordance with Appendix E, if applicable, and (viii) all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any Department approvals regarding such wastewater collection and treatment systems and monitoring equipment;

- (B) the registrant has, based on the review described in section 3(b)(10)(A) of this general permit, made an affirmative determination to: (i) comply with the terms and conditions of this general permit; (ii) maintain compliance with all plans and documents prepared pursuant to this general permit including, but not limited to, the Operation and Maintenance Plan, the Spill Prevention and Control Plan, the Solvent Management Plan, if applicable, the Monitoring Waiver Request Form, if applicable; and (iii) properly operate and maintain all wastewater collection and treatment systems and monitoring equipment in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution;
- (C) such registrant certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Wastewaters from Significant Industrial Users, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that such activity is eligible for authorization under such permit. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(10)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination required in accordance with Section 3(b)(10)(B) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination.

I certify that written approval from the POTW Authority with jurisdiction over the receiving POTW has been granted.

I certify that our facility does not use products or chemicals that may result in a discharge of mercury.

I understand that the registration filed in connection with such general permit may be denied, revoked or suspended for engaging in professional misconduct, including but not limited to the submission of false or misleading information, or making a false or inaccurate certification. I understand that the certification made pursuant to Section 3(b)(10) of this general permit may be subject to an audit by the commissioner in accordance with section 22a-430b of the Connecticut General Statutes, and that I will be required to provide additional information as may be requested in writing by the commissioner in connection with such audit, and the registration filed in connection with such general permit may be denied, revoked or suspended as a result of such audit. As part of such audit, I understand the commissioner may require that any information prepared in accordance with this general permit to be independently certified by a Qualified Professional Engineer or Qualified Certified Hazardous Materials Manager in accordance with this general permit and that such independent certification shall be at the registrant's expense. I understand that the reasonable cost of any such audit that reveals that a false certification was submitted to the commissioner may be charged to the registrant for this general permit for which such certification was made. I also understand that knowingly making any false statement in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(D) any other individual or individuals responsible for preparing the registration certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Wastewater from Significant Industrial Users, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that such activity is eligible for authorization under such permit. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(10)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I understand that the registration filed in connection with such general permit may be denied, revoked or suspended for engaging in professional misconduct, including but not limited to the submission of false or misleading information. or making a false or inaccurate certification. I understand that knowingly making any false statement in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

#### (c) Geographic Area

This general permit applies throughout the State of Connecticut.

#### (d) Effective Date and Expiration Date of this General Permit

This general permit is effective on October 31, 2020 and expires five (5) years from such date on October 30, 2025.

#### (e) Effective Date of Authorization

(1) For eligible activities previously permitted by an individual permit, such activity is authorized by this general permit on the 1<sup>st</sup> day of the month following the date of the approval of registration. The Permittee shall continue to comply with the terms and conditions of the previously issued permit until this effective date.

(2) For eligible activities previously permitted by the *General Permit for the Discharge of Wastewaters from Categorical Industrial Users to a Publicly Owned Treatment Works* reissued May 3, 2018, such activity is authorized under this general permit provided a timely and sufficient registration has been filed pursuant to section 4(c)(2) of this general permit and the registrant is compliant with the terms and conditions of this general permit until the Commissioner makes a final determination regarding such registration.

(3) For eligible activities previously permitted by the *General Permit for Miscellaneous Discharges of Sewer Compatible Wastewater*, reissued May 3, 2018, such activity is authorized by this general permit provided a timely and sufficient registration has been filed pursuant to section 4(c)(2) of this general permit and the registrant is compliant with the terms and conditions of this general permit until the Commissioner makes a final determination regarding such registration.

(4) For new activities, an activity is authorized by this general permit on the date the approval of registration is issued by the commissioner.

#### (f) Transition to and from an Individual Permit

No person shall operate or conduct an activity authorized by both an individual permit and this general permit. The requirements for transitioning authorization are as follows:

- (1) *Transition from an Individual Permit to Authorization under this General Permit.* If an activity meets the requirements of authorization of this general permit and such operation or activity is presently authorized by an individual permit, the permittee may seek a modification to the permit to exclude such operation or activity from the individual permit or if the operation or activity is the sole operation or activity authorized by such permit, the permittee shall surrender its permit in writing to the commissioner. In either event, such permittee's individual permit shall continue to apply and remain in effect until authorization of such operation or activity under this general permit takes effect.
- (2) *Transition from Authorization under this General Permit to an Individual Permit.* If an activity or operation is authorized under this general permit and the commissioner subsequently issues an individual permit for the same activity, then on the date any such individual permit is issued by the commissioner, the authorization issued under this general permit shall automatically expire.

# Section 4. Registration Requirements

#### (a) Who Must File a Registration

Any person seeking the authority of this general permit to discharge wastewater shall file with the commissioner on or before ninety (90) days prior to the effective date of this general permit:

- (1) a registration form which meets the requirements of Section 4(c)(2) of this general permit, and
- (2) the applicable fee specified under Section 4 of this general permit.

When a facility or activity is owned by one person or municipality but is leased or in some other way the legal responsibility of another person or municipality (the operator) it is the operator's responsibility to submit any applications required under this general permit.

#### (b) Scope of Registration

A registrant shall submit one registration form for all activities taking place at a single site for which the registrant seeks authorization under this general permit. Activities taking place at more than one site may not be consolidated on one registration form.

#### (c) Contents of Registration

- (1) Fees
  - (A) The registration fee established by section 22a-6f of the General Statutes of:
    - (i) \$6,250.00 for Metal Finishing Wastewater discharges (maximum daily flow) greater than or equal to 10,000 gallons per day or
    - (ii) \$3,125.00 for Metal Finishing Wastewater discharges with a maximum daily flow less than 10,000 gallons per day or
    - (iii) \$1,000 for other eligible wastewater discharges that are not subject to Categorical Pretreatment Standards.

shall be submitted with a registration form. A registration shall not be deemed complete and no activity shall be authorized by this general permit unless the registration fee has been paid in full.

- (B) The registration fee shall be paid by check or money order payable to the **Department of Energy and Environmental Protection**.
- (C) The registration fee is non-refundable.
- (2) Registration Form

A registration shall be filed on forms prescribed and provided by the commissioner and shall include but not be limited to the following:

- (A) Legal name, address, and telephone number of the registrant. If the registrant is an entity transacting business in Connecticut and is required to register with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.
- (B) Legal name, address, and telephone number of the owner of the property on which the subject activity is to take place.
- (C) Legal name, address, and telephone number of the registrant's attorney or other representative, if applicable.
- (D) Legal name, address, and telephone number of any consultant(s) or engineer(s) retained by the registrant to prepare the registration or to design or construct the subject activity.
- (E) Location address of the site with respect to which the registration is submitted.
- (F) Name of the receiving POTW.
- (G) Date discharge was/will be initiated.
- (H) Written approval issued by the receiving POTW Authority, or written approval on a form prescribed and provided by the commissioner, for connection or transport to a POTW.
- (I) A plan of the site ("site plan") showing property boundaries, the location of the subject activity and discharge location(s).
- (J) Discharge Information
  - (i) A detailed description of the authorized discharge(s). Such description shall include a brief description of the discharge, average rate of production, the maximum and average daily flow rates in both gallons per day and gallons per minute, the method of flow measurement and the anticipated hours of discharge, and the Standard Industrial Classification of the operations carried out at the facility
    - (a) For facilities discharging Metal Finishing Wastewater, the description shall also list all metal finishing subcategories, as defined by 40 CFR 413 and 433, which contribute to the discharge.,.
    - (b) For facilities discharging process wastewater not subject to Categorical Pretreatment Standards, the description shall also list the categories of process wastewater described in Section 5B(b) of this general permit.
  - (ii) Analytical Data

- (a) For new, previously unpermitted discharges, scientific calculations or information from similar discharges to project expected discharge characteristics. Following the issuance of the Approval of Registration under this general permit, the Permittee will be required to sample the discharge(s) authorized under the Approval of Registration within 30 days of initiating the discharge, conduct wastewater analyses as indicated in the Approval of Registration, and submit for the commissioner's review a completed discharge analysis from the application for registration under this general permit.
- (b) For existing discharges previously authorized by an individual permit, analytical data from at least one sample taken within the last six months prior to registration submission that is representative of typical daily operations and one sample that is representative of anticipated maximum effluent pollutant concentration(s), which are to be used in characterizing the chemical composition of each discharge and sub-discharge (e.g. cyanide or hexavalent chromium pretreatment) to be covered under this general permit reported on a form provided by the commissioner. Analytical data shall be provided for pH, pollutants listed in Section 5A(a) or 5B(a) of this general permit, all parameters necessary to demonstrate compliance with effluent limitations listed in section 22a-430-4 Appendix B or D of the Regulations of Connecticut State Agencies that are known or suspected to be present in the discharge.
- (c) For the renewal of an existing registration for a discharge previously authorized by the *General Permit for the Discharge of* Wastewaters from Categorical Industrial Users to a Publicly Owned Treatment Works or the General Permit for Miscellaneous Discharges of Sewer Compatible Wastewater, a summary of analytical data from the previous two years.
- (d) If any pollutant identified as an emerging contaminant is reasonably known to have been handled, stored, released or disposed of at the site where the subject wastewater originates, the subject wastewater shall also be analyzed to determine the concentration of such emerging contaminants(s) if an analytical method for such pollutant has been approved pursuant to 40 CFR 136. If necessary, any further monitoring during the term of the permit will be indicated in the Approval of Registration.
- (K) A description of the best management practices, such as conservation and reuse of water, minimization, substitution and reuse of chemicals, and other pollution prevention measures, implemented or to be implemented by the registrant to prevent or minimize any adverse environmental effects of the subject discharge.

- (L) A general description of any wastewater treatment processes, such as neutralization, oil/water separation, and precipitation of solids or metals, which the registrant utilizes or will utilize to achieve compliance with any of the effluent limitations specified in Section 5A(a) or 5B(a) of this general permit. This description shall include a diagram which clearly shows all treatment units, monitoring equipment and sampling locations.
- (M) A line drawing of the water flow through the facility which clearly shows a) the intake source (e.g. well, city water, river); b) all points of chemical addition into any treatment units; c) sampling and flow meter locations; d) all separate production operations with intake and discharge points of each operation; e) treatment units with intake and discharge points of each unit; and f) a water balance that indicates approximate average and maximum daily flows at intake and discharge points of all separate production operations, treatment units and between processes.
- (N) A process flow diagram identifying each process step or tank, its work flow position, size, contents, ultimate disposal location and the discharge rate of its contents. Include in the process flow diagram any treatment unit(s) integrated within a process. Indicate in the diagram if countercurrent rinsing is applied and indicate the direction of the countercurrent rinsing.
- (O) A Monitoring Waiver Request Form completed in accordance with Appendix E, as applicable.

For the registration of an activity previously registered under the *General Permit for the Discharge of Wastewaters from Categorical Industrial Users to a Publicly Owned Treatment Works*, a list of exemptions that were granted in the Approval of Registration under such general permit.

- (P) For Metal Finishing wastewater discharges, a Solvent Management Plan, if applicable. Registrants currently maintaining a Department approved Solvent Management Plan shall resubmit the plan with the registration for approval.
- (Q) A written certification, signed by a Qualified Professional Engineer or Qualified Certified Hazardous Materials Manager, which complies with the requirements of Section 3(b)(9) of this general permit.
- (R) A written certification, signed by the registrant and any other individual or individuals responsible for preparing the registration, which complies with the requirements of Section 3(b)(10) of this general permit.
- (S) A completed Connecticut DEEP NetDMR Subscriber Agreement.
- (T) For potable water treatment facilities only—water treatment facilities that

discharge clarifier tank blowdown, filter media backwash, sludge dewatering wastewater or other residuals handling wastewaters with Total Suspended Solids (TSS) levels in excess of 600 mg/l directly to a sanitary sewer line or transport residuals by truck to a POTW shall submit a plan for the management of water treatment wastewaters and residuals. Such plan shall, at a minimum, include the following information:

- (i) the sources of such wastewaters
- (ii) the expected average and maximum daily flows in gallons per day of wastewaters
- (iii) the source of the suspended solid (including the identification of any coagulant)
- (iv) the frequency of discharge
- (v) for residuals, the percent dry solids and quantity per shipment and per year
- (vi) the name of the POTW receiving the wastewater or residual
- (vii) which treatment unit of the POTW the wastewaters will be discharged to (e.g. headworks, solids handling, etc)
- (viii) standard operating procedures for residuals management at the facility which shall include:
  - a. a site map
  - b. a summary of the operation and maintenance plans for any lagoons or clarifiers
  - c. a description of where any solid residuals removed may be placed, stored or disposed of, and
  - d. the techniques used to prevent the removed solids from reentering the surface waters from any on-site storage.
- (ix) From a representative sample of residuals being removed during the treatment process, a chemical analysis of its content (percent solids and total metals in mg/kg). The following metal concentrations will be determined:
  - Arsenic (As),
  - Barium (Ba),
  - · Cadmium (Cd),
  - · Chromium (Cr),
  - Copper (Cu),
  - · Lead (Pb),
  - · Mercury (Hg),
  - Selenium (Se)
  - $\cdot$  Silver (Ag).
- (x) For residuals, provide a feasibility analysis of treatment and disposal options for residuals other than discharge to a POTW. Such analysis shall include:
  - a. a discussion of the alternatives and
  - b. approximate cost and time frame necessary for implementation of such alternatives at that facility.

- (U) For a discharge of vehicle maintenance wastewater, the registration shall include the following additional information:
  - (i) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that meets the specifications listed in Section 5B(c)(12)(A)(i) of this general permit and was **not** previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or a general permit issued in accordance with section 22a-430b of the Connecticut General Statutes, a completed collection and/or treatment system specification form prescribed and provided by the Commissioner and a certification form signed by a Connecticut licensed Professional Engineer that such treatment system meets the specifications of Section 5B(c)(12)(i) of this general permit.
  - (ii) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that meets the specifications listed in Section 5B(c)(12)(A)(ii) of this general permit and was **not** previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or a general permit issued in accordance with section 22a-430b of the Connecticut General Statutes, a completed collection and/or treatment system specification form prescribed and provided by the Commissioner and a certification form signed by a Connecticut licensed Professional Engineer that such treatment system meets the specifications of Section 5B(c)(12)(ii) of this general permit.
  - (iii) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that was previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or a general permit issued in accordance with section 22a-430b of the Connecticut General Statutes: a copy of such individual permit and written approval issued by the Commissioner in accordance with 22a-430 of the Connecticut General Statutes for the collection or treatment system installed to treat vehicle maintenance wastewaters; or a copy of the written certification (i.e., Certification Form VW2 or VS2) previously submitted to the Commissioner for authorization under the Car Wash or Vehicle Service Floor Drain Wastewater General Permit and a copy of documentation issued by the Commissioner authorizing coverage under such general permits.

#### (d) Contents of a Modified Registration

- (1) A modified registration shall be submitted:
  - (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.
- (2) Modified Registration Form:

A modified registration shall be filed on forms described in Section 4(c) of this general permit. Such modified registration shall, at a minimum, include Sections 4(c)(2)(A)-(F) of the registration form and any additional information required by Section 5(e)(3)(A) for a facility modification. For all registration section(s) remaining unchanged from the initial registration, a registrant may indicate "Information Unchanged" in the appropriate section(s) of the registration.

#### (e) Where to File a Registration or Modified Registration

(1) A registration or modified registration shall be filed with the commissioner at the *following* address:

CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

(2) The registrant shall submit a copy of any registration or modified registration filed with the commissioner to the applicable POTW Authority.

# (f) Additional Information

The commissioner may require a registrant to submit additional information, which the commissioner reasonably deems necessary to evaluate the consistency of the subject activity with the requirements for authorization under this general permit.

#### (g) Action by Commissioner

(1) The commissioner shall review a registration or modified registration and make a technical determination based on such review that the discharge will not cause pollution of the waters of the state or disapprove a registration in accordance with Section 4(g)(2) of this general permit.

If the commissioner makes a technical determination that the discharge will not cause pollution of the waters of the state, then the commissioner shall provide an Approval of Registration.

The commissioner may reject without prejudice a registration or modified registration if it is determined that it does not satisfy the requirements of Section 4(c) or 4(d) of this general permit and more than thirty (30) days have elapsed since the commissioner requested that the registrant submit additional information. Any registration re-filed after such a rejection shall be

accompanied by the fee specified in Section 4(c)(1) of this general permit.

- (2) The commissioner shall disapprove a registration or modified registration if it is found that the subject activity is:
  - (A) Inconsistent with the requirements for authorization under Section 3 of this general permit; OR
  - (B) Unable to comply with the effluent limitations and prohibitions described in Section 5 of this general permit; OR
  - (C) Through the imposition of the terms and conditions in this general permit, unable to ensure that the discharge, either singly or in combination with other discharges, would not cause or contribute to pollution, would not endanger human health or the environment or would not be consistent with the Connecticut Water Quality Standards; OR
  - (D) Deemed to be ineligible for coverage under this general permit for any other reason provided by law.
- (3) Disapproval of a Registration or modified registration under this subsection shall constitute notice to the registrant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit.
- (4) The commissioner may approve a registration or modified registration with reasonable conditions. If the commissioner approves a registration with conditions, the permittee shall be bound by such conditions as if they were a part of this general permit.
- (5) Rejection, Disapproval, or Approval of a Registration or Modified Registration shall be in writing.

# Section 5. Conditions of This General Permit Applicable to All Discharges

The permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit. In addition, a permittee shall assure that, at a minimum, activities authorized by this general permit are conducted in accordance with the following conditions:

# (a) Effluent Limits and Conditions

- (1) Effluent Limits
  - (A) Effluent limits for Metal Finishing Wastewater discharges are listed in section 5A(a) of this general permit.
  - (B) Effluent limits for process and non-process wastewater discharges not subject to Categorical Pretreatment Standards are listed in section 5B(a) of this general permit.

#### (2) Prohibitions

- (A) Wastewater discharged under the authority of this general permit shall not for any reason cause or threaten either singly or in combination with other discharges:
  - (i) Interference or adverse effect upon the operation of the POTW;
  - (ii) Interference or adverse effect upon the POTW's sludge handling, use or disposal, including but not limited to noncompliance with any federal, state, local laws, regulations or ordinances;
  - (iii) The POTW to exceed its influent design loading parameters;
  - (iv) The POTW to violate its permit, including but not limited to exceeding its permit limits;
  - (v) A worsening of any condition which is causing the POTW to exceed its influent design loading parameters or violate its permit; or
  - (vi) Pass through of any substance into the receiving waters which then causes or threatens pollution.
- (B) Wastewater discharged under the authority of this general permit shall not:
  - (i) contain any substance which causes or threatens a fire or explosion hazard in the receiving POTW, including but not limited to, wastewaters with a closed cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21.
  - (ii) cause or threaten corrosive structural damage to the receiving POTW and shall not have a pH of less than 5.0 or more than 12.0 Standard Units.
  - (iii) contain solid or viscous pollutants in amounts which will cause or threaten obstruction of flow in the sanitary sewer system or receiving POTW.
  - (iv) contain heat in amounts which will inhibit biological activity in the receiving POTW, nor contain heat in such quantities that the influent temperature at the POTW exceeds 104°F (40°C).
  - (v) contain pollutants which result in the presence of toxic gases, vapors or fumes within the receiving POTW in a quantity that may cause acute worker health or safety problems.
  - (vi)contain pollutants in a quantity or concentration which may cause or contribute to excessive foaming within the receiving POTW or which may cause foaming within the POTW's effluent.
  - (vii) 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.

- (viii) contain either singly or in combination with other discharges flow in excess of the hydraulic capacity of the receiving POTW or its conveyance system.
- (ix)contain mercury.
- (x) if trucked or hauled, be introduced into a POTW except at discharge points designated by the POTW.
- (C) The use or addition of water to dilute a discharge of wastewater in order to meet any effluent limit or condition of this general permit is prohibited.
- (3) Other Conditions
  - (A) The permittee shall maintain in full effect all best management practices (BMPs) needed to comply with any of the terms and conditions of this general permit. Such BMPs shall be developed and implemented consistent with sound and recognized engineering principles and include but not be limited to water conservation, chemical substitution/reuse and all other pollution prevention measures.
  - (B) The permittee shall ensure that all discharges authorized by this general permit are in conformance with the sewer use ordinance of the POTW Authority receiving the discharge, and that all required local permits and approvals have been obtained for the discharges authorized by this general permit.
  - (C) The discharge shall be totally enclosed in piping from the source to a municipal sanitary sewer line unless operating conditions require otherwise. Best management practices shall be used for chemical and fuel storage to prevent spillage that could be received by floor drains, trenches, etc.
  - (D) Any spill or release or leakage of any chemical liquid shall be immediately cleaned up and disposed of in accordance with all applicable state and federal law. In no case shall such a chemical liquid be disposed of in any floor drain, toilet, sink, sanitary sewer, storm drain, surface water body or on the ground.

#### (b) Monitoring Requirements

- (1) Monitoring requirements for Metal Finishing Wastewaters are listed in section 5A(b) of this general permit.
- (2) Monitoring requirements for Process or Non-process Wastewaters not subject to Categorical Pretreatment Standards are listed in section 5B(b) of this general permit.

# (c) Reporting Requirements

- (1) Results of chemical analyses shall be reported to the Bureau of Materials Management and Compliance Assurance on a Discharge Monitoring Report (DMR) each month. DMRs shall also include the Average Daily Flow and the Maximum Daily Flow for each month. DMRs shall be submitted by the last day of the month following the month in which samples are taken. Should a discharge not occur during a sampling month or quarter, a DMR shall still be submitted indicating "NO DISCHARGE".
  - (A) Timeline for Commencement of Electronic Reporting using NetDMR
    - i) Prior to one-hundred and twenty (120) days after the approval of registration for coverage under this general permit, the permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows permittees to electronically submit DMRs and other required reports through a secure internet connection.
    - Unless otherwise approved in writing by the commissioner, no later than one-hundred and twenty (120) days after the approval of registration for coverage under this general permit, the permittee shall begin reporting electronically using NetDMR.
  - (B) DMR Due Date

DMRs shall be submitted electronically to the Department no later than the last day of the month following the month in which samples are taken. Once a permittee begins submitting reports using NetDMR, it shall no longer be required to submit hard copies of DMRs or other reports to the Department.

- (2) Copies of all DMRs shall be submitted concurrently to the local Water Pollution Control Authority(ies) involved in the treatment and collection of the permitted discharge.
- (3) All individual sample results shall be attached to respective DMRs. When submitting NetDMRs, individual analytical results shall be submitted as an attached table.
- (4) In accordance with Section 5(e)(2)(C) of this general permit, the permittee discharging Metal Finishing Wastewater may, in lieu of analyzing for Total Toxic Organics, include a statement on the monthly DMR, at the frequency required, certifying compliance with its Solvent Management Plan if such plan has been approved by the commissioner in accordance with Section 22a-430-4(l) of the Regulations of Connecticut State Agencies and by 40 CFR 413 (Electroplating) or 433 (Metal Finishing). If such approval has been granted and the report includes the compliance statement, sampling for Total Toxic Organics is not required for the respective sampling period.

(5) If the permittee monitors any discharge more frequently than required by the general permit using test procedures approved under 40 CFR 136 or specified in the general permit, the results shall be included in the calculation and reporting of the data in the monitoring report.

# (d) Recording and Reporting Violations

- (1) The permittee shall immediately notify the Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance (860-424-3025 during business hours 8:30 am – 4:30 pm, 860-424-3338 after business hours) and the local WPCA of all discharges that could cause problems to the POTW, including but not limited to slug discharge 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.
- (2) If any sampling and analysis of the discharge performed by the permittee indicates a violation of the pollutant concentration limits contained in this general permit, the permittee shall:
  - (A) notify the Bureau of Materials Management and Compliance Assurance (Attn: Permitting and Enforcement Division) within twenty-four (24) hours of becoming aware of the violation or if the violation is greater than two times the permitted level provide such notification within two (2) hours of becoming aware of such violation;
  - (B) obtain a second representative sample of the effluent, analyze such sample for the parameter(s) in question, and report the results to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) within 30 days of the violation; and
  - (C) follow procedures to correct such violation in accordance with Section 6(b) of this general permit.
- (3) A detailed written explanation of any violation of effluent limitations or general permit conditions shall be submitted to the Department simultaneous to the respective NetDMR. This explanation shall include a description of the violation and its cause; the period of noncompliance including exact times and dates, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, as well as the root-cause of the noncompliance and corrective action necessary to eliminate/minimize any future noncompliance. If the noncompliance is greater than two times the permitted level or the condition may endanger human health, the environment or the operation of a POTW, then the detailed written explanation shall be provided within five (5) days of becoming aware of such noncompliance to:

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

#### (e) Operating Conditions

#### (1) Wastewater Treatment Systems and Controls

- (A) The permittee shall at all times properly operate and maintain all wastewater treatment equipment necessary to achieve compliance with effluent limitations and conditions.
- (B) The permittee shall at all times properly operate and maintain the wastewater treatment equipment as certified to in its registration or modified registration, unless a modification associated with the operation and maintenance is necessary to correct a permit violation or avoid an imminent permit violation.

#### (2) Plans

- (A) The permittee shall prepare an Operation and Maintenance Plan for the wastewater collection, storage, treatment, and control systems for the activity covered by this general permit. At a minimum, such plan shall include all of the elements described in Appendix B of this general permit and describe the effective performance of the collection and treatment systems, adequate funding, operator training, laboratory and process controls and quality assurance procedures. The permittee shall maintain such plan at the facility at all times and shall amend and update such plan as necessary to assure compliance with the terms and conditions of this general permit. The permittee shall perform all actions required by the Operation and Maintenance Plan and maintain compliance with it thereafter.
- (B) The permittee shall prepare a Spill Prevention and Control Plan for the activity covered by this general permit. At a minimum, such plan shall include all of the elements described in Appendix C of this general permit and describe all measures taken to prevent and control unplanned releases during the storage, collection, transfer, transport, treatment, loading and unloading of all toxic or hazardous substances, oils, process wastewaters, solvents, and any other chemicals. The permittee shall maintain such plan at the facility. The permittee shall perform all actions required by the Spill Prevention and Control Plan and maintain compliance with it thereafter.
- (C) For metal finishing wastewaters, in accordance with Section 5A(b)(1) of this general permit, a permittee may develop a Solvent Management Plan and maintain it at the facility in lieu of monitoring for Total Toxic Organics. Such plan must be approved by the commissioner in accordance with sections 22a-430-3(j)(5) and 22a-430-4(l) of the Regulations of

Connecticut State Agencies, as well as 40 CFR 413 (Electroplating) and 433 (Metal Finishing). At a minimum, such plan shall either certify that TTOs are not used or stored at the facility or shall contain all of the elements contained in Appendix D of this general permit, including but not limited to a description of the TTOs used at the facility, methods of disposal and methods used to ensure that TTOs do not spill or leak into wastewater. Registrants currently maintaining a Department approved Solvent Management Plan shall resubmit the plan for approval. The permittee shall maintain such plan at the facility at all times and shall amend and update such plan as necessary to assure compliance with the terms and conditions of this general permit and Sections 22a-430-3(j)(5) and 22a-430-4(1) of the Regulations of Connecticut State Agencies, as well as 40 CFR 413 (Electroplating) and 433 (Metal Finishing). The permittee shall perform all actions required by the Solvent Management Plan and maintain compliance with it thereafter.

#### (3) Facility and Treatment System Modifications

- (A) The permittee shall notify the commissioner prior to any expansion, alteration, increase in production or modification to processes that may result in (1) the introduction of a pollutant that was not known or suspected present in the authorized discharge(s) at the time of registration;
  (2) an increase in pollutant loading greater than twice previous registration levels; or (3) a change in the maximum daily flow to a level requiring a change in the effluent monitoring frequency. Wastewaters associated with such modification(s) may not be discharged without the prior written approval of the commissioner in the form of an Approval of Registration. Notification shall consist of a modified registration submitted in accordance with Section 4(d) of this general permit and include the following additional information:
  - A description of each proposed process modification, the nature of the proposed modification, and how the modification is expected to affect the authorized discharge(s). Include a timeline for implementation and expected completion of the proposed changes.
  - (ii) For material substitutions or addition of new chemicals or new sources to the discharge, identify all new substances that include or may break down into those listed in Appendix B or D of section 22a 430-4 of the Regulations of Connecticut State Agencies that can be expected to be present in the authorized discharge(s) as a result of the modification.
  - (iii) A copy of the Material Safety Data Sheet for each chemical substance identified in your modification request. Material Safety Data Sheets need not be provided for substances listed in Appendix B or D of Section 22a-430-4 of the Regulations of Connecticut State Agencies; but shall be provided for all trade-named compounds. The projected concentration in the authorized discharge(s) for those

substances identified above.

- (iv) A statement regarding how the proposed facility modification affects a previously authorized monitoring waiver, as applicable.
- (v) For all new substances referred to in Paragraph (ii), above, the projected concentration(s) expected to be present in the authorized discharge(s).
- (vi) On a form prescribed and provided by the commissioner, an approval by the applicable POTW Authority for connection to a POTW.
- (vii) A certification signed by a Qualified Professional Engineer or Qualified Certified Hazardous Materials Manager in accordance with Section 4(c)(2)(Q) of this general permit.
- (B) The permittee shall notify the Department within fifteen (15) days after expanding or significantly altering its wastewater collection or treatment system or its method of operation. Treatment system modifications **do not** require Department approval. Information provided should **clearly detail** all modifications and include the following additional information:
  - (i) A detailed explanation of any changes made to or proposed for the existing wastewater collection or treatment system or its method of operation. Explain the need for implementing each change and the anticipated effects the changes will have on the authorized discharge(s).
  - (ii) For material substitutions or addition of new treatment chemicals, identify all new substances that include or may break down into those listed in Appendix B or D of Section 22a-430-4 of the Regulations of Connecticut State Agencies that can be expected to be present in the authorized discharge(s) as a result of the modification.
  - (iii) A copy of the Material Safety Data Sheet for each chemical substance identified in your modification request. Material Safety Data Sheets need not be provided for substances listed in Appendix B or D of Section 22a-430-4, but must be provided for all tradenamed compounds.
  - (iv) A statement regarding how the proposed modification affects a previously authorized monitoring waiver, as applicable.
  - (v) An up-dated treatment system diagram, consistent with Section 4(c)(2)(L) of this general permit.
  - (vi) A certification signed by a Qualified Professional Engineer in accordance with Section 4(c)(2)(Q) of this general permit.

# (4) Collection and Transport of Wastewater in accordance with this general permit

- (A) No permittee is authorized to collect and transport wastewater for discharge to a POTW under this general permit unless the following conditions have been met:
  - (i) the POTW authority has authorized the acceptance of such wastewater in accordance with section 3(b)(8) of this general permit;
  - (ii) the permittee's facility is not connected to a sanitary sewer or the permittee's facility is connected to a sanitary sewer and the discharge has been rejected in writing by the local sewer authority;
  - (iii)the permittee has installed appropriate facilities to store such wastewater in accordance with section 5(e)(4)(B) of this general permit;
  - (iv)such wastewater is conveyed, either by a properly licensed waste transporter or by the permittee, in a manner prescribed by the receiving POTW;
  - (v) such wastewater transported to a POTW complies with the effluent limits specified in either Table 5A-1 or 5B-1 of this general permit;
  - (vi)written certification has been provided to the applicable POTW
     Authority that such wastewater is not a Hazardous Waste as defined in 40CFR 261, Subparts C and D including but not limited to any of the following hazardous wastes;

EPA	Description of Waste		
Hazardous Waste Code			
F006	Wastewater treatment sludges from electroplating operations, except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.		
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.		
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum, except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.		

- (vii) a log of each instance of wastewater transported has been maintained including dates, volumes, a description of the wastewater, and any monitoring results.
- (B) Any holding tank constructed for the storage of wastewater shall comply with the following:
  - (i) An above-ground holding tank shall be a double-walled tank or have 110% secondary containment storage capacity and have an inspection and management plan to insure that stormwater that collects within secondary containment is clean prior to discharge. Such above-ground holding tank shall be located under cover where feasible to prevent or minimize stormwater entry to the secondary containment area.
  - (ii) Any underground storage tank that is subject to the requirements of RCSA 22a-449(d)-101 shall comply with the requirements of said regulation(s).
  - (iii) Wastewater discharged to a concrete holding tank shall not have a pH of less than 5.0 Standard Units.
  - (iv) Unless otherwise approved in writing by the commissioner prior to August 9, 2017, a concrete holding tank may be used provided the tank will contain only boat hull wash wastewater, water treatment wastewater, vehicle maintenance wastewater, or food processing wastewater.

The tank must comply with the following specifications:

- a) All structural seams and openings for piping shall be grouted with non-shrinking cement or similar material and coated with a waterproof sealant.
- b) The tank interior shall be coated with a sealant preferably epoxy that is specifically formulated to be resistant to all chemicals to be stored in the tank. (This is not necessary for polymer concrete tanks.)
- c) The tank exterior, including the exterior top and bottom and extension to grade manholes, shall be coated with a waterproof sealant. (This is not necessary for polymer concrete tanks.)
- (v) The holding tank shall be equipped with a high-level alarm system clearly audible in the normal working range of responding personnel. It is *strongly recommended* that the alarm indicate when the holding tank has reached eighty percent (80%) of its wastewater storage capacity. At a minimum, the holding tank shall be equipped with a

means to determine/verify the wastewater level, including but not limited to sight glass and level indicator devices.

(vi) For tanks containing water treatment wastewater, Best Management Practices must be undertaken to insure that solids in the tank do not accumulate to greater than 20% of the tank capacity.

#### (f) Regulations of Connecticut State Agencies Incorporated into this General Permit for the Discharge of Wastewater from a Significant Industrial User

Unless specific conditions, terms or limitations within this general permit are more restrictive, the permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

(1) Section 22a-430-3:

Subsection (b) —	General-subparagraph (1)(D) and subdivisions (2), (3), (4)
	and (5)
Subsection (c) -	Inspection and Entry
Subsection (d) -	Effect of a Permit — subdivisions (1) and (4)
Subsection (e) -	Duty to Comply
Subsection (f) -	Proper Operation and Maintenance
Subsection (g) -	Sludge Disposal
Subsection (h) -	Duty to Mitigate
Subsection (i) -	Facility Modifications, Notification — subdivisions (1) and
	(4)
Subsection (j) -	Monitoring, Records and Reporting Requirements —
	subdivisions (1), (6), (7), (8), (9) and (11) (except
	subparagraphs (9)(A)(2), and (9)(C))
Subsection (k) -	Bypass
Subsection (m) -	Effluent Limit Violations
Subsection (n) -	Enforcement
Subsection (o) -	Resource Conservation
Subsection (p) -	Spill Prevention and Control
Subsection (q) -	Instrumentation, Alarms, Flow Recorders
Subsection (r) -	Equalization
	-

(2) Section 22a-430-4:

Subsection (p) -	Revocation, Denial, Modification
Subsection (q) -	Variances
Subsection (t) -	Prohibitions

# Section 5A. Conditions of this General Permit Applicable to Metal Finishing Wastewaters

#### (a) Effluent Limits

- (1) **Effluent Limits**—Metal Finishing Wastewater discharged under the authority of this general permit shall not exceed and shall otherwise conform to the specific terms and conditions listed in Table 5A-1, below.
- (2) **POTW Specific Effluent Limits**—If the discharge is directed to a POTW listed in Appendix F of this general permit and has a maximum total daily flow greater than 5000 gpd, effluent limits listed in Appendix F specific to that POTW supersede limits in Table 5A-1 below.

Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit
Aluminum, Total	mg/l			
Antimony, Total	mg/l			
Barium, Total	mg/l	2.0	4.0	6.0
Cadmium, Total	mg/l	0.07	0.11	0.16
Chromium, Hexavalent <sup>2</sup>	mg/l	0.1	0.2	0.3
Chromium, Total	mg/l	1.0	2.0	3.0
Cobalt, Total	mg/l			
Copper, Total	mg/l	1.0	2.0	3.0
Cyanide, Amenable <sup>2</sup>	mg/l	0.1	0.2	0.3
Cyanide, Total <sup>3</sup>	mg/l	0.65	1.2	1.8
Fluoride	mg/l	20	30	45
Gold, Total	mg/l	0.1	0.5	0.75
Iron, Total	mg/l			
Lead, Total	mg/l	0.1	0.5	0.75
Mercury, Total	ug/l	ND<0.2	ND<0.2	ND<0.2
Nickel, Total	mg/l	1.0	2.0	3.0
Nitrogen, Total	mg/l			
Oil & Grease, Hydrocarbon Fraction <sup>3</sup>	mg/l		100	150
Organics, Total Toxic <sup>1,4</sup>	mg/l			2.13
Phosphorus, Total	mg/l			
Silver, Total	mg/l	0.1	0.43 <sup>1</sup>	0.64
Solids, total suspended	mg/l		100	150
Tin, Total	mg/l	2.0	4.0	6.0
Titanium, Total	mg/l			
Zinc, Total	mg/l	1.0	2.0	3.0

Table 5A-1 : Metal Finishing Wastewater Pollutant Limits

Footnotes:

1 As defined by 40 CFR 413 and 433.

2 The limits for hexavalent chromium and amenable cyanide apply at the chromium reduction and cyanide destruction systems, respectively. These pollutants shall be monitored by using a grab sample average taken prior to combination with any dissimilar discharges.

3 This pollutant shall be monitored using a grab sample average taken prior to combination with any dissimilar discharges.

4 This pollutant shall be monitored using a grab sample taken prior to combination with any dissimilar discharges.

# (b) Monitoring Requirements

# (1) Pollutant Monitoring

- (A) The permittee shall perform chemical analyses of representative sample(s) obtained from each authorized discharge for all pollutants contained in Table 5A-1 of Section 5A(a)(1) of this general permit.
- (B) The commissioner may authorize the permittee to forego sampling of a pollutant if the permittee demonstrates through sampling and other technical factors that the pollutant is neither present nor expected to be present in the discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the permittee. This authorization is subject to the conditions and provisions described in Appendix E of this general permit. Permittees with an approved Solvent Management Plan may, in lieu of monitoring for TTOs, include a statement on the DMR certifying compliance with its Solvent Management Plan.

# (2) Monitoring Frequency

(A) Except as provided in Paragraph (B), below, sample analyses to determine compliance with pollutant concentration limits for discharges shall be performed as specified in Table 5A-2 below:

Flow	Sampling Frequency
0 to <5,000 gpd	Monthly <sup>1</sup>
≥5,000 to <10,000 gpd	Twice per Month <sup>1</sup>
≥10,000 gpd	Weekly <sup>1</sup>

# Table 5A-2 Metal Finishing Wastewater Sampling Schedule

<sup>1</sup>Please see Paragraph (B), below.

(B) When information provided in the registration identifies slug discharge(s) may impact discharge(s) authorized by this general permit, more frequent monitoring of such authorized discharge(s) shall be required, consistent with Section 4(g)(4) of this general permit. More frequent monitoring shall be required for the time period(s) associated with such slug discharge(s) and clearly delineated within the Approval of Registration.

# (3) Discharge Sampling

- (A) All samples shall be comprised of only those wastewaters authorized by this general permit taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable.
- (B) All samples obtained shall be representative of daily operations and shall be daily composite unless otherwise specified in the footnotes of Table 5A-1 of Section 5A(a)(1).
- (C) Chemical collection and analysis shall be performed in accordance with 40 CFR 136 unless otherwise specified by the commissioner. All metals analyses identified in this general permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136.
- (D) Samples collected to monitor for hexavalent chromium and amenable cyanide shall be obtained from the discharge of chromium reduction and cyanide destruction systems, respectively.

#### (4) Flow Monitoring

The permittee shall accurately determine the quantity of wastewater discharged.

- (A) Except for batch treatment system discharges of less than one thousand (1,000) gallons per batch, equipment and instrumentation (i.e., flow meter) shall be installed and maintained to accurately measure and record both instantaneous (gpm) and total daily flow (gpd). An effluent flow meter shall be:
  - (i) installed and maintained in accordance with manufacturer's specifications;
  - (ii) coupled with a continuous chart recorder and/or an electronic data recorder. If a continuous chart recorder is employed, the treatment system operator shall sign and date the chart at the beginning and end of each day of discharge with the date and time. If an electronic data recorder is employed, the flow data shall be printed-out at a frequency of at least once per week and signed by the treatment system operator with the date and time;
  - (iii) calibrated by a qualified source at least once per year to ensure accuracy.
  - (iv) Electronic data shall be made immediately available upon request by the commissioner.
- (B) Flow from batch treatment systems with a discharge of less than one thousand (1,000) gallons per batch may be calculated based on the measured volume within the batch discharge tank(s) and number of batches discharged in an operating day. For batch discharges that are not

monitored with a flowmeter, a daily log of the number of batches discharged and the total flow shall be maintained onsite.

# (5) pH Monitoring

The permittee shall accurately determine the pH of wastewater discharged.

- (A) Except for batch treatment system discharges of less than one thousand (1,000) gallons per batch, equipment and instrumentation for pH monitoring shall be installed and maintained to accurately measure and record the pH of all wastewater discharged in accordance with this general permit. An effluent pH meter shall:
  - (i) be installed and maintained in accordance with manufactures' specifications;
  - (ii) be coupled with a continuous chart recorder and/or an electronic data recorder. If a continuous chart recorder is employed, the treatment system operator shall sign and date the chart on each day of discharge with the date and time. If an electronic data recorder is employed, the pH data shall be printed-out at a frequency of at least once per week and signed by the treatment system operator with the date and time; and
  - (iii) be calibrated electronically by a qualified source at least once per year to ensure accuracy; and,
  - (iv) have its probes calibrated using a standard-buffer-solution at least monthly.
- (B) All discharges monitored with a pH meter shall have both audio and visual pH alarms that alert appropriate personnel capable of responding to incidents when the pH of the discharge goes below 6.0 or above 10.5 S.U. Tighter set points may be used to optimize treatment or prevent permit violations.
- (C) Any condition which causes an alarm shall be corrected immediately, or the discharge shall be stopped until the correction is made. All alarm conditions should be documented in the operators log.
- (D) For batch discharges not monitored with a pH meter, a daily log of pH readings for each batch discharged shall be maintained on site.

# (6) Record Keeping Requirements

The permittee shall retain copies of all records of data used to determine compliance with this general permit for a period of at least 5 years from the date of the record. The permittee shall at a minimum maintain at the facility, records of:

(A) the flow records required by section 5A(b)(4) of this general permit and the maximum daily flow for each month of the year;

- (B) the final discharge pH records required by section 5A(b)(5) of this general permit and the pH range (ie., the low and high pH recorded) of the final discharge pH for each day of discharge and each calendar month;
- (C) the calibration records of all pH and flow instrumentation equipment associated with wastewater treatment and discharge monitoring;
- (D) the frequency and duration of non-continuous discharges;
- (E) the individual(s) who performed the sampling or measurements;
- (F) the dates analyses were performed;
- (G) the individual who performed the analyses;
- (H) the analytical techniques or methods used;
- (I) the results of such analyses;

# Section 5B. Conditions of this General Permit Applicable to Process and Non-process Wastewaters that are not Subject to Categorical Pretreatment Standards

#### (a) Effluent Limits

(1) **Effluent Limits**—Process and Non-process Wastewater not subject to Categorical Pretreatment Standards discharged under the authority of this general permit shall not contain any pollutant identified in Table 5B-1 of this section except in a concentration at or below the maximum concentration specified therein.

Pollutant	Maximum Instantaneous Concentration	Pollutant	Maximum Instantaneous Concentration
Conventional Pollutants	mg/l	Metals	mg/l
Biochemical Oxygen Demand (BOD5)	600.0 <sup>2</sup>	Lead, Total	0.5
Total Suspended Solids (TSS)	600.0 <sup>2</sup>	Nickel, Total	2.0
Ammonia-Nitrogen	50.0 <sup>3</sup>	Silver, Total	0.55
Nitrate-Nitrogen	50.0 <sup>3</sup>	Tin, Total	4.0
Total Fats, Oils and Grease <sup>4</sup>	100.0	Zinc, Total	2.0
Organic Pollutants	mg/l		
Total Volatile Organics	5.0	Antimony, Total	4.0
Formaldehyde	10.0 <sup>3</sup>	Arsenic	0.10
Methylene Chloride	1.0	Beryllium, Total	2.0
Phenols, Total	10.0	Cobalt, Total	4.0
Phthalate Esters	2.0	Mercury, Total	0.0002
Polynuclear Aromatic Hydrocarbons	0.5	Molybdenum, Total	4.0
Ethylene Glycol	300.0 <sup>3</sup>	Selenium, Total	0.5
Propylene Glycol	300.0 <sup>3</sup>	Strontium, Total	2.0
Metals	mg/l	Thallium, Total	2.0
Cadmium, Total	0.5	Titanium, Total	4.0
Chromium, Total	2.0	Vanadium, Total	2.0
Copper, Total	2.0	Zirconium, Total	2.0

# Table 5B-1 Effluent Limits<sup>1</sup>

<sup>1</sup>These effluent limits do not apply to residuals generated by water treatment facilities that are transported to the solids handling portion of a POTW.

<sup>2</sup>This pollutant concentration may be exceeded provided that the total mass loading (flow x concentration)

of such pollutant discharged to the receiving POTW does not exceed 100.0 lbs/day or 2% of the POTW's design loading, whichever is less. This limit does not apply to discharges of Food Processing Wastewater or Water Treatment Wastewater

<sup>3</sup>For ammonia-nitrogen, nitrate-nitrogen, formaldehyde, ethylene glycol, or propylene glycol, the pollutant concentration may be exceeded provided that the total mass loading (flow x concentration) of each pollutant discharged to the receiving POTW does not exceed 10.0 lbs/day.

<sup>4</sup>For Food Processing wastewaters only, use EPA Method 1664, Rev. A reporting as Total Oil & Grease. For all other wastewaters use EPA Method 1664, Rev. A reporting as Total Petroleum Hydrocarbons.

<sup>5</sup> For photographic processing wastewaters only, if maximum daily flow is less than 100 gallons per day, the silver effluent limit is 5.0 mg/l. For flows greater than 100 gpd, the silver limit is 2.0 mg/l.

(2) **POTW Specific Effluent Limits**—If the facility process discharge is directed to a POTW listed in Appendix F of this general permit, effluent limits listed in Appendix F of this general permit specific to that POTW supersede limits in Table 5B-1.

(3) Wastewater discharged under the authority of this general permit shall not contain any substance listed in Appendix B, Table II, III, or V or Appendix D of Section 22a-430-4 of the Regulations of Connecticut State Agencies (all substances are listed in Appendix H of this general permit), other than a substance for which an effluent limit is specified in Table 5B-1 of this section or as otherwise approved by the commissioner in accordance with Section 7(a) of this general permit.

#### (b) Monitoring Requirements

For the purposes of determining monitoring requirements for Process and Nonprocess Wastewaters not subject to Categorical Pretreatment Standards in Section 5B(b) of this general permit, all discharges authorized under this general permit shall be categorized as follows:

#### **Group I: Process Wastewater Discharges**

- Contact cooling & heating water
- · Cutting and grinding wastewater
- Non-destruct testing rinsewater
- Printing and photo processing wastewater
- Tumbling and cleaning wastewater
- Water treatment wastewater
- Commercial laundry wastewater
- Food processing wastewater
- Reverse osmosis reject water
- Other process wastewaters, as defined in this general permit, also including: (i) process wastewaters which are hauled by a Connecticut licensed transporter to a POTW that has been approved by the commissioner to accept over-the-road wastewater (a list of POTWs that have been approved by the commissioner to accept over-the-road wastewater is described in Appendix G of this general permit); (ii) process wastewaters requiring a variance; and (iii) other wastewaters determined

by the commissioner to be process wastewaters.

#### **Group II: Non-process Wastewater Discharges**

- Air compressor condensate & blowdown
- Boiler blowdown
- Building maintenance wastewater
- Fire suppression testing wastewater
- Hydrostatic pressure testing wastewater
- Non-contact cooling water
- Potable water system maintenance or sampling wastewaters
- Swimming pool wastewaters
- Vehicle maintenance wastewaters
- Other non-process wastewaters including: (i) non-process wastewaters which are hauled by a Connecticut licensed transporter to a POTW that has been approved by the commissioner to accept over-the-road wastewaters (a list of POTWs that have been approved by the commissioner to accept over-the-road wastewater is described in Appendix G of this general permit); (ii) non-process wastewaters requiring a variance; and (iii) other wastewaters determined by the commissioner to be non-process wastewaters.
- (1) Parameter Monitoring
  - (A) (i) Each permittee must monitor the Process and Non-process Wastewater not subject to Categorical Pretreatment Standards for the parameters specified in Table 5B-2 of this section per category of wastewater (e.g. tumbling and cleaning wastewater or noncontact cooling water) at the frequency specified in Table 5B-3 of this section in accordance with the methods specified in 40 CFR Part 136 to determine whether such discharge complies with the effluent limits and other conditions of this general permit.
    - (ii) The commissioner may authorize the permittee to forego sampling of a pollutant if the permittee demonstrates through sampling and other technical factors that the pollutant is neither present nor expected to be present in the discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the permittee. This authorization is subject to the conditions and provisions described in Appendix E of this general permit.
  - (B) In addition, each permittee must monitor the wastewater at the frequency shown in Table 5B-3 for any parameters specified in Section 5B(a) of this general permit that are known or suspected to be present in the discharge.

Discharge Category	Air Compressor Condensate & Blowdown	Boiler Blowdown	Contact Cooling & Heating Water	Cutting & Grinding	Non- Destruct Testing Rinsewater	Printing (Photo- Processing <sup>1</sup> )	Tumbling & Cleaning	Water Treatment	Commercial Lanudry	Food Process- ing	Hydrostatic Pressure Testing	Non- contact cooling water, Reverse Osmosis Reject Water	Other process wastewater, non-process wastewater
Temperature			Х									Х	
рН	Х	Х	Х	Х	Х	X	Х	X	X	X	Х	Х	X
BOD <sub>5</sub>									X	Х			
Total Suspended													
Solids	Х	Х	Х	X	X		Х	X	X	X	Х		X
Nitrate-Nitrogen						X	X		X				
Ammonia-													
Nitrogen						X			X				
Phosphorus <sup>(3)</sup> ,													
total	X	X	Х	X	X	X	X	X	X	Х	Х	Х	X
Oil & grease,	v	v	V	v	V		V		v		v		v
TPH	Х	X	X	X	X		X		X		X		X
Oil & grease,										х			
total Volatile Organic										Χ			
Compounds, total						х							
Aluminum						<b>^</b>		X <sup>2</sup>					
Arsenic								X <sup>2</sup>					
Cadmium, total						X		~					
Chromium, total				X			X						
Copper, total	X	X	X	X	X	X	X	X					X
Iron, total	Λ	Λ	~		~	~	~	~			Х		~
Lead, total	Х	X	X	X	Х	X	X	X			~		X
Nickel, total			~	X	~ ~	X	X						~
Silver, total						X							
Zinc, total	X	X	X	Х	Х		Х	X	Х				Х

#### Table 5B-2. Minimum Monitoring Requirements—"X" indicates required monitoring.

<sup>1</sup> Required monitoring for a photoprocessing discharge is silver and pH only. Refer to specific instructions at Section 5B(b)(5)(B).

<sup>2</sup>Aluminum and arsenic monitoring shall be required only for wastewater associated with alum treatment.

<sup>3</sup>Phosphorus monitoring shall be required only for discharges being received by a POTW listed in Appendix F2(excluding commercial laundries which must always monitor for phosphorus).

- (2) Discharges of the following wastewaters are exempt from all monitoring requirements, unless otherwise directed by the POTW Authority, provided that the discharge is in compliance with the effluent limits of Section 5B(a) of this general permit:
  - (A) non-process building maintenance wastewaters,
  - (B) fire suppression testing wastewaters,
  - (C) swimming pool wastewaters,
  - (D) potable water system maintenance and sampling wastewaters
  - (E) vehicle maintenance wastewaters
  - (F) discharges comprised of sources of groundwater and stormwater which enter private or public utility equipment manholes and/or vaults which are conveyed to a POTW by combined storm and sanitary sewers, and
  - (G) discharges generated by the testing and maintenance of potable water distribution systems and/or used for insuring public health and safety which are conveyed to a POTW by combined storm and sanitary sewers.
- (3) Flow Monitoring
  - (A) The permittee shall monitor the total daily flow on the day of pollutant sampling for each discharge of Process and Non-process Wastewater not subject to Categorical Pretreatment Standards in accordance with the frequencies in Table 5B-3 below.
  - (B) The permittee shall monitor each discharge pipe having a maximum daily flow of greater than 5,000 gpd (before mixing with noncontact cooling water or domestic sewage and except for batch treatment systems with a known discharge volume and discharges which occur less than once per week) by means of a flow meter system and associated recording device which measures, visually indicates and records instantaneous flow (gallons per minute) and total daily flow (gallons per day), unless an alternate flow monitoring plan is approved by commissioner.
  - (C) Estimates of flow may be used to satisfy this requirement for discharges of less than 5,000 gpd or discharges that meet an exception in Section 5B(b)(3)(B) above, provided they are based on information from a dedicated incoming water meter, a batch treatment tank volume, the accurately timed filling of a container of known volume, a rated pump capacity or other generally acceptable engineering practice.
- (4) pH Monitoring
  - (A) The permittee shall accurately determine the pH of wastewater discharged in accordance with the requirements of this general permit. All instrumentation for pH monitoring must be installed and maintained in accordance with manufacturers' specifications, calibrated (electronic calibration) by a qualified source at least once per year to ensure accuracy and calibrated using a standard buffer solution at least monthly.
  - (B) Any discharge that requires pH adjustment shall comply with Section 5B(d)(1) of this general permit which incorporates section 22a-430-3(q) of

the Regulations of Connecticut State Agencies. Any audible and visual pH alarms installed in accordance with this requirement shall, at a minimum, alert appropriate personnel capable of responding to incidents when the pH of the discharge goes below 5.5 or above 11 Standard Units. Any condition which causes an alarm shall be corrected immediately, or the discharge shall be stopped until the correction is made.

- (C) For batch treatment systems, a daily log of pH readings for each batch discharged shall be maintained on site.
- (5) Frequency of Monitoring
  - (A) Each permittee must monitor the wastewater for the pollutants specified in Section 5B(b)(1) of this general permit per category of wastewater at the frequency specified in Table 5B-3 of this general permit, with the exceptions noted below. Total Maximum Daily Flow in Table 5B-3 shall mean the Total Maximum Daily Flow for that category documented in the registration that was filed for coverage under this general permit.

Discharge Group	Total Maximum Daily Flow Thresholds per Category of Wastewater	Minimum Frequency of Pollutant Monitoring <sup>1,3</sup>	Electronic Reporting Required <sup>2</sup>
	Flow < 1,000 gpd	None	No
Group I– Process Wastewaters (except as	1,000 gpd $\leq$ Flow $<$ 10,000 gpd	Quarterly	Yes
noted below)	10,000 gpd $\leq$ Flow	Monthly	Yes
Group I Food Processing, Commercial	Flow < 25,000 gpd	None	No
Laundry, Reverse Osmosis Reject Water	Flow $\geq$ 25,000 gpd	Quarterly	Yes
Group II Air Compressor Condensate, Boiler Blowdown, Non-contact	Flow < 10,000 gpd	None	No
Cooling Water, Hydrostatic Pressure Testing Wastewater	Flow $\geq$ 10,000 gpd	Quarterly	No
Group II Building Maintenance, Fire Suppression Testing, Swimming Pool, Vehicle Maintenance, Potable Water System Maintenance, etc. <sup>4</sup>	All Flows	None	No

<sup>1</sup>Discharges that do not have a prescribed monitoring frequency must comply with the effluent limits of Section 5B(a) of this general permit The permittee should maintain records of monitoring data that the permittee believes is representative of the current discharge.

<sup>2</sup>Note: Report to DEEP electronically via NetDMR.

<sup>3</sup>For water treatment wastewaters associated with annual or semi-annual maintenance cleaning of clarifier tank, settling lagoon, or other large tanks which may discharge greater than 50,000 gallons per day, samples shall be taken from the first 10% and last 10% of the discharge and analyzed separately. Such discharges

shall not be counted toward the total maximum daily flow when determining monitoring frequency. For all other water treatment wastewater discharges greater than 10,000 gpd, if the discharge lasts longer than four hours, two grab samples shall be taken at least four hours apart and composited.  $^{4}$ See Section 5B(b)(2).

- (B) Specific Photoprocessing Monitoring Requirements—
  - (i) All flows of photoprocessing wastewater discharges from silver recovery systems must be monitored monthly using silver test strips to assure proper operation of the silver recovery system. Monitoring must take place between metallic replacement cartridges to test for breakthrough on the first cartridge. If initial monitoring event indicates breakthrough, a second test will be taken. If second event also indicates breakthrough, the cartridges must be replaced. Results of all monitoring must be maintained in a log book and kept on site.
  - (ii) A 40 CFR Part 136 method is required once annually to verify compliance with 5 mg/l silver limit.
- (6) Monitoring Location

All wastewater samples, except for photographic processing wastewater, shall be collected before combination with non-contact cooling water, hydrostatic pressure testing wastewater, or the facility's domestic sewage. For any discharge of photographic processing wastewater, samples shall be taken before combination with any other wastewater discharges.

- (7) Sample Type
  - (A) For a discharge less than or equal to 10,000 gpd from a single pipe, a sample taken for the purpose of determining compliance with the effluent limits in Table 5B-1 of this general permit shall:
    - (i) Be a grab sample which consists solely of the Process or Nonprocess Wastewater not subject to Categorical Pretreatment Standards category whose discharge is authorized by this general permit; or
    - Be a composite sample which consists of any combination of Process or Non-process Wastewater not subject to Categorical Pretreatment Standards grab sample categories; and
    - (iii) Be representative in all respects, including without limitation chemically and thermally, of the sampled wastewater during routine operating conditions. Where multiple sources of a specific category of Process or Non-process Wastewater not subject to Categorical Pretreatment Standards are generated at a site, only one sample from a single representative source is required.
  - (B) For discharges greater than 10,000 gpd from a single pipe, excluding noncontact cooling water, water treatment wastewater and hydrostatic pressure testing wastewater, samples shall be composite with aliquots taken at

intervals of at least once every four hours over a full operating day.

Sampling to determine Total Fats, Oils and Grease (Food Processing only) and Oil and Grease, Total Petroleum Hydrocarbons (TPH) shall be a single grab sample and not a composite sample.

- (8) Record Keeping Requirements
  - (A) For each category of discharge, excluding those exempt from registration and monitoring under this general permit, the permittee shall maintain for the parameters specified in Table 5B-2 at the monitoring frequency specified per Table 5B-3 a record containing at least the following information: total daily flow, a description of the process or activity which generated it, sample analytical results and chain of custody forms.
  - (B) All analytical results shall be retained on-site or at the permittee's principal place of business in Connecticut for at least five years from the date such result or data was generated or received by the permittee. These results shall be made available to the commissioner, or the local POTW authority immediately upon request.

#### (c) Additional Specific Operating Conditions and BMPs for Process and Non-process Wastewaters not subject to Categorical Pretreatment Standards by Type of Wastewater

- (1) Boiler Blowdown Discharges
  - (A) Boil-out and boiler acid cleaning wastewaters are not authorized by this permit. The discharge of these wastewaters must be permitted separately under section 22a-430 or 22a-430b of the General Statutes or be collected by a waste transporter holding a valid license issued by the commissioner for that purpose.
  - (B) All discharges of boiler blowdown wastewater to which chemicals are added must be transported directly to a POTW by a properly licensed transporter or released directly to a POTW via a sanitary sewer.
  - (C) All discharges of boiler blowdown wastewater directly to surface water or to surface water by way of storm drain or any other conveyance are prohibited.

#### (2) Tumbling and Cleaning Discharges

Note: Tumbling and Cleaning discharges are often found at facilities that are subject to the Electroplating Point Source Category (40CFR Part 413) or the Metal Finishing Point Source Category (40CFR Part 433) (even if no discharges exist from the electroplating or metal finishing operations). If this is the case, the facility's tumbling and cleaning discharge is regulated by section 5A of this Significant Industrial User general permit.

- (A) If necessary, settleable solids should be removed from all tumbling or cleaning of parts wastewaters by utilizing settling, centrifuging, filtration or a combination of these or other technologies to meet all effluent limits in Table 5B-1 of this general permit.
- (B) The settling tank should prevent short circuiting of flow or displacement of accumulated tank solids.
- (C) The settling tank should have a submerged outlet to allow for retention of floatable materials.

#### (3) Food Processing Wastewater Discharges

- (A) All food processing wastewater generated by (1) the loading and unloading, storage (interior and exterior) or disposal of raw or processed materials, by-products and wastes, and (2) by clean up of such areas, should only be discharged to the food processing wastewater system. Loading and unloading shall be done in a manner that will not produce stormwater contamination and runoff, consistent with requirements of The General Permit for Discharges of Stormwater Associated with Industrial Activity.
- (B) Grease trap/interceptor
  - (i) Food processing wastewater treatment systems should employ processes to maximize the removal of floating solids, oils and greases prior to discharge, including use of a grease trap/interceptor.
  - (ii) At a minimum, the permittee should perform quarterly inspections of all grease trap/interceptors.
  - (iii) An outdoor in-ground grease trap/interceptor should be completely emptied by a grease trap/interceptor cleaner whenever 25% of the operating depth of the grease trap/interceptor is occupied by fats, oils, grease and settled solids.
  - (iv) The grease and oil portion of all grease trap/interceptors should be disposed of at a regional collection/transfer/disposal site.
  - (v) The permittee **must** maintain a written log on-site of grease trap/interceptor cleaning and maintenance and shall maintain copies of the grease trap/interceptor cleaner's receipts for five (5) years.
  - (vi) All wastewater flows connected to the grease trap/interceptors should be screened to prevent solids from entering the treatment units. All solids collected in the grease trap/interceptor should be disposed of in accordance with applicable solid waste regulations.
  - (vii) The permittee should discharge the food processing wastewater at a temperature which will allow optimum performance of the grease trap/interceptor.

#### (4) Printing and Photo Processing Discharges

- (A) Waste inks and waste printing press cleaning solvents shall not be discharged but shall either be treated and recycled or disposed of in accordance with applicable federal, state and local law.
- (B) Signs in English and other languages necessary to communicate to all employees should be posted at sinks and drains in areas where printing and publishing take place reading: "Do Not Pour any inks, cleaning solvents, untreated computer-to-plate waste developer, or untreated silver bearing wastes down any sink and/or drain."
- (C) Silver Recovery Systems
  - For any photoprocessing discharge where silver is a known or suspected pollutant, the discharge must be treated using a silver recovery system maintained to achieve 90% silver recovery at all times.
  - (ii) If metallic replacement cartridges are used for silver recovery, at least two should be used in series preceded by a metering device to allow for adequate dwell time. If the silver recovery system is used in a closed-loop system and batch dumped, only one metallic replacement cartridge is required.
  - (iii) Installation dates should be written on cartridges upon installation and should be replaced when they no longer remove silver at 90% efficiency. Cartridge installation, replacement dates, and results of all monthly test strip monitoring required by Section 5B(b)(5)(B) should be kept in a log. At a minimum metallic replacement cartridges must be replaced at least once per year.
  - (iv) Silver recovery treatment systems should be inspected at least weekly to ensure proper operation of such system.
- (D) The permittee should prepare and implement written procedures for the treatment and/or disposal of Printing and Photographic Wastewater. Such procedures should include, but not be limited to the containment, clean-up and disposal of spills. In addition, appropriate employees should be provided with routine training on these procedures. Such procedures and records of training dates should be kept on-site.
- (E) Printing equipment, including but not limited to plates and rollers, should have excess ink, coating, or adhesive wiped or squeegeed off prior to washing in sinks.
- (F) Floor drains in printing or pre-press areas shall be connected to the sanitary sewer or a holding tank, and not to the storm drainage system, dry well, or septic system. Floor drains should be collared or protected in some way as to prevent spills from entering the floor drain.

- (G) Any permittee that generates, transports, or stores silver bearing waste(s) that are recycled for purposes of precious metals recovery is subject to the Connecticut Hazardous Waste Management Regulations, including but not necessarily limited to, sections 22a-449(c)-101(c) and 22a-449(c)-106(b) of the Regulations of the Connecticut State Agencies incorporating 40 CFR 261.6 and 40 CFR 266.70 respectively. The permittee should contact the Waste Engineering and Enforcement Division's Compliance Assistance telephone number at (860) 424-4193 or (888) 424-4193 for additional details regarding the aforementioned RCRA provisions, or to request a copy of the recyclable materials registration form prescribed by the commissioner.
- (H) CTP processing wastewater adjusted for pH and directly discharged to the sewer shall meet the following:
  - pH adjust system shall have an automatic alarm that will alert operators, both audibly and visually, if the discharge pH goes below 5.0 or above 12.0 standard units;
  - (ii) pH adjust system shall have a chart recorder or electronic memory recorder.
- (I) CTP processing wastewater adjusted for pH in a closed-loop system should monitor pH with a portable test kit or pH meter prior to discharge. Date, volume discharged and pH of wastewater should be recorded on a log.

#### (5) Hydrostatic Pressure Testing Wastewater Discharges

Each permittee shall remove the maximum extent of all solid and liquid substances, including scale, soil and any residues from materials previously contained in the tank or pipeline, prior to any hydrostatic pressure testing, using the following practices at a minimum:

- (A) for all pipelines: cleaning with either compressed air, high pressure water spray, or both;
- (B) for natural gas pipelines: cleaning with compressed air and with cleaning pigs designed for such pipelines;
- (C) for all used tanks: cleaning with compressed air, high pressure water spray, or both.

Any wastewater resulting from this prior cleaning must be analyzed to determine if it can be discharged under the authority of this general permit or if it must be disposed of as hazardous waste.

Wastewater resulting from this prior cleaning cannot be discharged under the authority of this general permit.

#### (6) Non-contact Cooling and Heat Pump Water Wastewater

- (A) A discharge of minor non-contact cooling and heat pump water from vapor degreasers, dry cleaning machines, or other equipment used to cool chlorinated solvent vapors, and a discharge of minor non-contact cooling and heat pump water which contains chemicals added to the source water after it enters the site, e.g., cooling tower blowdown, shall be discharged only to a POTW.
- (B) For any discharge of minor non-contact cooling and heat pump water, no on-site water treatment chemicals or additives containing chromium, copper, lead, zinc, or tributyl tin shall be added to any discharge nor shall sacrificial metals be used within the cooling water or heat pump system on-site.

#### (7) Air Compressor Condensate & Blowdown

- (A) The permittee should establish a preventative maintenance program which includes, but is not limited to, a visual inspection for oil leaks, and a schedule for cleaning parts, replacing oil and replacing filters for the air compressor equipment as specified in the manufacturers specifications.
- (B) Any floating layer of oil should be removed or retained before discharge.

#### (8) Building Maintenance Wastewater

The use of ammoniated, petroleum or chlorinated solvent-based cleaning agents should be avoided or minimized to the extent possible.

#### (9) Non-Destruct Testing Rinsewater

- (A) Discharge must consist of final rinsewaters from non-destruct testing operations only; discharge of penetrant solution dip tank(s) is not allowed under this general permit.
- (B) Penetrant solution drippage from parts and products should be directed into penetrant solution dip tank(s) for reuse to the extent practicable.

#### (10) Commercial Laundry

- (A) Facility cannot accept industrial rags, soiled wipes from an auto repair facility, rugs, mats, dust tool covers, soiled rags, wiping towels, shop towels, wipes, wipers and rags that are used to clean solvent, ink, oil and grease or soils from various objects or to wipe up spilled solvent, other liquids and rags that are commonly used in printing and publishing shops, machine shops, automotive repair shops, gas stations and other industrial facilities.
- (B) Permittee shall ensure that no detergents, surfactants, cleaners or any

other types of products or substances contain Alkylphenol Ethoxylates or any of its derivatives including but not limited to Nonylphenol Ethoxylates, Octyl phenol Ethoxylate or dodycyl phenol ethoxylate.

#### (11) Water Treatment Wastewaters

Water treatment facilities may transport water treatment wastewater residuals to the solids handling portion of a POTW for disposal provided that:

- (A) the transport of such materials is in accordance with section 5(e)(4) of this general permit and
- (B) at six month intervals in a calendar year, the registrant shall analyze residuals for:
  - i) percent solids; and
  - ii) total metals in mg/kg of the following:
    - S Arsenic (As),
    - Barium (Ba),
    - · Cadmium (Cd),
    - Chromium (Cr),
    - Copper (Cu)
    - · Lead (Pb),
    - Mercury (Hg),
    - · Selenium (Se)
    - Silver (Ag); and
- (C) submit a report by January 31 of the following year that includes:i) the results of the two analyses performed in section 5(f)(11)(A)(i); and
  - ii) the total residuals disposed, in pounds dry weight, during the previous calendar year.
  - iii) The report shall be submitted to:

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

- (12) Vehicle Maintenance Wastewaters
  - (A) Treatment Requirements

- (i) Except as provided in subdivisions (A)(ii), (A)(iii), or (A)(iv) of this section, every discharge of vehicle maintenance wastewater shall be treated using an oil / grit separator which meets the following specifications:
  - 1. The separator shall have a capacity of at least 1,000 gallons or have a retention time of at least six hours at the maximum daily flow, whichever is greater.
  - 2. The separator shall be constructed of precast concrete, precast polymer concrete, cathodically protected steel, or fiberglass to withstand H-20 loading.
    - A. If the separator is constructed of precast concrete, the following requirements shall apply:
      - i. The interior of the separator shall be coated with an epoxy sealant resistant to gasoline, oil, and solvents.
      - ii. The exterior of the separator, including the exterior top and bottom and extension to grade manholes, shall be coated with a waterproof sealant.
      - iii. All structural seams shall be located above the static liquid level and grouted with non-shrinking cement or similar material and coated with a waterproof sealant.
      - iv. Voids between separator walls and inlet and outlet piping shall be grouted with non-shrinking cement and coated with a waterproof sealant.
      - v. Concrete covers shall be permanently removed from the separator.
    - B. If the separator is constructed of polymer concrete, it shall comply with subparagraphs (A)(iii), (iv) and (v) of this subparagraph 2.
  - 3. No pipe carrying any other water, material or substance, including but not limited to domestic sewage, septage, or stormwater, shall be connected to the separator.
  - 4. The separator shall have manholes with extensions to grade above the inlet and outlet piping. The extensions shall have steel frames and manhole covers. The manholes, extensions, and accesses to the separator shall be at least 18 inches in diameter.
  - 5. The inlet extension to grade shall be provided with a properly secured vent line which extends at least eight feet above finished grade. The size of the vent shall be at least half the size of the outlet discharge line from the separator.

- 6. The outlet piping shall utilize a tee-pipe on the interior of the separator. The tee-pipe shall be equipped with a stand pipe riser extending up the extension to grade more than three inches above the static liquid level, but no closer than eight inches from the manhole cover. The tee-pipe shall extend to within six to 24 inches from the bottom of the separator.
- 7. The outlet discharge line from the separator shall be directly connected to the municipal sanitary sewer or to a holding tank that meets the requirements listed in subsection 5(d) of this general permit.
- 8. The diameter of the outlet discharge line shall be at least the size of the inlet pipe and in no event less than four inches.
- 9. Such separator shall be visually inspected by a Connecticutlicensed Professional Engineer to verify compliance with the treatment requirements of this general permit prior to backfilling.
- (ii) If the Commissioner has determined that a registrant's site does not have the adequate space to install the oil/grit separator specified in Section 5B(c)(12)(A)(i) above, the Commissioner may approve in writing the installation of an alternate oil/grit separator ("separator") treatment technology for the treatment of no more than 500 gallons per day of vehicle maintenance wastewater. Such alternative treatment technology shall be designed in accordance with the standards promulgated by the American Petroleum Institute ("API") for oily-water separation, as described in API Publication 421, entitled "Design and Operation of Oil-Water Separators" dated February 1990 and, at a minimum, meet the following requirements:
  - 1. The separator shall have a storage capacity of at least 250 gallons or have a retention time of at least six hours at the maximum daily flow, whichever is greater.
  - 2. The separator shall be constructed of stainless steel, cathodically protected steel, polyethylene or fiberglass. Separators placed underground must be able to withstand H-20 loading.
  - The separator shall utilize coalescing plates or equivalent design for capture of oil droplets 60 micron size or greater at 70 degrees F. The separator shall have oil storage distinct from the separator tank with a capacity equal to at least 20% of the total separator volume.
  - 4. The oil storage tank shall be provided with a visual oil level sight line and high level alarm that will alert the operator when tank reaches 80% of oil storage capacity.

- 5. As required by RCSA 22a-430-3(f), all components of the treatment system shall at all times be properly operated and maintained to assure compliance with all permit conditions.
- 6. No pipe carrying any other water, material or substance, including but not limited to domestic sewage, septage, or stormwater, shall be connected to the separator.
- 7. An underground separator shall have manholes with extensions to grade above the inlet and outlet piping. The extensions shall have steel frames and manhole covers. The manholes, extensions, and accesses to the separator shall be at least 18 inches in diameter.
- 8. An underground separator shall be provided with a properly secured vent line connected to the inlet extension to grade which extends at least eight feet above finished grade. The size of the vent shall be at least half the size of the outlet discharge line from the separator.
- 9. The inlet line to the separator shall be equipped with a device to dissipate the energy of the inlet flow.
- 10. The outlet discharge line from the separator shall be at the opposite end of the separator from the inlet line to prevent short circuiting of flow and must be directly connected to the municipal sanitary sewer or to a holding tank that meets the requirements listed in subsection 5(e)(4) of this general permit.
- 11. The diameter of the outlet discharge line shall be at least the size of the inlet pipe and in no event less than two inches.
- 12. The separator must be emptied and cleaned at least once per year to remove buildup of solids and oil.
- 13. The POTW Authority may specify further requirements in accordance with local sewer ordinance.
- 14. Such separator shall be certified by a Connecticut licensed Professional Engineer (PE) as meeting these specifications, shall be visually inspected prior to installation or backfilling by the PE, and shall be approved in writing by the Commissioner.
- (iii) A discharge of vehicle maintenance wastewater to a collection and/or treatment system that does **not** meet the specifications of Section 5B(c)(12)(A)(i) or (ii) of this general permit, is not authorized under this general permit unless such system was installed and approved in writing by the Commissioner prior to the effective date of this general permit.

- (iv) A discharge from a small volume autobody repair or small volume vehicle detailing facility does not require treatment.
- (v) All open floor drains that receive vehicle maintenance wastewaters shall be directed to the collection and/or wastewater treatment system.
- (B) Pollution Prevention/Best Management Practices
  - (i) Every structure at the subject facility shall be constructed and maintained, and all operations at the site on which the facility is located shall be conducted, so as to ensure that vehicle maintenance wastewater is directed solely to interior floor drains and **not** to the outdoors. No valve or piping bypass equipment that could prevent vehicle maintenance wastewater from entering appropriate treatment equipment shall be present at such facility or site.
  - (ii) All washing of vehicles or vehicle tires shall be performed inside the wastewater collection structure.
  - (iii) All structures and operations at the subject site shall be located so as to minimize the collection of stormwater in the vehicle service floor drain and vehicle wash areas.
  - (iv) A temporary vehicle wash area at the subject site shall have an impervious ground surface surrounded by an impermeable berm, or be sufficiently sloped to ensure that all wastewater generated during washing operations is retained within the collection area. Wastewater from a temporary vehicle wash area shall be treated in accordance with subdivision (A)(i), (A)(ii), (A)(iii), or (A)(iv) of this section and shall be discharged to a POTW or to a holding tank that meets the requirements of section 5(e)(4) of this general permit.
  - (v) Storage at the subject facility of any toxic or hazardous materials, as those terms are defined in Section 22a-430-4 Appendix B Tables II, III, and V, and Appendix D of the Regulations of Connecticut State Agencies and 40 CFR 116.4, shall take place within an impermeable containment area capable of holding at least the volume of the largest chemical container used, or ten percent (10%) of the total volume of all containers used in such containment area, whichever is larger, without overflow from such containment area.
  - (vi) Chemical liquids, waste chemical liquids, oil or petroleum, and waste oil, associated with vehicle maintenance or autobody repair, including without limitation lubricating oils, gasoline, kerosene,

anti-freeze, degreasing agents, paints, solvents and rustproofing compounds, shall be stored and disposed of in accordance with all applicable state and federal law, including without limitation Connecticut General Statute 22a-454 and regulations adopted under Connecticut General Statute Section 22a-449(c).

- (vii) The permittee shall manage any waste oil storage tank and its contents in accordance with the applicable waste management requirements of RCSA Sections 22a-449(c)-100 et seq., including but not limited to those requirements pertaining to the management of used oil.
- (viii) Any above ground waste oil storage tank located at the facility shall have a capacity of at least 250 gallons.
- (ix) Any underground waste oil storage tank shall comply with Sections 22a-449 (d)-1 and 22a-449(d)-101 through 113 of the Regulations of Connecticut State Agencies.
- (x) At an autobody repair facility, flooring in any area where sanding or grinding of automobile parts occurs shall be swept or vacuumed clean of sand, grit, metal dust and any other material at least once per day and immediately prior to floor washing.
- (xi) Any spill or release or leakage of any chemical liquid referred to in subdivision (v) or (vi) of this subsection shall be immediately cleaned up and disposed of in accordance with all applicable state and federal law. In no case shall such a chemical liquid be disposed of in any floor drain, toilet, sink, sanitary sewer, storm drain, surface water body or on the ground.
- (xii) Semi-annual inspections of all treatment equipment associated with each discharge authorized by this general permit shall be performed. A log of such inspections shall be maintained at the facility on a copy of the form provided as Attachment A to this general permit. The log shall document the date of the inspection, the inspector's name, title and signature, the quantities, as measured at the time of the inspection, of oil, grease and grit located within the separator, and any maintenance work and changes in equipment associated with such discharge that has taken place at the site since the last inspection.
- (xiii) The separator shall be completely cleaned by a certified waste hauler as often as necessary to assure that the separator continues to operate effectively and efficiently. The quantity of oil, grease and grit located within the separator at any time shall not exceed twenty percent of the distance between the separator base and static liquid level.

(xiv) During vehicle washing operations, the permittee shall not use any detergent which could cause oil and grease/ hydrocarbon fraction in wastewater to exceed a concentration of 100 milligrams per liter.

#### Section 6. General Conditions

#### (a) Reliance on Registration

When evaluating a registration, the commissioner relies on information provided by the registrant. If such information proves to be false or incomplete, the authorization issued under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

#### (b) Duty to Correct Violations

Upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results and prevent recurrence of such violation

#### (c) Duty to Provide Information

If the commissioner requests any information pertinent to the authorized activity or to determine compliance with this general permit or with the permittee's Approval of Registration, the permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with Section 6(d) of this general permit.

#### (d) Certification of Documents

Any document, including but not limited to any notice, which is submitted to the commissioner under this general permit shall be signed by, as applicable, the registrant or the permittee in accordance with section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

#### (e) Date of Filing

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in

the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

#### (f) False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

#### (g) Correction of Inaccuracies

Within fifteen (15) days after the date a registrant becomes aware of a change in any of the information submitted pursuant to this general permit, becomes aware that any such information is inaccurate or misleading, or that any relevant information has been omitted, such registrant shall correct the inaccurate or misleading information with written correspondence to the commissioner. If the commissioner has already issued an Approval of Registration for the discharge in accordance with this general permit, then such permittee shall provide the revised information in writing to the commissioner on a modified registration. Such information shall be provided in accordance with Section 4(d) of this general permit.

#### (h) Transfer of Authorization

An Approval of Registration under this general permit is transferable only in accordance with the provisions of section 22a-60 of the General Statutes and section 22a-430-4(0) of the Regulations of Connecticut State Agencies.

#### (i) Other Applicable Law

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

#### (j) Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

#### Section 7. Commissioner's Powers

#### (a) Abatement of Violations

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for

any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

Violations of any of the terms, conditions or limitations contained in this general permit may subject the permittee to enforcement action, including but not limit to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the Connecticut General Statutes and Regulations of Connecticut State Agencies. Specifically, civil penalties of up to twenty-five thousand dollars may be assessed per violation per day.

#### (b) General Permit Revocation, Suspension, or Modification

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

#### (c) Public Notice of Facilities in Significant Noncompliance

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 general permit.

#### (d) Filing of an Individual Permit Application

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit to continue lawfully conducting the activity authorized by this general permit, the permittee may continue conducting such activity in accordance with this general permit only if the permittee files an application for an individual permit within sixty (60) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit and the subject Approval of Registration. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

#### (e) Audits

Pursuant to Section 22a-430b(e) of the Connecticut General Statutes, the commissioner may audit any certification made by a Qualified Professional Engineer or Qualified Certified Hazardous Materials Manager in a registration or correspondence associated with this general permit.

Issued:

Robert J. Klee Commissioner

### <u>Appendix A</u> General Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

"----" in the limits column in Table 5A-1 : Metal Finishing Wastewater Pollutant Limits means a limit is not specified, but a value must be reported on the Discharge Monitoring Report ("DMR").

*"Air compressor blowdown"* means condensed moisture from compressed air that is drained from the interior of electrical or mechanical air compressor equipment.

"Air compressor condensate" means wastewater which accumulates on the exterior of electrical or mechanical air compressor equipment due to condensation.

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

*"Applicable POTW Authority"* means the POTW Authority with jurisdiction over the POTW which receives or will receive the subject discharge.

*"Approval of Registration"* means an Approval of Registration issued under Section 4 of this general permit.

"Authorized activity" means any activity authorized by this general permit.

"Authorized discharge" means a discharge authorized under this general permit.

*"Average Daily Flow"* means the average of all total daily flows measured during any calendar month.

"Average Monthly Limit" means the average concentration of a substance as measured by the average of all daily composite, defined composites, grab(s) or grab sample averages taken during any calendar month.

"*Batch Treatment System*" means a treatment system that collects wastewater to be treated at one time, without additional wastewater being added once treatment has commenced until the batch has been fully discharged.

*"Best management practice"* (BMP) means a practice, procedure, structure or facility designed to prevent or minimize environmental damage, or to maintain or enhance environmental quality. BMPs include without limit treatment requirements, operating procedures, practices to control spillage or leaks, sludge or waste disposal, or providing for drainage from raw material storage.

*"Boiler acid cleaning wastewater" means* wastewater and waste acid cleaning solution generated from the use of an acidic cleaning solution to remove scale or other contaminants from a boiler.

*"Boiler blowdown wastewater"* means wastewater resulting from periodic or continuous bleed off or draining of bottom, bulk or surface water from a boiler during boiler operation for the purpose of eliminating excess solids from the boiler water, and shall include steam condensate from boiler operations but does not include boil-out or boiler acid cleaning wastewater.

*"Boil-out"* means wastewater and waste alkaline cleaning solution generated from hot alkaline cleaning to remove oil and grease, protective coatings or soil, performed as maintenance on a boiler or performed on a new boiler prior to operation.

*"Building maintenance wastewater"* means wastewater generated by the cleaning of interior or exterior building surfaces, other than chemical paint stripping wastewater, which meets all effluent limits specified in subsection 5B(a) of this general permit. Building maintenance wastewater from commercial, retail or office areas not in a manufacturing or industrial setting are not building maintenance wastewaters for the purpose of applying the definition of process wastewaters used in this general permit.

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

*"Categorical Industrial User (CIU)" means* all Industrial Users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, subchapter N.

*"Certified Hazardous Materials Manager"* or *"CHMM"* means a person who has gained recognition as a CHMM in accordance with the requirements developed and administered by the Institute of Hazardous Materials Management.

"CFR" means the Code of Federal Regulations.

"*Coastal waters*" means those waters of Long Island Sound and its harbors, embayments, tidal rivers, streams and creeks which contain a salinity concentration of at least five hundred parts per million under low flow conditions.

"CFR" means the Code of Federal Regulations.

"*Chemical* liquids" means chemical liquids as defined by section 22a-448 of the General Statutes.

"*Commercial Laundry wastewater*" means wastewater generated by the laundering of linen and textiles brought in from offsite facilities such as hospitals, restaurants, homes and healthcare facilities. This definition does not include wastewater from coin operated laundromats, laundering of rags, wipes, rugs, mats, shop towels or uniforms contaminated with oils, solvents, inks or other industrial pollutants or generated from facilities such as printing and publishing shops, machine shops, automotive repair shops and other industrial facilities.

"*Commissioner*" means commissioner as defined by section 22a-423 of the General Statutes

*Computer-to-Plate*" or "*Direct-to-Plate*" or "*CTP*" or "*DTP*" means a printing prepress process in which a digital image is transmitted directly from a computer to a plate used on a printing press without requiring film as an intermediate step.

"*Condensate*" means the product of the physical process in which water is removed from a vapor or vapor mixture (e.g., pipe sweat).

"*Contact cooling and heating wastewater*" means water which, for the purpose of heat transfer, comes directly into contact with a product or manufacturing process.

"Continuous Treatment System" means a treatment system that treats wastewater on a continuous basis; with additional wastewater entering the treatment system without interruption of treatment.

*"CTP processing wastewater"* means wastewater generated by the processing of CTP or DTP digital plates.

"*Cutting and grinding wastewater*" means wastewater generated by the cutting and/or grinding of glass, wood, plastics, or other non-metallic items.

"Day" means the twenty-four hour period commencing at 12:00 a.m., and, unless specified as "business day" shall mean calendar day.

"Department" means the Department of Energy and Environmental Protection.

"Domestic sewage" means sewage that consists of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surfaces or yard drains.

*"Emerging contaminants"* means emerging contaminants as defined in the *"Technical Fact Sheets about Contaminants of Concern at Federal Facilities"*, available at: www.epa.gov/fedfac/emerging-contaminants-and-federal-facility-contaminants-concern.

"Facility" means any facility at which an authorized discharge originates.

*"Filter to waste"* means the initial volume of filtrate produced following backwash of a filter, or following the initial construction, rebuilding or maintenance of a filter.

*"Filtration"* means a physical, chemical or biological process that reduces concentrations of contaminants in water by passing it through filter media.

*"Fire suppression system testwater"* means wastewater generated by the testing or maintenance of a fire sprinkler or suppression system that meets all effluent limits specified in subsection 5(a) of this general permit.

*"Food Processing Wastewaters"* means wastewaters generated by the manufacturing and storage of food and beverages for human or animal consumption as described in industry group numbers that begin with 311 through 3121 of the 2002 North American Industry Classification System or previously by industry group numbers 201 through 209, inclusive, of the Standard Industrial Classification Manual prepared by the Executive Office of the President, Office of Management and Budget, 1987, (see Appendix A of this general permit), including but not limited to, wastewater generated by: laboratories associated with storage, processing, packaging and disposal of raw materials, products and by-products; cleaning and maintenance of areas associated with storage, processing, packaging and disposal of raw materials, processing, packaging and disposal of raw materials, products; and composting operations.

"gpd" means gallons per day.

"gpm" means gallons per minute.

"*Gravure cylinder preparation*" means the pre-press preparation of cylinders or wraparound metallic plates for use in gravure printing, including but not limited to etching of cylinders, and the copper and chrome electroplating of cylinders.

"Grease trap/interceptor" means any device or equipment designed to separate fats, oils and grease from wastewater while allowing water to flow through.

*"Grease trap/interceptor cleaner"* means any person regularly offering to the general public services of cleaning or servicing of grease trap/interceptors including the removal and hauling of fats, oils, grease, and food wastes which are components of sewage.

*"Holding tank"* means a tank or other container for storing wastewater in accordance with this general permit.

"Hydrostatic pressure testing wastewater" means waters used to test the structural integrity of new tanks and pipelines, and tanks and pipelines which have been used to hold or transfer sewage, petroleum, or natural gas. This does not include *Potable water system maintenance or sampling wastewaters* as defined in this general permit. Tanks previously holding petroleum based products must be cleaned in accordance with the American Petroleum Institute Standard 2015 dated January 1, 2018 (Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks, Eighth Edition).

*"In responsible charge"* means: (A) when used in the Qualified Professional Engineer definition in this general permit, professional experience for which the Commissioner determines that a professional's primary duties consistently involve a high level of responsibility and decision making in the planning and designing of engineered systems for the treatment of industrial and commercial wastewaters; or (B) when used in the Qualified Certified Hazardous Materials Manager definition in this general permit, professional experience for which the Commissioner determines that a professional sprimary duties that a professional experience for which the Commissioner determines that a professional sprimary duties

consistently involve a high level of responsibility and decision making in the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters. The Commissioner shall consider the following in determining whether a professional's experience qualifies as responsible charge experience:

- (1) the level of independent decision-making exercised;
- (2) the number of individuals and the disciplines of the other professionals that the professional supervised or coordinated;
- (3) the extent to which a professional's responsibilities consistently involved the review of work performed by other professionals involved the planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
- (4) the extent to which a professional's responsibilities consistently involved the planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters and whether such responsibilities were an integral and substantial component of the professional's position;
- (5) the nature of a professional's employer's primary business interests and the relation of those interests to planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
- (6) the extent to which a professional has engaged in the evaluation and selection of scientific or technical methodologies for planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
- (7) the extent to which a professional drew technical conclusions, made recommendations, and issued opinions based on the results of planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters; and
- (8) any other factor that the Commissioner deems relevant.

*"Indirect Discharge"* or *"Discharge"* means the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c) or (d) of the Federal Water Pollution Control Act, also known as the Clean Water Act.

# *"Individual permit"* means a permit issued to a named permittee under section 22a-430 of the Connecticut General Statutes.

"Industrial User" or "User" means a source of Indirect Discharge.

*"Interference"* means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both: (1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and (2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the Solid Waste Disposal Act), the Clean Air Act, the Toxic Substances Control Act, and the Marine

Protection, Research and Sanctuaries Act.

*"Laboratory wastewaters"* means raw water samples, finished (drinking) water samples, other water treatment laboratory wastewaters, and/or laboratory utensil cleaning wastewaters which have no chemical additives or reagents containing any of the substances listed in Appendix B, Tables II, III, and V, or Appendix D of Section 22a-430-4 of the Regulations of Connecticut State Agencies.

*"Licensed Waste Transporter"* means a commercial waste transporter licensed by the commissioner under the authority of Section 22a-454(a) of the General Statutes.

"*Local building official*" means the municipal officer or other designated authority charged with the administration and enforcement of the State Building Code in accordance with Section 29-253 of the General Statutes or a duly authorized representative.

*"Maximum Daily Limit"* means the maximum concentration as measured in a daily composite sample, defined composite, grab(s) or grab sample average.

"*Maximum Daily Flow*" means the greatest volume of wastewater to be discharged over an operating day.

*"Maximum Instantaneous Limit"* means the maximum concentration as determined by a grab sample.

"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). Metal finishing wastewater shall not include non-contact cooling water, domestic sewage, blowdown from heating and cooling equipment, stormwater, or wastewater(s) not subject to the provisions of 40 CFR 413 or 40 CFR 433.

*"Metallic plate making"* means the creation of an image on a printing plate using etching, engraving, casting, or electroplating.

"mg/l" means milligrams per liter.

*"Miscellaneous general permit"* means the General Permit for Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater.

"Municipality" means a city, town or borough of the state.

"ND" as a monitoring table abbreviation means "non-detectable."

"Non-contact cooling and heat pump water" means wastewater which has been used for cooling purposes, or generated from cooling processes, including but not limited to condensate from cooling systems, or for heating purposes and which does not come into direct contact with a product or process, except for water treatment chemicals in recirculation systems, This definition does not include air compressor condensate or blowdown from boiler equipment.

"*Non-destruct testing rinsewater*" means wastewater generated by the removal of watersoluble penetrant dyes or similar chemical agents used for quality control, testing, or inspection of metal and non-metallic parts.

*"Nonmetallic plate making"* means the developing of a photographic image on light sensitive coatings on printing plates or screens.

"*Oil or petroleum*" means oil or petroleum as defined in Section 22a-448 of the General Statutes.

"Oil/water Separator" means a device or equipment for separating oil and grit from wastewater.

*"Pass Through"* means a discharge which exits the POTW into the waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

*"Permittee"* unless the context indicates otherwise, means any person who or municipality which initiates, creates, originates or maintains a discharge of wastewater under the authority of this general permit.

*"Permittee"* means any person to whom or which the commissioner has issued an Approval of Registration under this general permit.

"Person" means person as defined by section 22a-2(c) of the Connecticut General Statutes.

*"Photographic Processing Wastewater"* means wastewater resulting from the development or printing of paper prints, slides, negatives, enlargements, movie film, x-ray film, and other sensitized materials.

"*Potable water system maintenance or sampling wastewaters*" means 1) potable water storage tank or water line draining for maintenance or hydrostatic testing purposes or 2) raw or treated water from process sampling points, on-line process analytical instrumentation, or 3) raw or treated water from equipment leakage and bleed-off.

"*POTW authority*" means the chairperson, or duly authorized representative, of the Water Pollution Control Authority which owns or operates a Publicly Owned Treatment Works (POTW).

"*Printing and photographic processing wastewater*" means wastewater generated by letterpress, flexography, screen, digital and/or lithography printing, including but not limited to: photographic processing; x-ray film processing; CTP processing; nonmetallic plate making; and printing operations with water-based and non-water based inks, water-based coatings, and adhesives; but does not include wastewater generated by gravure cylinder preparation, metallic plate making, gravure printing, chromate bleach or dichromate based etch solutions, or solutions containing cyanide.

*"Professional Engineer"* or *"P.E."* means a person with a currently effective license issued in accordance with Chapter 391 of the Connecticut General Statutes.

"Process Wastewater" means any wastewater which, during manufacturing, commercial, mining or silvicultural activities, comes into direct contact with, or results from the production, use or handling of any process, raw material or intermediate or final product, byproduct or wasteproduct. This includes but is not limited to contact cooling and heating wastewater, cutting and grinding wastewater, non-destruct testing rinsewater, printing and photographic processing wastewater, tumbling or cleaning of parts wastewater, water treatment wastewater, commercial laundry wastewater, food processing wastewater, reverse osmosis reject water, building maintenance wastewater and other process wastewater. Other wastewaters which comingle with process wastewaters shall be deemed to be process wastewater. Process wastewater does not include air compressor condensate, non-contact cooling water, domestic sewage, blowdown from heating and cooling equipment, hydrostatic pressure testing wastewaters, stormwater, or wastewater from agricultural activities.

"*Publicly Owned Treatment Works*" or "*POTW*" means a system used for the collection, treatment and/or disposal of sewage from more than one lot as defined in section 22a-430-1 of the Regulations of Connecticut State Agencies and which discharges to the waters of the state and which is owned by a municipality or the state.

*"Public water system" means public water system* as defined in Section 19-13-B102(a) of the Regulations of Connecticut State Agencies.

"Qualified Certified Hazardous Materials Manager" or "Qualified CHMM" means a Certified Hazardous Materials Manager who: (1) has, for a minimum of eight years, engaged in the planning or compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters including, but not limited to, a minimum of four years in responsible charge of the planning or compliance certification of pre-engineered systems for such discharges; (2) is not an employee, as defined by the Internal Revenue Service of the Internal Revenue Code of 1986, of the registrant for the general permit; (3) does not have a financial interest, of any kind, in the activity for which a certification is being submitted; (4) has not engaged in any activities associated with the preparation, planning, or installation of the pre-engineered treatment systems, or the preparation of other documentation (e.g., an operation and maintenance plan, spill prevention and control plan, current permit registration, etc.) for which a certification is being submitted; and (5) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, design or engineering of the plans and specifications for the pre-engineered treatment systems, or the preparation of other documentation (e.g., an operation and maintenance plan, spill prevention and control plan, current permit registration, etc.) for which a certification is being submitted.

"*Qualified Professional Engineer*" or "Qualified P.E." means a professional engineer who: (1) has, for a minimum of eight years, engaged in the planning or designing of engineered systems for the treatment of industrial and commercial wastewaters including, but not limited to, a minimum of four years in responsible charge of the planning or designing of engineered systems for such discharges; (2) is not an employee, as defined by the Internal Revenue Service of the Internal Revenue Code of 1986, of the registrant for the general permit; (3) does not have a financial interest, of any kind, in the activity for which a certification is being submitted; (4) has not engaged in any activities associated with the preparation, planning, design or engineering of the plans and specifications for the engineered treatment systems, or the preparation of other documentation (e.g., an operation and maintenance plan, spill prevention and control plan, current permit registration, etc.) for which a certification is being submitted; and (5) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, design or engineering of the plans and specifications for the engineered treatment systems or the preparation of other documentation (e.g., an operation and maintenance plan, spill prevention and control plan, current permit registration, etc.) for which a certification is being submitted.

"*Quarterly*", in the context of a sampling frequency, means samples must be collected in the months of March, June, September and December.

*"Raw water"* means water withdrawn from a reservoir or well prior to any physical treatment of such water.

*"Regional collection/transfer/disposal site"* means a facility approved in accordance with law for the collection, transfer or disposal of fats, oils, grease and food waste which in Connecticut means a POTW or privately owned treatment works that is approved by the commissioner for the transfer, separation or disposal by incineration or other methods of fats, oils, grease and food waste from the wastewater of a facility. Pursuant to Section 22a-174-33 of the Regulations of Connecticut State Agencies related to Title V Sources, an instate regional incinerator must have an operating permit that lists FOG as a source of fuel.

*"Registrant"* means a person who files a registration pursuant to Section 4 of this general permit.

*"Registration"* means a registration form filed with the commissioner pursuant to Section 4. of this general permit.

*"Residuals"* for the purpose of this general permit means the solid or semi-solid residue removed during the production of potable water with a solids content of 2% or greater.

"Reverse osmosis reject water" means wastewater produced as a result of purifying water from potable sources using the reverse osmosis process.

"RCSA" means Regulations of Connecticut State Agencies.

"Separator" means a device or equipment for separating oil or grit from wastewater

"Significant Industrial User" means:

(1)(i) all Industrial Users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and

(ii) any other Industrial User that: discharges a cumulative maximum of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW Treatment plant; or is designated as such by the commissioner on the basis

that the Industrial User has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

(2) Upon a finding that an Industrial User meeting the criteria in paragraph (1)(ii) of this definition has no reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirement, the Commissioner may at any time, on its own initiative or in response to a petition received from an Industrial User or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such Industrial User is not a Significant Industrial User.

*"Significant Noncompliance"*, for the purposes of this general permit, a permittee is in significant noncompliance if its violation(s) meet one or more of the following criteria:

- (1) **Chronic violations:** Those in which sixty-six percent (66%) or more of all of the measurements taken for the same pollutant parameter during a six-month period exceed the average monthly, maximum daily or maximum instantaneous limit(s), as well as any other condition or limit established in Section 5(a) of this general permit.
- (2) **Technical Review Criteria Violations:** Those in which thirty-three percent (33%) or more of all of the measurements taken for the same pollutant parameter during a six-month period equal or exceed the average monthly, maximum daily or maximum instantaneous limit(s) multiplied by 1.4 (for BOD, TSS, oil and grease) or 1.2 (for all other pollutants except pH).
- (3) **Noncompliance Reporting:** Failure to accurately report noncompliance in accordance with this general permit or section 22a-430-3 of the Regulations of Connecticut State Agencies.
- (4) **Discretionary:** Any other violation of an effluent limit that the Department determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health of POTW personnel and the general public).
- (5) **Imminent Endangerment:** Any discharge of pollutant(s) that has caused imminent endangerment to human health, welfare or to the environment.
- (6) **Monitoring Reports:** Failure to provide, within 45 days after the due date, required reports such as Discharge Monitoring Report(s).
- (7) **Other:** Any other violation or group of violations, which may include a violation of Best Management Practices, which the Commissioner determines will adversely affect the operation or implementation of the Department's pretreatment program.

"Silver-rich wastewaters" means those undiluted wastewaters containing more than 5 mg/l of silver, including but not limited to used fixers and bleach-fix wastewaters, low flow

washes that follow fixers, stabilizers from washless minilab film and paper processes, and developers and rinsewaters from CTP systems.

*"Site"* means geographically contiguous land or water on which an authorized activity takes place or on which an activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person and connected by a right-of-way which such person controls and to which the public does not have access shall be deemed the same site.

"*Slug discharge*" means any discharge of metal finishing wastewater(s) capable of containing pollutant(s) at level(s) significantly above typical daily operations and/or that could potentially approach or exceed respective effluent limitations listed in Section 5(a) of this general permit.

*"Small volume autobody repair facility"* means a facility 1) from which, in connection with autobody repair operations, there is discharged less than 500 gallons per day of vehicle maintenance wastewater, 2) where steam cleaning of engines is not performed, and 3) where neither engine service nor engine repair is performed.

"Small volume vehicle detailing facility" means a facility 1) from which, in connection with vehicle cleaning operations, there is discharged less than 500 gallons per day of vehicle maintenance wastewater, 2) processes less than ten vehicles per day, 3) where automated exterior cleaning equipment is not used, 4) where steam cleaning of engines is not performed, and 5) where neither engine service nor engine repair is performed.

"S.U." means Standard Units.

*"Swimming pool wastewaters"* means wastewaters comprised of swimming pool maintenance wastewaters, swimming pool draining wastewaters and/or swimming pool filtration backwash wastewaters.

*"Temporary vehicle wash area"* means an area at any site where, for a period not exceeding twenty-four consecutive hours, nonpermanent structures are set up to collect all wastewater generated during washing operations and maintained for the purpose of washing vehicles.

*"Total Toxic Organics"* or *"TTO"* means the summation of all quantifiable values greater than 0.01 mg/l for toxic organics listed in 40 CFR 413.02(i) and 40 CFR 433.11(e).

*"Tumbling or cleaning of parts wastewater"* means wastewater generated by processing of aluminum, titanium, magnesium, steel, stainless steel, copper, zinc, brass, tin, nickel, selenium, chromium, cadmium, beryllium, antimony, silver, barium, cobalt, molybdenum, manganese, lead, vanadium, zirconium, thallium, strontium or non-metallic parts, or any combination thereof, for the removal of particulate metal, for surface texturing, or for cleaning, where no acid solutions with a pH less than 4.5 standard units or cyanides are used or present in the process.

"*Twice per Month*", in the context of sample frequency, means two samples per calendar month collected no less than twelve (12) days apart.

" $\mu g/l$ " means micrograms per liter.

"Unsewered area" means an area that does not have direct access to a POTW by means of a permanent sewer line.

*"Vehicle"* means a motorized device for transporting persons or things and including without limitation, every type of aircraft, automobile, bus, golf cart, motorcycle, train, and truck. For the purpose of this general permit, a motorized watercraft is not a vehicle.

"*Vehicle maintenance wastewater*" means wastewater generated by 1) floor washdown and incidental drippage from vehicles as a result of routine vehicle servicing operations and 2) washing of vehicle exteriors or steam cleaning of vehicle engines.

"Waste oil" means waste oil as defined in Section 22a-448 of the General Statutes.

"Watercourse" means watercourse as defined in section 22a-38 of the General Statutes.

*"Water Pollution Control Authority" or "WPCA"* means water pollution control authority as referred to in Chapter 103, Title 7.

"*Water Quality Standards*" means water quality standards as adopted by the commissioner in accordance with section 22a-426 of the General Statutes.

"*Water treatment facility*" means any system, excluding a reservoir, used for potable or industrial process use, including but not limited to any industrial, municipal or private water treatment facility.

"*Water treatment wastewaters or WTW*" means wastewaters generated by a well or water treatment facility used to produce water supplies for potable or industrial process use, including but not limited to wastewaters from the following:

- clarifier tank sludge blowdown;
- clarifier tank supernatant ;
- facility and equipment cleaning rinsewaters, excluding rinsewaters generated by the rinseout of containers used to store any chemical for which an effluent limit is not specified in Section 5(a) of this general permit;
- activated carbon and filter media backwash, including filter to waste, and regeneration wastewaters;
- mechanical and non-mechanical sludge dewatering wastewaters;
- infiltration bed and settling lagoon wastewaters;
- designed overflows from storage tanks and other WTW facilities resulting from emergency conditions and routine maintenance;
- start-up wastewaters for water treatment plants, facilities or equipment which commenced operation after the date of issuance of this general permit;
- ion exchange regeneration wastewaters; and
- laboratory wastewaters.

### Appendix B

## **Operation and Maintenance Plan**

An adequate Operation and Maintenance Plan shall contain the following:

- 1. A detailed description of all on-site wastewater treatment equipment including:
  - a. A description of all treatment units, including their manufacturer and model, all tank sizes, system operating capacities and retention times.
  - b. A functional description of each treatment system and subsystem including a discussion of how each item functions and variables that might affect performance.
- 2. A detailed description of the collection system and treatment system operation including start-up, shut-down, power outage, and emergency treatment control procedures. Each procedure shall include the positions of all switches, valves, instrument settings and precautions. For batch systems, include operating instructions describing treatment and testing procedures to be performed for each batch, when different treatments are to be used and instructions for operating the different types of treatments.
- 3. A detailed description of the methods used and frequency that all meters and probes are calibrated and cleaned. The minimum frequency shall meet the manufacturer's recommendations. For final discharge meters and probes, the minimum frequency of cleaning and calibration must be the manufacturer's recommendation.
- 4. A detailed description of all of the alarm(s) in the system and a schedule for testing each one.
- 5. An inventory of all spare parts and equipment kept at the facility for the wastewater treatment system.
- 6. A list of all treatment chemicals, quantities stored at the facility and dosage rates.
- 7. A maintenance schedule for the proper operation of the collection and treatment system, both preventive and corrective, with proposed daily, weekly, monthly, semi-annual and annual inspections and procedures.
- 8. The number of full or part time waste water treatment system operators needed to properly run the system at all times and a detailed description of any training the operators have had in the proper operation of the treatment systems.
- 9. A description of records and log(s) to be kept near the treatment system or readily accessible, for operational monitoring and inspections. All entries in logs shall indicate the time and date they are made and be initialed. Such records and log books shall include the following information, as applicable:
  - a. For all discharges:

- (i) the total daily flow for each day of discharge, consisting of the flow chart for each day of discharge and/or the flow data report from an electronic data recorder (if respective equipment is required in accordance with this general permit);
- (ii) the maximum daily flow for each month of the year;
- (iii) the final discharge pH for each day of discharge consisting of the pH chart for each day of discharge and/or the pH data report from an electronic data recorder (if respective equipment is required in accordance with this general permit);
- (iv) the pH range (ie., the low and high pH recorded) of the final discharge pH for each day of discharge;
- (v) the pH range (ie., the low and high pH recorded) of the final discharge pH during each calendar month of the year;
- (vi) the individual(s) who performed the sampling or measurements;
- (vii) the dates analyses were performed;
- (viii) the individual who performed the analyses;
- (ix) the analytical techniques or methods used;
- (x) the results of such analyses;
- (xi) the calibration records of all pH and flow instrumentation equipment associated with wastewater treatment and discharge monitoring;
- (xii) frequency and duration for non-continuous discharges; and
- (xiii) type and quantity of each treatment chemical used per day.
- b. for batch treatment systems:
  - (i) number of gallons discharged per batch;
  - (ii) treatment chemicals added to each batch;
  - (iii) the results of any chemical analysis done on each batch;
  - (iv) what the wastewater of each batch consisted of (what processes contributed to the batch);
  - (v) any maintenance performed on the system; and
  - (vi) any observations the operator may have noticed about the discharge (clarity, foam, etc.).
- c. for flow through systems:
  - (i) flow total daily and each shift;
  - (ii) treatment chemical dosage rates and/or quantity of chemical used each day;
  - (iii) daily/shift treatment chemical tank levels;
  - (iv) the results of any chemical analysis performed on the discharge;
  - (v) any maintenance performed on the system;
  - (vi) the reason for any upsets that may have occurred; and
  - (vii) any observations the operator may have noticed about the discharge (clarity, foam, etc.).
- 10. A description of any security measures to prevent vandalism of the collection and treatment systems.
- 11. A diagram of the treatment system showing the flows associated with each discharge. The diagram shall show all incoming waste streams, treatment units and their sizes, treatment chemical additions, all pumps and valves, electrical equipment (pH sensors, controllers and alarms, high level sensors and alarms, etc.) and connections between electrical units. Average, maximum, and design flow rates of incoming waste streams between treatment units and from discharge points and pumps shall be indicated.

## Appendix C

## **Spill Prevention and Control Plan**

An adequate Spill Prevention and Control Plan shall contain the following:

- 1. A copy of the site plan, exactly as prepared in Section 4(c)(2)(I) of this general permit, and topographic map.
- 2. Supplemental layout drawings shall be prepared as necessary to illustrate any item which is not included on the site plan or topographic map including:
  - a) a general layout of the facility;
  - b) property boundaries;
  - c) surface water bodies and wetlands on and adjacent to the facility;
  - d) entrance and exit routes to/from the facility;
  - e) areas occupied by manufacturing or commercial facilities;
  - f) hazardous materials process and storage areas;
  - g) waste handling, storage and treatment facilities;
  - h) loading and unloading areas;
  - i) storm drainage systems, including their discharge locations;
  - j) sanitary sewer lines and/or septic systems;
  - k) direction of drainage from hazardous material and waste handling, storage and treatment areas;
  - 1) floor drains, pipes, and channels which lead away from potential leak or spill areas and where these drain to; and
  - m) spill prevention structures.
- 3. A chemical inventory list of all toxic and hazardous substances and compounds stored at the facility. The list shall indicate the name, CASE number, quantity stored, and any hazardous/toxic components of all substances and compounds.
- 4. A description of all spill prevention equipment and structures employed including underground seepage protection, cathodic protection of underground tanks, leak detection equipment, liquid level sensing devices, alarms, collision protection, diversionary structures, dikes, berms, sealed drains, etc. All such equipment and structures shall be shown or referenced on the layout drawings required by element 2 of this checklist.
- 5. A description of each facility used for the storage, collection, transfer, transport, treatment, loading or unloading of the substances listed in the plan as required by element 3 of this checklist and an evaluation of each facility's potential to generate a spill, leak or other unplanned release and the potential magnitude of such a release as related to the containment capacities of the various spill

control structures described in the plan required by element 4 of this checklist. The evaluation shall demonstrate that good engineering practices have been instituted, including the spill prevention and control requirements of 40 CFR 112 and 264 and the General Permit for the Discharge of Stormwater Associated with Industrial Activities issued April 14, 2009 as applicable. At a minimum, the plan should provide that all areas in which chemicals are stored are provided with impermeable containment which will hold at least the volume of the largest chemical container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. In addition, no interior building floor drains shall exist which are connected to any storm drainage system or which may otherwise direct interior floor drainage to exterior surfaces, unless such floor drain connection has been approved and permitted by DEEP.

- 6. A description of spill prevention procedures including practices to ensure tanks are not overfilled, chemical transfer procedures, chemical disposal practices, security measures, and operation and maintenance procedures. Descriptions of the type and frequency of inspections and monitoring for leaks or other conditions that could lead to spills shall be included in the plan.
- 7. A list of available emergency response equipment at the site including a physical description of such equipment and its location. The location shall be indicated on the facility layout required by element 2 of this checklist. The list of equipment shall include, at a minimum, the following:
  - a) Communication Equipment and Alarms;
  - b) Spill Containment and Control Equipment and Tools;
  - c) Spilled Material Storage Containers;
  - d) Protective Clothing and Respirators;
  - e) First Aid Kits;
  - f) Decontamination Equipment; and
  - g) Ventilation Equipment.
- 8. A detailed description of procedures to be followed when responding to a spill at the facility. This description shall cover the following items:
  - a) Notification of Facility Personnel for Responding to Spills;
  - b) Chain of Command for Spill Response;
  - c) Evacuation Procedures;
  - d) Notification of Response Agencies and Contractors;
  - e) Spill Assessment and Response Procedures;
  - f) Procedures for Preventing Contact between Incompatible Materials; and
  - g) Procedures for Disposing or Treating Spilled Material.
- 9. A description of follow-up reporting and documentation procedures to be followed in the event of a spill. A copy of the forms used shall be included.
- 10. A detailed outline of the training program or programs given to employees which will enable them to understand the processes and materials with which they are working, the safety and health hazards of such processes and materials, and the procedures and practices for preventing and responding to

spills. A discussion of the appropriateness of training provided to each employee or group of employees should also be included in the plan.

- 11. A history of spills and leaks of five gallons or more of toxic or hazardous substances as defined in section 22a-430-4 Appendix B and Appendix D of the Regulations of Connecticut State Agencies and 40 CFR 116.4, oil, and process wastewaters that occurred at the facility within the last three years. As applicable, include at a minimum, the following information:
  - a) Type and amount of substance spilled;
  - b) Location, date, and time of spill;
  - c) Watercourse, soil or ground water affected;
  - d) Cause of Spill; and
  - e) Action taken to prevent recurrence.

### Appendix D

## **Solvent Management Plan**

A Solvent Management Plan shall be submitted when a registrant proposes to forego monitoring of TTOs in accordance with Section 5(b)(1) of this general permit. An adequate plan shall contain the following:

- 1. An inventory of toxic organic compounds, as defined in 40 CFR 433 and 413, used or suspected to be present in the discharges. This inventory shall include the trade name/manufacturer, quantity and concentration of each toxic organic compound and the source of each toxic organic compound.
- 2. A list of all processes where TTOs are used at the facility and a description of the methods used to ensure that TTOs do not enter any wastewaters at the facility.
- 3. The method of disposal of toxic organic compounds including the method of storage of such compounds prior to disposal. This section shall identify the quantity and size of containers used for collection of toxic organic compounds, the maximum quantity of materials containing toxic organic compounds stored on-site at any one time, the frequency when spent toxic organic compounds are replaced and disposed of, the storage locations prior to disposal and the name of any licensed haulers disposing of such compounds.
- 4. Housekeeping and Recordkeeping Procedures: Descriptions of the type and frequency of inspections and monitoring for leaks or other conditions that could lead to spills of toxic organic compounds shall be provided. Also, recordkeeping log forms shall be kept in each area where materials containing toxic organic compounds are present. These forms shall list all toxic organic compounds found in the area and material safety data sheets for each material containing toxic organic compounds.
- 5. Spill and Leak Prevention Measures: A description of each area used for the collection, storage and transfer of materials containing toxic organic compounds and an evaluation of such an area for its potential to generate a spill, leak or any other unplanned release of materials containing toxic organic compounds. Also, include a description of all spill prevention equipment and structures utilized at the facility.
- 6. Cleanup and Disposal Procedures: A detailed description of procedures to be followed when responding to a spill at the facility. This description shall include all the items listed in element 8 of the Spill Control Plan Checklist.
- 7. Plot Plan: A plot plan of the facility shall clearly show all collection, storage and transfer areas of toxic organic compounds including floor drains, the direction of drainage from a potential spill and spill prevention structures and equipment.
- 8. Historical Data: Summarize and evaluate any Total Toxic Organic (TTO) monitoring results over the past 2 years.

### Appendix E

# **Monitoring Waiver**

A Monitoring Waiver for Pollutants shall be submitted when a registrant proposes to forego monitoring of pollutants in accordance with Section 5A(b)(1)(B) or 5B(b)(1)(A)(ii) of this general permit.

The commissioner may authorize a permittee subject to this general permit to forego sampling of a pollutant (except for total toxic organics) if the permittee has demonstrated through sampling and other technical factors that the respective pollutant is neither present nor expected to be present in the discharge above background levels from intake water and without any increase in the pollutant due to activities of the permittee.

A monitoring waiver will not be granted for any pollutant that is added to the authorized discharge, in any quantities. Where monitoring and/or other data shows that the pollutant is present at levels above the background intake water level, the commissioner shall deny the request for the monitoring waiver.

The permittee's demonstration shall be made at the time of registration on forms provided by the commissioner and shall include, but not be limited to, the following:

- 1) A list of each of pollutant associated with the monitoring waiver request.
- 2) Analytical data for each pollutant from at least one sample of the facility's authorized discharge(s), after treatment. This sample shall be representative of all wastewaters capable of being discharged from the facility through the respective authorized discharge location(s) and shall be obtained and analyzed consistent with 40 CFR 136.
- 3) Analytical data for each pollutant from at least one sample of the facility's authorized discharge(s), prior to any treatment. This sample shall be representative of all wastewaters capable of being discharged from the facility through the respective authorized discharge location(s) and shall be obtained and analyzed consistent with 40 CFR 136.
- 4) For those parameters detected in either the treated or untreated wastewater, analytical data for the influent water.
- 5) A request for monitoring waiver signed by a "responsible corporate officer", if the permittee is a corporation, or by a general partner or proprietor if the permittee is a partnership or sole proprietorship. For purposes of the monitoring waiver requirements, "responsible corporate officer" means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation. The request for monitoring waiver shall include the following:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,

and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Non-detectable sample results may only be used as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR 136 with the lowest minimum detection level for that pollutant is utilized.

Granting of the monitoring waiver will be identified within the Approval of Registration.

If the monitoring waiver request is granted, then the permittee shall provide the following certification on all subsequent discharge monitoring reports:

"BASED ON MY INQUIRY OF THE PERSON OR PERSONS DIRECTLY RESPONSIBLE FOR MANAGING COMPLIANCE WITH THIS GENERAL PERMIT, I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THERE HAS BEEN NO INCREASE IN THE LEVEL OF \_\_\_\_\_{LIST POLLUTANTS FOR WHICH A WAIVER WAS GRANTED} IN THE WASTEWATERS DUE TO THE ACTIVITIES AT THE FACILITY SINCE FILING OF THE LAST DISCHARGE MONITORING REPORT."

In the event that a waived pollutant is found to be present or is expected to be present in the authorized discharge(s) based on changes that occur at the facility, the permittee shall immediately comply with the monitoring requirements or more frequent monitoring requirements imposed by the general permit.

### <u>Appendix F1</u> POTW-Specific Effluent Limits

In addition to complying with the effluent limits identified in Section 5A(a) or 5B(a) of this general permit, wastewater discharged under the authority of this general permit shall comply with the following POTW-specific effluent limits<sup>1</sup>:

Table II : City of Bristol POTW						
Pollutants						
Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit		
Lead, Total	mg/l	0.03	0.06	0.09		

Table III : Town of Litchfield, Town of Ridgefield (Route 7), Town of Sharon and Town of Vernon POTWs						
Pollutants						
Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit		
Copper, total	mg/l	0.54	0.73	1.09		

Table IV : Town of Canaan, Town of New Canaan, Town of Norfolk, Town of Plymouth, Town of Ridgefield (South Street) and Town of Salisbury POTWs					
Pollutants					
Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit	
Copper, Total	mg/l	0.54	0.73	1.09	
Zinc, Total	mg/l	0.47	0.72	1.08	

Table V : Town of Newtown POTW						
Pollutants						
Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit		
Copper, Total	mg/l	0.54	0.73	1.09		
Lead, Total	mg/l	0.03	0.06	0.09		

Table VI : Town of Plainfield (Village)						
Pollutants						
Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit		
Copper, Total	mg/l	0.54	0.73	1.09		
Silver, Total	mg/l	0.05	0.07	0.105		

Table VIII : City of Waterbury					
Pollutants					
Pollutant	Unit	Average Monthly Limit	Maximum Daily Limit	Maximum Instantaneous Limit	
Copper, Total	mg/l	0.54	0.73	1.09	
Nickel, Total	mg/l	0.63	0.85	1.28	
Zinc, Total	mg/l	0.47	0.72	1.08	

<sup>1</sup>Discharges of process or non-process wastewater not subject to Categorical Standards must comply with the limits in the "Maximum Daily Limit" column because the monitoring of these discharges is no more frequent than monthly.

### Appendix F2

### Receiving POTWs for which Phosphorus Monitoring is Required for Process or Non-process Wastewaters Not Subject to Categorical Standards

Any process wastewater not subject to Categorical Standards must be monitored for total phosphorus if it is discharged to one of the following POTWs:

Bristol	Plymouth
Cheshire	Ridgefield Main
Danbury	Salisbury
Manchester	Southington
Meriden	Torrington
Naugatuck	Vernon
New Canaan	Wallingford
Plainville	Waterbury

### <u>Appendix G</u> Connecticut Publicly Owned Treatment Works (POTWs) Approved to Accept Transported, Non-domestic Wastewaters

Facility	Mailing Address	Facility Address	City	Zip	Phone
Deer Direct		00 Winter Area	Deen Dimen	06417	960 506 6044
Deep River	99 Winter Ave. PO Box 6000	99 Winter Ave.	Deep River	06417	860-526-6044
Killingly	Danielson, CT 06239-6000	31 Wauregan Road	Killingly	06239- 6000	(860) 779-5392
Metropolitan District	PO Box 800	240 Brainard Road	Hartford	06142-0800	860-278-7850
Commission (MDC)	555 Main St				
Mattabassett District	245 Main Street	245 Main Street	Cromwell	06416-2302	860-635-5550
Naugatuck (Veolia	500 Cherry	500 Cherry Street	Naugatuck	06770	203-723-1433
Water)	Street		C		x. 2015
New Haven	325 East Shore	345 East Shore	New Haven	06512	(203)466-5280
	Parkway	Parkway			x222
New London	100 Trumbull	100 Trumbull	New London	06320	(860) 447-5257
	Street	Street			
New Milford	PO Box 178	123 West Street	New Milford	06776	860-355-1049
Norwalk	60 South Smith	60 South Smith	East Norwalk	06855	203-584-3212
	Street	Street			
Stamford	1 Harbor View	1 Harbor View	Stamford	06902	203-977-4590
	Ave.	Ave.			
Torrington	WPC Munic	251 Lower Bogue	Torrington	06790	860-485-9166
	Bldg	Road			
	140 Main Street				
Vernon	WPCF Town	100 Windsorville	Vernon	06066	860-870-3545
	Hall; PO Box 22	Road			
Windham/Willimantic	PO Box 257	2 Main Street	Willimantic	06226	860-465-3078

### Appendix H

### Section 22a-430-4 of the Regulations of Connecticut State Agencies, Appendix B, Tables II, III, V and Appendix D

### Appendix B of RCSA 22a-430-4

# Table II – Organic Toxic Substances in Each of Four Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GS/MS)

Volatiles							
Name	e of Compound	CAS Number	Nam	e of Compound	CAS Number		
1	acrolein	107-02-8	17	1,2-dichloropropane	78-87-5		
2	acrylonitrile	107-13-1	18	1,3-dichloropropylene	542-75-6		
3	benzene	71-43-2	19	ethylbenzene	100-41-4		
5	bromoform	75-25-2	20	methylbromide	74-83-9		
6	carbon tetrachloride	56-23-5	21	methylchloride	74-87-3		
7	chlorobenzene	108-90-7	22	methylene chloride	75-09-2		
8	chlorodibromomethane	124-48-1	23	1,1,2,2-tetrachloroethane	79-34-5		
9	chloroethane	75-00-3	24	tetrachloroethylene	127-18-4		
10	2-chloroethylvinyl ether	110-75-8	25	toluene	108-88-3		
11	chloroform	67-66-3	26	1,2-trans-	156-60-5		
12	dichlorobromomethane	75-27-4		dichloroethylene	150-00-5		
14	1,1-dichloroethane	75-34-3	27	1,1,1-trichloroethane	71-55-6		
15	1,2-dichloroethane	107-06-2	28	1,1,2-trichloroethane	79-00-5		
16	1,1-dichloroethylene	75-35-4	29	trichloroethylene	79-01-6		
	-		31	vinyl chloride	75-01-4		

#### **Acid Compounds**

Name of Compound		CAS Number	Nam	e of Compound	CAS Number	
1	2-chlorophenol	95-57-8	7	4-nitrophenol	100-02-7	
2	2,4-dichlorophenol	120-83-2	8	p-chloro-m-cresol	59-50-7	
3	2,4-dimethylphenol	105-67-9	9	pentachlorophenol	87-86-5	
4	4,6-dinitro-o-cresol	534-52-1	10	phenol	108-95-2	
5	2,4-dinitrophenol	51-28-5	11	2,4,6-trichlorophenol	88-06-2	
6	2-nitrophenol	88-75-5				

#### **Base/Neutral**

Name	e of Compound	CAS Number	Nam	e of Compound	CAS Number			
1	acenaphthene	83-32-9	25	dimethyl phthalate	131-11-3			
2	acenaphthylene	208-96-8	26	di-n-butyl phthalate	84-74-2			
3	anthracene	120-12-7	27	2,4-dinitrotoluene	121-14-2			
4	benzidine	92-87-5	28	2,6-dinitrotoluene	606-20-2			
5	benzo(a)anthracene	56-55-3	29	di-n-octyl phthalate	117-84-0			
6	benzo(a)pyrene	50-32-8	30	1,2-diphenylhydrazine (as	103-33-3			
7	3,4-benzofluoranthene	205-99-2		azobenzene)	103-33-3			
8	benzo(ghi)perylene	191-24-2	31	fluroranthene	206-44-0			
9	benzo(k)fluoranthene	207-08-9	32	fluorene	86-73-7			
10	bis(2-chloroethoxy)methane	111-91-1	33	hexachlorobenzene	118-74-1			
11	bis(2-chloroethyl)ether	111-44-4	34	hexachlorobutadiene	87-68-3			
12	bis(2-chloroisopropyl)ether	108-60-1	35	hexachlorocyclopentadiene	77-47-4			
13	bis(2-ethylhexyl)phthalate	117-81-7	36	hexachloroethane	67-72-1			
14	4-bromophenylphenyl ether	101-55-3	37	indeno(1,2,3-cd)pyrene	193-39-5			
15	butylbenzyl phthalate	85-68-7	38	isophorone	78-59-1			
16	2-chloronaphthalene	91-58-7	39	napthalene	91-20-3			
17	4-chlorophenyl phenyl ether	7005-72-3	40	nitrobenzene	98-95-3			
18	chrysene	218-01-9	41	N-nitrosodimethylamine	62-75-9			
19	dibenzo(a,H)anthracene	53-70-3	42	N-nitrosodi-n-propylamine	621-64-7			
20	1,2-dichlorobenzene	95-50-1	43	N-nitrosodiphenylamine	86-30-6			
21	1,3-dichlorobenzene	541-73-1	44	phenanthrene	85-01-8			
22	1,4-dichlorobenzene	106-46-7	45	pyrene	129-00-0			
23	3,3-dichlorobenzidine	91-94-1	46	1,24-trichlorobenzene	120-82-1			
24	diethyl phthalate	84-66-2						
	Pesticides							

### Pesticides

Name of Compound		CAS Number	Nam	e of Compound	CAS Number
1	aldrin	309-00-2	14	endrin	72-20-8
2	alpha-BHC	319-84-6	15	endrin aldehyde	7421-93-4
3	beta-BHC	319-85-7	16	heptachlor	76-44-8
4	gamma-BHC	58-89-9	17	heptachlor epoxide	1024-57-3
5	delta-BHC	319-86-8	18	PCB-1242	53469-21-9
6	chlordane	57-74-9	19	PCB-1254	11097-69-1
7	4,4-DDT	50-29-5	20	PCB-1221	11104-28-2
8	4,4-DDE	72-55-9	21	PCB-1232	14975-23-6
9	4,4-DDD	72-54-8	22	PCB-1248	12672-29-6
10	dieldrin	60-57-1	23	PCB-1260	11096-82-5
11	alpha-endosulfan	959-98-8	24	PCB-1016	12674-11-2
12	beta-endosulfan	33213-65-9	25	toxaphene	8001-35-2
13	endosulfan sulfate	1031-07-8		-	

Name of Compound		CAS Number	Nam	e of Compound	CAS Number	
1	Antimony, Total	7440-36-0	10	Nickel, Total	7440-02-0	
2	Arsenic, Total	7440-38-2	11	Selenium, Total	7782-49-2	
3	Beryllium, Total	7440-41-7	12	Silver, Total	7440-22-4	
4	Cadmium, Total	7440-43-9	13	Thallium, Total	7440-28-0	
5	Chromium, Total	7440-47-3	14	Zinc, Total	7440-66-6	
6	Chromium, Hexavalent	185540-29-9	15	Cyanide, Total	57-12-5	
7	Copper, Total	7440-50-8	16	Cyanide, Amenable	57-12-5	
8	Lead, Total	7439-92-1	17	Phenols, Total	64743-03-9	
9	Mercury, Total	7439-97-6				

#### Table III - Other Toxic Substances: Metals, Cyanide, and Total Phenols

### Table V - Other Toxic Substances and Hazardous Substances

Name of Compound		CAS Number	Name of Compound		CAS Number
Toxic Substances			26	Dichlorvos	62-73-7
1	Asbestos	132207-33-1	27	Diethyl amine	109-89-7
Hazardous Substances			28	Dimethyl amine	124-40-3
1	Acetaldehyde	75-07-0	29	Dintrobenzene	99-65-0
2	Allyl alcohol	107-18-6	30	Diquat	231-36-7
3	Allyl chloride	107-05-1	31	Disulfoton	298-04-4
4	Amyl acetate	628-63-7	32	Diuron	330-54-1
5	Aniline	62-53-3	33	Epichlorohydrin	106-89-8
6	Benzonitrile	100-47-0	34	Ethanolamine	141-43-5
7	Benzyl chloride	100-44-7	35	Ethion	563-12-2
9	Butly acetate	123-86-4	36	Ethylene diamine	107-15-3
10	Butylamine	109-73-9	37	Ethylene dibromide	106-93-4
11	Captan	133-06-2	38	Formaldehyde	50-00-0
12	Carbaryl	63-25-2	39	Furfural	98-01-1
13	Carbofuran	1563-66-2	40	Guthion	86-50-0
14	Carbon disulfide	75-15-0	41	Isoprene	78-79-5
15	Chlorpyrifos	2921-88-2	42	Isopropanolamine	78-96-6
16	Coumaphos	56-72-4	43	Kelthane	115-32-2
17	Cresol	1319-77-3	44	Kepone	143-50-0
18	Crotonaldehyde	4170-30-3	45	Malathion	121-75-5
19	Cyclohexane	110-82-7	46	Mercaptodimethur	2032-65-7
20	2,4-Dichlorophenoxy acetic	04 75 7	47	Methoxychlor	72-43-5
	acid)	94-75-7	48	Methyl mercaptan	74-93-1
21	Diazinon	333-41-5	49	Methyl methacrylate	80-62-6
22	Dicamba	1918-00-9	50	Methyl parathion	298-00-0
23	Dichlobenil	1194-65-6	51	Mevinphos	7786-34-7
24	Dichlone	117-80-6	52	Mexacarbate	315-18-4
25	2,2-Dichloropropionic acid	75-99-0	53	Monoethyl amine	75-04-7

Name of Compound		CAS Number	Name of Compound		CAS Number	
54	Monomethyl amine	74-89-5	69	2,4,5-T (2,4,5-		
55	Naled	300-76-5		Trichlorophenoxy acetic	93-76-5	
56	Napthenic acid	1338-24-5		acid)		
57	Nitrotoluene	1321-12-6	70	TDE	72-54-8	
58	Parathion	56-38-2		(Tetrachlorodiphenylethane)	e) 72-34-0	
59	Phenolsulfanate		71	2,4,5-TP [2-(2,4,5-	93-72-1	
60	Phosgene	75-44-5		Trichlorophenoxy)	93-72-1	
61	Propargite	2312-35-8	72	Trichlorofan		
62	Propylene oxide	75-56-9	73	Triethylamine	121-44-8	
63	Pyrethrins	8003-34-7	74	Trimethylamine	75-50-3	
64	Quinoline	91-22-5	75	Uranium	7440-61-1	
65	Resorcinol	108-46-3	76	Vanadium	7440-62-2	
66	Strontium	7440-24-6	77	Vinyl acetate	108-05-4	
67	Strychnine	57-24-9	78	Xylene	1330-20-7	
68	Styrene	100-42-5	79	Xylenol	1300-71-6	
			80	Zirconium	7440-67-7	

### Appendix D of RCSA 22a-430-4

Name of Compound		CAS Number	Name of Compound		CAS Number	
1	Acenaphthene	83-32-9		Dichloropropene	26952-23-8	
2	Acrolein	107-02-8	30	2,4-dimethylphenol	105-67-9	
	Acrylonitrile	107-13-1	31	Dinitrotoluene	25321-14-6	
	•		32	Diphenylhydrazine	38622-18-3	
4	Aldrin/	309-00-2	33	Endosulfan and metabolites	115-29-7	
	D'aldain		34	Endrin and metabolites	72-20-8	
-	Dieldrin	60-57-1	35	Ethylbenzene	100-41-4	
5	Antimony and compounds	7440-36-0	36	Fluoranthen	206-44-0	
6 7	Arsenic and compounds	7440-38-2 <sup>1</sup>	37	Haloethers (other than those listed elsewhere;		
7	Asbestos	132207-33-1		includes		
8 9	Benzene Benzidine	71-43-2 92-87-5		chlorophenylphenyl ethers,		
		92-87-5 7440-41-7 <sup>2</sup>		includes		
10 11	Beryllium and compounds Cadmium and compounds	7440-41-7 7440-43-9 <sup>3</sup>		chlorophenylphenyl ethers,		
11	Carbon tetrachloride	56-23-5		bromophenylphenyl ether,	N/A	
12	Chlordane (technical	50-25-5		bis(dischloroisopropyl)		
15	mixture and metabolites)	12789-03-6		ether, bis-(chloroethoxy)		
14	Chlorinated benzenes (other			methane and		
17	than dichlorobenzenes)	N/A		polychlorinated diphenyl		
15	Chlorinated ethanes			ethers)		
15	(including 1,2-		38	Halomethanes (other than		
	dichloroethane, 1,1,1-	N/A		those listed elsewhere;		
	trichloroethane, and			includes methylene		
	hexachloroethane)			chloride, methylchloride,	<b>NT / A</b>	
16	Chloroalkyl ethers			methylbromide,	N/A	
	(chloromethyl, chloroethyl,	N/A		bromoform, dichlorobromomethane,		
	and mixed ethers)			trichlorofluoromethane,		
17	Chlorinated naphthalene			dichlorodifluoromethane)		
18	Chlorinated phenols (other		39	Heptachlor and metabolites	76-44-8 <sup>7</sup>	
	than those listed elsewhere;	1336-35-2	40	Hexachlorobutadiene	87-68-3	
	includes trichlorophenols		41	Hexachlorocyclohexane	07 00 0	
10	and chlorinated cresols)			(all isomers)		
19 20	Chloroform	67-66-3	42	Hexachlorocyclopentadiene	77-47-4	
20 21	2-chlorophenol	95-57-8 7440-47-3 <sup>4</sup>	43	Isophorone	78-59-1	
21 22	Chromium and compounds Copper and compounds		44	Lead and compounds	7439-92-1	
	Copper and compounds Cyanides	7440-50-8 <sup>5</sup> 57-12-5	45	Mercury and compounds	7439-97-6	
23 24	DDT and metabolites	57-12-5 50-29-3 <sup>6</sup>	46	Naphthalene	91-20-3	
24 25	DD1 and metabolites Dichlorobenzenes (1,2-1,3-,	30-29-5	47	Nickel and compounds	7440-02-0 <sup>8</sup>	
23	and 1,4-dichlorobenzenes)	25321-22-6	48	Nitrobenzene	98-95-3	
26	Dichlorobenzidine	1331-47-1	49	Nitrophenols (including		
27	Dichloroethylenes (1,1-and			2,4-dinitrophenol,		
	1,2-dichloroethylene)	540-59-0	50	dinitrocresol) Nitrosamines	25576 01 1	
28	2,4-dichlorophenol	120-83-2	50 51		35576-91-1	
29	Dichloropropane	26638-19-7	51 52	Pentachlorophenol Phenol	87-86-5 108-95-2	
			52	1 1101101	100-93-2	

Name	of Compound	CAS Number	
53	Phthalate esters	*	
54	Polychlorinated biphenyls (PCBs)	See Pesticides, App. B, Table 2	
55	Polynuclear aromatic		
	hydrocarbons (including		
	benzanthracenes,		
	benzopyrenes,		
	benzofluoranthene,		
	chrysenes,		
	dibenzanthracenes, and		
	indenopyrenes)		
56	Selenium and compounds	7782-49-2	
57	Silver and compounds	7440-22-4 <sup>9</sup>	
58	2,3,7,8 -		
	Tetrachlorodibenzo-p-dioxin	1746-01-6	
(TCDD)			
59	Tetrachloroethylene	127-18-4	
60	Thallium and compounds	7440-28-0 <sup>10</sup>	
61	Toluene	108-88-3	
62	Toxaphene	8001-35-2	
63	Trichloroethylene	79-01-6	
64	Vinyl chloride	75-01-4	
65	Zinc and compounds	7440-66-6 <sup>11</sup>	

<sup>1</sup>CAS number is only for pure arsenic.

<sup>2</sup>CAS number is for only for pure beryllium. <sup>3</sup>CAS number is only for pure cadmium.

<sup>4</sup>CAS number is only for pure chromium. <sup>5</sup>CAS number is only for pure copper.

<sup>6</sup>CAS number is only for pure DDT.

<sup>7</sup>CAS number is only for pure heptachlor.

<sup>8</sup>CAS number is only for pure nickel.

<sup>9</sup>CAS number is only for pure silver.

<sup>10</sup>CAS number is only for pure thallium.

<sup>11</sup>CAS number is only for pure zinc.