



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Materials Management & Compliance Assurance  
Water Permitting and Enforcement Division  
79 Elm Street  
Hartford, Connecticut 06106-5127



## *Printing & Publishing Wastewater General Permit (Summary Information)*

All wastewater must be discharged under the guidelines of a permit issued by the Connecticut Department of Environmental Protection (CGS 22a-430). **Printing and publishing wastewater**—wastewater discharged during most common printing operations—requires such a permit.

*Small italic print following each paragraph denotes section of general permit where more detailed information can be found.*

The Connecticut Department of Environmental Protection (DEP) reissued the *General Permit for the Discharge of Minor Printing and Publishing Wastewater* (Printing and Publishing GP) February 15, 2008 to easily permit the majority of printing and publishing discharges throughout the state. The Printing and Publishing GP defines "**minor printing and publishing wastewater**" as:

wastewater generated by letterpress, flexography, screen, digital and/or lithography printing, including but not limited to: photo 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. (*Section 2 of the Printing and Publishing GP defines many terms used in this summary*)

**Registration Required:** Any discharge of *minor printing and publishing wastewater* must be registered under this general permit (or an individual permit) and will authorize the discharge until February 15, 2018. (*Sections 3(a), 3(d) and 4(a)*)

### **Fees:**

- For a maximum discharge of less than 40 gallons per day of all minor printing and publishing wastewater, the fee shall be \$100.00 (good until 2/15/2018) (*Section 4(c)(1)(A)*)
- For a maximum discharge of greater than 40 gallons per day of all minor printing and publishing wastewater, photo processing wastewater, and CTP wastewater combined, the fee shall be \$500.00 (good until 2/15/2018) (*Section 4(c)(1)(A)*)

### **Requirements of the Printing and Publishing General Permit**

- All *minor printing and publishing wastewater* must be discharged to a POTW (Publicly Owned Treatment Works, also known as a sewage treatment plant). Discharges to septic systems, ground waters, or surface waters are not allowed. (*Section 3(b)(5)*)
- The maximum daily flow of all discharges of *minor printing and publishing wastewater*, **other than** photo processing and CTP (Computer-to-Plate) wastewater, does not exceed 1,000 gallons per day from a site. (*Section 3(b)(6)*)
- The maximum daily flow of all discharges of photo processing and CTP wastewater does not exceed 5,000 gallons per day from a site, or one percent of the design capacity of the POTW which receives the discharge, whichever is less. (*Section 3(b)(7)*)
- The maximum weekly flow of treated silver-rich wastewater does not exceed 250 gallons per week. (Silver-rich wastewater contains more than 5 mg/l of silver) (*Section 3(b)(7)*)

- Waste inks and waste printing press cleaning solvents must either be treated and recycled or disposed of in accordance with applicable laws. (*Section 5(a)(1)*)
- Signs in English and all necessary languages shall be posted at sinks and drains in printing areas 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." (*Section 5(a)(2)*)
- Minor Printing and Publishing Wastewater, other than silver-rich wastewater and high pH CTP wastewater, including but not limited to waste developers, bleach without fixer, stop bath solutions without fixer, final stage stabilizers following a rinse stage, fountain solutions, screen reclamation wastewater, pre-press rinse water and aqueous coating flush water may be discharged to the POTW without treatment under this general permit provided all effluent conditions and other conditions of this general permit are met. (*Section 5(a)(5)*)
- **Silver-Rich Wastewater** (wastewater containing more than 5 mg/l silver)
  - All silver-rich wastewaters must be treated using a silver recovery system, or shall be collected and disposed of by a properly licensed waste transporter. (*Section 5(a)(3)(A)*)
  - If metallic replacement cartridges are used for silver recovery, at least two must 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 is required. (*Section 5(a)(3)(B)*)
  - Silver recovery treatment systems shall be inspected at least weekly to ensure proper operation. (*Section 5(a)(3)(C)*)
- **CTP (Computer-to-Plate) Wastewater**
  - Silver-based CTP systems must meet the above silver-rich wastewater requirements. (*Section 5(a)(4)(A)*)
  - CTP wastewater that does not meet a pH equal to or between 6—11 Standard Units must adjust pH to meet that requirement prior to discharge. (*Section 5(a)(4)(B)*)

### Other Requirements

- The permittee shall prepare and implement written procedures for the treatment and/or disposal of Minor Printing and Publishing Wastewater. Such procedures shall include, but not be limited to the containment, clean-up and disposal of spills. In addition, appropriate employees shall be provided with routine training on these procedures. Such procedures and records of training dates shall be kept on-site. (*Section 5(a)(6)*)
- Bulk photo processing or CTP solutions, inks, solvents, or wastewaters which are stored in containers of at least 50 gallons capacity shall be kept in a roofed containment area with impermeable flooring which will hold at least the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is larger. Storage areas established inside a building shall be located away from floor drains, outside door openings, and high traffic areas for equipment such as fork lifts. (*Section 5(a)(7)*)
- Printing equipment, including but not limited to plates and rollers, shall have excess ink, coating, or adhesive wiped or squeegeed off prior to washing in sinks. (*Section 5(a)(8)*)
- 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 must be collared or protected in some way as to prevent spills from entering the floor drain. (*Section 5(a)(9)*)
- 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. (*Section 5(a)(10)*)

## Collection and Transport of Minor Printing and Publishing Wastewater

Any person may install treatment and/or storage facilities for the collection of Minor Printing and Publishing Wastewater produced on-site and provide for the transport of these wastewaters to a POTW for further treatment in accordance with this paragraph with the prior approval of the POTW authority. It should be noted that all wastewaters to be hauled to a POTW shall 1) meet the effluent limits specified in Section 5(b) of this general permit prior to transport and 2) be transported by a permitted waste transporter in a manner acceptable to the commissioner. Any holding tank constructed for the storage of Minor Printing and Publishing Wastewater shall comply with the following: (*Section 5(a)(11)*)

- (1) An above-ground holding tank shall have 110% secondary containment storage capacity.
- (2) A below-ground holding tank shall be constructed of either fiberglass reinforced plastic, cathodically protected steel with a manufacturer applied anti-corrosive coating, or cathodically protected double-walled steel.
- (3) Any above or below-ground holding tank shall be equipped with an alarm system which indicates when tank has reached 80% of its holding capacity.

## Effluent Limitations

- (1) Minor Printing and Publishing Wastewater shall meet the pH and chemical limitation requirements of the POTW to which the wastewater will be discharged or the limitations below, whichever is more stringent. (*Section 5(b)(1)*)

### (2) pH

The pH of discharges of Minor Printing and Publishing Wastewater shall not be less than 6.0 nor greater than 11.0 Standard Units at any time. (*Section 5(b)(2)*)

- (3) **Chemical Limitations** (*Section 5(b)(3)*)

#### (A) Minor Printing and Publishing Wastewater

**Table I**

<i>Parameter</i>	<i>Maximum Concentration</i>
Arsenic, Total	0.1 mg/l
Cadmium, Total	0.5 mg/l
Chromium, Total	2.0 mg/l
Copper, Total	2.0 mg/l
Cyanide, Total	0.65 mg/l
Lead, Total	0.5 mg/l
Mercury, Total	0.1 mg/l
Nickel, total	2.0 mg/l
Silver, Total	2.0 mg/l
<b>*Total Volatile Organics</b>	<b>5.0 mg/l</b>

\*as measured by EPA test method 624

- (B) **Silver-rich Wastewater** (wastewater containing more than 5 mg/l silver )

**Table II**

<i>Parameter</i>	<i>Limit</i>	
Silver, Total	5.0 mg/l	For discharges of 100 gallons per week or less of treated silver-rich wastewater
Silver, Total	2.0 mg/l	For discharges of more than 100 gallons per week of treated silver-rich wastewater

## Monitoring Requirements

### (1) Monitoring Parameters and Frequency

- (A) Discharges of Minor Printing and Publishing Wastewater, other than photo processing wastewater, with a maximum daily flow per site of 100 gallons per day or greater shall monitor such discharge for pH and the chemical limitations in the table above at least once every twelve months using 40CFR Part 136 methods at a CTDPH certified lab. (*Section 5(c)(1)(A)*) (For a list of certified DPH environmental labs using these methods, go to [www.ct.gov/dph](http://www.ct.gov/dph) or call the DEP at 860-424-3018)
- (B)
  - (i) CTP wastewater adjusted for pH and directly discharged to the sewer must meet the following: (*Section 5(c)(1)(B)(iii)*)
    - a. pH adjust system must have an automatic alarm to alert operators if the system is malfunctioning.
    - b. pH adjust system must have a chart recorder or electronic memory recorder.
  - (ii) CTP Wastewater adjusted for pH in a closed-loop system must monitor pH with a portable test kit or pH meter prior to discharge. Date, volume discharged and pH of wastewater must be recorded on a log. (*Section 5(c)(1)(B)(iv)*)
- (C) Discharges of treated silver-rich wastewater (including treated silver-rich CTP wastewater) shall be monitored as follows: (*Section 5(c)(1)(C)*)
  - (i) The performance of any silver recovery system shall be evaluated by monitoring the effluent using silver test paper or a portable Colorimetric test kit and recording the results a minimum of once per month. (*These methods are crude and will only indicate when a treatment system is failing. Thus, proper maintenance is imperative.*)
  - (ii) Discharges of treated silver-rich wastewater greater than or equal to 1 gallon per week must be tested annually to determine compliance with silver-rich wastewater effluent limitations of Table II above using 40 CFR Part 136 methods at a CTDPH certified lab. (For a list of CTDPH labs, see Monitoring Requirements (1)(A) above.)
  - (iii) Discharges of treated silver-rich wastewater less than 1 gallon per week are exempt from effluent monitoring using 40 CFR Part 136 methods but are still responsible for monthly performance testing using silver test paper or a portable Colorimetric test kit.

### (2) Monitoring Location

- (A) Minor Printing and Publishing Wastewater must be sampled before mixing with silver-rich wastewater.
- (B) Silver-rich wastewater must be sampled after treatment to determine compliance with the silver limitations of Table II above.

## Reporting and Recordkeeping Requirements

- (1) Retain all records for a period of five years. Keep in mind that the DEP or local POTW can request these at any time. (*Section 5(d)*)
- (2) Report any exceedance of a permit limitation within thirty days to the DEP and the local POTW. (*Section 5(e)*)

Please note that this sheet is provided solely as a preliminary source of information on the General Permit for Discharge of Minor Printing and Publishing Wastewater. This permit can be obtained from the DEP website at [www.ct.gov/dep/permits&licenses](http://www.ct.gov/dep/permits&licenses) or by contacting the Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance at 860-424-3018.