# **Total Toxic Organic (TTO) Certification Policy**

An industrial user regulated under the Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical and Electronic Components (40 CFR 469) Category may, in lieu of monitoring for Total Toxic Organics (TTO), request approval for use of a Toxic Organic/Solvent Management Plan (TOMP) and certify that concentrated toxic organics were not discharged during the reporting period.

In order to qualify for the TTO certification option in lieu of monitoring, the industrial user must meet the following conditions:

- 1. The industrial user's wastewater discharge must be regulated under 40 CFR part 413, 433 or 469. Other categorical pretreatment standards that contain TTO limits, do not allow the option of certifying in lieu of monitoring.
- 2. The facility must demonstrate that it is in compliance with the appropriate TTO standards. To do this the user must submit a baseline TTO analysis of all wastestreams, which may contain toxic organic chemicals. If your facility is currently monitoring for TTO, the most recently submitted TTO analysis report can be used for the baseline.
- 3. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto. Where 40 CFR 136 does not contain sampling or analytical techniques for the pollutant in question, or where part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using analytical methods or other applicable sampling and analytical procedures approved by the Davenport Water Pollution Control Plant Pretreatment Office.
- 4. The industrial user must develop and submit to the Davenport WPCP Pretreatment Office an effective TOMP (a TOMP Preparation Guide follows as pages 2-5). In addition, the industrial user must submit for approval by the Davenport WPCP Pretreatment Office, a "Request for approval of certification in lieu of monitoring for TTO", see page 6. The TOMP must be implemented before the industrial user will be approved for certification in lieu of monitoring. Continued implementation of the TOMP must be demonstrated during annual inspections. Until the TOMP is approved and implemented, the industrial user must monitor for and report TTO according to the requirements contained in their "Industrial Pretreatment Permit".
- 5. Once the request for certification has been approved, the appropriate certification statement must be signed by an Authorized Representative of the company, as defined in 40 CFR 403.12(l) and included with each periodic compliance report submitted.
- 6. If any production process is modified, or if conditions change that effect the use and or storage of toxic organics, the Davenport WPCP Pretreatment Office must be notified and the TOMP modified and re-submitted for approval.
- 7. At a minimum of every 5 years, the regulated waste stream must be sampled and analyzed for the required TTOs and the TOMP must be updated.
- 8. The Davenport WPCP reserves the right to revoke the certification eligibility and require the industrial user to sample and analyze for TTOs based on, but not limited to the following reasons:
  - a. Compliance and/or self-monitoring samples indicate TTOs in non-compliance with the appropriate standards.
  - b. Failure to report changes to industry processes involving toxic organics not covered by the original TOMP.
  - c. Failure to implement the TOMP.
  - d. Failure to submit a certification statement with each periodic compliance report.

# **Toxic Organic Management Plan (TOMP) Preparation Guide**

The TOMP does not supersede any local, state or federal regulations. Many of the TOMP requirements may already be required for other regulations, namely the Resource Conservation and Recovery Act (RCRA) and the "Emergency Planning and Community Right-to-Know Act", Title III of the Superfund Amendments and Reauthorization Act (SARA). The TOMP objective is to provide assurance that toxic organics are properly used and disposed of instead of being discharged to the sewers.

## **Step 1- Toxic Organics Inventory**

A. Identify and list all toxic organic chemicals used at your facility. Estimate the maximum daily amount and the average daily amount of toxic organics stored at your facility. Estimate the annual amount of toxic organics purchased. For a list of regulated total toxic organics, refer to the following:

a.	Electroplating:	40 CFR 413.02 (i)
b.	Metal Finishing:	40 CFR 433.11 (e)
с.	Electrical and	
	Electronic Components:	40 CFR 469.12 (a)

- B. **Product/Trade names alone will not be accepted**; consult material safety data sheets (MSDS) and/or technical bulletins for the organic constituents.
- C. The above information may be given in tabular form. For Example:

Organic Inventory/ Storage						
Product Name	TTO Constituent	Max. Daily Amt.	Ave. Daily Amt.	Annual Purchase Amt.		

- D. Wastestreams must be sampled and analyzed using EPA approved methods, see 40 CFR 136. Sampling and analyses should be conducted for those individual compounds listed in the user's Industrial Pretreatment Permit or are reasonably expected to be present in the wastestream. The Davenport WPCP Pretreatment Office shall be provided with a copy of the results reporting form from the laboratory analyzing the wastestream samples. The most recent TTO monitoring results may be used to fulfill this requirement.
- E. If no toxic organic compounds or compounds containing such toxic organics are identified as being used or stored at your facility <u>and</u> the wastestream sampling and analysis shows that your facility's wastestream does not contain any regulated TTO's, then you may proceed to step 7. If any toxic organic compounds or compounds containing such toxic organics are identified as being used or stored at your facility and/or any TTO's are found in the wastestream monitoring report, then you must complete steps 2 through 6.

#### Step 2- Identify and Approximate the Quantities of TTO in the Wastestream

- A. Describe the step(s) in the regulated process in which toxic organics are used.
- B. Describe the sources where toxic organics may be introduced into the wastestream in addition to those described in Step 1-B. above (i.e. floor drains).
- C. Provide a flow schematic showing all of the sources where toxic organics may enter the wastestream.
- D. List the approximate quantities (i.e. gallons/day) of each toxic organic chemical used at each step in the regulated process.

E. Evaluate any regulated TTO found in the effluent, but not on the TTO inventory list in step #1 and determine if they are formed as reaction products or by-products, raw material impurities, equipment corrosion, or other sources.

#### **Step 3- Methods of Disposal**

- A. Describe the waste(s) being generated.
- B. Provide the amount of waste being disposed of, and the frequency of disposal.
- C. Provide the method(s) of disposal (i.e. surface impoundment, direct discharge, reclamation or contract disposal).
- D. Provide the name of the contractor(s) or the receiving stream.
- E. Estimate the maximum daily amount and the average daily amount of waste stored at your facility.

F.	The above	information	may be	given in	tabular form	. For example:	
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Method of Disposal					
Waste Type	Waste Disposal Amt/freq.	Disposal Method Contractor		Waste Storage Max. Daily/Ave. Daily	
Waste paint	8 drums/2x a yr.	Incineration	XYZ Co.	8 drums/2 drum	

- G. Provide your facility's RCRA generator number.
- H. Describe the storage of waste generated awaiting disposal. This should include, but is not limited to, location of storage (preferably indoors or a roofed area), the duration of storage, and the types of waste being stored (includes solvent soaked rags and absorbents/adsorbents). The storage area must be designed and maintained to not allow leakage. Incompatible wastes should not be stored together.
- I. Evaporation of waste is not an acceptable disposal method. All waste containers should be covered.
- J. Evaluate control options that could be implemented to minimize or eliminate the discharge of toxic organics or the source or potential source where toxic organics are introduced to the treatment system. These include but are not limited to, the following:
  - i. in-plant modifications: Evaluate new technologies and improved equipment to eliminate or minimize the use or discharge of toxic organics. New technologies may eliminate toxic organic use completely and vastly simplify TOMP preparation requirements. To reduce toxic organic loss from coating activities such as painting, consider improved transfer efficiency using electrostatic spraying or high volume low pressure (HVLP) spraying. For cleaning, consider technologies such as aqueous cleaning systems and media blasting (dry ice, plastic, abrasives, etc.)
  - ii. **solvent/ chemical substitution:** Evaluate replacing existing toxic organic materials with non-toxic organic materials. Non-toxic materials may not be covered under the regulated TTO parameter list and will vastly simplify TOMP preparation requirements. Substitutes for toxic organics are available for many cleaning, metal working and coating applications.

- iii. partial or complete recycle: Evaluate recycling opportunities for toxic organics. Environmentally sound recycling practices for toxic organics will help prevent material loss and reduce raw material costs. Cleaning solvents containing toxic organics can be recovered for reuse using solvent distillation. Metal-working fluids and wastewater from paint water curtains, which may contain toxic organics, can be recovered using recycling equipment such as filtration and centrifugation. Other recycling opportunities could include using waste exchanges to find buyers for unwanted toxic organics.
- **iv. operational changes:** Evaluate practices to eliminate or minimize the use or loss of toxic organics that are discharged to the wastestream. Consider implementing sound inventory control practices to reduce loss of toxic organics due to poor storage practices. For example, using toxic organics prior to shelf-life expiration and storing toxic organics according to manufacturer's recommendations to prevent degradation or contamination. Consider implementing appropriate procedures and training staff to ensure that minimal amount of toxic organics are used to do a task. For example, consider precleaning methods of wiping or brushing prior to using solvents containing toxic organics. Evaluate process control options (monitoring for specific gravity, conductivity, pH, etc.) for minimizing toxic organic loss to the wastestream from poor management of metal working fluids.

#### Step 4- Practices to Insure that Spills or Leaks do not Routinely Occur

- A. Describe the practices to be followed, including housekeeping procedures, during the use, collection and storage of organics to insure that organics do not spill or leak. These practices should include, but are not limited to:
  - a. Properly labeling and handling toxic organic containers.
  - b. Storing a minimal amount of organics on site.
  - c. A centralized storage area (preferably indoors or a roofed area) designed and maintained not to allow leakage,
  - d. Sealing floor drains when they are in the area where toxic organics are used or stored.
  - e. Overflow control equipment
  - f. Containment system (sump or dike) capable of holding 10% of the total volume stored or the volume of the largest container, which ever is greatest. The containment system must be designed and maintained not to allow leakage.
- B. Describe the procedures that will provide routine and detailed visual inspections to insure the absence of leaking storage containers. The Davenport WPCP recommends visual inspections at least once a week.
- C. Describe how all employees are trained in the proper use, collection and storage of all chemicals with which they work.
- D. Describe the procedures by which employees are informed of the health risks associated with exposure to the toxic organic chemicals with which they work.
- E. Provide a simple but complete floor plan showing the storage location of toxic organics prior to use and toxic organics waste waiting for disposal.

#### Step 5- Spill or Leak Notification and Containment Procedures

- A. Name of facility personnel responsible for implementing the TOMP
- B. Name and phone number of your facility's emergency response coordinator

- C. Notifications procedures:
  - a. A list of agencies to be contacted with their telephone numbers must be posted where organics are used and stored. This list may include but is not limited to; your facility's emergency response coordinator, the Davenport WPCP, Local Fire Department, Iowa DNR Emergency Response Center and National Emergency Response Center.
  - b. If a spill or leak enters the wastewater, the Davenport Water Pollution Control Plant should be promptly notified with the following information:
    - i. Your facility's name
    - ii. Your facility's location
    - iii. The chemical(s) and the cause of the spill/leak
    - iv. Quantity of the chemical(s)
    - v. Time and duration of the spill/leak
    - vi. Steps being taken and/or planned to eliminate and prevent any further spill/leaks.
- D. Describe the practices to be followed in the event of a spill or leak (i.e. containment, treatment, disposal, etc.)
- E. Describe the equipment/supplies on site to contain a rupture in the largest container.
- F. Describe how employees will be trained in the procedures to follow in the event of a spill or leak of a toxic organic.

#### Step 6- Certification Statement for Facilities using or Storing Total Toxic Organics

Please complete the "Request for Approval of Certification in lieu of monitoring for TTOs", initializing the certification statement for facilities using or storing Total Toxic Organics and signing the bottom certification statement. Include with the request a copy of the TOMP.

The following certification statement must be included on each periodic compliance report submitted by the user.

"Based on my inquiry of the person or persons directly responsible for managing compliance with the standards for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastestream has occurred since filing the last Periodic Report on continued compliance. I further certify that this facility is implementing the current Toxic Organic Management Plan which is on file with the Davenport WPCP Pretreatment Office."

#### Step 7- Certification Statement for Facilities Not using or Storing Total Toxic Organics

Please complete the "Request for Approval of Certification in lieu of monitoring for TTOs", initializing the certification statement for facilities <u>NOT</u> using or storing Total Toxic Organics and signing the bottom certification statement. Include with the request a copy of the Baseline Monitoring report to support that no TTO's are present in the wastestream.

The following certification statement must be included on each periodic compliance report submitted by the user.

"I certify that toxic organic compounds or compounds containing such toxic organics, as regulated by an applicable categorical pretreatment standard, are <u>not used or stored</u> at this facility. Therefore, there is no reason to expect any toxic organics to be present in the wastewaters. If any production process is modified, or if conditions change that effect the use and or storage of toxic organics, I will notify the Davenport WPCP Pretreatment Office."

# **Request for Approval of Certification in lieu of Monitoring for TTO**

Local Facility Name:							
Parent Company Name (if different):							
Permit #:			40 CFR Category:				
Physical street addre	ess of facility:		Official mailing addres	s, if different: Note if	same.		
City:	State: IA	Zip:	City:	Sity: State:			
This is a request for approval of certification in lieu of monitoring for TTO by the above named facility. The undersigned authorized representative, as defined in the local Sewer Use Ordinance or the Federal Regulations; 40 CFR 403.12 (l) understands that approval will allow the facility to certify with each periodic self-monitoring report that there are no TTOs being used or stored at this facility, or a TOMP is implemented for those TTOs used or stored at the above named facility rather than monitor for toxic organics.							
Place your initials in t	he box next to the certi	fication you are requestin	g approval for:				
Certification fo	r Facilities <u>Not</u> using	or Storing TTOs	Certification f	Certification for Facilities using or Storing TTOs			
I certify that toxic organic compounds or compounds containing such toxic organics, as regulated by an applicable categorical pretreatment standard, are <u>not used or stored</u> at this facility. Therefore, there is no reason to expect any toxic organics to be present in the wastewaters. I any production process is modified, or if conditions change that effect the use and or storage of toxic organics, I will notify the Davenport WPCP Pretreatment Office.			I certify that this facility is implementing the attached Toxic Organic Management Plan. Based on my inquiry of the person or persons directly responsible for managing compliance with the standards for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastestream has occurred since the TOMP has been implemented.				
I further certify that this facility will continue to monitor for toxic organics until the Davenport WPCP Pretreatment Office has approved the request for certification in lieu of sampling.			I further certify that this facility will continue to monitor for toxic organics until the Davenport WPCP Pretreatment Office has approved the attached TOMP.				
*must submit monito TTO's in wastestreau	oring results to suppo m.	rt that there are no	* must submit TOMP along with request				
I further 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 upon 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/or imprisonment for knowing violations.							
Printed Name					Title		
Sig	gnature				Date		