

Toxic Organic Management Plans

Al Garcia

Region 8 Pretreatment Workshop

May 9, 2017

Regulatory Background

- 40 CFR 403.8(f)(1)(iii) - Control through Permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements.

Total Toxic Organics

- Established in the following Pretreatment Categories:
 - Electroplating – 40 CFR 413
 - Metal Finishing – 40 CFR 433
 - Electrical and Electronic Components – 40 CFR 469
 - Copper Forming – 40 CFR 468
 - Aluminum Forming – 40 CFR 467
 - Coil Coating; Can Making Subcategory – 40 CFR 465, Subpart D

Total Toxic Organics

- Established based on potential for TTO discharges from the processes
- “shall mean the sum of the masses or concentrations of each of the following toxic organic compounds which is found at a concentration greater than 0.010 mg/l.”
- TTO lists vary

TTO Limits

Pretreatment Category	TTO Limit (mg/L)
Metal Finishing	2.13
Electroplating (less or greater than 10K gpd)	4.57/2.13
Electric and Electronic Components	1.37 (subparts A-B) 1.58 (subpart C)
Aluminum/Copper Forming	Production-Based
Coil Coating-Can Making (PSES/PSNS)	0.059/0.045 lbs per 1,000,000 cans produced

Total Toxic Organics

- Alternate O+G limits
- Toxic Organic (Solvent) Management Plans

Alternate O+G Monitoring Allowances

“As an alternate monitoring procedure for TTO, indirect dischargers may monitor for oil and grease and meet the alternate monitoring standards for oil and grease established for PSES and PSNS. Any indirect discharger meeting the alternate monitoring oil and grease standards shall be considered to meet the TTO standard.”

- Copper Forming
- Aluminum Forming
- Coil Coating-Can Making Subpart

Toxic Organic (Solvent) Management Plans

- Electroplating
- Metal Finishing
- Electrical and Electronic Components

Toxic Organic (Solvent) Management Plans

- Metal Finishing TTO Monitoring Requirements – 40 CFR 433.12.(a,b)
- 433.12(a) – Certification Statement in Periodic compliance reports
- 433.12(b) – TOMP

433.12(a) – Certification Statement in Periodic compliance reports

- In lieu of requiring monitoring for TTO, the permitting authority (or, in the case of indirect dischargers, the control authority) may allow dischargers to make the following certification statement: “Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting [or control] authority.” For indirect dischargers, the statement is to be included as a comment to the periodic reports required by 40 CFR 403.12(e). **If monitoring is necessary to measure compliance with the TTO standard, the industrial discharger need analyse for only those pollutants which would reasonably be expected to be present.**

433.12(b) – TOMP

- In requesting the certification alternative, a discharger shall submit a **solvent management plan** that specifies to the satisfaction of the permitting authority (or, in the case of indirect dischargers, the control authority) **(1)** the toxic organic compounds used; **(2)** the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and **(3)** procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

Reasonably Expected to Be Present

- MSDS Review
- Annual Inspection Information
- Data – BMR and 90 day Compliance Reporting
- Permit Application for Reissuance

Control Authority Monitoring

40 CFR 403.8(f)(2)(v)

- Inspect and sample the effluent from each Significant Industrial User at least once a year
- Only TTOs reasonably expected to be present

Control Authority Monitoring

IU inspection and sampling Manual

Section 3-2, page 59

- "The regulations do not specifically require POTWs to conduct compliance sampling for TTOs when a CIU implements a TOMP...EPA strongly recommends that POTWs collect at least one compliance sample during the term of the CIU's permit cycle to confirm that no changes have occurred and that the TOMP is still effective. EPA has concluded that the most appropriate time to conduct this monitoring is during the renewal of the permit. However, EPA also asserts that the timing is best left to the discretion of the POTW

Domestic Sewage Exclusions-1990

- Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works
- The amendments added two prohibitions addressing POTW worker health and safety:
 - pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed-cup flashpoint of less than 140° F or 60° C using the test methods specified in 40 CFR 261.21; and
 - pollutants which result in toxic gases and vapors within the POTW in a quantity that may cause acute worker health and safety problems.

Best Management Practices (BMP)

Pretreatment Streamlining - 2005

- Clarifies that POTWs may develop BMPs for industrial users (IUs) in order to implement the specific limits requirements listed at 40 CFR 403.5(c)(1-2). Such BMPs are considered local limits and Pretreatment Standards.

Best Management Practices (BMP)

Legal Authority

- BMP Definition
- Pretreatment Standards and local limits
- Documentation of Compliance in reporting and recordkeeping
- Permit Condition
- SNC Criteria

Best Management Practices (BMP)

- Enforceable BMPs:
 - specific notice of requirements and enforceability;
 - requirements for prohibitions on practices, or discharges;
 - timeframes;
 - compliance certification, reporting and records retention;
 - provision for re-opening or revoking the BMP conditions; and
 -

EPA Contact Info

Al Garcia

EPA Region 8 Pretreatment Coordinator

303.312.6382

garcia.al@epa.gov