

THE CITY OF TEMPE ARIZONA

2019

INDUSTRIAL USER WASTEWATER DISCHARGE ANNUAL REPORT

**CITY OF TEMPE
ENVIRONMENTAL SERVICES SECTION
P.O. BOX 5002
TEMPE, ARIZONA 85280
(480) 350-2678
pretreatment@tempe.gov**

Official City Use Only		
Permit #: _____	IU Code: _____	Due Date: _____
<u>TYPE OF PERMIT:</u>		
Class I _____	Class II _____	Class III _____

PERMITTEE SITE INFORMATION

I. Company Profile

A. Business Name: _____

Property Owner: _____

B. Service Address: _____

C. Mailing Address: _____

Contact Person: _____

Contact Title: _____

Telephone #: _____ Fax #: _____

E-Mail Address: _____

Cell #: _____

D. Name of Facility Owner, Manager, or Corporate Officer Responsible for Facility Operations: _____

Title: _____ Telephone #: _____

Fax #: _____ Cell #: _____

E-Mail Address: _____

E. Individual Responsible for Supervision of Wastewater Treatment and Disposal of All Waste Streams:

Name: _____

Title: _____ Telephone #: _____

Fax #: _____ Cell #: _____

E-Mail Address: _____

F. Individual Responsible for Daily Operations of Wastewater Treatment and Disposal of All Waste Streams:

Name: _____

Title: _____ Telephone #: _____

Fax #: _____ Cell #: _____

E-Mail Address: _____

G. Emergency Contact: _____

Name: _____

Title: _____ Telephone #: _____

Fax #: _____ Cell #: _____

E-Mail Address: _____

II. **Plant Operational Characteristics**

A. North American Industry Classification Codes (primary and secondary):

1. _____ 2. _____

B. Brief Description of Process at Permitted Address:

C. Number of Employees at Permitted Address: _____
Days of Week Facility is in Operation: _____
Total Hours Facility is in Operation Per Day: _____
Number of Shifts Used to Cover Hours of Operation: _____
Hours of Each Shift: a) _____ b) _____ c) _____
Employees Per Shift: a) _____ b) _____ c) _____
Coverage Comments:

D. Does Your Facility Generate Hazardous Waste? Yes _____ No _____

If yes, describe process of disposal or method used to treat wastes that are excluded under 40 CFR 261.3(a)(2)(iv).

Generator's EPA ID Number: _____

Transporter 1 Company Name: _____

Phone: _____ US EPA ID Number: _____

State Transporter's ID: _____

Transporter 2 Company Name: _____

Phone: _____ US EPA ID Number: _____

State Transporter's ID: _____

Transporter 3 Company Name: _____

Phone: _____ US EPA ID Number: _____

State Transporter's ID: _____

E. Type of Waste Generated (Hazard Class)

List by RCRA Code; i.e., F006, D001, etc.

	RCRA Code	Volume/Year*		RCRA Code	Volume/Year*
1.	_____	_____	2.	_____	_____
3.	_____	_____	4.	_____	_____
5.	_____	_____	6.	_____	_____
7.	_____	_____	8.	_____	_____
9.	_____	_____	10.	_____	_____

* Specify Volume Per Year in the Appropriate Units of Measure

G = Gallons P = Pounds T=Tons (2000 lbs) L = Liters
K = Kilograms M = Metric Ton (1000 kg) N = Cubic Meters

III. Water Flow

A. List All Water Account Numbers that the Permitted Facility Has With the City of Tempe:

1.	_____	2.	_____	3.	_____
4.	_____	5.	_____	6.	_____
7.	_____	8.	_____	9.	_____
10.	_____	11.	_____	12.	_____

Daily Average Purchase (consumption) can be provided in Microsoft Excel for each account. Contact your assigned inspector or call (480) 350-2678. Please provide the entire account number.

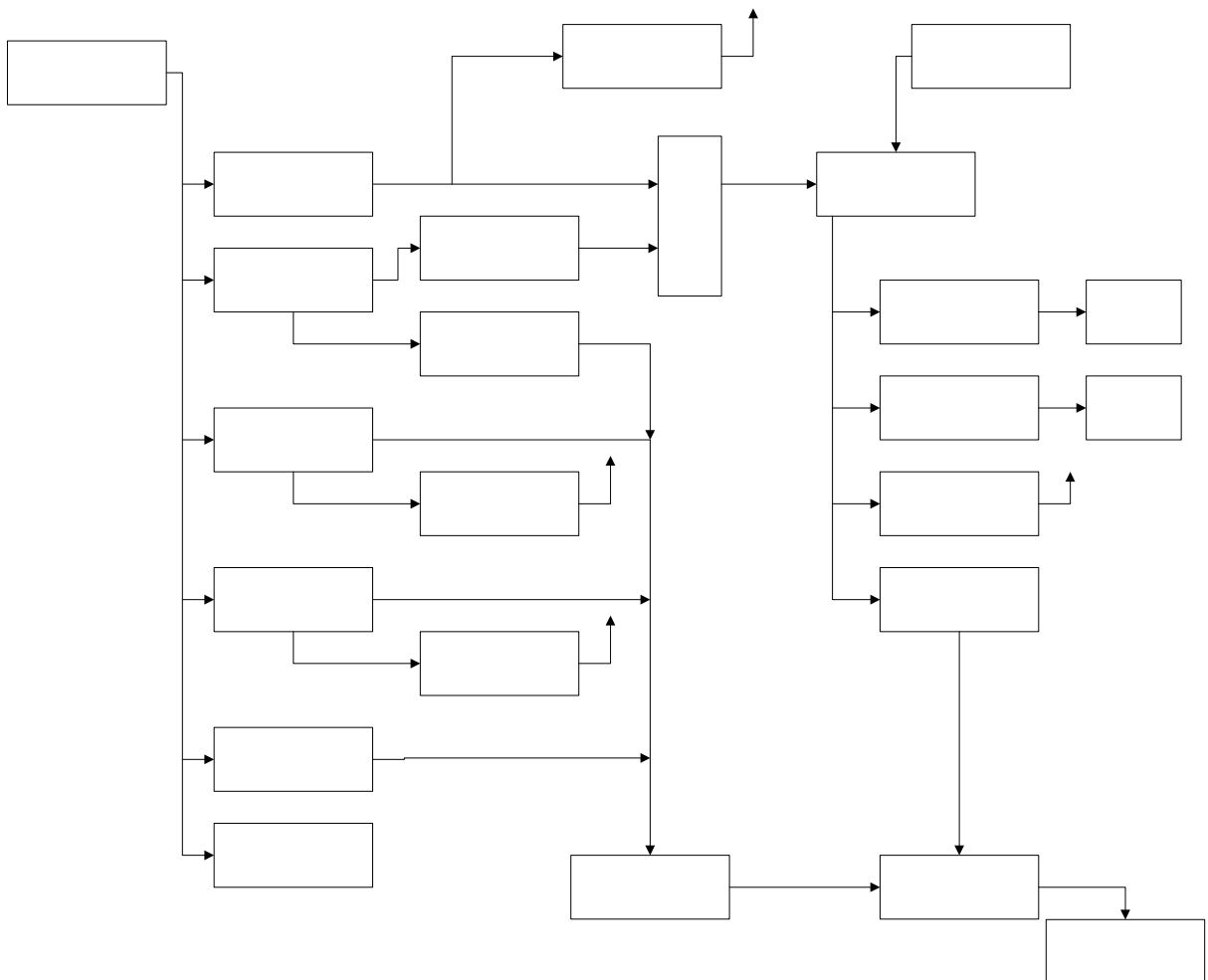
IV. Wastewater Discharge Point Sources

- A. For each major process in which wastewater is generated, diagram the flow of materials and water from start to completed product, showing all unit processes generating wastewater and estimated volumes in gallons per day (GPD) from each process. Identify each unit process having discharges to sewer.

When the Process Diagram and Flow Chart is completed, the resultant numbers obtained can be used to complete Section D on page 8. Please be as accurate as possible. Please attach a diagram which will be used during the facility inspection(s).

Daily Average Purchase (consumption) will be calculated by the City.

Example of Process Flow Diagram



B. Describe the Location of all Wastewater Flow Meters - Include Model Number, Manufacturer, Serial Number and Last Calibration Date:

Location: _____
 Manufacturer: _____
 Serial Number: _____
 Last Calibration Date: _____

C. Describe the Location of all Wastewater Control Manholes or Available Sampling Points:

1. Description: _____
 Location: _____
2. Description: _____
 Location: _____
3. Description: _____
 Location: _____

D. List Average Volume Use, Discharge, or Use Per Day:

Water Used For:	%	GPD	Measurements Determined By:
Boiler Feed	_____	_____	_____
Contained in Product	_____	_____	_____
Cooling Water	_____	_____	_____
Evaporation	_____	_____	_____
Process Industrial Waste	_____	_____	_____
Sanitary Domestic Use	_____	_____	_____
Scrubber Water	_____	_____	_____
Waste Hauled	_____	_____	_____
Other: _____	_____	_____	_____

V. Facilities Diagram

- A. Facility Layout and Flow Diagrams: Attach a Drawing (suggested no larger than 24" X 36") of the Facility Showing the Following Items:
- General facility layout
 - Major activities in each area (offices, storage, production, etc.)
 - Water meter(s) and incoming water lines
 - General plumbing including both domestic and process areas including location of floor drains and sumps
 - General plumbing to and through treatment area - identify type of treatment(s)
 - Location of sampling point(s) and effluent flow meters described in Section IV-C
 - Location of large storage tanks and list tank storage capacity
 - Location of outside storage areas (Indicate if covered or open)
 - Location of Storm Water On-Site retention
 - Location of Dry Wells

B. Wastewater Treatment Systems (Check appropriate boxes):

Type of System	Existing	Proposed
Activated Carbon Adsorption		
Biological Treatment		
Chemical Precipitation		
Closed Loop System(s)		
Coagulation/Flocculation		
Cyanide Destruction		
Deionization/Ion Exchange		
Evaporation		
Filtration/Filter Press		
Flow Equalization		
Grease/Oil Removal		
Grit Removal		
pH Neutralization		
Reverse Osmosis		
Screening		
Sedimentation (Clarifier)		
Silver Recovery Unit		
Solvent Separation		
Solvent Still		
Other		

C. Is There a Spill Prevention Control and Counter-measure Plan (SPCC) in Effect and on File With the City of Tempe Environmental Services Section for This Facility?

Yes No If Yes, Date of Last Update _____

D. Has your Pretreatment Facility Been Upgraded during the last 12 months?

Yes No If Yes, Date of Upgrade _____

If You Have Marked Yes, List What Was Added and Give Approximate Cost. If necessary, submit additional information in a separate document.

E. Does This Facility Have Underground Storage Tanks or Aboveground Storage Tanks?

Yes No

If Yes, Complete the Following Information. Write "empty" if tank is empty.
Provide general location on property: i.e., nw corner, south side, etc.

Underground Tank Location	Size (gallons)	Material Stored
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Aboveground Tank Location		
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

VI. Priority Pollutants Chemicals	Final Disposition (Estimated)					
	#1 Lbs./Gal. on Site	#2 Amount Used/Day	#3 Percent in Product	#4 Percent to Sewer	#5 Percent to Evap.	#6 Percent to Waste Hauler

2,4, 6-trichlorophenol						
2,4-dichlorophenol						
2,4-dinitrophenol						
2-chlorophenol						
2-nitrophenol						
4,6-dinitro-o-cresol						
4-nitrophenol						
Parachlorometa cresol						
Pentachlorophenol						
Phenol						
1,12-benzoperylene (benzo(ghi)perylene)						
1,2,4-trichlorobenzene						
1,2,5,6-dibenzanthracene (dibenzo(,h) anthracene)						
1,2-benzanthracene (benzo(a)anthracene)						
1,2-dichlorobenzene						
1,2-diphenylhydrazine						
1,3-dichlorobenzene						
1,4-dichlorobenzene						
11,12-benzofluoranthene (benzo(b)fluoranthene)						
2,4-dinitrotoluene						
2,6-dinitrotoluene						
2-chloronaphthalene						
3,3-dichlorobenzidine						
3,4-Benzofluoranthene (benzo(b)fluoranthene)						
4-bromophenyl phenyl ether						
4-chlorophenyl phenyl ether						
Acenaphthene						
Acenaphthylene						
Anthracene						
Benzidine						
Benzo(a)pyrene (3,4-benzo-pyrene)						
Bis(2-chloroethoxy)methane						

VI. Priority Pollutants Chemicals	Final Disposition (Estimated)					
	#1 Lbs./Gal. on Site	#2 Amount Used/Day	#3 Percent in Product	#4 Percent to Sewer	#5 Percent to Evap.	#6 Percent to Waste Hauler

Bis(2-chloroethyl)ether						
Bis(2-chloroisopropyl)ether						
Bis(2-ethylhexyl)phthalate						
Butyl benzyl phthalate						
Chrysene						
Di-N-Butyl Phthalate						
Di-n-octyl phthalate						
Diethyl Phthalate						
Dimethyl phthalate						
Fluoranthene						
Fluorene						
Hexachlorobenzene						
Hexachlorobutadiene						
Hexachloroethane						
Hexachloromyclopentadiene						
Indeno (,1,2,3-cd) pyrene (2,3-o-pheynylene						
Isophorone						
N-nitrosodi-n-propylamin						
N-nitrosodimethylamine						
N-nitrosodiphenylamine						
Naphthalene						
Nitrobenzene						
Phenanthrene						
Pyrene						
Antimony						
Arsenic						
Asbestos						
Beryllium						
Cadmium						
Chromium						
Copper						
Cyanide, Total						

VI. Priority Pollutants						
	Chemicals					
	Final Disposition (Estimated)					
	#1 Lbs./Gal. on Site	#2 Amount Used/Day	#3 Percent in Product	#4 Percent to Sewer	#5 Percent to Evap.	#6 Percent to Waste Hauler

Lead						
Mercury						
Nickel						
Selenium						
Silver						
Thallium						
Zinc						
2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)						
4,4-DDD (p,p-TDE)						
4,4-DDE (p,p-DDX)						
4,4-DDT						
Aldrin						
Alpha-BHC						
Alpha-endosulfan						
Beta-BHC						
Beta-endosulfan						
Chlordane (technical mixture and)						
Delta-BHC (PCB-polychlorinated biphenyls)						
Dieldrin						
Endosulfan sulfate						
Endrin						
Endrin aldehyde						
Gamma-BHC (lindane)						
Heptachlor						
Heptachlor epoxide (BHC-hexachlorocyclohexane)						
PCB-1016 (Arochlor 1016)						
PCB-1221 (Arochlor 1221)						
PCB-1232 (Arochlor 1232)						
PCB-1242 (Arochlor 1242)						
PCB-1248 (Arochlor 1248)						
PCB-1254 (Arochlor 1254)						
PCB-1260 (Arochlor 1260)						

VI. Priority Pollutants Chemicals	Final Disposition (Estimated)					
	#1 Lbs./Gal. on Site	#2 Amount Used/Day	#3 Percent in Product	#4 Percent to Sewer	#5 Percent to Evap.	#6 Percent to Waste Hauler

Toxaphene						
1,1,1-trichloroethane						
1,1,2,2-tetrachloroethane						
1,1,2-trichloroethane						
1,1-dichloroethane						
1,1-dichloroethylene						
1,2-dichloroethane						
1,2-dichloropropane						
1,2-dichloropropylene (1,3-dichloropropene)						
1,2-trans-dichloroethylene						
2-chloroethyl vinyl ether (mixed)						
Acrolein						
Acrylonitrile						
Benzene						
Bromoform (tribromomethane)						
Carbon tetrachloride (tetrachloromethane)						
Chlorobenzene						
Chlorodibromomethane						
Chloroethane						
Chloroform (trichloromethane)						
Dichlorobromomethane						
Ethylbenzene						
Methyl bromide (bromomethane)						
Methyl chloride (dichloromethane)						
Methylene chloride (dichloromethane)						
Tetrachloroethylene						
Toluene						
Trichloroethylene						
Vinyl chloride (chloroethylene)						

C. List Any Permits Which Have Been Issued to You by Other Agencies; i.e., Air Quality, ADEQ, Fire Department, or Other Agencies.

Permit Type/Agency Name	Permit Number	Expiration Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

D. Does This Facility Have a Waste Minimization/Pollution Prevention Plan in Place?

Yes No N/A

E. Does This Facility Have a Water Conservation Plan in Place?

Yes No N/A

Need more information

VII. Instructions for Certification by Company Official

- A. This report must be signed by:
1. A responsible corporate officer, if the user is a corporation. A corporate officer shall be 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, or the manager of one or more manufacturing, production or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 2. A general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship.
 3. A duly authorized representative of the individual if:
 - a. the authorization is made in writing by the individual described in #1 or #2 above;
 - b. the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager or equivalent position having overall responsibility for environmental matters for the company, and that
 - c. the written authorization is submitted to the City of Tempe Environmental Services Section.
- B. If an authorization under paragraph 1, 2, or 3 is no longer accurate, a new authorization satisfying the above must be submitted to the City prior to or together with any signed reports.
- C. After saving the completed report by using "save as" in Adobe 8 Reader, print the completed report. Please mail or deliver to:

By mail (Certified is Recommended)

City of Tempe
Water Utilities Department
Environmental Services Section
P.O. Box 5002
Tempe, Arizona 85280

Hand Delivery

City of Tempe
Water Utilities Department
Environmental Services Section
6600 South Price Road
Tempe, Arizona 85283

VIII. Certification by Company Official

Business Name: _____

Name: _____

Title: _____

Phone Number: _____

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 fines and imprisonment for knowing violations.

Signature: _____

Date: _____

City of Tempe Public Works Department
Water Utilities Division
Environmental Services Section

Total Toxic Organic Verification & Certification Form

Name of Facility: _____

Address of Facility: _____

Contact Person: _____

Contact Title: _____ Contact Phone: _____

Please check the appropriate box below:

A. No toxic organic compounds as listed in Appendix A are used or stored at this facility.

(Sign and date this form and submit it to the address below. No other form is required).

B. I elect to have this facility monitored for Total Toxic Organics ("TTO's"). I understand the potential exists that this facility could be required to assume all or part of the cost of sampling and laboratory fees for the implementation of this program. TTO monitoring shall be completed on an annual basis. Complete and attach a TTO Inventory Form for each product listed in Appendix A which your facility uses.

C. This facility elects to submit and implement a Solvent Management Plan ("SMP") in lieu of the required TTO monitoring. I understand that this Plan must be recertified every six months in our Periodic Compliance Report. The SMP must include a TTO Inventory Form for each product listed in Appendix A which is used in your facility.

Based on my inquiry of the person or persons directly responsible for the managing compliance with the 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 wastewater has occurred since filing of the last Periodic Compliance Report.

_____ Date

_____ Signature of Responsible Company Official

_____ Print or type Name of Above Official

_____ Title of Above Official

Please submit this report to the following address:
City of Tempe, Environmental Services Section, P O Box 5002, Tempe, AZ 85280

City of Tempe Public Works Department
Water Utilities Division
Environmental Services Section

Total Toxic Organic Inventory Form

1. Name of Product: _____

2. Appendix A Constituent(s): _____

3. Indicate Usage of Product by selecting the appropriate category:

biocide	catalyst	coolant	degreasing
flux	fuel	metal etch	metal prep
paint stripping	other: (explain)		

4. Indicate Procedure(s) for processing spent solvents.

chemical extraction	physical extraction	recycled on site
still	used as fuel	
other (explain)		

solvent shipped off site (check appropriate box and supply name of hauler)

recycling company:
waste disposal firm:

solvent lost or destroyed (check appropriate box)

destroyed in usage	evaporation	Incinerated
oxidized to non-toxic		

5. Describe procedure for assuring toxic organics do not enter the sewer system.

Procedures identified in parts 4 and 5 will be verified during the inspection of your facility.

Please submit this report to the following address:
City of Tempe, Environmental Services Section, P O Box 5002, Tempe, AZ 85280

APPENDIX A

The following is the total toxic organics table. List any chemical used in the manufacturing process or stored at your facility. Column A is the chemical name as listed in 40 CFR 413.02(i) and 40 CFR 433.11(e). Columns B and C are synonyms of the chemical in column A.

Organic Name	Synonym	Synonym
Acenaphthene	1,2-Dihydroacenaphthylene	
Acrolein	Acraldehyde	Aqualin
Acrylonitrile	Cyanoethylene	Vinylcyanide
Benzene	Benzol	Cyclohexatriene
Benzidine	4,4'-Diaminobiphenyl	p,p'-Bianiline
Carbon tetrachloride	Tetrachloromethane	Carbontetrachloride
Chlorobenzene	Monochlorobenzene	
1,2,4-Trichlorobenzene	unsym-Trichlorobenzene	
Hexachlorobenzene	Perchlorobenzene	
1,2-Dichloroethane	Ethylene Dichloride	
1,1,1-Trichloroethane	Trichlorethylene(TCE)	Methylchloroform
Hexachloroethane	Perchloroethane	
1,1-Dichloroethane		
1,1,2-Trichloroethane	Vinyltrichloride	
1,1,2,2-Tetrachloroethane	Bonoform / Cellon	Acetylenetetrachloride
Chloroethane	Ethylchloride	
Bis (2-chloroethyl) ether		
2-Chloroethyl vinyl ether (mixed)	(2-chloroethoxy) ethene	
2-Chloronaphthalene	2-chloronaphthalene	
2,4,6-Trichlorophenol	Dowicide 2S	
Parachlorometa cresol	3 methyl-4-Chlorophenol	p-Chloro-m-cresol
Chloroform	Trichloromethane	
2-Chlorophenol	2 Chlorophenol	
1,2-Dichlorobenzene	o-Dichlorobenzene	ortho-Dichlorobenzene
1,3-Dichlorobenzene	m-Dichlorobenzene	meta-Dichlorobenzene
1,4-Dichlorobenzene	p-Dichlorobenzene	para-Dichlorobenzene
3,3-Dichlorobenzidine	DCB	Dichlorobenzidine
1,1-Dichloroethylene	1,1-Dichloroethene	Vinylidenechloride
1,2-Trans-dichloroethylene	Acetylenedichloride, trans-	trans-1,2-Dichloroethylene
2,4-Dichlorophenol		
1,2-Dichloropropane	Propylenedichloride	
1,3-Dichloropropylene	1,3-Dichloropropene	
2,4-Dimethylphenol	2,4-Xylenol	
2,4-Dinitrotoluene	1-Methyl-2,4-dinitrobenzene	
2,6-Dinitrotoluene		
1,2-Diphenylhydrazine	1,2-Diphenyl hydrazine	Hydrazobenzene
Ethylbenzene	Phenylethane	
Fluoranthene	Benzo(jk)fluorene	Idryl
4-Chlorophenyl phenyl ether	2-Chlorophenyl phenyl ether	4-Chlorophenylphenylether
4-Bromophenyl phenyl ether	4-Bromophenylphenylether	4-Bromodiphenylether
Bis (2-chloroisopropyl) ether	Diethylhexylphthalate	Di(2-ethylhexyl)phthalate
Bis (2-chloroethoxy) methane		
Methylene chloride	Dichloromethane	Methylenechloride
Methyl chloride	Chloromethane	Methylchloride

Organic	Synonym	Synonym
Methyl bromide	Bromomethane	Methylbromide
Bromoform	Tribromomethane	
Dichlorobromomethane	Bromodichloromethane	
Chlorodibromomethane	Dibromochloromethane	
Hexachlorobutadiene	Hexachloro-1,3-butadiene	
Hexachlorocyclopentadiene	Perchlorocyclopentadiene	
Isophorone	Isooctaphenone	Isophorene
Naphthalene	Naphthene	Tar camphor
Nitrobenzene		
2-Nitrophenol	o-Nitrophenol	
4-Nitrophenol	4-Hydroxynitrobenzene	p-Nitrophenol
2,4-Dinitrophenol	alpha-Dinitrophenol	
4,6-Dinitro-o-cresol	2-Methyl-4,6-dinitrophenol	DNOC
N-nitrosodimethylamine	N-Methyl-N-nitrosomethanamine	Dimethylnitrosamine
N-nitrosodiphenylamine	N-Nitroso-N-phenylbenzenamine	
N-nitrosodi-n-propylamine	Di-N-propylnitrosamine	N-Nitrosodipropylamine
Pentachlorophenol	PCP	
Phenol	Carbolic acid	
Bis (2-ethylhexyl) phthalate	Diethylhexylphthalate	Di(2-ethylhexyl)phthalate
Butyl benzyl phthalate	Phthalic acid, butylbenzylester	Butylbenzylphthalate
Di-n-butyl phthalate	Phthalic acid	Butylbenzyl phthalate
Di-n-octyl phthalate	Diocetyl phthalate	Diocetylphthalate
Diethyl phthalate	Diethylphthalate	
Dimethyl phthalate	Dimethylphthalate	
Benzo(a)anthracene	1,2-Benzanthracene	
Benzo(a)pyrene	3,4-Benzopyrene	
3,4-Benzofluoranthene	Benzo(e)fluoranthene	Benzo(b)fluoranthene
Benzo(k)fluoranthene	11,12-Benzofluoranthene	
Chrysene	1,2-Benzophenanthrene	
Acenaphthylene		
Anthracene		
Benzo(ghi)perylene	1,12-Benzoperylene	
Fluorene	2,2'-Methylenebiphenyl	
Phenanthrene		
Dibenzo(a,h)anthracene	1,2,5,6-Dibenzanthracene	Dibenzo (ah) anthracene
Indeno(1,2,3-cd) pyrene	2,3-o-phenylene pyrene	2,3-Phenylenepyrene
Pyrene	Benzo(def)phenanthrene	
Tetrachloroethylene	Perchloroethylene	Ethylenetetrachloride
Toluene	Methylbenzene	
Trichloroethylene	1,1,2-Trichloroethene	TCE
Vinyl chloride	Chloroethylene	Chloroethene
Aldrin		
Dieldrin		
Chlordane (technical mixtures)		
4,4-DDT	Dichlorodiphenyltrichloroethane	p,p'-DDT
4,4-DDE	p,p-DDX	Dichlorodiphenyldichloroethylene
4,4-DDD	p,p-TDE	Rhothane
A-endosulfan-Alpha	Endosulfan I	a-Endosulfan
B-endosulfan-Beta	Endosulfan II	b-Endosulfan
Endosulfan sulfate	Endosulfansulfate	
Endrin		
Endrin aldehyde	Endrinaldehyde	
Heptachlor	Heptachlorodicyclopentadiene	
Heptachlor epoxide	Heptachlorepoxyde	Vesicol 53-CS-17

Organic Name	Synonym	Synonym
Alpha-BHC	alpha-Benzenehexachloride	a-BHC
Beta-BHC	beta-Benzenehexachloride	b-BHC
Gamma-BHC	gamma-Benzenehexachloride	g-BHC
Delta-BHC	delta-Benzenehexachloride	d-BHC
PCB-1242	Arochlor 1242	
PCB-1254	Arochlor 1254	
PCB-1221	Arochlor 1221	
PCB-1232	Arochlor 1232	
PCB-1248	Arochlor 1248	
PCB-1260	Arochlor 1260	
PCB-1016	Arochlor 1016	
Toxaphene	Polychlorocamphene	Chlorinated camphene
2,3,7,8-Tetrachlorodibenzo-p-dioxin	TCDD	Dioxin

Appendix B

GUIDANCE FOR THE PREPARATION OF A SOLVENT MANAGEMENT PLAN

As previously discussed, one alternative to routine TTO monitoring is the preparation of a Solvent Management Plan (SMP).

An SMP must specify the toxic organic compounds used, the method of disposal used (instead of discharge into waste streams), and procedures for assuring that toxic organics do not routinely spill or leak into wastewater discharged to the POTW. Guidelines for preparation of an SMP are presented below as four basic steps.

Step 1 - Process Engineering Analysis

A process engineering analysis should be conducted to determine the source and type of toxic organic compounds found in a facility's wastewater discharge, including sources and compounds that could reasonably be expected to enter the wastewater in the event of spills, leaks, etc., based on the type of operations conducted at a particular plant. Such an analysis should be based on the results of one or more analyses of the plant's wastewater for the toxic organic pollutants which are included in the definition of TTO for that industrial category and which can reasonably be expected to be present (see TTO monitoring guidance). The process engineering analysis should include:

- a. An examination of published reports on the specific industry;
- b. A water flow diagram to identify all possible wastewater sources;
- c. A list of raw materials used in the industrial processes, including chemical additives, water treatment chemicals and cleaning agents, and the wastewater stream that each regulated toxic organic could potentially enter;
- d. Comparison of the toxics found in the effluent with the list of raw materials and selection of the most probable wastewater source;
- e. Evaluation of the toxics found in the effluent, but not on the raw materials list and determination of those formed as reaction products or by-products;
- f. Examination of sources such as equipment corrosion or raw materials' impurities that could result in release to wastewaters of toxic organic pollutants.

Step 2 - Pollutant Control Evaluation

An evaluation should be made of the control options that could be implemented to eliminate the toxic compound(s) or the source or potential source of toxic organic compound introduction to the treatment system. This may include in-plant modifications, solvent or chemical substitution, partial or complete recycle, reuse, neutralization, and operational changes. The analysis should be conducted on a case-by-case basis and will often result in one or more feasible options to control each source or potential source of toxic pollutant discharge. Finally, evaluation of the available control options, including the advantages and disadvantages of

each, may lead to a decision of whether an SMP is a feasible alternative to TTO monitoring.

Step 3 - Preparation of Solvent Management Plan

A Solvent Management Plan should include the following items at a minimum:

- a. A complete inventory of all toxic organic chemicals in use or identified through sampling and analysis of the wastewater from regulated process operations (organic constituents of trade-name products should be obtained from the appropriate suppliers as necessary);
- b. Descriptions of the methods of disposal other than dumping used for the inventoried compounds, such as reclamation, contract hauling, or incineration;
- c. The procedures for ensuring that the regulated toxic organic pollutants do not spill or routinely leak into process wastewaters, floor drains, non-contact cooling water, groundwater, surface waters (i.e., Spill Prevention, Control, and Countermeasures [SPCC] Plan) or any other location which allows discharge of the compounds; and
- d. Determinations or best estimates of the identities and approximate quantities of toxic organic pollutants used as well as discharged from the regulated manufacturing processes. Compounds present in waste streams that are discharged to sanitary sewers may be a result of regulated processes or disposal, spills, leaks, rinse water carryover, air pollution control, and other sources.