

## SUMMARY OF FEDERAL PRETREATMENT STANDARDS

### CENTRALIZED WASTE TREATMENT CATEGORY

Applicable CFR: 40 CFR Part 437

Estimated Number of Companies Affected:  
Within U.S.: 165

Proposal in Federal Register: January 27, 1995 (60 FR 5464)  
Notice of Data Availability: September 16, 1996 (61 FR 48806)  
Re-proposal: January 13, 1999 (64 FR 2280)  
Final Regulation in Federal Register: December 22, 2000 (65 FR 81242)  
Final Compliance Date: December 22, 2003  
New Source Date: August 28, 2000

#### Subcategories

- A. Metals Treatment and Recovery Subcategory
- B. Oils Treatment and Recovery Subcategory
- C. Organics Treatment and Recovery Subcategory
- D. Multiple Wastestreams Subcategory

Types of Technology on Which Pretreatment Standards are Based:

#### *Metals Treatment and Recovery Subcategory:*

Primary precipitation, liquid-solid separation, secondary precipitation, clarification, and sand filtration  
Cyanide treatment: Alkaline chlorination in a two-step process prior to metals treatment

#### *Oils Treatment and Recovery Subcategory:*

Emulsion breaking/gravity separation and dissolved air flotation

#### *Organics Treatment or Recovery Subcategory:*

Equalization and biological treatment

Applicability:

Generally applies to wastewater generated from the treatment and recovery of hazardous and non-hazardous industrial wastes received from off-site.

Exemptions:

- ! Facilities that receive that receive off-site waste from the same industry or of the same nature as wastes generated on-site.
- ! Treatment of waste received from off-site via pipeline.
- ! Treatment of wastewater from product stewardship activities, limited to acceptance of unused products, shipping and storage containers with product residues, and off-spec products.
- ! Treatment of off-site sanitary wastes and wastes of domestic origin, such as septage, chemical toilet waste, and restaurant waste.
- ! Treatment of grease trap wastes and wastes from food processing and food service activities.
- ! Treatment or recovery of solids that remain in solid form when contacted with water and which do not leach any chemicals into the water, such as recycling of aluminum cans, glass, and plastic bottles.
- ! Wastewater from scrap metal processing and auto salvage operations.
- ! POTWs, transfer stations, and municipal recycling centers.
- ! Truck washes that do not receive off-site waste other than "heels" of empty trucks.
- ! Wastewater from solvent recovery if distillation is used.
- ! Wastewater from silver recovery operations of used photographic and x-ray materials if it is not mixed with other types of wastes.
- ! Treatment of marine generated waste (ballast water, bilge water, etc.) as long as the waste is treated at the servicing facility where it is off-loaded.
- ! Metals recovery operations regulated under other federal pretreatment categories.

## Subcategory Determination

To determine the appropriate subcategory or subcategories, the regulated facility should review one year's data on its incoming wastes. Each waste receipt should be classified into the metals subcategory, the oils subcategory, or the organics subcategory by using the list of waste streams below. To determine the appropriate category:

1. See if the waste receipt is of a type listed below. If so, the subcategory for the waste should be taken from this list.

*Metals Subcategory:* spent electroplating baths and/or sludges, metal finishing rinse water and sludges, chromate wastes, air pollution control blow down water and sludges, spent anodizing solutions, incineration wastewaters, waste liquid mercury, cyanide-containing wastes, waste acids and bases with or without metals, cleaning and rinsing and surface preparation solutions from electroplating or phosphating operations, vibratory deburring wastewater, and alkaline and acid solutions used to clean metal parts or equipment.

*Oils Subcategory:* used oils, oil-water emulsions or mixtures, lubricants, coolants, contaminated groundwater clean-up from petroleum sources, used petroleum products, oil spill clean-up, bilge water, rinse/wash water from petroleum sources, interceptor wastes, off-specification fuels, underground storage remediation waste, tank clean-out from petroleum or oily sources, non-contact used glycols, aqueous and oil mixtures from parts cleaning operations, and wastewater from oil bearing pain washes.

*Organics Subcategory:* landfill leachate, contaminated groundwater clean-up from non-petroleum sources, solvent-bearing wastes, off-specification organic product, still bottoms, byproduct waste glycol, wastewater from paint washes, wastewater from adhesives and/or epoxies formulation, wastewater from chemical product operations, tank clean-out from organic non-petroleum sources.

2. If the waste receipt is not listed above, the following hierarchy should be followed to determine its classification:
  - a. If the waste receipt contains oil and grease at 100 mg/l or above, the waste should be classified in the oils subcategory.
  - b. If the waste receipt contains less < 100 mg/l oil and grease and has any of the pollutants listed below in excess of the values listed below, the waste should be classified in the metals subcategory.
    - Cadmium: 0.2 mg/l
    - Chromium: 8.9 mg/l
    - Copper: 4.9 mg/l
    - Nickel: 37.5 mg/l
  - c. If the waste receipt contain < 100 mg/l oil and grease and does *not* have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.
3. If a facility only receives wastes in one subcategory, the facility is regulated under the appropriate subcategory. If a facility receives wastes in more than one subcategory, the facility is regulated under Subcategory D, Multiple Wastestreams.

Subpart A - Metals Treatment and Recovery Subcategory

**Pretreatment Standards**

Pollutant or Pollutant Parameter	Existing Sources and New Sources	
	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)
Antimony	0.249	0.206
Arsenic	0.162	0.104
Cadmium	0.474	0.0962
Chromium	15.5	3.07
Cobalt	0.192	0.124
Copper	4.14	1.06
Lead	1.32	0.283
Mercury	0.00234	0.000739
Nickel	3.95	1.45
Selenium	1.64	0.408
Silver	0.120	0.0351
Tin	0.409	0.120
Titanium	0.0947	0.0618
Vanadium	0.218	0.0662
Zinc	2.87	0.641

**In-Plant Cyanide Pretreatment Standards for Existing Sources and New Sources**

Pollutant or Pollutant Parameter	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)
Total Cyanide	500	178

## Subpart B - Oils Treatment and Recovery Subcategory

### Pretreatment Standards

Pollutant or Pollutant Parameter	Existing Sources		New Sources	
	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)
Antimony	0.237	0.141	0.237	0.141
Barium	0.427	0.281	0.427	0.281
Chromium	0.947	0.487	0.746	0.323
Cobalt	56.4	18.8	56.4	18.8
Copper	0.405	0.301	0.500	0.242
Lead	0.222	0.172	0.350	0.160
Molybdenum	3.50	2.09	3.50	2.09
Tin	0.249	0.146	0.335	0.165
Zinc	6.95	4.46	8.26	4.50
Bis-2-ethylhexyl phthalate	0.267	0.158	0.215	0.101
Carbazole	0.392	0.233	0.598	0.276
Fluoranthene	0.787	0.393	0.0537	0.0268
n-Decane	5.79	3.31	0.948	0.437
n-Octadecane	1.22	0.925	0.589	0.302

## Subpart C - Organics Treatment and Recovery Subcategory

### Pretreatment Standards

Pollutant or Pollutant Parameter	Existing Sources and New Sources	
	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)
Molybdenum	1.01	0.965
o-Cresol	1.92	0.561
p-Cresol	0.698	0.205
2,3-Dichloroaniline	0.0731	0.0361
2,4,6-Trichlorophenol	0.155	0.106

## Subpart D - Multiple Wastestreams Subcategory

If a facility treats wastewater from more than one subcategory of waste (ie. metals, oils, and organics), it must treat the waste in separate systems and comply with the appropriate discharge limitations for each subcategory OR it must comply with the following requirements:

1. Meet applicable Multiple Wastestream Subcategory discharge standards.
2. Submit an initial certification statement that is signed by a responsible corporate officer and includes the following information:
  1. List and description of the subcategories of wastes accepted for treatment at the facility.
  2. List and description of the treatment systems in-place at the facility and the conditions under which the treatment systems are operated for the subcategories of wastes accepted for treatment at the facility.
  3. Information and supporting data establishing that these treatment systems will achieve equivalent treatment.
3. Submit an annual periodic certification statement that is signed by a responsible corporate officer and certifies that the facility is operating its treatment systems to provide equivalent treatment as set forth in the initial certification. If a facility has modified its treatment systems, the facility should submit a description of the modified systems and information and supporting data to establish that the modified system will achieve equivalent treatment.
4. Maintain and allow inspection of on-site compliance paperwork, including:
  1. A list and description of the subcategory wastes being accepted for treatment at the facility.
  2. A list and description of the treatment systems in-place at the facility, modifications to the treatment systems, and the conditions under which the systems are operated for the subcategories of wastes accepted for treatment at the facility.
  3. Information and supporting data establishing that these treatment systems will achieve equivalent treatment.
  4. A description of the procedures it follows to ensure that its treatment systems are well-operated and maintained.
  5. An explanation of why the procedures it has adopted will ensure its treatment systems are well-operated and maintained.

Subpart D - Multiple Wastestreams Subcategory: Metals, Oils, and Organics

**Pretreatment Standards**

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	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)	Maximum for Any One Day (mg/l)	Monthly Average (mg/l)
Antimony	0.237	0.141	0.237	0.141
Arsenic	0.162	0.104	0.162	0.104
Barium	0.427	0.281	0.427	0.281
Cadmium	0.474	0.0962	0.474	0.0962
Chromium	0.947	0.487	0.746	0.323
Cobalt	0.192	0.124	0.192	0.124
Copper	0.405	0.301	0.500	0.242
Lead	0.222	0.172	0.350	0.160
Mercury	0.00234	0.000739	0.00234	0.000739
Molybdenum	1.01	0.965	1.01	0.965
Nickel	3.95	1.45	3.95	1.45
Selenium	1.64	0.408	1.64	0.408
Silver	0.120	0.0351	0.120	0.0351
Tin	0.409	0.120	0.409	0.120
Titanium	0.0947	0.0618	0.0947	0.0618
Vanadium	0.218	0.0662	0.218	0.0662
Zinc	2.87	0.641	2.87	0.641
Bis-2-ethylhexyl phthalate	0.267	0.158	0.215	0.101
Carbazole	0.392	0.233	0.598	0.276
o-Cresol	1.92	0.561	1.92	0.561
p-Cresol	0.698	0.205	0.698	0.205
2,3-Dichloroaniline	0.0731	0.0361	0.0731	0.0361
Fluoranthene	0.787	0.393	0.0537	0.0268
n-Decane	5.79	3.31	0.948	0.437
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2,4,6-Trichlorophenol	0.155	0.106	0.155	0.106

**In-Plant Cyanide Pretreatment Standards for Existing Sources and New Sources**

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Subpart D - Multiple Wastestreams Subcategory: Metals and Oils

**Pretreatment Standards**

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## Subpart D - Multiple Wastestreams Subcategory: Metals and Organics

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