Chapter 14
IMPLEMENTATION

Effluent limitations and pretreatment standards act as a primary mechanism to control the discharges of pollutants to waters of the United States. These limitations and standards are applied to individual facilities through NPDES permits and through POTW pretreatment programs.

Implementation of a regulation is a critical step in the regulatory process. If a regulation is not effectively implemented, the removals and environmental benefits estimated for the regulation may not be achieved. Likewise, ineffective implementation could hinder the facility's operations without achieving the estimated environmental benefits. In discussions with permit writers and control authorities, many stated that close communication with CWT facilities is important for effective implementation of discharge requirements. Permit writers and control authorities need to have a thorough understanding of a CWT facility's operations to effectively implement this rule. Likewise, CWT facilities must maintain close communication with the waste generators in order to accurately characterize and treat the incoming waste streams.

This chapter provides direction to permit writers, control authorities, and CWT facilities to aid in the implementation of this rule. Interested parties should also consult the Small Entity Compliance Guide for the Final Effluent Limitations, Guidelines, Pretreatment Standards and New Source Performance Standards for the Centralized Waste Treatment Industry.

Based on local site-specific factors, the permit writer or control authority may establish limitations and standards for pollutants not covered by this regulation and may require more stringent limits or standards for covered pollutants.

New and reissued Federal and State NPDES permits to direct dischargers must *immediately* include the CWT effluent limitations (BAT) if applicable.

Existing indirect dischargers (discharge to a POTWs) must comply with the applicable CWT pretreatment standards (PSES) no later than three years after publication of the final rule in the Federal Register.

New direct or indirect discharging sources must comply with applicable limitations or standards on the date the new sources begin operations. New direct dischargers must comply with NSPS while new indirect sources must comply with PSNS. New direct and indirect sources are those that began CWT construction after publication of the final rule in the Federal Register.

Chapter 3 details the applicability of the CWT rule to various operations. Permit writers and control authorities should closely examine all CWT operations to determine if they should be subject to provisions of this rule.

Chapter 5 describes the sources of wastewater for the CWT industry, which include the following:

Off-site-generated wastewater:

- Waste receipts via tanker truck, trailer/roll-off bins, and drums.

On-site-generated wastewater:

- Equipment/area washdown
- Water separated from recovered/recycled materials
- Contact/wash water from recovery and treatment operations
- Transport container washdown
- Solubilization water
- Laboratory-derived wastewater
- Air pollution control wastewater
- Landfill wastewater from on-site landfills
- Contaminated stormwater.

These waste streams are classified as process wastewaters and are, thus, subject to the appropriate subcategory discharge standards. Uncontaminated stormwater should not be mixed with waste receipts prior to complete treatment of the waste receipts since this arrangement may allow discharge standards to be met by dilution rather than proper treatment. Only contaminated stormwater (i.e. stormwater which comes in direct contact with waste receipts or waste handling and treatment areas) should be classified as a process wastewater. During site visits at CWT facilities, EPA observed many circumstances in which uncontaminated stormwater was commingled with the CWT wastewaters prior to treatment or was added after treatment prior to effluent discharge monitoring. EPA believes that permit writers and control authorities should be responsible for determining which stormwater sources warrant designation as process wastewater. Additionally, permit writers and control authorities should require facilities to monitor and meet their CWT discharge requirements following wastewater treatment and prior to combining these treated CWT wastewaters with non-process wastewaters. If a permit writer or control authority allows a facility to combine treated CWT wastewaters with non-process wastewaters prior to compliance monitoring, the permit writer or control authority should ensure that the non-contaminated stormwater dilution flow is factored into the facility's discharge requirements.

EPA has also observed situations where stormwater, contaminated and uncontaminated, was recycled as process water (e.g., as solubilization water for solid wastes to render the wastes treatable). In these instances, dilution is not the major source of pollutant reductions (treatment). Rather, this leads to reduced wastewater discharges. Permit writers and control authorities should investigate opportunities for use of such alternatives and encourage such practices wherever feasible.

SUBCATEGORY DESCRIPTIONS *14.4*

One of the most important aspects of implementation is the determination of which subcategory's limitations are applicable to a facility's operation(s). As detailed in Chapter 5, EPA established a subcategorization scheme based on the character of the wastes being treated and the treatment technologies utilized. The subcategories are as follows:

Subcategory A: Metals Subcategory:

Facilities which treat or recover metal from metal-bearing waste, wastewater, or used material received from offsite;

Subcategory B: Oils Subcategory:

Facilities which treat or recover oil from oily waste, wastewater, or used material received from offsite;

Subcategory C: Organics Subcategory:

Facilities which treat or recover organics from organic waste, wastewater, or used material received from offsite; and

Subcategory D: Multiple Wastestream Subcategory:

> Facilities which treat or recover some combination of metal-bearing, oily, or organic waste, wastewater, or used material received from off-site.

The subcategory determination is based primarily on the type of process generating the waste, the characteristics of the waste, and the type of treatment technologies which would be effective in treating the wastes. It is important to note that a wide range of pollutants were detected in all four subcategories. That is, organic constituents were detected in metal subcategory wastewater and vice versa. The following sections provide a summary description of the wastes in each of the four subcategories; a more detailed presentation is in Chapter 5.

Metals Subcategory Description *14.4.1*

Waste receipts classified in the metals subcategory include, but are not limited to the following: spent electroplating baths and sludges, spent anodizing solutions, air pollution control water and sludges, incineration wastewaters, waste liquid mercury, metal finishing rinse water and sludges, chromate wastes, cyanide-containing wastes, and waste acids and bases. The primary concern with metals subcategory waste streams is the concentration of metal constituents, and some form of chemical precipitation with solid-liquid separation is essential. These raw waste streams generally contain few organic constituents and have low oil and grease levels. The range of oil and grease levels in metal subcategory wastestreams sampled by EPA was 5 mg/L (the minimum analytical detection limit) to 143 mg/L. The average oil and grease level measured at metals facilities by EPA was 39 mg/L. As expected, metal concentrations in wastes from this subcategory were generally high in comparison to other subcategories. In general, wastes that contain significant quantities of inorganics and/or metals should be classified in the metals subcategory.

Oil Subcategory Description *14.4.2*

Waste receipts classified in the oils subcategory include, but are not limited to the following: lubricants, used petroleum products, used oils, oil spill clean-up, interceptor wastes, bilge water, tank cleanout, off-specification fuels, and underground storage tank remediation waste. Based on EPA's sampling data, oil and grease concentrations in these streams following emulsion breaking and/or gravity separation range from 38 mg/L to 180,000 mg/L. The facility average value is 5,976 mg/L. Based on information provided by industry, oil and grease content in these waste receipts prior to emulsion breaking and/or gravity separation varies between 0.1% and 99.6% (1,000 mg/L to 996,000 mg/L). Additionally, as measured after emulsion breaking and/or gravity separation, these oily wastewaters generally contain a broad range of organic and metal constituents. Therefore, while the primary concern is often a reduction in oil and grease levels, oils subcategory wastewaters also require treatment for metal constituents and organic constituents. In general, wastes that do not contain a recoverable quantity of oil should not be classified as being in the oils subcategory. The only exception to this would be wastes contaminated with gasoline or other hydrocarbon fuels.

Organics Subcategory Description *14.4.3*

Waste receipts classified in the organics subcategory include, but are not limited to, the following: landfill leachate, contaminated groundwater clean-up, solvent-bearing waste, off-specification organic product, still bottoms, wastewater from adhesives and epoxies, and wastewater from chemical product operations

and paint washes. These wastes generally contain a wide variety and concentration of organic compounds, low concentrations of metal compounds (as compared to waste receipts in the metals subcategory), and low concentrations of oil and grease. The concentration of oil and grease in organic subcategory samples measured by EPA ranged from 2mg/L to 42 mg/L, with an average value of 22 mg/L. The primary concern for organic wastestreams is the reduction in organic constituents, which generally requires some form of biological treatment. In general, wastes that do not contain significant quantities of inorganics, metals, or recoverable quantities of oil or fuel should be classified as belonging to the organics subcategory.

Multiple Wastestream Subcategory Description *14.4.4*

Waste receipts in the multiple wastestream subcategory can all be classified in one of the first three subcategories. This subcategory may apply to a CWT facility which accepts waste receipts from more than a single subcategory listed above. For example, a CWT multiple wastestream subcategory facility may accept electroplating baths and sludges and used oils and oily wastewater. The multiple wastestream subcategory determination can only be made after the metals, oils, and organics subcategory classifications have been completed.

FACILITY SUBCATEGORIZATION IDENTIFICATION *14.5*

EPA believes that the paperwork and analyses currently performed at CWT facilities as part of their waste acceptance procedures (as outlined in Chapter 4) provide CWT facilities with sufficient information to make a subcategory determination. EPA based its recommended subcategorization determination procedure on information generally obtained during these waste acceptance and confirmation procedures. EPA discourages permit writers and control authorities from requiring additional monitoring or paperwork solely for the purpose of subcategory determinations, unless a CWT facility's waste acceptance procedures are inadequate. EPA believes that if CWT facilities follow EPA's recommendations, they should easily be able to classify their wastes. Permit writers and control authorities would only need to satisfy themselves that the facility made a good-faith effort to determine the category of wastes treated. In most cases, as detailed below, EPA believes the subcategory determination can be made on the type of waste receipt, e.g., metal-bearing sludge, waste oil, landfill leachate. Certainly, in EPA's estimation, all CWT facilities should, at a minimum, collect adequate information from the generator on the type of waste receipt since this is the minimum information required by CWT facilities to effectively treat off-site wastes.

To determine an existing facility's subcategory classification(s), the facility should review data for a period of one year on its incoming wastes (collected at the point where the shipment is received at the facility and recorded on forms similar to the template of a waste acceptance form shown as Figure 14-7 at the end of this chapter). ***For a one year period, the facility should first use Table 14-1 to classify each of its waste receipts into Subcategory A, B, or C.***

Table 14-1. Waste Receipt Classification

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 (> 136 mg/L) waste acids and bases with or without metals cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations vibratory deburring wastewater 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 waters 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 wastewater from oil bearing paint 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 organic chemical product operations tank clean-out from organic, non-petroleum sources

If the CWT facility receives the wastes listed in Table 14-1, the subcategory determination is made solely from this information. If, however, the wastes are unknown or not listed above, EPA recommends that the facility use the following hierarchy to characterize the wastes it is treating and identify the appropriate regulatory subcategory:

1). If the waste receipt contains oil and grease at or in excess of 100 mg/L, the waste receipt should be classified in the oils subcategory;

2). If the waste receipt contains oil and grease <100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste receipt 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

3). If the waste receipt contains oil and grease < 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste receipt should be classified in the organics subcategory.

This process is also illustrated in Figure 14-1.

Members of the CWT industry have expressed concern that wastes may be received from the generator as a "mixed waste", i.e., a single waste receipt may be classified in more than one subcategory. Based on the information collected during the development of this rule, using the subcategorization procedure recommended in this section, EPA is able to classify each waste receipt identified by the industry into the appropriate subcategory. Therefore, EPA believes that these "mixed waste receipt" concerns have been addressed in the current subcategorization procedure.

Once the facility's subcategory determination has been made based on a year of waste receipt information, EPA recommends that the facility should not be required to repeat this determination process unnecessarily. However, if a CWT facility alters its operation to accept wastes from another subcategory (or no longer accepts waste from a subcategory), the facility should notify the appropriate permit writer or control authority and the subcategory determination should be reevaluated. EPA notes that current regulations require notification to the permitting or control authority when significant changes occur. EPA also recommends that the subcategory determination be re-evaluated whenever the permit or pretreament agreement (or control mechanism) is re-issued, though this would not necessarily require complete characterization of a subsequent year's waste receipts if there is no indication that the make-up of the facility's receipts had significantly changed.

For new CWT facilities, the facility should estimate the percentage of waste receipts expected in each subcategory. Alternatively, the facility could compare the treatment technologies being installed to the selected treatment technologies for each subcategory. After the initial year of operation, the permit writer or control authority should reassess the facility's subcategory determination and follow the procedures outlined for existing facilities.

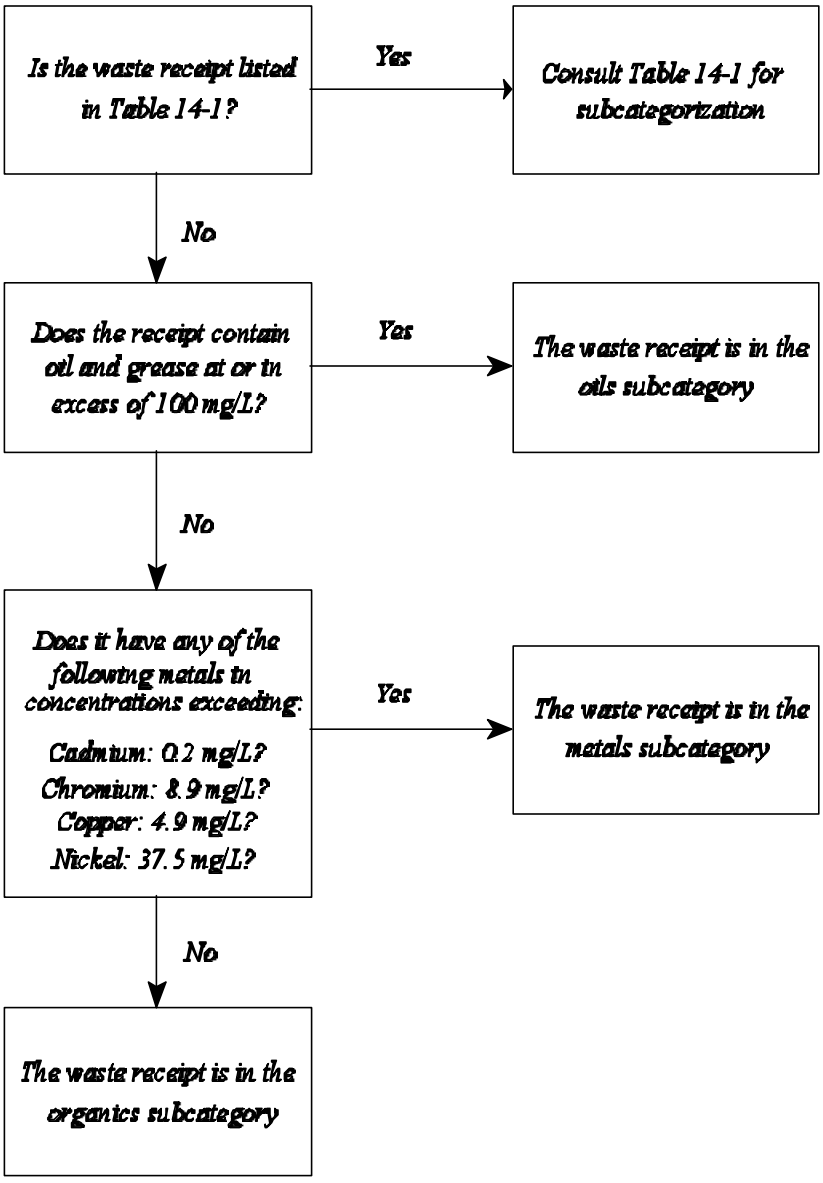

Figure 14-1. Waste Receipt Subcategory Classification Diagram

ON-SITE GENERATED WASTEWATER SUBCATEGORY DETERMINATION 14.6

Section 14.5 describes the subcategory determination for off-site waste receipts. For other on-site generated wastewater sources, such as those described in Section 14.3, wastewater generated in support of, or as the result of, activities associated with each subcategory should be classified in that subcategory. For facilities that are classified in a single subcategory, the facility should generally classify on-site wastewater in that subcategory. For facilities that are classified in more than one subcategory, however, the facility should apportion the on-site generated wastewater to the appropriate subcategory. Certain waste streams may be associated with more than one subcategory, such as stormwater, equipment/area washdown, air pollution control wastewater, etc. For these wastewater sources, the volume generated should be apportioned to each associated subcategory. For example, for contaminated stormwater, the volume can be apportioned based on the proportion of the surface area associated with operations in each subcategory. Equipment/area washdown may be assigned to a subcategory based on the volume of waste treated in each subcategory. Alternatively, control authorities may assign the on-site wastestreams to a subcategory based on the appropriateness of the selected subcategory treatment technologies. **EPA notes that this is only necessary for multiple subcategory facilities which elect not to comply with Subcategory D limitations or standards.**

SUBCATEGORY DETERMINATION IN EPA QUESTIONNAIRE DATA BASE 14.7

In order to estimate the quantities of wastewater being discharged and current pollutant loads, pollutant reductions, post compliance costs, and environmental benefits for each subcategory, EPA developed a methodology to classify waste streams for CWT facilities in the EPA Waste Treatment Industry Questionnaire database into each of the subcategories. Using the RCRA and Waste Form Codes listed in Table 14-2, EPA developed rules for making subcategory assignments of the waste receipts reported in the 308 Questionnaires. The rules rely primarily on Waste Form Codes (where available) plus RCRA wastes codes.

Wastes Classified in the Metals Subcategory - Questionnaire Responses 14.7.1

The wastes that EPA classified in the metals subcategory include the following:

- All wastes reported in Section G, Metals Recovery, of the 308 Questionnaire; and
- All wastes with Waste Form Codes and RCRA codes meeting the criteria specified in Table 14-3.

Wastes Classified in The Oils Subcategory - Questionnaire Responses 14.7.2

The wastes EPA classified in the oils subcategory include the following:

- All wastes reported in Section E, Waste Oil Recovery, of the 308 Questionnaire;
- All wastes reported in Section H, Fuel Blending Operations, of the 308 Questionnaire that generate a wastewater as a result of the fuel blending operations; and
- All wastes with Waste Form Codes and RCRA codes meeting the criteria in Table 14-4.

Wastes Classified in the Organics Subcategory - Questionnaire Responses 14.7.3

The wastes EPA classified in the organics subcategory include the following:

- All wastes with Waste Form Codes and RCRA codes meeting the criteria specified in Table 14-5.

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

RCRA CODES	
D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic
D005	Barium
D006	Cadmium
D007	Chromium
D008	Lead
D009	Mercury
D010	Selenium
D011	Silver
D012	Endrin(1,2,3,4,10,10-hexachlorc-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-5,8-dimeth-ano-napthalene)
D017	2,4,5-TP Silvex (2,4,5-trichlorophenixypropionic acid)
D035	Methyl ethyl ketone
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene; trichloroethane; carbon tetrachloride and chlorinated fluorocarbons and all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F002	The following spent halogenated solvents: tetrachloroethylene; 1,1,1-trichloroethane; chlorobenzene; 1,1,2-trichloro-1,2,2- trifluoroethane; ortho-dichlorobenzene; trichloroethane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and a total of 10 percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005-1 and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F004	The following spent nonhalogenated solvents: cresols, cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents; all spent solvent mixtures/blends containing before use a total of 10 percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvents mixtures
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel: (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum
F007	Spent cyanide plating bath solutions from electroplating operations

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

F008	Plating bath residues from the bottom of plating baths from electroplating operations in which cyanides are used in the process
F009	Spent stripping and cleaning bath solutions from electroplating operations in which cyanides are used in the process
F010	Quenching bath residues from oil baths from metal heat treating operations in which cyanides are used in the process
F011	Spent cyanide solutions from slat bath pot cleaning from metal heat treating operations
F012	Quenching waste water treatment sludges from metal heat treating operations in which cyanides are used in the process
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum
F039	Multi-source leachate
K001	Bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile
K015	Still bottoms from the distillation of benzyl chloride
K016	Heavy ends or distillation residues from the production of carbon tetrachloride
K031	By-product salts generated in the production of MSMA and cacodylic acid
K035	Wastewater treatment sludges generated in the production of creosote
K044	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	Spent carbon from the treatment of wastewater containing explosives K048 air flotation (DAF) float from the petroleum refining industry K049 Slop oil emulsion solids from the petroleum refining industry
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry
K051	API separator sludge from the petroleum refining industry
K052	Tank bottoms (leaded) from the petroleum refining industry
K061	Emission control dust/sludge from the primary production of steel in electric furnaces
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene
K098	Untreated process wastewater from the production of toxaphene
K103	Process residues from aniline extraction from the production of aniline K104 Combined wastewater streams generated from nitrobenzene/aniline production
P011	Arsenic pentoxide (t)
P012	Arsenic (III) oxide (t) Arsenic trioxide (t)
P013	Barium cyanide
P020	Dinoseb, Phenol,2,4-dinitro-6-(1-methylpropyl)-
P022	Carbon bisulfide (t)
	Carbon disulfide (t)

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

P028	Benzene, (chloromethyl)
	-Benzyl chloride
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified (t)
P040	0,0-diethyl 0-pyrazinyl phosphorothioate
	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester
P044	Dimethoate (t)
	Phosphorodithioic acid,
	0,0-dimethyl S-[2-(methylamino)-2-oxoethyl]ester (t)
P048	2,4-dinitrophenol
	Phenol,2,4-dinitro-
P050	Endosulfan
	5-norbornene-2,3-dimethanol,
	1,4,5,6,7,7-hexachloro,cyclic sulfite
P063	Hydrocyanic acid
	Hydrogen cyanide
P064	Methyl isocyanate
	Isocyanic acid, methyl ester
P069	2-methyllactonitrile
	Propanenitrile,2-hydroxy-2-methyl-
P071	0,0-dimethyl 0-p-nitrophenyl phosphorothioate
	Methyl parathion
P074	Nickel (II) cyanide
	Nickel cyanide
P078	Nitrogen (IV) oxide
	Nitrogen dioxide
P087	Osmium tetroxide
	Osmium oxide
P089	Parathion (t)
	Phosphorothiotic acid,0,0-diethyl 0-(p-nitrophenyl) ester (t)
P098	Potassium cyanide
P104	Silver cyanide
P106	Sodium cyanide
P121	Zinc cyanide
P123	Toxaphene
	Camphene,octachloro-
U002	2-propanone (i)
	Acetone (i)
U003	Ethanenitrile (i,t)
	Acetonitrile (i,t)
U008	2-propenoic acid (i)
	Acrylic acid (i)

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

U009	2-propenenitrile
	Acrylonitrile
U012	Benzenamine (i,t)
	Aniline (i,t)
U019	Benzene (i,t)
U020	Benzenesulfonyl chloride (c,r)
	Benzenesulfonic acid chloride (c,r)
U031	1-butanol (i)
	N-butyl alcohol (i)
U044	Methane, trichloro-
	Chloroform
U045	Methane,chloro-(i,t)
	Methyl chloride (i,t)
U052	Cresylic acid
	Cresols
U057	Cyclohexanone (i)
U069	Dibutyl phthalate
	1,2-benzenedicarboxylic acid, dibutyl ester
U080	Methane,dichloro-
	Methylene chloride
U092	Methanamine, N-methyl-(i)
	Dimethylamine (i)
U098	Hydrazine, 1,1-dimethyl-
	1,1-dimethylhydrazine
U105	2,4-dinotrotoluene
	Benzene, 1-methyl-2,4-dinitro-
U106	2,6-dinitrotoluene
	Benzene, 1-methyl-2,6-dinitro
U107	Di-n-octyl phthalate
	1-2-benzenedicarboxylic acid, di-n-octyl ester
U113	2-propenoic acid, ethyl ester (i)
	Ethyl acrylate (i)
U118	2-propenoic acid, 2-methyl-, ethyl ester
	Ethyl methacrylate
U122	Formaldehyde
	Methylene oxide
U125	Furfural (i)
	2-furancarboxaldehyde (i)
U134	Hydrogen fluoride (c,t)
	Hydrofluoric acid (c,t)
U135	Sulfur hydride
	Hydrogen sulfide

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

U139	Ferric dextran
	Iron dextran
U140	1 -propanol, 2-methyl- (i,t)
	lsobutyl alcohol (i,t)
U150	Melphalan
	Alanine, 3-[p-bis(2-chloroethyl)amino] phenyl-,L-
U151	Mercury
U154	Methanol (i)
	Methyl alcohol (i)
U159	Methyl ethyl ketone (i,t)
	2-butanone (i,t)
U161	4-methyl-2-pentanone (i)
	Methyl isobutyl ketone (i)
U162	2-propenoic acid,2-methyl-,methyl ester (i,t)
	Methyl methacrylate (i,t)
U188	Phenol
	Benzene, hydroxy-
U190	Phthalic anhydride
	1,2-benzenedicarboxylic acid anhydride
U205	Selenium disulfide (r,t)
	Sulfur selenide (r,t)
U210	Tetrachloroethylene
	Ethene, 1,1,2,2-tetrachloro
U213	Tetrahydrofuran (i)
	Furan, tetrahydro- (i)
U220	Toluene
	Benzene, methyl-
U226	1,1,1-trichloroethane
	Methylchloroform
U228	Trichloroethylene
	Trichloroethene
U239	Xylene (i)
	Benzene, dimethyl- (i,t)
	WASTE FORM CODES
B001	Lab packs of old chemicals only
B101	Aqueous waste with low solvent
B102	Aqueous waste with low other toxic organics
B103	Spent acid with metals
B104	Spent acid without metals
B105	Acidic aqueous waste
B106	Caustic solution with metals but no cyanides
B107	Caustic solution with metals and cyanides
B108	Caustic solution with cyanides but no metals

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

B109	Spent caustic
B110	Caustic aqueous waste
B111	Aqueous waste with reactive sulfides
B112	Aqueous waste with other reactives (e.g., explosives)
B113	Other aqueous waste with high dissolved solids
B114	Other aqueous waste with low dissolved solids
B115	Scrubber water
B116	Leachate
B117	Waste liquid mercury
B119	Other inorganic liquids
B201	Concentrated solvent-water solution
B202	Halogenated (e.g., chlorinated) solvent
B203	Nonhalogenated solvent
B204	Halogenated/Nonhalogenated solvent mixture
B205	Oil-water emulsion or mixture
B206	Waste oil
B207	Concentrated aqueous solution of other organics
B208	Concentrated phenolics
B209	Organic paint, ink, lacquer, or varnish
B210	Adhesive or epoxies
B211	Paint thinner or petroleum distillates
B219	Other organic liquids
B305	“Dry" lime or metal hydroxide solids chemically "fixed"
B306	"Dry" lime or metal hydroxide solids not "fixed"
B307	Metal scale, filings, or scrap
B308	Empty or crushed metal drums or containers
B309	Batteries or Battery parts, casings, cores
B310	Spent solid filters or adsorbents
B312	Metal-cyanides salts/chemicals
B313	Reactive cyanides salts/chemicals
B315	Other reactive salts/chemicals
B316	Other metal salts/chemicals
B319	Other waste inorganic solids
B501	Lime sludge without metals
B502	Lime sludge with metals/metal hydroxide sludge
B504	Other wastewater treatment sludge
B505	Untreated plating sludge without cyanides
B506	Untreated plating sludge with cyanides
B507	Other sludges with cyanides
B508	Sludge with reactive sulfides
B510	Degreasing sludge with metal scale or filings
B511	Air pollution control device sludge (e.g., fly ash, wet scrubber sludge)
B513	Sediment or lagoon dragout contaminated with inorganics only
B515	Asbestos slurry or sludge

Table 14-2. RCRA and Waste Form Codes Reported by Facilities in 1989

B519	Other inorganic sludges
B601	Still bottoms of halogenated (e.g., chlorinated) solvents or other organic liquids
B603	Oily sludge
B604	Organic paint or ink sludge
B605	Reactive or polymerized organics
B607	Biological treatment sludge
B608	Sewage or other untreated biological sludge
B609	Other organic sludges

Table 14-3. Waste Form Codes in the Metals Subcategory

All Inorganic Liquids	Waste Form Codes B101-B119	Exceptions:* Waste Form Codes B116, and B101, B102, B119 when combined with RCRA Codes: F001-F005 and other organic F, K, P, and U Codes
All Inorganic Solids	Waste Form Codes B301-B319	Exceptions:* Waste Form Code B301 when combined with RCRA Codes: F001-F005 and other organic F, K, P, and U Codes
All Inorganic Sludges	Waste Form Codes B501-B519	Exceptions:* Waste Form Code B512 when combined with RCRA Codes: F001-F005 and other organic F, K, P, and U Codes

* These exceptions were classified as belonging in the organics subcategory

Table 14-4. Waste Form Codes in the Oils Subcategory

Organic Liquids	Waste Form Codes B205, B206	Exceptions: None
Organic Sludge	Waste Form Code B603	Exceptions: None

Table 14-5. Waste Form Codes in the Organics Subcategory

Organic Liquids	Waste Form Codes B201-B204, B207-B219	Exceptions: None
Organic Solids	Waste Form Codes B401-B409	Exceptions: None
Organic Sludges	Waste Form Codes B601, B602, B604-B609	Exceptions: None
Inorganic Liquids	Waste Form Codes B101, B102, B116, B119	when combined with RCRA Codes: F001-F005 and other organic F, K, P, and U Codes
Inorganic Solids	Waste Form Code B301	when combined with RCRA Codes: F001-F005 and other organic F, K, P, and U Codes
Inorganic Sludges	Waste Form Code B512	when combined with RCRA Codes: F001-F005 and other organic F, K, P, and U Codes

For wastes that cannot be easily classified into a subcategory, such as lab-packs, the subcategory determination was based on other information provided such as RCRA codes and descriptive comments. Therefore, some judgement is required in assigning some waste receipts to a subcategory.

ESTABLISHING LIMITATIONS AND STANDARDS FOR FACILITY DISCHARGES 14.8

In establishing limitations and standards for CWT facilities, the permit writer or control authority must ensure that the CWT facility has an optimal waste management program. First, the permit writer or control authority should verify that the CWT facility is identifying and segregating waste streams to the extent possible since segregation of similar waste streams is the first step in obtaining optimal mass removals of pollutants from industrial wastes. Next, the permit writer or control authority should verify that the CWT facility is employing treatment technologies designed and operated to optimally treat all off-site waste receipts. For example, biological treatment is inefficient for treating concentrated metals waste streams like those found in the metals subcategory or wastestreams with oil and grease compositions and concentrations like those found in the oils subcategory. In fact, concentrated metals streams and high levels of oil and grease compromise the ability of biological treatment systems to function. Likewise, emulsion breaking/gravity separation, and/or dissolved air flotation is typically insufficient for treating concentrated metals wastewaters or wastewaters containing organic pollutants which solubilize readily in water. Finally, chemical precipitation is insufficient for treating organic wastes and waste streams with high oil and grease concentrations.

Once the permit writer or control authority has established that the CWT facility is segregating its waste receipts and has appropriate treatment technologies in place for all off-site waste receipts, the permit writer or control authority can then establish limitations or standards which ensure that the CWT facility is operating its treatment technologies optimally. Available guidance in calculating NPDES categorical limitations for direct discharge facilities can be found in the U.S. EPA NPDES Permit Writers' Manual (December 1996, EPA-833-B-96-003). Sources of information used for calculating Federal pretreatment standards for indirect discharge facilities include 40 CFR Part 403.6, the Guidance Manual for the Use of Production-Based Pretreatment Standards and the Combined Waste Stream Formula (September 1985), and EPA's Industrial User Permitting Guidance Manual (September 1989).

The CWT limitations and standards for each subcategory are listed in Tables 1 through 8 of the Executive Summary at the beginning of this document.

Implementation for Facilities in Multiple CWT Subcategories 14.8.1

EPA estimates that many facilities in the CWT industry accept wastes in two or more subcategories (a combination of wastes in Subcategory A, B or C). This situation is different from the case in which metal-bearing waste streams may include low-level organic pollutants or that oily wastes may include low level metal pollutants due to the origin of the waste stream accepted for treatment.

For these multi-subcategory CWT facilities which combine subcategory wastes prior to discharge, guidance provided during development of this rule required that control authorities apply either the building block approach (see Section 14.8.4.1) or the combined waste stream formula (see Section 14.8.4.2) as appropriate to develop combined limitations or standards.

As promulgated, however, neither the building block approach nor the combined waste stream formula apply in developing limitations or standards for multi-subcategory CWT facilities. Rather, multiple subcategory facilities may comply with this rule in one of two ways: 1) facilities may elect to comply with the limitations or standards for each applicable subcategory directly following treatment (before commingling with different subcategory wastes); or 2) facilities may certify equivalent treatment and comply

with one of the four sets of limitations or standards for the multiple wastestream subcategory (Subcategory D). Each of these options is discussed further below.

Comply with Limitations or Standards for Subcategory A, B or C *14.8.1.1*

If a CWT facility elects to comply with each applicable subcategory's limitations or standards individually, the permit writer or control authority should establish compliance monitoring for each applicable subcategory directly following treatment of each subcategory's waste steam (and apply the appropriate limitations or standards at that point). As a further point of clarification, the permit writer or control authority should not allow CWT facilities to commingle waste streams from different subcategories prior to monitoring for compliance with each subcategory's limitations or standards. Example 14-1 illustrates this approach. EPA notes that multiple subcategory facilities which elect to comply with each applicable subcategory's limits or standards individually do not have to demonstrate equivalent treatment (see Section 14.8.1.2).

Example 14-1

Facility A accepts wastes in all three CWT subcategories with separate subcategory treatment systems and has elected to comply with each set of pretreatment standards separately. This facility treats 20,000 l/day of metal-bearing wastes, 10,000 l/day of oily wastes, and 45,000, l/day of organic wastes and discharges to its local POTW.

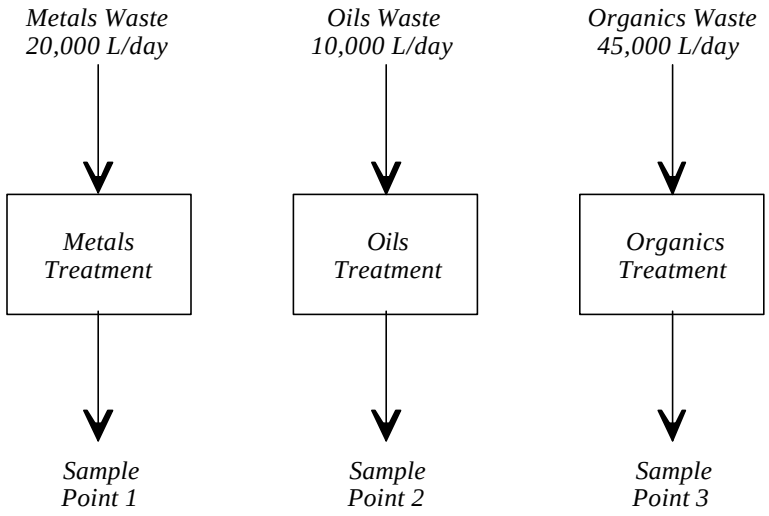

Figure 14-2. Facility Accepting Waste in All Three Subcategories With Treatment in Eac

For this example, the control authority establishes monitoring points 1, 2, and 3. The control authority requires that the facility comply with the metals subcategory pretreatment standards at Sample Point 1, the oils subcategory pretreatment standards at Sample Point 2, and the organics subcategory pretreatment standards at Sample Point 3. Note that the specific analytes requiring compliance monitoring vary at each sampling point since the pollutants regulated vary among subcategories.

Comply with Limitations or Standards for Subcategory D *14.8.1.2*

If a multi-subcategory CWT facility elects to comply with the limitations or standards for Subcategory D, then the permit writer or control authority establishes a single monitoring point prior to discharge and applies the appropriate set of limitations or standards from Subcategory D (for example, if a CWT facility accepts wastes in both the metals and oils subcategory, the permit writer or control authority establishes limits or standards for Subcategory D facilities which commingle wastes from Subcategories A and B). Examples 14-2 and 14-3 illustrate this approach. EPA notes that under this approach, the permit writer or control authority must allow a multi-subcategory facility to commingle wastestreams prior to discharge. **Also, facilities which select this compliance method must first establish equivalent treatment as detailed in Section 14.8.1.2.1 below.**

Example 14-2

Facility B accepts wastes in all three CWT subcategories with separate subcategory treatment systems and has elected to comply with Subcategory D pretreatment standards at a combined outfall. This facility treats 20,000 l/day of metal-bearing wastes, 10,000 l/day of oily wastes, and 45,000 l/day of organic wastes and discharges to its local POTW.

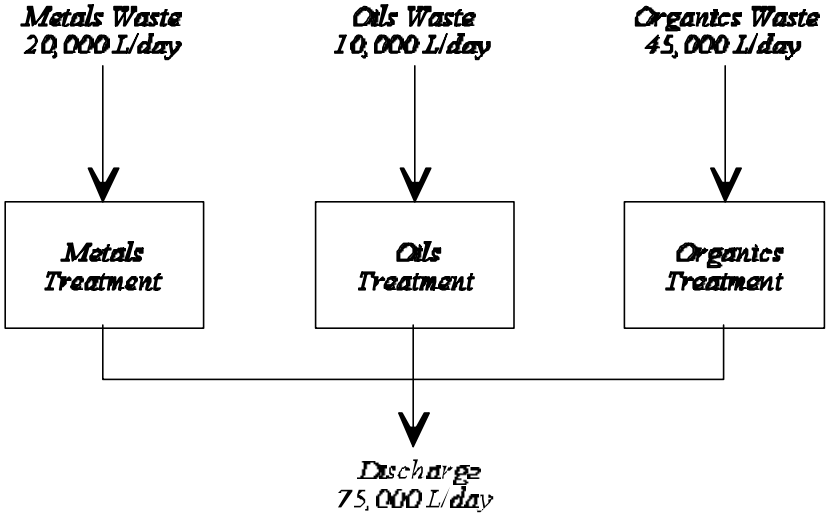

Figure 14-3. Facility Accepting Waste in All Three Subcategories With Treatment in Eac And Combined Outfall

For this example, the control authority establishes a single monitoring point as indicated. The control authority requires the facility to comply with Subcategory D pretreatment standards for facilities which commingle wastes from Subcategory A, B, and C.

Example 14-3: Facility Which Accepts Wastes in Multiple Subcategories and Treats the Wastewater Sequentially

Facility C accepts waste in the oils and metals subcategory. The total volume of wastewater discharged to the local POTW is 100,000 liters per day. The facility segregates oils and metals waste receipts and first treats the oils waste receipts using two stage emulsion breaking/gravity separation and dissolved air flotation (see Figure 14-4). The facility then commingles this wastewater with metal subcategory waste receipts and treats the combined wastestreams using primary and secondary chemical precipitation and solid/liquid separation followed by multimedia filtration.

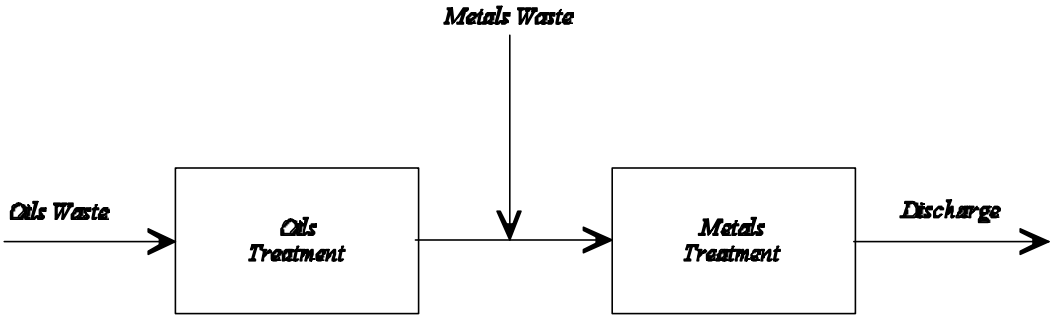

Figure 14-4. Facility Which Accepts Wastes in Multiple Subcategories and Treats Separately

For this example, like example 14-2, the control authority establishes a single monitoring point. This monitoring point follows the metals treatment. The control authority requires that the facility comply with Subcategory D pretreatment standards for facilities which commingle wastes from Subcategories A and B.

EQUIVALENT TREATMENT DETERMINATION FOR SUBCATEGORY D *14.8.1.2.1*

Before a multi-subcategory CWT facility can elect to comply with limitations or standards from Subcategory D, it must first demonstrate equivalent treatment for each applicable wastestream. The CWT rule defines equivalent treatment as "a wastewater treatment system that achieves comparable pollutant removals to the applicable treatment technology selected as the basis for the limits and standards." The following outlines the procedure for demonstrating equivalent treatment.

First, facilities which desire this option must submit an initial request to their permit writer or control authority certifying that their treatment train includes all applicable equivalent treatment systems. This initial certification would include, at a minimum, the applicable subcategories (i.e., metals, oils, organics), a listing of and descriptions of the treatment technologies and operating conditions used to treat wastes in each subcategory, and the justification for making an equivalent treatment determination. For example, a facility which accepts metals subcategory and oils subcategory wastewaters could show that its treatment train includes two-stage oil/water separation, two-stage chemical

precipitation, and dissolved air flotation operated in a similar manner to the model technology costed by EPA. Since these are the treatment technologies selected as the basis for this rule, the equivalent treatment determination could be established. However, EPA is not defining "equivalent treatment" as specific treatment technologies or the technology bases, but rather as a "wastewater treatment system that is demonstrated in literature, tractability tests, or self-monitoring data to remove a similar level of the appropriate pollutants as the applicable treatment technology selected as the basis for the applicable regulations." While EPA is leaving the decision as to whether a particular treatment train is "equivalent treatment" to the permit writer or control authority's best professional judgement, the Small Entity Compliance Guide for this rule provides several examples of cases where EPA believes equivalent treatment is demonstrated. EPA notes that the requesting facility is responsible for providing the permit writer or control authority with enough information and/or data to make the equivalent treatment determination. This initial certification statement must be signed by the responsible corporate officer as defined in 40 CFR 403.12(1) or 40 CFR 122.22. If the permit writer or control authority determines that equivalent treatment is demonstrated, then the permit writer or control authority will issue discharge requirements based on one of the four subsets of limitations or standards promulgated for the mixed waste subcategory. If the facility has not demonstrated equivalent treatment, then the permit writer or control authority will not allow the CWT facility to comply with limitations or standards from Subcategory D. Rather, the permit writer or control authority will issue discharge requirements based on the appropriate limitations or standards from Subcategory A, B or C and require that these requirements be met prior to commingling (See Section 14.8.1.1).

Once the facility has established equivalent treatment, the facility shall submit an annual certification statement which indicates that the treatment technologies are being utilized in the manner set forth in its original certification or a justification to allow modification of the practices listed in its initial certification. If the information contained in the initial certification statement is still applicable, a facility shall simply state that in a letter to the permit writer or control authority, and the letter shall constitute the periodic statement. However, if the facility has modified its treatment system in any way, it shall submit the revised information in a manner similar to the initial certification. Once again, the permit writer or control authority will use BE/B.J. in reviewing any modifications.

Finally, the facility shall be required to maintain on-site compliance paperwork. The on-site compliance paperwork should include information from the initial and periodic certifications, but must also include: (1) the supporting documentation for any modifications that have been made to the treatment system; (2) a method for demonstrating that the treatment system is well operated and maintained; and (3) a discussion of the rationale for choosing the method of demonstration. Proper operation and maintenance of a system includes a qualified person to operate the system, use of correct treatment chemicals in appropriate quantities, and operation of the system within the stated design parameters. For example, a facility may operate dissolved air flotation. The method for demonstrating the dissolved air flotation system is well operated can be as simple as maintaining records on the temperature and pH, the chemicals added (including quantity), the duration of treatment, recycle ratio, and physical characteristics of the wastewater before and after dissolved air flotation. Alternatively, the facility could monitor for selected parameters for the purpose of demonstrating effective treatment. This could include any pollutant or a combination of pollutants. The implementation manual for the CWT rule provides additional examples.

Permit writers and control authorities may inspect the CWT facility at any time to confirm that the listed practices are being employed, that the treatment system is well operated and maintained, and that the necessary paperwork provides sufficient justification for any modifications.

Implementation for Facilities with Cyanide Subset *14.8.2*

Whenever a CWT facility accepts a waste receipt that contains more than 136 mg/L of total cyanide, the CWT facility must monitor for cyanide when the wastewater exits the cyanide destruction process rather than after mixing with other process wastewater. Alternatively, the facility may monitor for compliance after mixing if the cyanide limitations are adjusted using the "building block approach" or "combined waste stream formula," assuming the cyanide limitations do not fall below the minimum analytical detection limit. For further information on the "building block approach" or "combined waste stream formula", see section 14.8.4.

CWT Facilities Also Covered By Another Point Source Category *14.8.3*

As detailed in Chapter 3, some manufacturing facilities, which are subject to existing effluent guidelines and standards, may also be subject to provisions of this rule. In all cases, these manufacturing facilities accept waste from off-site for treatment and/or recovery which are generated from a different categorical process as the on-site generated wastes. EPA is particularly concerned that these facilities demonstrate compliance with all applicable effluent guidelines and pretreatment standards -- including this rule.

Direct Discharging Facilities *14.8.3.1*

For determination of effluent limits where there are multiple categories, the effluent guidelines are applied using a flow-weighted combination of the appropriate guideline for each category(i.e., "the building block approach"). Where a facility treats a CWT wastestream and process wastewater from other non-CWT industrial operations, the effluent guidelines would be applied by using a flow-weighted combination of the BPT/BAT limitations for the CWT and the other non-CWT industrial operations to derive the appropriate limitations. Example 14-4, on the next page, illustrates the daily maximum limitations calculations for a CWT facility which is also subject to another effluent guideline.

Example 14-4 Categorical Manufacturing Facility Which Also Operates as a CWT Facility

Facility D is a manufacturing facility currently discharging wastewater to the local river under the OCPSF point source category. Facility D also performs CWT operations and accepts off-site metal-bearing wastes for treatment. Facility D commingles the on-site wastewater and the off-site wastewater together for treatment in an activated sludge system. The total volume of wastewater discharged at Facility D is 100,000 liters per day. The total volume of wastewater contributed by the off-site wastewater is 10,000 liters per day.

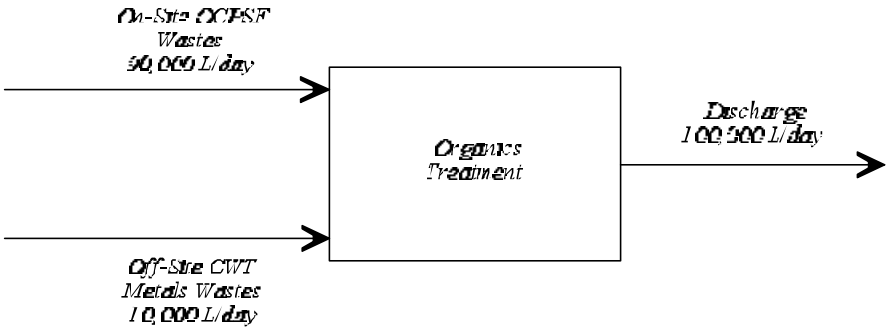

Figure 14-5. Categorical Manufacturing Facility Which Also Operates as a CWT

Facility D will be required to monitor and demonstrate that it has complied with the CWT metals BAT limitations. Since Facility D commingles the wastestreams and has no treatment in place for the metals wastestreams, Facility D will be unable to demonstrate compliance with the BAT limits through treatment rather than dilution. Therefore, Facility D can not commingle the CWT metals wastestreams and on-site OCPSF wastestreams for treatment.

If Facility D chose to install metals treatment for the off-site wastewater and wanted to commingle the effluent from the metals treatment and the biological treatment at a single discharge point (See Figure 14-6 on the next page), the permit writer would use the building block approach to determine the limitations. Using lead and chromium as examples, for the metals subcategory, EPA has promulgated BAT monthly average limits of 3.07 mg/L for chromium and 0.283 mg/L for lead. Since the OCPSF facility has no limits for chromium and lead, the contribution for the OCPSF wastewaters would be zero. Therefore, the chromium monthly average limit would be (0.1 x 3.07) + (0.9 x 0) = 0.307 mg/l and the lead monthly average limit would be (0.1 x 0.283) x (0.9 x 0) = 0.0283 mg/l. Since the monthly average limit for lead is below the minimum analytical detection level (.050 mg/l), the facility would be required to demonstrate compliance with the lead limit for the CWT metals subcategory prior to commingling at the outfall. The monthly average and daily maximum limitations for other pollutants would be calculated in a similar manner. Since EPA has not proposed any BAT limits for organic pollutants under the metals subcategory of the CWT point source category, the contribution for these pollutants would be zero.

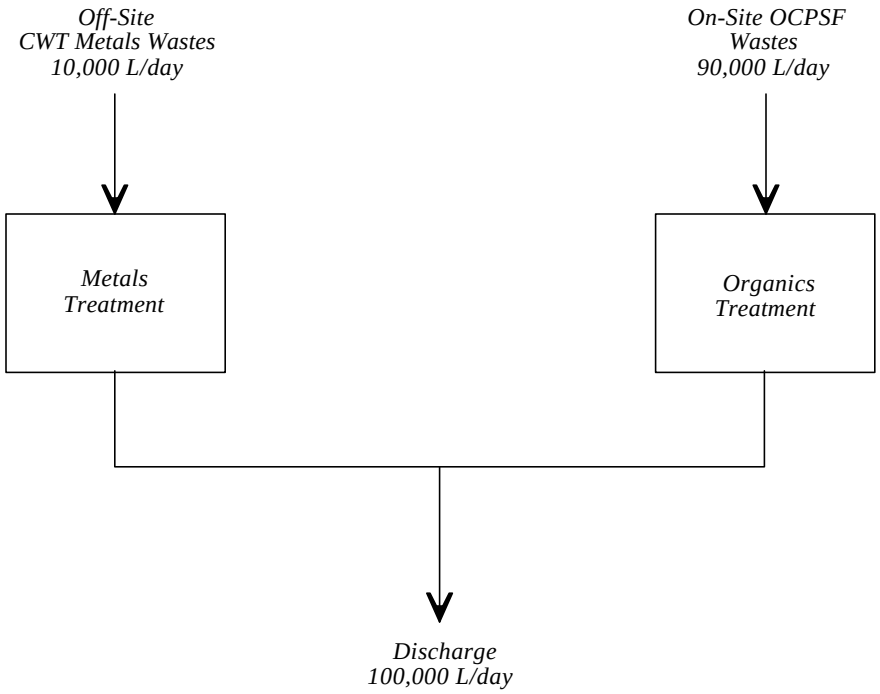

Figure 14-6. Facility That Commingles Wastestreams After Treatment

Indirect Discharging Facilities *14.8.3.2*

For determination of pretreatment standards where there are multiple categories, the pretreatment standards are applied using the "combined waste stream formula" as defined in 40 CFR § 403.6(e). The combined wastestream formula (CWF) is based on three types of wastestreams that can exist at an industrial facility: regulated, unregulated, and dilute. As defined (40 CFR 403), a regulated wastestream is a wastestream from an industrial process that is regulated by a categorical standard for pollutant x. An unregulated wastestream is a wastestream that is not covered by categorical pretreatment standards and not classified as dilute, or one that is not regulated for the pollutant in question although it is regulated for others. A dilute wastestream is defined to include sanitary wastewater, noncontact cooling water and boiler blowdown, and wastestreams listed in Appendix D to 40 CFR 403.

Therefore, as described in 40 CFR 403, the combined waste stream formula is

$$C_T = \frac{\sum_{i=1}^{N} C_i F_i}{\sum_{i=1}^{N} F_i} \times \frac{F_T - F_D}{F_T} \quad , \quad (14\text{-}1)$$

where C_T = the alternate concentration limit for the combined wastestream;

C_i = the categorical pretreatment standard concentration limit for a pollutant in the regulated stream i;

F_i = the average daily flow of stream i;

F_d = the average daily flow from dilute wastestreams as defined in 40 CFR 403; and

F_T = the total daily average flow including regulated,

unregulated, and dilution wastestreams.

Using example 14-4 above, but assuming the facility discharges to the local POTW, there are no dilution flows. Therefore, the CWF equation reduces in the following manner:

$$C_T = \frac{\sum_{i=1}^{N} C_i F_i}{\sum_{i=1}^{N} F_i} \times \frac{F_T \& 0}{F_T} \quad , (14\text{-}2)$$

$$C_T = \frac{\sum_{i=1}^{N} C_i F_i}{\sum_{i=1}^{N} F_i}$$

Using chromium and lead as examples again, EPA has promulgated monthly average pretreatment standards of 3.07 mg/L for chromium and 0.283 mg/L for lead. Since the OCPSF facility has no pretreatment standards for chromium and lead, these wastestreams are defined as "unregulated." Therefore, for this example, the only regulated wastestream is the oils subcategory flow and the chromium monthly average limit would be (10,000 x 3.07)/10,000 = 3.07 mg/l and the lead monthly average limit would be (10,000 x 0.283)/10,000 = 0.283 mg/l.

The monthly average and daily maximum pretreatment standards for other pollutants would be calculated in a similar manner. Since EPA has not proposed any pretreatment standards for organic pollutants under the metals subcategory of the CWT point source category, for organic pollutants the CWT wastestreams would be unregulated and would not effect the allowable discharge concentration of organic pollutants as required by OCPSF. For additional information on the application of the combined waste stream formula, see the Guidance Manual for the Use of Production-Based Pretreatment Standards and the Combined Waste Stream Formula.

However, as discussed on pages 3-2 to 3-3 of this guidance manual, unregulated streams are presumed, for purposes of using the CWF, to contain pollutants of concern at a significant level. In effect, the CWF "gives credit" for pollutants which might be present in the unregulated wastestream. Rather than treating the unregulated flow as dilution, which would result in lowering the allowable concentration of a pollutant, the CWF allows the pollutant to be discharged in the unregulated wastestream at the same concentration as the standard for the regulated wastestream that is being discharged. This is based on the assumption that if pollutants are present in the unregulated wastestream, they will be treated to the same level as in the regulated wastestream. In some cases, unregulated wastestreams may not actually contain pollutants of concern at a significant level. Even if this is the case, they are still considered unregulated when applying the formula. However, if the control authority is concerned that an unregulated stream is actually acting as dilution, a local or state control authority can use its own legal authority to establish a limit more stringent than would be derived using the formula in the manner prescribed by the Federal regulations. Therefore, the control authority could apply its best professional judgment to derive the same chromium and lead limits as those derived in Example 14-4 for the direct discharge example. In the case of chromium the BPJ pretreatment standard could be 0.307 mg/l rather than the CWF result of 3.07 mg/l. Similarly for lead, the BPJ pretreatment standard could be 0.283 mg/l rather than the CWF result of 0.283 mg/l.

Exceptions to Guidance Provided for CWT Facilities Also Covered By Another Point Source Category *14.8.3.3*

The only exceptions to the guidance provided in sections 14.8.4.1 and 14.8.4.2 are for facilities also subject to effluent guidelines and preatreatment standards for Transportation Equipment Cleaning (40 CFR 442) and effluent guidelines for Landfills (40 CFR 445). The application of the CWT rule to each of these types of facilities is discussed below.

TRANSPORTATION EQUIPMENT CLEANING (TEC) *14.8.3.3.1*

There are some facilities which are engaged in both traditional CWT activities and traditional TEC activities. If the wastewaters from the two operations are commingled, under the approach adopted for TEC, the commingled wastewater flow from the transportation equipment cleaning activities would be subject to CWT limits. Therefore, a facility performing transportation equipment cleaning as well as other CWT services that commingles these wastes is a CWT facility and all of the wastewater discharges are subject to provisions of this rule. If, however, a facility is performing both operations and the waste streams are not commingled (that is, transportation equipment cleaning process wastewater is treated in one system and CWT wastes are treated in a second, separate system), both the TEC rule and CWT rule apply to the respective wastewaters. If, however, the wastewaters from the two separate treatment systems are combined after treatment but prior to discharge monitoring, discharge requirements would be calculated by applying the "building block approach" or the "combined waste stream formula" as detailed in Sections 14.8.4.1 and 14.8.4.2.

LANDFILLS *14.8.3.3.2*

In the CWT industry, there are some facilities which are engaged both in CWT activities and in operating landfills. For the CWT final rule, EPA's approach to facilities which treat mixtures of CWT wastewater and landfill wastewater is consistent with that established for the landfill guideline. Therefore, a facility performing landfill activities, as well as other CWT services, and commingles the wastewater is a CWT facility only, and all of the wastewater discharges are subject to the provisions of this rule. If a facility is performing both operations and the waste streams are not commingled (that is, landfill wastewater is treated in one treatment system and CWT wastewater is treated in a second, separate treatment system), the provisions of the Landfill rule and CWT rule apply to its respective wastewaters. If, however, the wastewaters from the two separate treatment systems are combined after treatment, but prior to discharge monitoring, discharge requirements would be calculated by applying the "building block approach" or the "combined waste stream formula" as detailed in Sections 14.8.4.1 and 14.8.4.2.

ANYFIRM **ANYTOWN, USA** **(555) 555-1212**	**GENERATOR'S WASTE MATERIAL PROFILE SHEET** __ **NEW** __ **AMENDMENT**	**PROFILE NUMBER**

GENERATOR		**BROKER OR SALESPERSON**	
Name		Name	
Address		Address	
Technical Contact	Phone	Contact	Phone
Shipping Contact	Phone	**TRANSPORTER**	
Business Contact	Phone	Name	
EPA ID #		Address	
		Contact	Phone
		EPA ID #	

WASTE DESCRIPTION

CHEMICAL & PHYSICAL STATE

__ Liquid	__ Multilayered	Odor
__ Semi-liquid	__ Bilayered	TSS
__ Solid	__ Single Phase	Color
pH		Flash Point
__ # 2	__ 8-10	% Bottoms Sediment
__ 2-4	__ 10-12	% Debris
__ 4-6	__ $12	% Ash
__ 6-8	__ N/A	Specific Gravity

PROCESS DESCRIPTION

(Describe process generating waste stream. Include a list of virgin materials and their Material Safety Data Sheets.)

CHEMICAL CONSTITUENTS		**METALS (PPM)**	
Petroleum Phase	Aqueous Phase	Arsenic	Magnesium
		Cadmium	Mercury
		Chromium	Nickel
		Copper	Tin
		Lead	Zinc
OTHER CONSTITUENTS		**SHIPPING INFORMATION**	
% Oil		RCRA Code	
		Shipping Method	
		Volume (gallons)	

Figure 14-7. Template of a CWT Waste Receipt/Acceptance Form