ENVIROMENTAL HEALTH AND SAFETY
STANDARD OPERATING PROCEDURES

SOP No. 24.01.01.W1.06AR Drain Disposal Procedure
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Environmental Health and Safety at WTAMU is composed of three distinct but integrated environmental safety departments that report to the Vice President of Research and Compliance. Academic and Research Environmental Health and Safety (AR-EHS) is responsible for research and academic related compliance, which includes laboratory and academic research and the associated compliance committees. Fire and Life Safety (FLS-EHS) is responsible for fire related compliance and conducts fire and life safety inspections of campus buildings and assists with the testing all fire detection and suppression systems. General Safety (GHS-EHS) promotes safe work and health practices, to all faculty, staff, students, and visitors. Examples of General Health and Safety components include: office safety, proper lifting techniques, trip and fall prevention.

Supplements TAMUS Regulation 24.01.01

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1. **Purpose**

To establish a procedure for the drain disposal in accordance with the governing authorities including, but not limited, to the City of Canyon. Drain disposal for facilities falls into two categories: (1) laboratories that have specific exemptions, and (2) all other drains, such as those found in the Arts and other areas that do not qualify for the laboratory drain exemptions. This procedure addresses the daily operations and activities in the laboratory, such as rinse and wash and chemicals used in process and bench experiments. Excess chemicals and those chemicals that are no longer useable should be submitted to EHS per 24.01.01.W1.04AR Hazardous Materials and Hazardous Waste Identification Procedure.

2. **Scope**

This procedure applies to all organizations at West Texas A&M University (WTAMU). It addresses the materials and concentrations of materials that may and may not be discharged into the City of Canyon Sewer System. WTAMU discharges all drains into the City of Canyon Publicly Owned Treatment Works (POTW). If WTAMU discharges meet the discharge requirements of the City of Canyon Code of Ordinances Title 5: Public Works Chapter 51 then WTAMU requires no special discharge permit.

3. **Procedures**

**Note:** These procedures are intended for drains that flush to a sanitary sewer system which eventually goes to the waste water treatment plant. Storm drain systems flow directly into surface water and should **NEVER** be used for chemical disposal. *Floor drains may flow to storm sewers and should never be used for disposal of chemicals.*

3.1. **Washing of Equipment and Facilities**

The wastewater for regular ‘soap and water’ washing is not a concern as long as the container or equipment is empty as defined by the Empty Container Policy 24.01.01.W1.07AR.

3.2. **Permitted and Prohibited Releases**

Chapter 51 of the City of Canyon Ordinances (Appendix B) covers sewer and water collection and delivery to the treatment facility. Within this chapter one can find the prohibited and permitted discharges for industrial centers in the City of Canyon.

3.3. **Prohibited Releases**

The following substances have a release concentration of zero, i.e. they are prohibited for drain disposal.

<table>
<thead>
<tr>
<th>PROHIBITED SUBSTANCES</th>
<th>Inorganics</th>
<th>Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid (strong, pH&lt;5)</td>
<td>Gasoline</td>
<td></td>
</tr>
<tr>
<td>Antimony</td>
<td>Benzene*</td>
<td></td>
</tr>
<tr>
<td>Base (strong, pH&gt;9)</td>
<td>Naptha</td>
<td></td>
</tr>
<tr>
<td>Beryllium</td>
<td>Fuel Oil</td>
<td></td>
</tr>
<tr>
<td>Bismuth</td>
<td>Other flammable liquids</td>
<td></td>
</tr>
<tr>
<td>Cobalt</td>
<td>Herbicides</td>
<td></td>
</tr>
<tr>
<td>Iron pickling wastes</td>
<td>Fungicides</td>
<td></td>
</tr>
<tr>
<td>Molybdenum</td>
<td>Pesticides</td>
<td></td>
</tr>
</tbody>
</table>
Plating solutions (concentrated)

<table>
<thead>
<tr>
<th>Species</th>
<th>mg/l or ppm</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Acids and Bases</th>
<th>mg/l or ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids: pH should be greater than 5.5 pH units.</td>
<td></td>
</tr>
<tr>
<td>Bases: pH should be less than 9.5 pH units.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inorganics</th>
<th>mg/l or ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>0.05</td>
</tr>
<tr>
<td>Barium*</td>
<td>5</td>
</tr>
<tr>
<td>Boron</td>
<td>1</td>
</tr>
<tr>
<td>Cadmium*</td>
<td>0.02</td>
</tr>
<tr>
<td>Chloride</td>
<td>250</td>
</tr>
<tr>
<td>Chromium (total)*</td>
<td>5</td>
</tr>
<tr>
<td>Copper</td>
<td>1</td>
</tr>
<tr>
<td>Cyanide</td>
<td>0.001</td>
</tr>
<tr>
<td>Fluoride</td>
<td>3</td>
</tr>
<tr>
<td>Lead*</td>
<td>0.1</td>
</tr>
<tr>
<td>Manganese</td>
<td>1</td>
</tr>
<tr>
<td>Mercury*</td>
<td>0.005</td>
</tr>
<tr>
<td>Nickel</td>
<td>1</td>
</tr>
<tr>
<td>Selenium*</td>
<td>0.02</td>
</tr>
<tr>
<td>Silver*</td>
<td>0.1</td>
</tr>
<tr>
<td>Zinc</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organics</th>
<th>mg/l or ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grease, Fat, Oil</td>
<td>100</td>
</tr>
<tr>
<td>phenols</td>
<td>individually permitted</td>
</tr>
<tr>
<td>hydrogen sulfide</td>
<td>individually permitted</td>
</tr>
<tr>
<td>other odor producers</td>
<td>individually permitted</td>
</tr>
</tbody>
</table>

*EPA Listed Hazardous Waste

These materials are NOT prohibited for use on campus, but their disposal should follow the guidelines set forth in the 24.01.01.W1.04AR Hazardous Materials and Hazardous Waste Identification Procedure.

3.4. Permitted Releases

The following substances have a non-zero release limit, i.e. there is a permitted concentration for industrial discharge into the Canyon Sewer System. These substances can be made non-hazardous by additional process steps that guarantee their concentrations do not exceed the permitted concentrations at the source (your drain). This form of process treatment is allowable as stated in the EPA document EPA 233-B-00-002 in Appendix C. See this document for the regulatory specifics.

Note: Discharges containing grease, oil, sand, flammable wastes, or other harmful ingredients require a trap. The trap must be maintained in an effective operating condition.
3.5. Applicable Federal Guidelines for Drain Disposal

Spent solvents

Carbon tetrachloride, tetrachloroethylene, and trichloroethylene may be disposed of in a wastewater treatment system, as long as the maximum total weekly usage divided by the average weekly flow of wastewater into the headworks of the wastewater treatment plant does not exceed 1 part per million. Methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, crls, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, and spent chlorofluorocarbon solvents may be disposed of in a wastewater treatment system, as long as the maximum total weekly usage divided by the average weekly flow of wastewater into the headworks of the wastewater treatment plant does not exceed 25 parts per million.

Any spent solvent which can be demonstrated not to be disposed of in a drain must not be included in this calculation.

Laboratory operations containing waste listed as Toxic (T):

NOTE: The following applies ONLY to Laboratories

Wastes listed as Toxic (T) wastes are listed in Appendix A of this document. Wastewater resulting from laboratory operations containing toxic (T) waste may be disposed of into a wastewater treatment system, as long as the average annual flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the wastewater treatment facility, or the wastes combined annualized average concentration does not exceed one part per million into the headworks of the wastewater treatment facility.

Any toxic waste which can be demonstrated not to be discharged to wastewater must not be included in this calculation.

3.6. City of Canyon Sewer Collection System

The interface of West Texas A&M University and the city sewer is shown in sketch form in Figure 1.
Figure 1 WTAMU discharge points to the City of Canyon Sewer System

3.7. Monitoring

The University will set up a monitoring procedure and schedule and will maintain monitoring records in agreement with best management practices. These records will be kept in the Environmental Health and Safety Office.

4. Governing Documents

- 33 USC chapter 26 Clean Water Act
- 40 CFR 261.3 a(2) (iv) E
- 40 CFR 129.4
- EPA document 233-B-00-002 “Little Known but Allowable Ways to Deal with Hazardous Waste”
- EPA document 233-B-00-001 “Environmental Management Guide for Small Laboratories”
- 30 TAC 335.1 (123)
- 30 TAC 335.41(d) (1)
- TAMU System Policy 24.02.03
- City of Canyon Code of Ordinances Title 5: Public Works Chapter 51
5. **Record Retention**

No official state records may be destroyed without permission from the Texas State Library as outlined in [Texas Government Code, Section 441.187](#) and [13 Texas Administrative Code, Title 13, Part 1, Chapter 6, Subchapter A, Rule 6.7](#). The Texas State Library certifies Agency retention schedules as a means of granting permission to destroy official state records.

West Texas A & M University Records Retention Schedule is certified by the Texas State Library and Archives Commission. West Texas A & M University Environmental Health and Safety will follow [Texas A & M University Records Retention Schedule](#) as stated in the Standard Operating Procedure 61.99.01.W0.01 Records Management. All official state records (paper, microform, electronic, or any other media) must be retained for the minimum period designated.

6. **Training**

West Texas A & M University Environmental Health and Safety will follow the Texas A & M University System Policy [33.05.02 Required Employee Training](#). Staff and faculty whose required training is delinquent more than 90 days will have their access to the Internet terminated until all trainings are completed. Only Blackboard and Single Sign-on will be accessible. Internet access will be restored once training has been completed. Student workers whose required training is delinquent more than 90 days will need to be terminated by their manager through Student Employment.

7. **Definitions**

*Code of Federal Regulations (CFR):* The Code of Federal Regulations (CFR) is a codification of general and permanent rules (regulations) that have been previously published in the Federal Register. The CFR, which is compiled by the Office of the *Federal Register*, is divided into 50 titles, which cover broad areas subject to federal regulation.

*Environmental Protection Agency (EPA):* Its mission is to protect human health and to safeguard the natural environment — air, water, and land — upon which life depends.

*Environmental Health and Safety (EHS):* The office at WTAMU charged with operating and maintaining the WTAMU Environmental Health, Safety, and Waste Management Program.

*Hazardous Waste (HazWaste):* A waste may be hazardous if

- It meets the definition of hazardous by one or more of the following characteristics
  - Ignitability.
  - Corrosivity.
  - Reactivity.
  - Toxicity/
- It is listed in 40 CFR 261 subpart D as a hazardous waste.

*Headworks:* The collection point of all sanitary sewer lines, prior to entering the Publicly Owned Treatment Works.

*Publicly Owned Treatment Works (POTW):* The publicly owned facility where wastewater is treated before discharge to the environment.

*Satellite Accumulation Area (SAA):* An area at the site of waste generation, where wastes are accumulated to facility handling. Each SAA must meet the standards required in 24.01.01.W1.05AR.

*Texas Administrative Code (TAC):* A compilation of all state agencies’ regulations. There are sixteen titles in the TAC, and each title represents a category, and related agencies are assigned to the appropriate title.

Related Statutes, Policies, or Requirements

Contact Office

WTAMU Environmental Health and Safety
(806) 651-2270
Sec. 261.31 Hazardous wastes from non-specific sources.

(a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under Secs. 260.20 and 260.22 and listed in appendix IX.

<table>
<thead>
<tr>
<th>Industry and EPA hazardous waste No.</th>
<th>Hazardous waste</th>
<th>Hazard code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic:</td>
<td>The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten 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.</td>
<td>(T)</td>
</tr>
<tr>
<td>F001..........................</td>
<td>The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.</td>
<td>(T)</td>
</tr>
</tbody>
</table>
**F003**

The following spent non-halogenated 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, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

**F004**

The following spent non-halogenated solvents: Cres and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated 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 non-halogenated 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 ten percent or more (by volume) of one or more of the above non-halogenated solvents.
or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent 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.

F008......................... Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.

F009......................... Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.

F010......................... Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.

F011......................... Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.

F012......................... Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.

F019......................... Wastewater treatment sludges from the chemical conversion
coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.

F020......................... Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).

F021......................... Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.

F022......................... Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.

F023......................... Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical
intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).

F024......................... Process wastes, including (T) but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in Sec. 261.31 or Sec. 261.32.).

F025......................... Condensed light ends, (T) spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.

F026......................... Wastes (except wastewater (H) and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the
manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.

F027........................ Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.).

F028........................ Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

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F032........................ Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Sec. 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use
of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

F034......................... Wastewaters (except those (T) that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

F035......................... Wastewaters (except those (T) that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

F037......................... Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oil cooling wastewaters from petroleum refineries. Such sludges include, but are not
limited to, those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in Sec. 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under Sec. 261.4(a)(12)(i), if those residuals are to be disposed of.

F038......................... Petroleum refinery secondary (emulsified) oil/water/solids separation sludge--Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated
in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in Sec. 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.

F039......................... Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.).

(b) Listing Specific Definitions: (1) For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.(2) (i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employ a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes.
under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other onsite records, documents and data sufficient to prove that: (A) the unit is an aggressive biological treatment unit as defined in this subsection; and (B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually generated in the aggressive biological treatment unit.

(3) (i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing,
(A) sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement and
(B) floats are considered to be generated at the moment they are formed in the top of the unit.

[46 FR 4617, Jan. 16, 1981]

Editorial Note: For Federal Register citations affecting Sec. 261.31, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

Sec. 261.32 Hazardous wastes from specific sources.

The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under Secs. 260.20 and 260.22 and listed in appendix IX.

<table>
<thead>
<tr>
<th>Industry and EPA hazardous waste No.</th>
<th>Hazardous waste</th>
<th>Hazard code</th>
</tr>
</thead>
<tbody>
<tr>
<td>K001.............................</td>
<td>Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.</td>
<td>(T)</td>
</tr>
<tr>
<td>K002.............................</td>
<td>Wastewater treatment sludge from the production of chrome yellow and orange pigments.</td>
<td>(T)</td>
</tr>
<tr>
<td>K003.............................</td>
<td>Wastewater treatment sludge from the production of molybdate orange pigments.</td>
<td>(T)</td>
</tr>
<tr>
<td>K004.............................</td>
<td>Wastewater treatment sludge from the production of zinc yellow pigments.</td>
<td>(T)</td>
</tr>
<tr>
<td>K005.............................</td>
<td>Wastewater treatment sludge from the production of chrome green pigments.</td>
<td>(T)</td>
</tr>
</tbody>
</table>
K006......................... Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).

K007......................... Wastewater treatment sludge from the production of iron blue pigments.

K008......................... Oven residue from the production of chrome oxide green pigments.

Organic chemicals:
K009......................... Distillation bottoms from the production of acetaldehyde from ethylene.

K010......................... Distillation side cuts from the production of acetaldehyde from ethylene.

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.

K017......................... Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.

K018......................... Heavy ends from the fractionation column in ethyl chloride production.

K019......................... Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.

K020......................... Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.

K021......................... Aqueous spent antimony catalyst waste from fluoromethanes
K022......................... Distillation bottom tars from the production of phenol/acetone from cumene.  
K023......................... Distillation light ends from the production of phthalic anhydride from naphthalene.  
K024......................... Distillation bottoms from the production of phthalic anhydride from naphthalene.  
K025......................... Distillation bottoms from the production of nitrobenzene by the nitration of benzene.  
K026......................... Stripping still tails from the production of methy ethyl pyridines.  
K027......................... Centrifuge and distillation residues from toluene diisocyanate production.  
K028......................... Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.  
K029......................... Waste from the product steam stripper in the production of 1,1,1-trichloroethane.  
K030......................... Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.  
K083......................... Distillation bottoms from aniline production.  
K085......................... Distillation or fractionation column bottoms from the production of chlorobenzenes.  
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.  

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K095......................... Distillation bottoms from the production of 1,1,1-trichloroethane.  
K096......................... Heavy ends from the heavy ends column from the production of 1,1,1-
K103....................... Process residues from aniline extraction from the production of aniline. (T)
K104....................... Combined wastewater streams generated from nitrobenzene/aniline production. (T)
K105....................... Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. (T)
K107....................... Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines. (C,T)
K108....................... Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (I,T)
K109....................... Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)
K110....................... Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. (T)
K111....................... Product washwaters from the production of dinitrotoluene via nitration of toluene. (C,T)
K112....................... Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K113....................... Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)
K114....................... Vicinals from the purification of trichloroethane. (T)
toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

K115......................... Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. (T)

K116......................... Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. (T)

K117......................... Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. (T)

K118......................... Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)

K136......................... Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. (T)

K149......................... Distillation bottoms from the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.). (T)

K150......................... Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures (T)
of these functional groups.

K151......................... Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

K156......................... Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylicarbamate).

K157......................... Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylicarbamate).

K158......................... Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylicarbamate).

K159......................... Organics from the treatment of thiocarbamate wastes.

K161......................... Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the
production of
dithiocarbamate acids
and their salts. (This
listing does not include
K125 or K126).

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| K174......................... | Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the |
generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met.

K175........................ Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.

Inorganic chemicals:
K071......................... Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
K073......................... Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
K106......................... Wastewater treatment sludge from the mercury cell process in chlorine production.

Pesticides:
K031......................... By-product salts generated in the production of MSMA and cacodylic acid.
K032......................... Wastewater treatment sludge from the production of chlordane.
K033......................... Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
K034......................... Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
K035......................... Wastewater treatment sludges generated in the production of creosote.
K036......................... Still bottoms from toluene reclamation distillation in the production of disulfoton.
K037......................... Wastewater treatment sludges from the production of disulfoton.
K038......................... Wastewater from the washing and stripping of phorate production.
Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (T)

Wastewater treatment sludge from the production of phorate. (T)

Wastewater treatment sludge from the production of toxaphene. (T)

Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. (T)

2,6-Dichlorophenol waste from the production of 2,4-D. (T)

Vacuum stripper discharge from the chlordane chlorinatory in the production of chlordane. (T)

Untreated process wastewater from the production of toxaphene. (T)

Untreated wastewater from the production of 2,4-D. (T)

Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt. (T)

Reactors vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. (C, T)

Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. (T)

Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. (T)

Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. (C, T)

Spent absorbent and wastewater separator (T)
solids from the production of methyl bromide.

Explosives:
K044.......................... Wastewater treatment sludges from the manufacturing and processing of explosives. (R)
K045.......................... Spent carbon from the treatment of wastewater containing explosives. (R)
K046.......................... Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds. (T)
K047.......................... Pink/red water from TNT operations. (R)

Petroleum refining:
K048.......................... Dissolved air flotation (DAF) float from the petroleum refining industry. (T)
K049.......................... Slop oil emulsion solids from the petroleum refining industry. (T)
K050.......................... Heat exchanger bundle cleaning sludge from the petroleum refining industry. (T)
K051.......................... API separator sludge from the petroleum refining industry. (T)
K052.......................... Tank bottoms (leaded) from the petroleum refining industry. (T)
K169.......................... Crude oil storage tank sediment from petroleum refining operations. (T)
K170.......................... Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. (T)

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K171.......................... Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
K172.......................... Spent Hydrorefining catalyst from petroleum refining operations, including guard beds (I,T)
used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).

Iron and steel:
K061......................... Emission control dust/sludge from the primary production of steel in electric furnaces. (T)

K062......................... Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332). (C,T)

Primary copper:
Primary lead:
Primary zinc:
Primary aluminum:
K088......................... Spent potliners from primary aluminum reduction. (T)

Ferroalloys:
Secondary lead:
K069......................... Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register. (T)

K100......................... Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. (T)

Veterinary pharmaceuticals:
K084......................... Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)

K101......................... Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. (T)
K102......................... Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Ink formulation:
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.

Coking:
K060......................... Ammonia still lime sludge from coking operations.
K087......................... Decanter tank tar sludge from coking operations.
K141......................... Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).
K142......................... Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143......................... Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144......................... Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.
Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

Tar storage tank residues from coal tar refining.

Residues from coal tar distillation, including but not limited to, still bottoms.

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[46 FR 4618, Jan. 16, 1981]

Editorial Note: For Federal Register citations affecting Sec. 261.32, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

Sec. 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in Sec. 261.2(a)(2)(i), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section.

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

(c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this section, unless the container is empty as defined in Sec. 261.7(b) of this chapter.

[Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, EPA considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.]

(d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate...
having the generic name listed in paragraph (e) or (f) of this section, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

[Comment: The phrase `commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . . .' refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraph (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraph (e) or (f), such waste will be listed in either Sec. 261.31 or Sec. 261.32 or will be identified as a hazardous waste by the characteristics set forth in subpart C of this part.]

(e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to be the small quantity exclusion defined in Sec. 261.5(e).

[Comment: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

<table>
<thead>
<tr>
<th>Hazardous waste No.</th>
<th>Chemical abstracts No.</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P023</td>
<td>107-20-0</td>
<td>Acetaldehyde, chloro-</td>
</tr>
<tr>
<td>P002</td>
<td>591-08-2</td>
<td>Acetamide, N-(aminothioxomethyl)-</td>
</tr>
<tr>
<td>P057</td>
<td>640-19-7</td>
<td>Acetamide, 2-fluoro-</td>
</tr>
<tr>
<td>P058</td>
<td>62-74-8</td>
<td>Acetic acid, fluoro-, sodium salt</td>
</tr>
<tr>
<td>P002</td>
<td>591-08-2</td>
<td>1-Acetyl-2-thiourea</td>
</tr>
<tr>
<td>P003</td>
<td>107-02-8</td>
<td>Acrolein</td>
</tr>
<tr>
<td>P070</td>
<td>116-06-3</td>
<td>Aldicarb</td>
</tr>
<tr>
<td>P203</td>
<td>1646-88-4</td>
<td>Aldicarb sulfone.</td>
</tr>
<tr>
<td>P004</td>
<td>309-00-2</td>
<td>Aldrin</td>
</tr>
</tbody>
</table>

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Arsenic trioxide
Arsine, diethyl-
Arsine, diethyl-
Arsine, diethyl-
Aziridine
Aziridine, 2-methyl-
Barium cyanide
Benzenamine, 4-chloro-
Benzenamine, 4-nitro-
Benzene, (chloromethyl)-
Benzeneethanamine, alpha, alpha-
dimethyl-
Benzenethiol
7-Benzofuranol, 2,3-dihydro-2,2-
dimethyl-, methylcarbamate.
Benzoic acid, 2-hydroxy-, compd. with
(3aS-cis)-1,2,3,3a,8,8a-hexahydro-
1,3a,8-trimethylypyrrolo[2,3-b]indol-5-
yl methylcarbamate ester (1:1).
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-
oxo-1-phenylbutyl)-, & salts, when
present at concentrations greater
than 0.3%
Benzyl chloride
Beryllium powder
Bromoacetone
Brucine
2-Butanone, 3,3-dimethyl-1-
(methylthio)-, O-[methylamino]carbonyl] oxime
Calcium cyanide
Calcium cyanide Ca(CN)<inf>2</inf>
Carbamic acid, [(dibutylamino)-
thio]methyl-, 2,3-dihydro-2,2-
dimethyl-7-benzofuranyl ester.
Carbamic acid, dimethyl-, 1-[(dimethyl-
amino)carbonyl]-5-methyl-1H-
pyrazol-3-yl ester.
Carbamic acid, dimethyl-, 3-methyl-1-
(1-methylethyl)-1H- pyrazol-5-yl
ester.
Carbamic acid, methyl-, 3-methylphenyl
ester.
Carbophur.
Carbon disulfide
Carbonic dichloride
Carbosulfan.
Chloroacetaldehyde
p-Chloroaniline
1-(o-Chlorophenyl)thiourea
3-Chloropropionitrile
Copper cyanide
Copper cyanide Cu(CN)<inf>2</inf>
m-Cumenyl methylcarbamate.
Cyanides (soluble cyanide salts), not
otherwise specified
Cyanogen
Cyanogen chloride
Cyanogen chloride (CN)<inf>2</inf>
2-Cyclohexyl-4,6-dinitrophenol
Dichloromethyl ether
Dichlorophenylarsine

Diethylarsine

Diethyl-p-nitrophenyl phosphate

O,O-Diethyl O-pyrazinyl phosphorothioate

Diisopropylfluorophosphate (DFP)

1,4,5,8-Dimethanonaphthalene,

1,2,3,4,10,10-hexachloro-

1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5alpha,8alpha,8beta)

2,7:3,6-Dimethanonaphth[2,3-b]oxirene,

3,4,5,6,9,9-hexachloro-

1a,2a,3,6,6a,7,7a-octahydro-, (1alpha,2alpha,2alpha,3alpha,6alpha,6beta,7beta,7alpha)

Dimethoate

alpha,alpha-Dimethylphenethylamine

Dimetilan.

4,6-Dinitro-o-crl, & salts

2,4-Dinitrophenol

Dinoseb

Diphenylphosphoramide, octamethyl-

Diphenylphosphoric acid, tetraethyl ester

Disulfoton

Dithiobiuret

1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,- O-[(methylamino)carbonyl]oxime.

Endosulfan

Endothall

Endrin

Epinephrine

Ethanedinitrile

Ethanamidothioc acid, 2-(dimethylamino)-N-[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester.

Ethanamidothioic acid, N-[(methylamino)carbonyl]oxy]-, methyl ester

Ethyl cyanide

Ethyleneimine

Famphur

Fluorine
P057  640-19-7 Fluroacetamide
P058  62-74-8 Fluroacetic acid, sodium salt
P197  17702-57-7 Formparanate.
P065  628-86-4 Fulminic acid, mercury(2+) salt (R,T)
P059  76-44-8 Heptachlor
P062  757-58-4 Hexaethyl tetrathoposphate
P116  79-19-6 Hydrazinecarbothioamide
P068  60-34-4 Hydrazine, methyl-
P063  74-90-8 Hydrocyanic acid
P063  74-90-8 Hydrogen cyanide
P096  7803-51-2 Hydrogen phosphide
P060  465-73-6 Isodrin
P192  119-38-0 Isolran.
P202  64-00-6 3-Isopropylphenyl N-methylcarbamate.
P007  2763-96-4 3(2H)-Isoxazolone, 5-(aminomethyl)-
P196  15339-36-3 Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196  15339-36-3 Manganese dimethyldithiocarbamate.
P092  62-38-4 Mercury, (acetato-O)phenyl-
P065  628-86-4 Mercury fulminate (R,T)
P082  62-75-9 Methanamine, N-methyl-N-nitroso-
P064  624-83-9 Methane, isocyanato-
P016  542-88-1 Methane, oxybis[chloro-
P112  509-14-8 Methane, tetranitro- (R)
P118  75-70-7 Methanethiol, trichloro-
P198  23422-53-9 Methanimidamide, N,N-dimethyl-N'-[3-
P197  17702-57-7 Methanimidamide, N,N-dimethyl-N'-[2-
                   methyl-4-
                   [(methylamino)carbonyl]oxy]phenyl]-
P050  115-29-7 6,9-Methano-2,4,3-benzodioxathiepin,
                   6,7,8,9,10,10-
                   hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059  76-44-8 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-
                   heptachloro-
                   3a,4,7,7a-tetrahydro-
P199  2032-65-7 Methiocarb.
P066  16752-77-5 Methomyl
P068  60-34-4 Methyl hydrazine
P064  624-83-9 Methyl isocyanate
P069  75-86-5 2-Methylactonitrile
P071  298-00-0 Methyl parathion
P190  1129-41-5 Metolcarb.
P128  315-8-4 Mexacarbate.
P072  86-88-4 alpha-Naphthlythiourea
P073  13463-39-3 Nickel carbonyl
P073  13463-39-3 Nickel carbonyl Ni(CO)<INF>4</INF>, (T-4)-
P074  557-19-7 Nickel cyanide
P074  557-19-7 Nickel cyanide Ni(CN)<INF>2</INF>
P075  \  54-11-5 Nicotine, & salts
P076  10102-43-9 Nitric oxide
P077  100-01-6 p-Nitroaniline
P078  10102-44-0 Nitrogen dioxide

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P076  10102-43-9 Nitrogen oxide NO
P078  10102-44-0 Nitrogen oxide NO<INF>2</INF>
3-Propanal, 2
8 Potassium cyanide K(CN)
7 Phosphorothioic acid, O,O
2 Phosphorothioic acid, O,O
2 Phosphorodithioic acid, O,O
5 Phosphoric acid, diethyl O
5 Phenylthiourea
4 Phenol, 2,4,6-dinitro-
3 7- Oxabicyclo[2.2.1]heptane-2,3-
dicarboxylic acid
23135-22-0 Oxamyl.
56-38-2 Parathion
131-69-5 Phenol, 2-cyclohexyl-4,6-dinitro-
51-28-5 Phenol, 2,4-dinitro-
534-52-1 Phenol, 2-methyl-4,6-dinitro-, & salts
88-85-7 Phenol, 2-(1-methylpropyl)-4,6-dinitro-
131-74-8 Phenol, 2,4,6-trinitro-, ammonium salt (R)
315-18-4 Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
2032-65-7 Phenol, 3-(5-dimethyl-4-(methylthio))-2,4-dinitrophenyl) ester
64-00-6 Phenol, 3-(1-methylethyl)-, methyl carbamate.
2631-37-0 Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate.
62-38-4 Phenylmercury acetate
103-85-5 Phenylthiourea
298-02-2 Phorate
75-44-5 Phosgene
7803-51-2 Phosphine
311-45-5 Phosphoric acid, diethyl 4-nitrophenyl ester
298-04-4 Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
298-02-2 Phosphorodithioic acid, O,O-diethyl S-[ethylthio)methyl] ester
60-51-5 Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
55-91-4 Phosphorofluoridic acid, bis(1-methylethyl) ester
56-38-2 Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
297-97-2 Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
52-85-7 Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-diethyl ester
298-00-0 Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
57-47-6 Physostigmine.
57-64-7 Physostigmine salicylate.
78-00-2 Plumbane, tetraethyl-
151-50-8 Potassium cyanide
151-50-8 Potassium cyanide K(CN)
506-61-6 Potassium silver cyanide
2631-37-0 Promecarb
116-06-3 Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
1646-88-4 Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime.
107-12-0 Propanenitrile
P027  542-76-7 Propanenitrile, 3-chloro-
P069  75-86-5 Propanenitrile, 2-hydroxy-2-methyl-
P081  55-63-0 1,2,3-Propanetriol, trinitrate (R)
P017  598-31-2 2-Propanone, 1-bromo-
P102  107-19-7 Propargyl alcohol
P003  107-02-8 2-Propanal
P005  107-18-6 2-Propan-1-ol
P067  75-55-8 1,2-Propylenimine
P102  107-19-7 2-Propan-1-ol
P008  504-24-5 4-Pyridinamine
P075  \1\ 54-11-5 Pyridine, 3-(1-methyl-2-pyrrolidinyl)-
      \1\, (S)-, & salts
P204  57-47-6 Fyrrolo[2,3-b]indol-5-ol,
      1,2,3,3a,8,8a-hexahydro-1,3a,8-
      trimethyl-
      methylcarbamate (ester), (3aS-cis)-.
P114  12039-52-0 Selenious acid, dithallium(1+) salt
P103  630-10-4 Selenourea
P104  506-64-9 Silver cyanide
P104  506-64-9 Silver cyanide Ag(CN)
P105  26628-22-8 Sodium azide
P106  143-33-9 Sodium cyanide
P114 \1\ 57-24-9 Strychnidin-10-one, & salts
P018  357-57-3 Strychnidin-10-one, 2,3-dimethoxy-
P115 \1\ 57-24-9 Strychnine, & salts
P115  7446-18-6 Sulfuric acid, dithallium(1+) salt

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P109  3689-24-5 Tetraethylidithiopyrophosphate
P110  78-00-2 Tetraethyl lead
P111  107-49-3 Tetraethyl pyrophosphate
P112  509-14-8 Tetranitromethane (R)
P062  757-58-4 Tetraphosphoric acid, hexaethyl ester
P113  1314-32-5 Thallic oxide
P113  1314-32-5 Thallium oxide Tl<INF>2</INF>O<INF>5</INF>
P114  12039-52-0 Thallium(I) selenite
P115  7446-18-6 Thallium(I) sulfate
P109  3689-24-5 Thiodiphosphoric acid, tetraethyl ester
P045  39196-18-4 Thifanox
P049  541-53-7 Thioimidodicarbonic diamide [(H<INF>2</INF>N)C(S)]<INF>2</INF>NH
P014  108-98-5 Thiophenol
P116  79-19-6 Thiosemicarbazide
P026  5344-82-1 Thiourea, (2-chlorophenyl)-
P072  86-88-4 Thiourea, 1-naphthalenyl-
P093  103-85-5 Thiourea, phenyl-
P185  26419-73-8 Tirpate.
P123  8001-35-2 Toxaphene
P118  75-70-7 Trichloromethanethiol
P119  7803-55-6 Vanadic acid, ammonium salt
P120  1314-62-1 Vanadium oxide V<INF>2</INF>O<INF>5</INF>
P120  1314-62-1 Vanadium pentoxide
P084  4549-40-0 Vinyilamine, N-methyl-N-nitroso-
P001  \1\ 81-81-2 Warfarin, & salts, when present at
      concentrations greater than 0.3%
P205  137-30-4 Zinc, bis(dimethylcarbamodithioato-
      S,S')-,
P121  557-21-1 Zinc cyanide
(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (a) through (d) of this section, are identified as toxic wastes (T), unless otherwise designated and are subject to the small quantity generator exclusion defined in Sec. 261.5 (a) and (g).

<Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.)

These wastes and their corresponding EPA Hazardous Waste Numbers are:

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U234  99-35-4  Benzene, 1,3,5-trinitro-
U021  92-67-5  Benzidine
U202  \1\ 81-07-2  1,2-Benzisothiazol-3(2H)-one, 1,1-
dioxide, & salts
U278  22781-23-3  1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate.
U364  22961-82-6  1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U203  94-59-7  1,3-Benzodioxole, 5-(2-propenyl) -
U141  120-58-1  1,3-Benzodioxole, 5-(1-propenyl) -
U367  1563-38-8  7-Benzofuranol, 2,3-dihydro-2,2-
dimethyl-
U090  94-58-6  1,3-Benzodioxole, 5-propyl-
U064  189-55-9  Benzo[rst]pentaphene
U248  \1\81-81-2  2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-
oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022  50-32-8  Benzo[a]pyrene

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benzimidazol-2-yl]-, methyl ester.

U280 101-27-9 Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester.
U238 51-79-6 Carbamic acid, ethyl ester
U178 615-53-2 Carbamic acid, methyl nitroso-, ethyl ester
U373 122-42-9 Carbamic acid, phenyl-, 1-methylethyl ester.
U409 23564-05-8 Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester.
U097 79-44-7 Carbamic chloride, dimethyl-
U389 2303-17-5 Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester.
U387 52888-80-9 Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester.
U14 111-54-6 Carbamodithioic acid, 1,2-ethanediylibis-, salts & esters

U062 2303-16-4 Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U279 63-25-2 Carbaryl.
U372 10605-21-7 Carbendazim.
U367 1563-38-8 Carbofuran phenol.
U215 6533-73-9 Carbonic acid, dithallium(I) salt
U033 353-50-4 Carbonic difluoride
U156 79-22-1 Carbonchloridic acid, methyl ester (I, T)
U033 353-50-4 Carbon oxyfluoride (R, T)
U211 56-23-5 Carbon tetrachloride
U034 75-87-6 Chioral
U035 305-03-3 Chiorambucil
U036 57-74-9 Chiordane, alpha & gamma isomers
U026 494-03-1 Chiornaphazin
U037 108-90-7 Chlorobenzene
U038 510-15-6 Chlorobenzilate
U039 59-50-7 p-Chloro-m-crl
U042 110-75-8 2-Chloroethyl vinyl ether
U044 67-66-3 Chloroform
U046 107-30-2 Chloromethyl methyl ether
U047 91-58-7 beta-Chloronaphthalene
U048 95-57-8 o-Chlorophenol
U049 3165-93-3 4-Chloro-o-toluidine, hydrochloride
U032 13765-19-0 Chromic acid H<INF>2</INF>CrO<INF>4</INF>, calcium salt
U050 218-01-9 Chrysene
U051 ............ Creosote
U052 1319-77-3 Cr1 (Cresylic acid)
U053 4170-30-3 Crotonaldehyde
U055 98-82-8 Cumene (I)
U246 506-68-3 Cyanogen bromide (CN)Br
U197 106-51-4 2,5-Cyclohexadiene-1,4-dione
U056 110-82-7 Cyclohexane (I)
U129 58-89-9 Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6 beta)-

U057 108-94-1 Cyclohexanone (I)
U130 77-47-4 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058 50-18-0 Cyclophosphamid
U240 94-75-7 2,4-D, salts & esters
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<td>62-55-5</td>
<td>Ethanethioamide</td>
</tr>
<tr>
<td>U226</td>
<td>71-55-6</td>
<td>Ethane, 1,1,1-trichloro-</td>
</tr>
<tr>
<td>U227</td>
<td>79-00-5</td>
<td>Ethane, 1,1,2-trichloro-</td>
</tr>
<tr>
<td>U410</td>
<td>59669-26-0</td>
<td>Ethanimidothioic acid, N,N'-[thiobis[(methyllimino)carbonyloxy]]bis-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dimethyl ester</td>
</tr>
<tr>
<td>U394</td>
<td>30558-43-1</td>
<td>Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>methyl ester.</td>
</tr>
<tr>
<td>U359</td>
<td>110-80-5</td>
<td>Ethanol, 2-ethoxy-</td>
</tr>
<tr>
<td>U173</td>
<td>1116-54-7</td>
<td>Ethanol, 2,2'-(nitrosoimino)bis-</td>
</tr>
</tbody>
</table>

5952-26-1 Ethanol, 2,2'-oxybis-, dicarbamate.

98-86-2 Ethanone, 1-phenyl-

75-01-4 Ethene, chloro-

110-75-8 Ethene, (2-chloroethoxy)-

75-35-4 Ethene, 1,1-dichloro-

156-60-5 Ethene, 1,2-dichloro-, (E)-

127-18-4 Ethene, tetrachloro-

79-01-6 Ethene, trichloro-

141-78-6 Ethyl acetate (I)

140-88-5 Ethyl acrylate (I)

51-79-6 Ethyl carbamate (urethane)

60-29-7 Ethyl ether (I)

111-54-6 Ethylenebisdithiocarbamic acid, salts & esters

106-93-4 Ethylene dibromide

107-06-2 Ethylene dichloride

110-80-5 Ethylene glycol monoethyl ether

75-21-8 Ethylene oxide (I,T)

96-45-7 Ethylendithiourea

75-34-3 Ethylidene dichloride

97-63-2 Ethyl methacrylate

62-50-0 Ethyl methanesulfonate

206-44-0 Fluoranthene

50-00-0 Formaldehyde

64-18-6 Formic acid (C,T)

110-00-9 Furan (I)

98-01-1 2-Furancarboxaldehyde (I)

108-31-6 2,5-Furandione

109-99-9 Furan, tetrahydro-(I)

98-01-1 Furfural (I)

110-00-9 Furfuran (I)

18883-66-4 Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-

18883-66-4 D-Glucose, 2-deoxy-2-

765-34-4 Glycidylaldehyde
70-25-7 Guanidine, N-methyl-N'-nitro-N-nitrosoguanidine

118-74-1 Hexachlorobenzene
87-68-3 Hexachlorobutadiene
77-47-4 Hexachlorocyclopentadiene
67-72-1 Hexachloroethane
70-30-4 Hexachlorophene
1888-71-7 Hexachloropropene
302-01-2 Hydrazine (R,T)
1615-80-1 Hydrazine, 1,2-diethyl-
57-14-7 Hydrazine, 1,1-dimethyl-
540-73-8 Hydrazine, 1,2-dimethyl-
122-66-7 Hydrazine, 1,2-diphenyl-
7664-39-3 Hydrofluoric acid (C,T)
7664-39-3 Hydrogen fluoride (C,T)
7783-06-4 Hydrogen sulfide
7783-06-4 Hydrogen sulfide H<INF>2</INF> S
80-15-9 Hydroperoxide, 1-methyl-1-phenylethyl-
96-45-7 2-Imidazolidinethione
193-39-5 Indeno[1,2,3-cd]pyrene
85-44-9 1,3-Isobenzofurandione
78-83-1 Isobutyl alcohol (I,T)
120-58-1 Isosafrole
143-50-0 Kepone
303-34-4 Lasiocarpine
301-04-2 Lead acetate
1335-32-6 Lead, bis(acetato-O)tetrahydroxytrihydrate
7446-27-7 Lead phosphate
1335-32-6 Lead subacetate
58-89-9 Lindane
70-25-7 MNNG
108-31-6 Maleic anhydride
123-33-1 Maleic hydrazide
109-77-3 Malononitrile
148-82-3 Melphalan
7439-97-6 Mercury
126-98-7 Methacrylonitrile (I, T)
124-40-3 Methanamine, N-methyl- (I)
74-83-9 Methane, bromo-

74-87-3 Methane, chloro- (I, T)
107-30-2 Methane, chloromethoxy-
74-95-3 Methane, dibromo-
75-09-2 Methane, dichloro-
75-71-8 Methane, dichlorodifluoro-
74-88-4 Methane, iodo-
62-50-0 Methanesulfonic acid, ethyl ester
56-23-5 Methane, tetrachloro-
74-93-1 Methanethiol (I, T)
75-25-2 Methane, tribromo-
67-66-3 Methane, trichloro-
75-69-4 Methane, trichlorofluoro-
57-74-9 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
67-56-1 Methanol (I)
91-80-5 Methapyrilene
143-50-0 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-
2-one, 1,1a,3,3a,4,5,5a,5b,6-

42
decachlorooctahydro-

U247 72-43-5 Methoxychlor
U154 67-56-1 Methyl alcohol (I)
U029 74-83-9 Methyl bromide
U186 504-60-9 1-Methylbutadiene (I)
U045 74-87-3 Methyl chloride (I,T)
U156 79-22-1 Methyl chlorocarbonate (I,T)
U226 71-55-6 Methyl chloroform
U157 56-49-5 3-Methylcholanthrene
U158 101-14-4 4,4'-Methylenebis(2-chloroaniline)
U068 74-95-3 Methylene bromide
U080 75-09-2 Methylene chloride
U159 78-93-3 Methyl ethyl ketone (MEK) (I,T)
U160 1338-23-4 Methyl ethyl ketone peroxide (R,T)
U138 74-88-4 Methyl iodide
U161 108-10-1 Methyl isobutyl ketone (I)
U162 80-62-6 Methyl methacrylate (I,T)
U161 108-10-1 4-Methyl-2-pentanone (I)
U164 56-04-2 Methylthiouracil
U010 50-07-7 Mitomycin C
U059 20830-81-3 5,12-Naphthacenedione, 8-acetyl-10-[(3-

U167 134-32-7 1-Naphthalenamine
U168 91-59-8 2-Naphthalenamine
U026 494-03-1 Naphthalenamine, N,N'-bis(2-

U165 91-20-3 Naphthalene
U047 91-58-7 Naphthalene, 2-chloro-
U166 130-15-4 1,4-Naphthalenedione
U236 72-57-1 2,7-Naphthalenedisulfonic acid, 3,3'-

U279 63-25-2 1-Naphthalenol, methylcarbamate.
U166 130-15-4 1,4-Naphthoquinone
U167 134-32-7 alpha-Naphthylamine
U168 91-59-8 beta-Naphthylamine
U217 10102-45-1 Nitric acid, thallium(I+) salt
U169 98-95-3 Nitrobenzene (I,T)
U170 100-02-7 p-Nitrophenol
U171 79-46-9 2-Nitropropane (I,T)
U172 924-16-3 N-Nitrosodi-n-butylamine
U173 1116-54-7 N-Nitrosodiphenolamine
U174 55-18-5 N-Nitrosodiethylamine
U176 759-73-9 N-Nitroso-N-ethylurea
U177 684-93-5 N-Nitroso-N-methylurea
U178 615-53-2 N-Nitroso-N-methylurethane
U179 100-75-4 N-Nitrosopiperidine
U180 930-55-2 N-Nitrosopyrrolidine
U181 99-55-8 5-Nitro-o-toluidine
U193 1120-71-4 1,2-Oxathiolane, 2,2-dioxide
U058 50-18-0 2H-1,3,2-Oxazaphosphorin-2-amine, 

U115 75-21-8 Oxirane (I,T)
U126 765-34-4 Oxiranecarboxyaldehyde
U041 106-89-8 Oxirane, (chloromethyl)-

2 123-63-7 Paraaldehyde
| U183   | 608-93-5 | Pentachlorobenzene |
| U184   | 76-01-7  | Pentachloroethane  |
| U185   | 82-68-8  | Pentachloronitrobenzene (PCNB) |

See F027 87-86-5 Pentachlorophenol

U161 108-10-1 Pentanol, 4-methyl-

U186 504-60-9 1,3-Pentadiene (I)

U187 62-44-2 Phenacetin

U188 108-95-2 Phenol

U048 95-57-8 Phenol, 2-chloro-

U039 59-50-7 Phenol, 4-chloro-3-methyl-

U081 120-83-2 Phenol, 2,4-dichloro-

U082 87-65-0 Phenol, 2,6-dichloro-

U089 56-53-1 Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-

U101 105-67-9 Phenol, 2,4-dimethyl-

U052 1319-77-3 Phenol, methyl-

U132 70-30-4 Phenol, 2,2'-methylenedis[3,4,6-trichloro-

U411 114-26-1 Phenol, 2-(1-methylethoxy)-, methylcarbamate.

U170 100-02-7 Phenol, 4-nitro-

See F027 87-86-5 Phenol, pentachloro-

See F027 58-90-2 Phenol, 2,3,4,6-tetrachloro-

See F027 95-95-4 Phenol, 2,4,5-trichloro-

See F027 88-06-2 Phenol, 2,4,6-trichloro-

U150 148-82-3 L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-

U145 7446-27-7 Phosphoric acid, lead(2+) salt (2:3)

U087 3288-58-2 Phosphorodithioic acid, O,O-diethyl S-methyl ester

U189 1314-80-3 Phosphorus sulfide (R)

U190 85-44-9 Phthalic anhydride

U191 109-06-8 2-Picoline

U179 100-75-4 Piperidine, 1-nitroso-

U192 23950-58-5 Pronamide

U194 107-10-8 1-Propanamine (I,T)

U111 621-64-7 1-Propanamine, N-nitroso-N-propyl-

U110 142-84-7 1-Propanamine, N-propyl- (I)

U066 96-12-8 Propane, 1,2-dibromo-3-chloro-

U083 78-87-5 Propane, 1,2-dichloro-

U149 109-77-3 Propanedinitrile

U171 79-46-9 Propane, 2-nitro- (I,T)

U027 108-60-1 Propane, 2,2'-oxybis[2-chloro-

U193 1120-71-4 1,3-Propane sultone

See F027 93-72-1 Propanoic acid, 2-(2,4,5-trichlorophenoxy)-

U235 126-72-7 1-Propanol, 2,3-dibromo-, phosphate (3:1)

U140 78-83-1 1-Propanol, 2-methyl- (I,T)

U002 67-64-1 2-Propanone (I)

U007 79-06-1 2-Propanamide

U084 542-75-6 1-Propene, 1,3-dichloro-

U243 1888-71-7 1-Propene, 1,1,2,3,3,3-hexachloro-

U009 107-13-1 2-Proponenitrile

U152 126-98-7 2-Proponenitrile, 2-methyl- (I,T)

U008 79-10-7 2-Propanoic acid (I)

U113 140-88-5 2-Propanoic acid, ethyl ester (I)

U118 97-63-2 2-Propanoic acid, 2-methyl-, ethyl
U227  80-62-6  2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373  122-42-9  Propham.
U411  114-26-1  Propoxur.
U387  52888-60-9  Fosulfocarb.
U194  107-10-8  n-Propylamine (I,T)
U083  78-87-5  Propylene dichloride
U148  123-33-1  3,6-Pyridazinedione, 1,2-dihydro-
U196  110-86-1  Pyridine
U191  109-06-8  Pyridine, 2-methyl-
U237  66-75-1  2,4-(1H,3H)-Pyrimidinedione, 5-[[bis(2-
U164  56-04-2  4(1H)-Pyrimidinone, 2,3-dihydro-6-
U180  930-55-2  Pyrrolidine, 1-nitroso-
U200  50-55-5  Reserpine
U201  108-46-3  Rcinol
U202  \1\ 81-07-2  Saccharin, & salts
U203  94-59-7  Safrole
U204  7783-00-8  Selenious acid

[[Page 77]]
U228  79-01-6  Trichloroethylene
U121  75-69-4  Trichloromonofluoromethane
See F027  95-95-4  2,4,5-Trichlorophenol
See F027  88-06-2  2,4,6-Trichlorophenol
U404  121-44-8  Triethylamine.
U234  99-35-4  1,3,5-Trinitrobenzene (R,T)
U182  123-63-7  1,3,5-Trioxane, 2,4,6-trimethyl-
U235  126-72-7  Tris(2,3-dibromopropyl) phosphate
U236  72-57-1  Trypan blue
U237  66-75-1  Uracil mustard
U176  759-73-9  Urea, N-ethyl-N-nitroso-
U177  684-93-5  Urea, N-methyl-N-nitroso-
U043  75-01-4  Vinyl chloride
U248  \1\  81-81-2  Warfarin, & salts, when present at
         concentrations of 0.3% or less
U239  1330-20-7  Xylene (I)
U200  50-55-5  Yohimbane-16-carboxylic acid, 11,17-
         dimethoxy-18-[(3,4,5-
         trimethoxybenzoyl)oxy]-, methyl
         ester,
         (3beta,16beta,17alpha,18beta,20alpha)-
U249  1314-84-7  Zinc phosphide Zn<INF>3</INF> P<INF>2</INF>, when present at
         concentrations of 10% or less

Appendix B
City of Canyon Ordinance Title 5: Public Works Chapter 51
CHAPTER 51: SEWER AND WATER

51.01 Purpose

51.02 Definitions

51.03 Authority for extension

51.04 Standard size for water and sewer mains

51.05 Industrial or commercial extensions

51.06 Water and sewer improvements by assessment

51.07 Costs divided proportionately

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51.20 Water and sewer tap charges

51.21 Water rates

51.22 Sewer rates

51.23 Connection service fees

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51.41 Prohibited discharges

51.42 Chemical discharges

51.43 Heavy metals and toxic materials

51.44 Garbage

51.45 Storm water and other unpolluted drainage

51.46 Temperature

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51.48 Impairment of facilities

51.49 Compliance with existing authority

WATER AND SEWER MAIN CONNECTIONS

§ 51.01 PURPOSE.

The intent and purpose of this subchapter is to provide an equitable front-foot rate to be charged for water and sanitary sewer connections as a proportionate distribution of the cost of water and sanitary sewer main extensions to serve property in the city. No person shall acquire any vested rights under the terms and provisions of this subchapter.

('66 Code, § 19-28) (Ord. 475, passed 7-19-79)

§ 51.02 DEFINITIONS.
FOR THE PURPOSE OF THIS SUBCHAPTER THE FOLLOWING DEFINITIONS SHALL APPLY UNLESS THE CONTEXT CLEARLY INDICATES OR REQUIRES A DIFFERENT MEANING.

ACTUAL COST. The cost of a water and/or sewer main as established by sealed bids.

DEVELOPER. Owner, or agent of the owner, or anyone subdividing property and installing utilities to serve lots or tracts of land.

FRONT-FOOT RATE. The total cost for such water and/or sewer extensions divided by the total front footage of the lots or tracts to be served.

OFF-SITE MAIN. Water and/or sewer mains totally outside of a tract of land to be subdivided and developed for resale.

ON-SITE MAIN. Water and/or sewer mains totally within a tract of land to be subdivided or developed for resale.

OVER-SIZE COST. The difference between the actual cost of the main as built and the cost of the main determined to be the minimum size required to serve the area.

§ 51.03 AUTHORITY FOR EXTENSION.

The city may extend and/or connect water and sanitary sewer mains in the streets, alleys, and easements within its city limits in order to permit connections by persons desiring and seeking water and/or sanitary sewer service.

§ 51.04 STANDARD SIZE FOR WATER AND SEWER MAINS.

The standard size for water and sewer mains shall be eight inches unless a larger size is determined necessary for adequate service by the City Engineer. Six-inch mains shall be known as a substandard size and shall be installed only in special limited flow areas to be determined by the City Engineer. No mains smaller than six inches will be allowed.

§ 51.05 INDUSTRIAL OR COMMERCIAL EXTENSIONS.

Where an on-site extension is requested by an industrial or commercial concern using large quantities of water, such extension may be made at the discretion of the City Commission upon receipt of the charges due under this subchapter. The city may extend water and/or sewer mains necessary as off-site extensions required to serve industrial and commercial extensions provided that the charges for the total distance that the lines have to be extended are first deposited in escrow with the city.

§ 51.06 WATER AND SEWER IMPROVEMENTS BY ASSESSMENT.

Upon recommendation of the Director of Public Works and the City Engineer, the City Commission may consider and determine the necessity for extension and construction of water and/or sanitary sewer mains by providing for the payment of the cost of such improvements by assessments to be made against the benefited property owners under the terms and provisions of Tex. Rev. Civ. Star. Art. 1110c, as amended, and as may be hereafter amended.

('66 Code, § 19-29) (Ord. 475, passed 7-19-79)

('66 Code, § 19-32) (Ord. 475, passed 7-19-79)

('66 Code, § 19-35) (Ord. 475, passed 7-19-79)
§ 51.07 COSTS DIVIDED PROPORTIONATELY.

Each owner shall be charged his proportionate share of the cost for such water and sewer extensions on the front-foot rate regardless of the size or shape of the lot or tract of land. ('66 Code, § 19-30) (Ord. 475, passed 7-19-79)

§ 51.08 ESCROW DEPOSIT REQUIRED.

No water and/or sanitary sewer mains shall be extended unless and until all monies required to cover the estimated cost of such extension shall be deposited in escrow with the city. ('66 Code, § 19-31) (Ord. 475, passed 7-19-79)

§ 51.09 PRIOR AGREEMENTS OR CONTRACTS.

This subchapter shall not affect or change any agreement or contract to provide water and sewer services which was entered into by the city on or before the effective date of this subchapter. ('66 Code, § 19-34) (Ord. 475, passed 7-19-79)

§ 51.10 EXTENSIONS FOR NEW SUBDIVISIONS.

Water and sewer main, extensions to serve a new subdivision of the city, a plat of which has been finally approved by the Planning and Zoning Commission and the City Commission and filed of record, may be accomplished in the following manner:

(A) On-site mains: Developers of such property will pay the entire cost of water and sewer systems within their subdivisions; provided, however, that the city shall pay any over-size cost of any water or sewer main inside such subdivision larger than eight inches, unless such larger size is required to serve the subdivision, which shall be determined by the City Engineer.

(B) Off-site mains: Where water and/or sewer facilities are not available to the subdivision, the city may extend such facilities to the nearest subdivision property line within the following limitations:
(1) The developer may request the City Commission to construct the mains and assess the intervening owners proportionately for the cost; or
(2) In the event the City Commission denies the developer's request, the off-site water and/or sewer mains will be constructed only after the developer has deposited with the city the total cost of such extensions required to serve his property, including the cost of approach or off-site mains fronting property not owned by the developer.

(C) Upon determination of the actual cost of such extensions, the city will refund any excess amount deposited or required of such developer or the developer shall deposit any additional money required to cover all project costs should that amount previously deposited be less than the actual cost.

(D) Any refundable amounts for off-site costs or over-size costs will be determined by the City Engineer.

(66 Code, § 19-47) (Ord. 475, passed 7-19-79)

§ 51.11 LIFT STATIONS AND PACKAGE TREATMENT PLANTS.

The city may construct lift stations and/or package treatment plants as required or requested by the developer to serve the subdivision provided that the total estimated cost for the facility to be constructed is first deposited in escrow with the city. Upon determination of the actual cost of such facility, the city will refund any excess amount deposited or required of such developer or the developer shall deposit any additional money required to cover all project costs should that amount previously deposited be less than the actual cost.

(66 Code, § 19-48) (Ord. 475, passed 7-19-79)

RATES AND CHARGES

§ 51.20 WATER AND SEWER TAP CHARGES.

The rates for the tapping of the city's water mains shall be as follows:

<table>
<thead>
<tr>
<th>Tap Size (Inches)</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; X 5/8&quot; Meter</td>
<td>$425.00</td>
</tr>
<tr>
<td>3/4&quot; X 3/4&quot; Meter</td>
<td>449.00</td>
</tr>
<tr>
<td>Remote 3/4&quot; X 5/8&quot;</td>
<td>525.00</td>
</tr>
<tr>
<td>Remote 3/4&quot; X 3/4&quot;</td>
<td>549.00</td>
</tr>
<tr>
<td>1&quot; Meter</td>
<td>556.00</td>
</tr>
<tr>
<td>Remote 1&quot; Meter</td>
<td>656.00</td>
</tr>
</tbody>
</table>

Charges for taps larger than 1" shall be based on the following schedule:

- 1'/2" - Material costs plus 2'/2 hours labor @ $75/hour
- 2" - Material costs plus 3'/2 hours labor @ $75/hour
- 4" - Material costs plus 5 hours labor @ $75/hour
- 6" - Material costs plus 8 hours labor @ $75/hour

If taps are to be performed within a paved alley or street, an additional charge of $100 for pavement repair will be required.

(66 Code, § 19-1) (Ord. 331, passed 3-13-69; Am. Ord. 657, passed 10-7-93; Am. Ord. 695, passed 12-19-96)

§ 51.21 WATER RATES.

Unless otherwise provided in this chapter, the water rates per month to be charged and collected by the city from all customers obtaining service from the water system shall be fixed as set forth below:

<table>
<thead>
<tr>
<th>Gallons</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 2,000</td>
<td>$8.70 minimum</td>
</tr>
<tr>
<td>2,000 to 8,000</td>
<td>1.80 per 1 M</td>
</tr>
<tr>
<td>Over 8,000</td>
<td>2.17 per 1 M</td>
</tr>
</tbody>
</table>

§ 51.22 SEWER RATES.

(A) The monthly rates or charges for sewer services furnished by the city shall be as follows:
<table>
<thead>
<tr>
<th>Classification of Service</th>
<th>Monthly Charge</th>
<th>Code 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code O - Commercial</td>
<td>Determined by prior calendar year average monthly usage as follows:</td>
<td>Appliance Stores</td>
</tr>
<tr>
<td></td>
<td>$36.00</td>
<td>Auto and Tire Stores</td>
</tr>
<tr>
<td></td>
<td>84.38</td>
<td>Banks</td>
</tr>
<tr>
<td>Monthly Usage</td>
<td>146.25</td>
<td>Barber Shops</td>
</tr>
<tr>
<td>25M - 50M</td>
<td>205.88</td>
<td>Beauty Shops</td>
</tr>
<tr>
<td>50M - 100M</td>
<td></td>
<td>Churches</td>
</tr>
<tr>
<td>100M - 150M</td>
<td></td>
<td>Dry Cleaners</td>
</tr>
<tr>
<td>150M - 200M</td>
<td></td>
<td>Dry Good Stores</td>
</tr>
<tr>
<td>200M or over</td>
<td></td>
<td>Florists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Code 4</td>
</tr>
<tr>
<td>Code 2 - Residential</td>
<td>$ 9.00 per unit</td>
<td>Fast Food Establishments</td>
</tr>
<tr>
<td>Code 3 - Commercial</td>
<td>9.50 per unit</td>
<td>Pharmacies with Retail and/or Snack Restaurants</td>
</tr>
<tr>
<td>Code 4 - Commercial</td>
<td>14.06 per unit</td>
<td>Code 5</td>
</tr>
<tr>
<td>Code 5 - Commercial</td>
<td>19.69 per unit</td>
<td>Convenience Stores/Stations</td>
</tr>
<tr>
<td>Code W - Colleges or universities</td>
<td>Monthly usage multiplied by 58 (percentage of water treated) at $2.06 per 1,000 gallons treated.</td>
<td>Grocery Stores</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multi-type Department Stores</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Service Stations</td>
</tr>
</tbody>
</table>

(B) (1) All commercial classifications with average monthly usage of 25,000 gallons or more shall be classified as a Code O.

(2) Commercial classifications with monthly usage less than 25,000 gallons will be classified as follows:

§ 51.23 CONNECTION SERVICE FEES.

(A) The initial connection fee shall be $5 during regular business hours or $10 if an initial connection is required after business hours.

(B) The fee to transfer a connection from one address to another address shall be $5 during regular business hours or $10 if required after regular business hours.

('66 Code, § 19-13) (Ord. 206, passed 6-30-58; Am. Ord. 526, passed 5-19-83; Am. Ord. 568, passed 9-4-86; Am. Ord. 585, passed 9-17-87; Am. Ord. 616, passed 9-7-89; Am. Ord. 681, passed 9-7-95; Am. Ord. 699, passed 9-11-97; Am. Ord. 707, passed 8-31-98; Am. Ord. 720, passed 8-30-99)
§ 51.24 DUE DATE; DISCONNECTION FOR NONPAYMENT.

(A) The rates or charges fixed by this chapter shall be paid by the users at the City Hall on or before the tenth day of the month following the month of service. It is hereby made the duty of the office of the City Clerk to collect a 10% penalty on all past due accounts. (‘66 Code, § 19-16) (Ord. 206, passed 630-58)

(B) In the event any user or customer does not pay the rates or charges within the time specified in this chapter, it shall be the duty of the City Clerk to have such service disconnected in accordance with the procedure set forth in division (C) below. Such service may be resumed only when such delinquent amount, plus a service fee of $10 for reconnection during regular business hours or $15 after regular business hours, is paid in full.

(‘66 Code, § 19-17) (Ord. 206, passed 6-30-58; Am. Ord. 511, passed 6-24-82)

(C) The city shall disconnect utility service in accord with the following policies:

(1) When it becomes necessary for the city to discontinue utility service to a customer for nonpayment of bills, service will be reinstated only after all bills for service then due have been paid and all service fees and penalty amounts as set forth above have been made.

(2) It is the policy of the city to discontinue utility service to customers by reason of nonpayment of bills only after notice and a meaningful opportunity to be heard on disputed bills. The city's form for application for utility service and all bills shall contain, in addition to the title, address, room number, and telephone number of the official in charge of billing, clearly visible and easily readable provisions to the effect:

(a) That all bills are due and payable on or before the tenth day of the month following the month of service; and

(b) That if any bill is not paid by or before that date, a second bill will be mailed containing a cutoff notice that if the bill is not paid within ten days of the mailing of the second bill, service will be discontinued for nonpayment; and

(c) That any customer disputing the correctness of his bill shall have a right to a hearing at which time he may be represented in person and by counsel or any other person of his choosing and may present orally or in writing his complaint and contentions to the city official in charge of utility billing. This official shall be authorized to order that the customer's service not be discontinued and shall have the authority to make a final determination of the customer's complaint.

(3) Requests for delays or waiver of payment will not be entertained; only questions of proper and correct billing will be considered. In the absence of payment of the bill rendered or resort to the hearing procedure provided herein, service will be discontinued at the time specified.

DISCHARGE OF WASTES

§ 51.40 DEFINITIONS.

For the purpose of this subchapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

APPROVING AUTHORITY. The City Manager or his duly authorized representative.

B.O.D. or BIOCHEMICAL OXYGEN DEMAND. The quantity of oxygen by weight, expressed in mg/l, utilized in the biochemical oxidation of organic matter under standard laboratory conditions for five days at a temperature of 20 degrees centigrade.
• **BUILDING SEWER.** The extension from the building drain to the public sewer or other place of disposal (also called house lateral and house connection).

• **CITY.** The city of Canyon, Texas or any authorized person acting in its behalf.

• **C.O.D.** or **CHEMICAL OXYGEN DEMAND.** Measure of the oxygen consuming capacity of inorganic and organic matter present in the water or wastewater expressed in mg/l as the amount of oxygen consumed from a chemical oxidant in a specific test, but not differentiating between stable and unstable organic matter and thus not necessarily correlating with biochemical oxygen demand.

• **CONTROL MANHOLE.** A manhole giving access to a building sewer at some point before the building sewer discharge mixes with other discharges in the public sewer.

• **CONTROL POINT.** A point of access to a course of discharge before the discharge mixes with other discharges in the public sewer.

• **GARBAGE.** Animal and vegetable wastes and residue from preparation, cooking, and dispensing of food; and from the handling, processing, storage and sale of food products and produce.

• **INDUSTRIAL WASTE.** Waste resulting from any process of industry, manufacturing, trade, or business from the development of any natural resource, or any mixture of the waste with water or normal wastewater, or distinct from normal wastewater.

• **INDUSTRIAL WASTE CHARGE.** The charge made on those persons who discharge industrial wastes into the city's sewerage system.

• **MILLIGRAMS PER LITER** or **MG/L.** The same as parts per million and is a weight-to-volume ratio; the milligram-per-liter value multiplied by the factor 8.34 shall be equivalent to pounds per million gallons of water.

• **NATURAL OUTLET.** Any outlet into a watercourse, ditch, lake, or other body of surface water or groundwater.

• **NORMAL DOMESTIC WASTEWATER.** The wastewater excluding industrial wastewater discharged by a person into sanitary sewers and in which the average concentration of total suspended solids is not more than 300 mg/l and B.O.D. is not more than 300 mg/l.

• **OVERLOAD.** The imposition of organic or hydraulic loading on a treatment facility in excess of its engineered design capacity.

• **PERSON.** Includes corporation, organization, government or governmental subdivision or agency, business trust, estate, trust, partnership association, and any other legal entity.

• **pH.** The reciprocal of the logarithm (base 10) of the hydrogen ion concentration expressed in grams per liter.

• **PUBLIC SEWER.** Pipe or conduit carrying wastewater or unpolluted drainage in which owners of abutting properties shall have the use, subject to control by the city.

• **SANITARY SEWER.** A public sewer that conveys domestic wastewater or industrial wastes or a combination of both, and into which storm water, surface water, groundwater, and other unpolluted wastes are not intentionally passed.

• **SLUG.** Any discharge of water, wastewater, or industrial waste which in concentration of any given constituent or in quantity of flow, exceeds for any period of duration longer than 15 minutes more than five times the average 24 hour concentration or flows during normal operation.

• **STANDARD METHODS.** The examination and analytical procedures set forth in the latest edition, at the time of analysis, of Standard Methods for the Examination of Water and Wastewater as prepared, approved, and published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.
STORM SEWER. A public sewer which carries storm and surface waters and drainage and into which domestic wastewater or industrial wastes are not intentionally passed.

STORM WATER. Rainfall or any other forms of precipitation.

SUPERINTENDENT. The Water and Wastewater Superintendent of the city or his duly authorized deputy, agent, or representative.

SUSPENDED SOLIDS. Solids measured in mg/l that either float on the surface of, or are in suspension in, water, wastewater, or other liquids, and which are largely removable by a filtration device.

TO DISCHARGE. Includes to deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

TRAP. A device designed to skim, settle, or otherwise remove grease, oil, sand, flammable wastes or other harmful substances.

UNPOLLUTED WASTEWATER. Water containing:

1. No free or emulsified grease or oil;
2. No acids or alkalis;
3. No phenols or other substances producing taste or odor in receiving water;
4. No toxic or poisonous substances suspension, colloidal state, or solution;
5. No noxious or otherwise obnoxious or odorous gases;
6. Not more than ten mg/l each of suspended solids and B. O. D.; and
7. Color not exceeding 50 units as measured by the Platinum-Cobolt method of determination as specified in Standard Methods.

WASTE. Rejected, unutilized or superfluous substances in liquid, gaseous, or solid form resulting from domestic, agricultural, or industrial activities.

WASTEWATER. A combination of the water carried waste from residences, business buildings, institutions, and industrial establishments, together with any ground, surface, and storm water that may be present.

WASTEWATER FACILITIES. Includes all facilities for collection, pumping, treating, and disposing of wastewater and industrial wastes.

WASTEWATER SERVICE CHARGE. The charge on all users of the public sewer system whose wastes do not exceed in strength the concentration values establishes as representative of normal wastewater.

WASTEWATER TREATMENT PLANT. Any city-owned facilities, devices, and structures used for receiving, processing, and treating wastewater, industrial waste, and sludges from the sanitary sewers.

WATERCOURSE. A natural or man-made channel in which a flow of water occurs, either continuously or intermittently.

(Ord. 434, passed 9-20-76)

§ 51.41 PROHIBITED DISCHARGES.

(A) No person may discharge to public sewers any waste which by itself or by interaction with other wastes may:

1. Injure or interfere with wastewater treatment processes or facilities;
(2) Constitute a hazard to humans or animals; or

(3) Create a hazard in receiving waters of the wastewater treatment plant effluent.

(B) All discharges shall conform to requirements of this subchapter. (Ord. 434, passed 9-20-76)

§ 51.42 CHEMICAL DISCHARGES.

(A) No discharge to public sewers may contain:

(1) Cyanide greater than .001 mg/l;

(2) Fluoride other than that contained in the public water supply;

(3) Chlorides in concentrations greater than 250 mg/l.

(4) Gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas; or

(5) Substances causing an excessive Chemical Oxygen Demand (C.O.D.).

(B) No waste or wastewater discharged to public waters may contain:

(1) Strong acid, iron pickling wastes, or concentrated plating solutions whether neutralized or not;

(2) Fats, wax, grease or oils, whether emulsified or not, in excess of 100 mg/l or containing substances which may solidify or become viscous at temperatures below 32 degrees Fahrenheit (0 and 65 degrees Centigrade);

(3) Objectionable or toxic substances, exerting an excessive chlorine requirement, to such degree that any such material received in the composite wastewater at the wastewater treatment works exceeds the limits established by the Approving Authority for such materials; or

(4) Obnoxious, toxic, or poisonous solids, liquids, or gases in quantities sufficient to violate the provisions of § 51.51 (A).

(C) No waste, wastewater, or other substance may be discharged into public sewers without a permit from the Approving Authority specifying conditions of pretreatment, concentrations, volumes, and other applicable provision.

(D) All waste, wastewater, or other substance containing phenols, hydrogen sulfide, or other taste-and-odor producing substances, shall conform to concentration limits established by the Approving Authority. After treatment of the composite wastewater, concentration limits may not exceed the requirements established by state, federal, or other agencies with jurisdiction over discharges to receiving water.

(Ord. 434, passed 9-20-76)

§ 51.43 HEAVY METALS AND TOXIC MATERIALS.

(A) No discharges may contain concentrations of heavy metals greater than amounts specified in subsection (B) of this section.

(B) The maximum allowable concentrations of heavy metals stated in terms of milligrams per liter (mg/l), determined on the basis of individual sampling in accordance with Standard Methods are:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Limit (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>.05</td>
</tr>
<tr>
<td>Barium</td>
<td>5.0</td>
</tr>
<tr>
<td>Boron</td>
<td>1.0</td>
</tr>
<tr>
<td>Cadmium</td>
<td>.02</td>
</tr>
<tr>
<td>Chromium (total)</td>
<td>5.0</td>
</tr>
<tr>
<td>Copper</td>
<td>1.0</td>
</tr>
<tr>
<td>Lead</td>
<td>.1</td>
</tr>
<tr>
<td>Manganese</td>
<td>1.0</td>
</tr>
<tr>
<td>Mercury</td>
<td>.005</td>
</tr>
<tr>
<td>Nickel</td>
<td>1.0</td>
</tr>
<tr>
<td>Selenium</td>
<td>.02</td>
</tr>
<tr>
<td>Silver</td>
<td>.1</td>
</tr>
<tr>
<td>Zinc</td>
<td>5.0</td>
</tr>
</tbody>
</table>

(C) No other heavy metals or toxic materials may be discharged into public sewers without a permit from the Approving Authority.
(D) Prohibited heavy metals and toxic materials include but are not limited to:

1. Antimony
2. Beryllium
3. Bismuth
4. Cobalt
5. Molybdenum
6. Tin
7. Uranyl ion
8. Rhenium
9. Strontium
10. Tellurium
11. Herbicides

§ 51.44 GARBAGE.
(A) No person may discharge garbage into public sewers unless it is shredded to a degree that all particles can be carried freely under the flow conditions normally prevailing in public sewers. Particles greater than 1 & 1/2 inch in any dimension are prohibited.

(B) The Approving Authority is entitled to review and approve the installation and operation of any garbage grinder equipped with a motor of 1/8 horsepower (0.76 hp metric) or greater.
(Ord. 434, passed 9-20-76)

§ 51.45 STORM WATER AND OTHER UNPOLLUTED DRAINAGE.

(A) No person may discharge to public sanitary sewers:

1. Unpolluted storm water, surface water, ground water, roof runoff or subsurface drainage;
2. Unpolluted cooling water;
3. Unpolluted industrial process waters; or
4. Other unpolluted drainage.

(B) In compliance with the Texas Water Quality Act and other statutes, the Approving Authority may designate storm sewers and other watercourses into which unpolluted discharge described in subsection (A) of this section may be discharged.
(Ord. 434, passed 9-20-76)

§ 51.46 TEMPERATURE.

No person may discharge liquid or vapor having a temperature higher than 150 degrees Fahrenheit (65 degrees Centigrade), or any substance which causes the temperature of the total wastewater treatment plant influent to increase at a rate of 10 degrees Fahrenheit or more per hour, or a combined total increase of plant influent temperature to 110 degrees Fahrenheit. (Ord. 434, passed 9-20-76)

§ 51.47 RADIOACTIVE WASTES.

(A) No person may discharge radioactive wastes or isotopes into public sewers without the permission of the Approving Authority.

(B) The Approving Authority may establish, in compliance with applicable state and federal regulations, regulations for discharge of radioactive wastes into public sewers.
(Ord. 434, passed 9-20-76)

§ 51.48 IMPAIRMENT OF FACILITIES.

(A) No person may discharge into public sewers any substance capable of causing:

1. Obstruction to the flow in sewers; or
2. Interference with the operation of treatment processes of facilities.

(B) Discharges prohibited by subsection (A) include but are not limited to materials which exert or cause concentrations of:

1. Inert suspended solids greater than 250 mg/l including but not limited to:
   a. Fuller’s earth;
   b. Lime slurries; and
   c. Lime residues;

2. Dissolved solids greater than 100 mg/l including but not limited to:
   a. Sodium chloride; and
   b. Sodium sulfate;
(3) Excessive discoloration including, but not limited to:
   (a) Dye wastes; and
   (b) Vegetable tanning solutions; or
(4) B.O.D., C.O.D., or chlorine demanding excess of normal plant capacity.

(C) No person may discharge into public sewers any substance that may:
(1) Deposit grease or oil in the sewer lines in such a manner as to clog the sewers;
(2) Overload skimming and grease handling equipment;
(3) Pass to the receiving waters without being effectively treated by normal wastewater treatment processes due to excessive quantities;
(4) Deleteriously affect the treatment process due to excessive quantities.

(D) No person may discharge any substance into public sewers which:
(1) Is not amenable to treatment or reduction by the processes and facilities employed; or
(2) Is amenable to treatment only to such a degree that the treatment plant effluent cannot meet the requirements of the other agencies having jurisdiction over discharge to the receiving waters.

(E) The Approving Authority shall regulate the flow and concentration of slugs when they may:
(1) Impair the treatment process;
(2) Cause damage to collection facilities;
(3) Incur treatment costs exceeding those for normal wastewater; or
(4) Render the waste unfit for stream disposal or industrial use.

(F) No person may discharge into public sewers solid or viscous substances which may violate subsection (A) if present in sufficient quantity or size including but not limited to:

• (1) Ashes
• (2) Cinders
• (3) Sand
• (4) Mud
• (5) Straw
• (6) Shavings
• (7) Metal
• (8) Glass
• (9) Rags
• (10) Feathers
• (11) Tar
• (12) Plastics
• (13) Wood
• (14) Underground garbage
• (15) Whole blood
• (16) Paunch manure
• (17) Hair and fleshing
• (18) Entrails
• (19) Paper products, either whole or ground by garbage grinder
• (20) Slops
• (21) Chemical residues

§ 51.49 COMPLIANCE WITH EXISTING AUTHORITY.

(A) Unless exception is granted by the Approving Authority the public sewer system shall be used by all persons discharging:
(1) Wastewater;
(2) Industrial waste;
(3) Polluted liquids; or
(4) Unpolluted waters or liquids.

(B) Unless authorized by the Texas Water Quality Board, no person may deposit or discharge any waste included in subsection (A) on public or private property in or adjacent to any:
condition.

(1) Natural outlet;

(2) Watercourse;

(3) Storm sewer;

(4) Other area within the jurisdiction of the city.

(C) The Approving Authority shall verify prior to discharge that wastes authorized will receive suitable treatment within the provision of laws, regulations, ordinances, rules and orders of federal, state, and local governments.

(Ord. 434, passed 9-20-76)

§ 51.50 APPROVING AUTHORITY REQUIREMENTS.

(A) If discharges or proposed discharges to public sewers may:

(1) Deleteriously affect wastewater facilities, processes, equipment, or receiving water;

(2) Create a hazard to life or health; or

(3) Create a public nuisance;

The Approving Authority shall require: pretreatment to an acceptable condition for discharge to the public sewers; control the quantities and rates of discharge; and payment to cover the cost of handling and treating the wastes.

(B) The Approving Authority is entitled to determine whether a discharge or proposed discharge is included under subsection (A).

(C) The Approving Authority shall reject wastes when:

(1) Discharge is included under subsection (A); and

(2) The discharges does not meet the requirements of subsection (A).

(Ord. 434, passed 9-20-76)

§ 51.51 APPROVING AUTHORITY REVIEW AND APPROVAL.

(A) If pretreatment or control is required, the Approving Authority shall review and approve design and installation of equipment and processing.

(B) The design and installation of equipment and processes must conform to all applicable statutes, codes, ordinances, and processes.

(C) Any person responsible for discharges requiring pretreatment, flow-equalizing, or other facilities shall provide and maintain the facilities in effective operating condition at his own expense.

(Ord. 434, passed 9-20-76)

§ 51.52 REQUIREMENTS FOR TRAPS.

(A) Discharges requiring a trap include:

(1) Grease or waste containing grease in excessive amounts;

(2) Oil;

(3) Sand;

(4) Flammable wastes; and

(5) Other harmful ingredients.

(B) Any person responsible for discharges requiring a trap shall at his own expense and as required by the Approving Authority:

(1) Provide equipment and facilities of a type and capacity approved by the Approving Authority;

(2) Locate the trap in a manner that provides and ready and easy accessibility for cleaning and inspection; and

(3) Maintain the trap in effective operating condition.

(Ord. 434, passed 9-20-76)
§ 51.53 REQUIREMENTS FOR BUILDING SEWERS.

Any person responsible for discharges through a building sewer carrying industrial wastes shall, at his own expense and as required by the Approving Authority:

(A) Install an accessible and safely located control manhole;

(B) Install meters and other appurtenances to facilitate observation sampling and measurement of the waste; and

(C) Maintain the equipment and facilities. (Ord. 434, passed 9-20-76)

§ 51.54 SAMPLING AND TESTING.

(A) Sampling shall be conducted according to customarily accepted methods, reflecting the effect of constituents upon the sewage works and determining the existence of hazards to health, life, limb, and property. (Note: The particular analyses involved will determine whether a 24 hour composite sample from all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, B.O.D. and suspended solids analyses are obtained from 24 hour composites of all outfalls. Where applicable, 16 hour, 8 hour or some other period may be required. Periodic grab samples are used to determine pH.)

(B) Examination and analyses of the characteristics of waters and wastes required by this subchapter shall be:

(1) Conducted in accordance with the latest edition of Standard Methods; and

(2) Determined from suitable samples taken at the control manhole provided or other control point authorized by the Approving Authority.

(C) B.O.D. and suspended solids shall be determined from composite sampling.

(D) The city may select an independent firm or laboratory to determine flow, B.O.D., and suspended solids.

(E) The city is entitled to select the time of sampling at its sole discretion so long as at least annual samples are taken.

(Ord. 434, passed 9-20-76)

§ 51.55 PAYMENT AND AGREEMENT REQUIRED.

(A) Persons making discharges of industrial waste shall pay a charge to cover the cost of collection and treatment.

(B) When discharges of industrial waste are approved by the Approving Authority, the city or its authorized representative shall enter into an agreement or arrangement providing:

(1) Terms of acceptance by the city; and

(2) Payment by the person making the discharge.

(Ord. 434, passed 9-20-76)

§ 51.56 INDUSTRIAL WASTE CHARGE AND ADDED COSTS.

(A) If the volume or character of the waste to be treated by the city does not cause overloading the sewage collection, treatment, or disposal facilities of the city, then prior to approval, the city and the person making the discharge shall enter into an agreement which provides that the discharger pay an industrial waste charge to be determined from the schedule of charges.

(B) If the volume or character of the waste to be treated by the city requires that wastewater collection, treatment, or other disposal facilities of the city, be improved, expanded, or enlarged in order to treat the waste, then prior to approval, the city and the person making the discharge shall enter into an agreement which provides that the discharger pay in full all added costs the city may incur due to acceptance of the waste.

(C) The agreement entered into pursuant to subsection (A) of this section shall include but not be limited to:

(1) Amortization of all capital outlay for collecting and treating the waste, including new capital outlay and the proportionate part of the value of the existing system used in handling and treating the waste;

(2) Operation and maintenance costs including salaries and wages, power costs, costs of chemicals and supplies, proper allowances for maintenance, depreciation, overhead, and office expenses, and

(D) Amortization shall be completed in a one year period and payment shall include all debt service costs.

(Ord. 434, passed 9-20-76)
§ 51.57 SCHEDULE OF CHARGES.
Industrial waste charges shall be calculated by the following formula:

\[ S = V \times 8.34 \times (B.O.D. - 300) \times 0.087 + V \times 8.34 \times (S.S. - 300) \times 0.087 \]

\( S \) - Surcharge in dollars

\( V \) - Water consumption in millions of gallons during the billing period

8.34 – Pounds per gallon of water

0.087 – Units charge per pound for B.O.D. in dollars

300 – Normal B.O.D. strength index in parts per million by weight

0.087 – Units charge per pound for suspended solids in dollars

S.S. – Suspended solids strength index in parts per million by weight

300 – Normal B.O.D. strength index in parts per million by weight

§ 51.58 ADJUSTMENT OF CHARGES.

(A) The city shall adjust charges at least annually to reflect changes in the characteristics of wastewater based on the results of sampling and testing.

(B) Increases in charges shall be retroactive for two billing periods and shall continue for six billing periods unless subsequent tests determine that the charge should be further increased.

(C) The city shall review at least (annually/semiannually/other, but not less than annually) the basis for determining charges and shall adjust the unit treatment cost in the formula to reflect increases or decreases in wastewater treatment costs based on the previous year’s experience.

(D) The city shall bill the discharges by the month and shall show industrial waste charges as a separate item on the regular bill for water and sewer charges. The discharger shall pay monthly in accordance with practices existing for payment of sewer charges.

(Ord. 434, passed 9-20-76)

§ 51.59 SAVINGS CLAUSE.
A person discharging industrial wastes into public sewers prior to 9-20-76 may continue without penalty so long as he:

(A) Does not increase the quantity or quality of discharge, without permission of the Approving Authority;

(B) Has discharged the industrial waste at least six months prior to the 9-20-76; and

(C) Applies for and is granted a permit no later than 90 days after 9-20-76. (Ord. 434, passed 9-20-76)

§ 51.60 CONDITIONS OF PERMITS.

(A) The city may grant a permit to discharge to persons meeting all requirements of the savings clause provided that the person:

1. Submit an application within 90 days after 9-20-76 on forms supplied by the Approving Authority;

2. Secure approval by the Approving Authority of plans and specification for pretreatment facilities when required; and

3. Has complied with all requirements for agreements including, but not limited to, provisions for:

   (a) Payment of charges;

   (b) Installation and operation of pretreatment facilities;

   (c) Sampling and analysis to determine quantity and strength; and

4. Provides a sampling point subject to the provisions of this subchapter and approval of the Approving Authority.

(B) A person applying for a new discharges shall:

1. Meet all conditions of subsection (.A); and

2. Secure a permit prior to discharging any waste.

(Ord. 434, passed 9-20-76)
§51.61 POWER TO ENTER PROPERTY.

(A) The Superintendent and other duly authorized employees of the city bearing proper credentials and identification are entitled to enter any public or private property at any reasonable time for the purpose of enforcing this subchapter.

(B) Anyone acting under this authority shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection.

(C) Except when caused by negligence or failure of the company to maintain safe conditions, the city shall indemnify the company against loss or damage to its property by city employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the sampling operation.

(D) The Superintendent and other duly authorized employees of the city bearing proper credentials and identification are entitled to enter all private properties through which the city holds a negotiated easement for the purposes of:

1. Inspection, observation, measurement, sampling, or repair;
2. Maintenance of any portion of the sewerage system lying within the easements; and
3. Conducting any other authorized activity. All activities shall be conducted in full accordance with the terms of the negotiated easement pertaining to the private property involved.

(E) No person acting under authority of this provision may inquire into any processes including metallurgical, chemical, oil refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the public sewers.

(Ord. 434, passed 9-20-76)

§51.62 AUTHORITY TO DISCONNECT SERVICE.

(A) The city may terminate water and wastewater disposal service and disconnect an industrial customer from the system when:

1. Acids or chemical damaging to sewer lines or treatment process are released to the sewer causing rapid deterioration of these structures or interfering with proper conveyance and treatment of wastewater;
2. A governmental agency informs the city that the effluent from the wastewater treatment plant is no longer of a quality permitted for discharge to a watercourse, and it is found that the customer is delivering wastewater to the city's system that cannot be sufficiently treated or requires treatment that is not provided by the city at normal domestic treatments; or
3. The industrial customer:
   (a) Discharges industrial waste or wastewater this in violation of the permit issued by the Approving Authority;
   (b) Discharges wastewater at an uncontrolled, variable rate in sufficient quantity to cause an imbalance in the wastewater treatment system;
   (c) Fails to pay monthly bills for water and sanitary sewer services when due;
   (d) Repeats a discharge of prohibited wastes to public sewers.

(B) If service is disconnected pursuant it subsection (A) (2), the city shall:

1. Disconnect the customer;
2. Supply the customer with governmental agency’s report and provide the customer with all pertinent information; and
3. Continue disconnection until such time as the industrial customer provides additional pretreatment characteristics from his industrial wastes.

(Ord. 434, passed 9-20-76)
§ 51.63 NOTICE.

The city shall serve persons discharging in violation of this subchapter with written notice stating the nature of the violation and providing a reasonable time limit for satisfactory compliance.
(Ord. 434, passed 9-20-76)

§ 51.64 PENALTY.

(A) A person who continues prohibited discharges is guilty of a misdemeanor and upon conviction is punishable by a fine of not more than $200 for each act of violation and for each day of violation.

(B) In addition to proceeding under authority of subsection (A), the city is entitled under authority of statutes or other ordinances against a person continuing prohibited discharges.

(C) The city may pursue all criminal and civil remedies to which it is entitled under authority of statutes and ordinances against a person negligently, willfully or maliciously causing loss by tampering with or destroying public sewers or treatment facilities.

(D) In addition to sanctions provided for by this subchapter, the city is entitled to exercise sanctions provided for by the other provisions of the city for failure to pay the bill for water and sanitary sewer services when due.
(Ord. 434, passed 9-20-76)
7.1. Notice

This document has been prepared to assist those responsible for administering or improving hazardous waste management programs at small businesses. The document provides information related to allowable ways to manage hazardous waste on site. It does not prescribe in detail all required factors and considerations for hazardous waste or other environmental management programs. The U.S. Environmental Protection Agency (EPA) does not make any guarantee or assume any liability with respect to the use of any information or recommendations contained in this document. It is recommended that users of this document requiring additional information or advice consult a qualified professional.

7.2. Acknowledgements

This document was prepared under the direction of the U.S. Environmental Protection Agency’s (EPA) Small Business Division. There were numerous reviewers from government and private organizations. Additionally, many state representatives provided important advice and/or reference materials.

7.3. Suggested Improvements

Although every reasonable effort was made to make this document useful to small businesses, it is recognized that additional improvements are always possible. Comments and suggested improvements on this document are welcome and should be directed to:

U.S. Environmental Protection Agency
Small Business Division
MC 2131
401 M Street, SW
Washington, DC 20460

7.4. Introduction

Hazardous waste management and off-site disposal can be challenging and expensive for small businesses. But not all hazardous waste must be shipped off site for treatment or disposal. The EPA has identified a number of allowable ways that small businesses can minimize their hazardous waste on site. This document provides information on five of these methods. They are:

- Domestic Sewage Exclusion;
- Elementary Neutralization;
- Recycling;
- Treatment in Accumulation Containers; and
- Burning in Small Boilers and Industrial Furnaces

The EPA has delegated authority to each state to implement and enforce major portions of the hazardous waste management program. Some state requirements relative to these hazardous waste minimization methods may be more stringent than the Federal requirement.

This Guide should provide you with the information you need to answer the question of whether any of these methods will work for you. The Guide contains two principal sections. This introduction provides background information on the purpose of the Guide, a brief overview of the EPA Hazardous Waste Program as it applies to small businesses, and a summary of the five EPA allowed hazardous waste minimization methods identified above.
The second section is a state-by-state review of these allowable ways to minimize hazardous waste. The section provides summary information for each state including their definition of hazardous waste, allowances for each of the five EPA allowed waste minimization methods, and information on special state hazardous waste management program considerations. It should be noted that state requirements do not apply to small businesses located in Indian Country because states do not have jurisdictions in these areas. In these situations, the appropriate Tribal government, rather than the state, should be contacted to ensure their regulations are not more stringent than those of the EPA.

If after reviewing the information contained in this Guide, it looks like any of the five waste minimization methods could be effective at your facility, you should conduct further research at both the Federal and state level to confirm their allowance and understand the specific operational requirements. Information on whom to call and where to get further information at each state is provided in the State-by-State section of the Guide. Small businesses should remember that the waste minimization methods described in this Guide should only be conducted as part of a comprehensive hazardous waste management program that addresses all regulatory requirements.

7.4.1. Hazardous Waste Program Description

Definition of “Hazardous Waste”: EPA defines “hazardous waste” in 40 CFR 261. EPA specifies that wastes can be hazardous because they appear on one of the four lists or because they exhibit a particular hazardous characteristic. Listed and characteristic hazardous wastes are identified using codes consisting of one letter followed by three digits. Often, for small businesses, the most relevant listings are those for spent solvents (a portion of the F-list) and discarded commercial chemical products (known as the P- and U-lists). Spent solvents on the F-list are designated by the codes F001, F002, F003, F004 and F005 and include common solvents such as acetone, methanol, methylene chloride, toluene, and xylene. The P- and U-lists apply to unused, discarded commercial chemical products with a sole-active ingredient on one of the two lists. Typical P- and U-listed wastes are expired or unused chemicals or wastes from cleaning up spills of unused chemicals. P-listed wastes are special in that they are known as “acutely hazardous wastes.” The K-list specifies various industrial process wastes.

There are four hazardous waste characteristics: ignitability, corrosivity, reactivity and toxicity. Ignitable wastes are generally liquids with a flash point below 140°F. Nonchlorinated solvent wastes are usually ignitable and, sometimes, also F-listed. Corrosive wastes are aqueous solutions with a pH < 2 or > 12.5. Reactive wastes are those that are unstable, explosive, water reactive, or can generate toxic cyanide or sulfide fumes. Toxic wastes, denoted by the codes D004 through D043, contain toxic constituents (e.g., herbicides, toxic organic compounds, heavy metals) that, when subjected to the toxicity characteristic leaching procedure (TCLP), are likely to leach hazardous concentrations.

In addition to the four federal hazardous waste lists and four federal hazardous waste characteristics, state regulators sometimes add wastes to their state definition of hazardous waste. Often these wastes are added in the form of additional “state lists” and include wastes such as waste oils and polychlorinated biphenyls. Although it is less common, state regulators sometimes add additional characteristics or modify the federal characteristics to broaden the scope of waste subject to regulation as hazardous waste. Hazardous Waste Generator Status: EPA sets varying requirements for three classes of generators: large quantity generators (LQGs), small quantity generators (SQGs), and conditionally exempt small quantity generators (CESQGs). Often, states define generator status differently and set more stringent requirements. Generators are defined by site; so, your hazardous waste gets counted along with all other hazardous waste generated at the site in order to determine generator status. Sites generating not more than 100 kg of hazardous waste per month are CESQGs and are subject to very minimal regulation (in most states). Sites that generate >100 kg and <1,000 kg of hazardous waste per month are SQGs. Those sites generating more are LQGs. Also, any site that accumulates more than 1 kg of acutely hazardous waste is a LQG.

SQGs and LQGs must obtain EPA generator identification numbers and comply with numerous requirements. When waste is accumulating at the point that it was generated is said to be in a “satellite accumulation area” (SAA) and must be placed in containers that are in good condition, compatible with the waste, and labeled as to the contents. Satellite accumulation is limited to one quart of acutely hazardous waste (e.g., P-listed waste) or 55 gallons of hazardous waste. Once the waste is moved from the SAA it is marked with the date and placed in a designated accumulation area with equipment to handle emergencies such as a release or fire. Also, plans for handling such emergencies must be developed and distributed. Waste management personnel must receive RCRA training annually. SQGs can accumulate waste on site for up to 180 days or 270 days if it is to be transported over 200 miles for disposal; while LQGs can accumulate waste for up to 90 days.

7.4.2. Regulatory Allowances for On-Site Waste Minimization

EPA mandates that generators attempt to minimize the volume and toxicity of their waste. EPA prefers that generators eliminate waste generation through source reduction – source reduction is synonymous with pollution prevention (P2) and includes any activity that reduces or eliminates the generation of hazardous waste at the source. EPA specifies that when source reduction is not feasible then, when possible, waste should be recycled or treated to reduce the volume and toxicity of the waste. From a practical perspective, there are substantial incentives for source reduction and waste minimization; for example avoiding the high costs of disposing of hazardous waste and limiting liability concerns.
Certainly small businesses should look for source reduction opportunities (e.g., through careful chemical purchasing and inventory control, substitution of hazardous chemicals with less hazardous replacements, etc.). In addition, generators can sometimes treat their hazardous waste to reduce the volume or toxicity of the waste. Typically, small businesses do not have permits for treatment, storage or disposal of hazardous wastes since the RCRA permitting process is very burdensome and costly. However, RCRA does contain provisions for treating and disposing of hazardous waste on-site without a permit.

On-Site Disposal: As for disposal, there is an allowance that provides for certain wastes to be disposed of down the drain, even if they may be hazardous. In writing its RCRA regulations, EPA wanted to avoid double regulation of wastewaters that are subject to the Clean Water Act. Specifically, wastes that are mixed with domestic sewage and discharged to a publicly owned treatment works (POTW) are not regulated under RCRA (see 40 CFR 261.4(a)(1)). This exclusion is commonly called the “domestic sewage exclusion” (DSE). Essentially, a small business tied to a POTW may discharge waste down the drain as long as it is in compliance with all applicable wastewater standards. Applicable wastewater standards typically include national pretreatment standards (40 CFR 403.5), state limits and discharge limits imposed by the POTW. In some cases, wastes that meet the RCRA definition of hazardous may be acceptable for sewer disposal. Be aware that hazardous waste stored prior to discharge is regulated and dilution of waste in order to meet discharge limits is usually unacceptable. The DSE is limited in its applicability. There are no other means of on-site disposal of hazardous waste available to hazardous waste generators. On-Site Treatment: EPA and many states provide several regulatory exclusions that allow generators to treat of hazardous waste without a permit. Some of these treatment exclusions may be useful in furthering waste reduction efforts. Treating hazardous waste on-site in ways other than provided for in the regulatory exclusions subjects generators to extremely high fines (e.g., up to $50,000 per day) and possible criminal penalties (i.e., jail time). Before treating hazardous waste on site, generators must be absolutely sure that the treatment they are considering is allowed without a RCRA permit. In addition, generators must ensure that they have proper procedures, equipment and skilled employees to conduct treatment safely and effectively on-site.

EPA’s exclusions that allow generators to treat hazardous waste on-site without a permit are described below.

EPA and most state authorities clearly allow elemental neutralization (i.e., pH adjustment) of hazardous wastes. Elementary neutralization units (as defined in 40 CFR 260.10) may be used to neutralize D002 (corrosive) wastes without any worry of RCRA permitting requirements. Two important points to remember are (1) elementary neutralization only refers to pH adjustment, and (2) neutralized waste should only be discharged down the drain if it meets all applicable 2 Elementary Neutralization discharge standards (i.e., local, state and EPA limits). EPA allows generators to recycle hazardous wastes without a TSDF permit. In its regulations, EPA states that a material is “recycled” if it is used, reused or reclaimed (40 CFR 261.1). A material is “used or reused” if it is either (1) employed as an ingredient to make a product, or (2) employed in a particular function as an effective substitute for a commercial product. A material is “reclaimed” if it is processed to recover a useful product or if it is regenerated. Although EPA considers recycling a form of treatment, it does not require recyclers to obtain a treatment permit.

In 40 CFR 261.6©(1), EPA states that “the recycling process is exempt from regulation.” Generators may be able to take advantage of this exemption by distilling solvents, reclaiming precious metals (e.g., silver) from solutions, or precipitating metal salts. Generators may treat hazardous wastes in accumulation containers without obtaining a RCRA treatment permit provided the containers are managed in compliance with EPA’s container management standards in 40 CFR Part 265, Subpart I. EPA clearly states this exemption in its Federal Register notice issued March 24, 1986 (51 FR 10168) as well as in subsequent FR notices and interpretive memos. Examples of treatment in accumulation containers include precipitating heavy metals from solutions, and oxidation/reduction reactions. Remember, treatment residues may still require management as a hazardous waste and, residues destined for land disposal are subject to land disposal restriction (LDR) treatment standards (40 CFR 268). The “small-quantity on-site burner exemption” (40 CFR 266.108), which is part of the Boiler and Industrial Furnace (BIF) regulations, allows hazardous waste generators (small or large quantity) to burn small quantities of hazardous waste in an on-site boiler without a permit. The quantity of waste that can be burned onsite is determined by the “terrain-adjusted stack height” as described in the regulation and the boiler’s total fuel requirement. Some additional restrictions apply to the properties of waste that can be burned (i.e., Btu 2 Recycling 2 Treatment in Accumulation Containers 2 Small Boilers and Industrial Furnaces value) and small businesses taking advantage of this allowance are subject to simple notification and recordkeeping requirements. Before burning hazardous waste on site, consult not only with the state regulators: both the hazardous waste agency and the air pollution control agency. A 2 symbol adjacent to a specific regulatory allowance means that it is available in that state. A ½ symbol means it is not available or there are special provisions.

7.4.3. Special Considerations

In this section, the authors attempt to point out state regulations that are different and more stringent than EPA’s regulations and may impact small businesses.

7.4.4. State Contact Information

Contact with state regulators is essential since, in every state except Alaska, Iowa and Hawaii (as of this writing), EPA has delegated authority to each state to implement and enforce major portions of the hazardous waste management programs. In order to receive
authorization from EPA, states’ hazardous waste management regulations must be at least as stringent as EPA’s hazardous waste regulations. Still, one must keep up with the EPA regulations since EPA regularly publishes new hazardous waste management regulations that are enforceable by EPA until they are included in a given state’s hazardous waste regulations. The state authorization process is ongoing and can be difficult to track. Generators need to check with their states to understand what portions of the hazardous waste program are operated and enforced by state authorities and what portions EPA enforces. Relevant state hazardous waste contact information is presented in the shaded box. In all cases, this information includes an Internet address for the state agency with authority for the hazardous waste program. In addition, state hazardous waste regulations are cited and information concerning where the regulations can be obtained is presented. In most cases, state hazardous waste regulations are available on the Internet and the specific Website address for the regulations is listed.

Texas

7.4.5. Hazardous Waste Program Description

Definition of “Hazardous Waste”: Same as federal; however, TNRCC regulates various classes of non-hazardous waste (e.g., Class I, II and III: see 335.501 through 515).

Hazardous Waste Generator Status: Similar to federal (see 335.61 through 335.78).

7.4.6. Regulatory Allowances for On-Site Waste Minimization

² Domestic Sewage Exclusion See 335.1(123), definition of “solid waste.”

² Elementary Neutralization See 335.41(d)(1).

² Recycling See 335.24.

² Treatment in Accumulation Follows EPA interpretation.

Containers

² Small Boilers and Industrial Incorporates 40 CFR 266.108 by Furnaces reference. See 335.221(a)(19).

Section 335.6(i) reiterates the onetime notification requirement.

7.4.7. Special Considerations

None.

TX Natural Resource Conservation Commission (TNRCC)
Industrial and Hazardous Waste Permits Section
P.O. Box 13087, MC 129
Austin, TX 78711-3087
Phone: 512/239-6412
http://www.tnrcc.state.tx.us/

TX’s Hazardous Waste Management Regulations are in Title 30 of the Texas Administrative Code, Chapter 335 (30 TAC 335). A single free copy can be obtained from TNRCC’s Publications Office, 512/239-0028, or they can be accessed for free on the Internet at http://www.tnrcc.state.tx.us/oprd/rules/indexpdf5.html#335.