

Chapter 11. Identification and Listing of Hazardous Waste

Article 1. General

66261.1. Purpose and scope.

(a) This chapter identifies those wastes which are subject to regulation as hazardous wastes under this division and which are subject to the notification requirements of Health and Safety Code Section 25153.6. In this chapter:

- (1) Article 1 defines the terms "waste" and "hazardous waste", identifies those wastes which are excluded from regulation under this division, and establishes special management requirements for hazardous waste which is recycled and establishes rules for classifying and managing contaminated containers.
- (2) Article 2 sets forth the criteria used by the Department to identify characteristics of hazardous waste.
- (3) Article 3 identifies characteristics of hazardous waste.
- (4) Article 4 lists particular hazardous wastes.
- (5) Article 5 identifies categories of hazardous waste including RCRA hazardous waste, non-RCRA hazardous waste, extremely hazardous waste, and special waste, and establishes criteria and management standards for special waste and extremely hazardous waste.

(b) (1) The definition of waste contained in this chapter applies only to wastes that also are hazardous pursuant to this division and Chapter 6.5 of Division 20 of the Health and Safety Code. It does not apply to materials (such as non-hazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes.

(2) This chapter identifies only some of the materials which are wastes and hazardous wastes for the purposes of Health and Safety Code Sections 25185 and 25187.1. A material which is not defined as a waste or identified as a hazardous waste pursuant to this chapter, is still a waste and a hazardous waste for purposes of Health and Safety Code Sections 25185 and 25187.1, if the Department has reason to believe that a material may be a waste within the meaning of Health and Safety Code Section 25124 and a hazardous waste within the meaning of Health and Safety Code Section 25117.

NOTE: Authority cited: Sections 208, 25141, 25150 and 25159, Health and Safety Code.

Reference: Sections 25117, 25124, 25141, 25159, 25159.5, 25185 and 25187.1, Health and Safety Code and 40 CFR Section 261.1.

66261.2

66261.2. Definition of Waste.

(a) "Waste" means any discarded material^{of any form} that is not excluded by Section 66261.4(a) or that is not excluded by Health and Safety Code Section 25143.2(b) or Health and Safety Code Section 25143.2(d).

(b) A discarded material is any material which is any of the following:

- (1) Relinquished as explained in subsection (c) of this section; or
- (2) Recycled, as explained in subsection (d) of this section; or
- (3) Considered inherently waste-like, as explained in paragraph (e) of this section.

(c) A material is a waste if it is relinquished by being any of the following:

- (1) Disposed of.
- (2) Burned or incinerated.
- (3) Accumulated, stored or treated, but not recycled, before or in lieu of, being relinquished by being disposed of, burned or incinerated.

(d) A material is a waste if it is recycled, or accumulated, stored or treated before recycling, by being managed as specified in subsections (d)(1) through (d)(4) of this section.

(1) Used in a manner constituting disposal.

(A) Materials noted with an "*" in Column 1 of Table I are wastes when they are:

1. Applied to or placed on the land in a manner that constitutes disposal; or
2. Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself is a waste).

(B) However, commercial chemical Materials listed in Section 66261.33, which are discarded commercial chemical products, off-specification species, container residues, or spill residues thereof, and which are applied to the land and application to the land is their ordinary manner of use are non-RCRA hazardous wastes. Commercial chemical products which are "retrograde materials" as defined in Section 66260.10 are not wastes until they become "recyclable materials" pursuant to subsection (e) of the definition of "recyclable materials" in Section 66260.10.

(2) Burned for energy recovery.

(A) Materials noted with an "*" in Column 2 of Table 1 are wastes when they are:

1. Burned to recover energy;
2. Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself is a waste).

(B) However, commercial chemical Materials listed in Section 66261.33, which are discarded commercial chemical products, off-specification species, container residues, or spill residues thereof, and which are fuels are non-RCRA hazardous wastes. Commercial chemical products which are "retrograde materials" as defined in Section 66260.10 are not wastes until they become "recyclable materials" pursuant to subsection (e) of the definition of "recyclable materials" in Section 66260.10.

(3) Reclaimed. Materials noted with an "*" or "***" in Column 3 of Table 1 are wastes when reclaimed.

(4) Accumulated speculatively. Materials noted with an "*" or "***" in Column 4 of Table 1 are wastes when accumulated speculatively.

TABLE 1

Use	constituting	Energy	Reclamation	Speculative
	disposal	recovery/fuel	accumulation	
	(66261.2(1))	(66261.2(2))	(66261.2(3))	(66261.2(4))
	(d) ↑ (1)	(d) ↑ (2)	(d) ↑ (3)	(d) ↑ (4)
Spent				
Materials	*	*	*	*
Sludges (listed in				
Section 66261.31				
or 66261.32)	*	*	*	*
Sludges exhibiting				
a characteristic				
of hazardous				
waste	*	*	**	*
By-products				
(listed in				
Section 66261.31				
or 66261.32)	*	*	*	*
By-products				

exhibiting a
characteristic
of hazardous
waste

* * * * *

Commercial
chemical products
(listed in
Section 66261.33)

* * * * *

Note: The terms "spent materials", "sludges", and "by-products"
are defined in Section 66260.10.

*.. Except as provided in Sections 66261.2(d)(1)(B)
and 66261.2(d)(2)(B), a material designated by a single
asterisk in Column (1), (2), (3), or (4) is a waste which is
not eligible to be classified as a non-RCRA hazardous waste.

**.. Unless exempt pursuant to Health and Safety Code
Section 25143.2(d), a material designated with a double
asterisk in Column (3) or (4) which is identified as a
hazardous waste pursuant to Section 66261.3 is a non-RCRA
hazardous waste. Commercial chemical products which are
"retrograde materials" as defined in Section 66260.10 are not
wastes until they become "recyclable materials" pursuant to
subsection (e) of the definition of "recyclable materials" in
Section 66260.10.

A material is a waste if it is inherently

(e) ~~Inherently waste-like materials.~~ The following materials are ^{*Inherently waste like*} wastes when they are recycled.

(1) Hazardous Waste Nos. F020, F021 (~~unless used as an ingredient to make a product at the site of generation~~), F022, F023, F026 and F028.

(f) A material is a waste if it poses a threat to human health or the environment and meets either, or both, of the following:

(1) It is mislabeled or not adequately labeled, unless the material is correctly labeled or adequately labeled within 10 days after the material is discovered to be mislabeled or inadequately labeled.

(2) It is packaged in deteriorated or damaged containers, unless the material is contained in sound or undamaged containers within 96 hours after the containers are discovered to be deteriorated or damaged.

NOTE: Authority cited: Sections 208, 25141, 25150, and 25159, Health and Safety Code.

Reference: Sections 25120.5, 25121, 25124, 25143.2, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.2.

66261.3. Definition of Hazardous Waste.

(a) A waste, as defined in Section 66261.2, is a hazardous waste if:

(1) It is not excluded from classification as a waste or a hazardous waste under Health and Safety Code Section 25143.2(b) or 25143.2(d) or Section 66261.4; and

(2) It meets any of the following criteria:

(A) It exhibits any of the characteristics of hazardous waste identified in Article 3 of this chapter.

(B) It is listed in Article 4 of this chapter and has not been excluded by the USEPA Administrator from 40 CFR Part 261 Subpart D pursuant to 40 CFR Sections 260.20 and 260.22.

(C) It is listed in or contains a constituent listed in Appendix X to this chapter. However, the waste is not a hazardous waste if:

1. If it is determined that the waste does not meet the criteria of subsection (a)(2)(B) of this section, and

2. It is determined that the waste does not meet the criteria of subsection (a)(2)(A) of this section by:

i. Testing the waste according to the methods set forth in Article 3 of this chapter, or according to an equivalent method approved by the Department pursuant to Section 66260.21, or

ii. Applying knowledge of the hazardous properties of the waste in light of the materials or the processes used and the characteristics set forth in Article 3 of this chapter.

(D) It is a mixture of a hazardous waste that is listed in Article 4 of this chapter other than a hazardous waste listed with hazard code (T) or (H), and another waste, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Article 3 of this chapter.

(E) It is a mixture of a waste and one or more hazardous wastes listed in Article 4 of this chapter which has not been excluded by the USEPA Administrator from 40 CFR Part 261 Subpart D pursuant to 40 CFR Sections 260.20 and 260.22. However, the following mixtures of wastes and hazardous wastes listed in Article 4 of this chapter are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) of this section) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater), and:

1. One or more of the following spent solvents listed in Section 66261.31: carbon tetrachloride, tetrachloroethylene,

trichloroethylene - provided, that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or

2. One or more of the following spent solvents listed in Section 66261.31--methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents--provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

3. Heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste NO. K050); or

4. A discarded commercial chemical product, or chemical intermediate listed in Section 66261.33 arising from "de minimis" losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subsection, "de minimis" losses include those from normal material handling operations (e.g. spills from the unloading or transfer of

materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

5. Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Article 4 of this chapter, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(F) It is not classified as a hazardous waste by application of the criteria in subsections (a)(2)(A) through (a)(2)(E) of this section, but has been classified as a hazardous waste by the Department because it otherwise conforms to the definition of hazardous waste set forth in Health and Safety Code Section 25117.

(b) A waste which is not excluded from classification as a waste or hazardous waste under the provisions of Section 66261.4(b) or

Health and Safety Code Section 25143.2(b) or 25143.2(d) becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in Article 4 of this chapter, when the waste first meets the listing description set forth in Article 4 of this chapter.

(2) In the case of a mixture of waste and one or more hazardous wastes listed in Article 4 of this chapter, when the hazardous waste listed in Article 4 of this chapter is first added to the waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Article 3 of this chapter.

(1)
(c) Unless and until ^{ahw} it meets the criteria of subsection (d) of this section: ←

~~(1)~~ ^{it} A hazardous waste will remain a hazardous waste.

~~(2)~~ Except as otherwise provided in subsection (c)(2)(A) of this section, any waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate including precipitation runoff is a hazardous waste. * (However, materials that are reclaimed from wastes and that are used beneficially are not wastes and hence are not hazardous wastes under this provision unless the reclaimed

material is burned for energy recovery or used in a manner constituting disposal.)

(2)
(A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332) is not hazardous even though it is generated from the treatment, storage, or disposal of a hazardous waste, unless it exhibits one or more of the characteristics of hazardous waste.

(d) Except as provided in subsection (e) of this section, any waste described in subsection (c) of this section is not a hazardous waste if it meets both of the following criteria:

(1) The waste does not exhibit any of the characteristics of hazardous waste identified in Article 3 of this chapter.

(2) In the case of a waste which is a waste listed in Article 4 of this chapter, contains a waste listed under Article 4 of this chapter or is derived from a waste listed in Article 4 of this chapter (but not including precipitation run off), the waste also has been excluded by the USEPA Administrator from the lists of hazardous wastes in 40 CFR Part 261 Subpart D pursuant to 40 CFR Sections 260.20 and 260.22.

NOTE: Authority cited: Sections 208, 25141, 25150 and 25159, Health and Safety Code.

Reference: Sections 25117, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.3.

66261.4. Exclusions.

(a) Materials which are not wastes. The following materials are not wastes for the purpose of this chapter:

(1) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the federal Clean Water Act, as amended (33 U.S.C. Section 1342). This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.

(2) Source, special nuclear or by-product material as defined by the federal Atomic Energy Act of 1954, as amended, (42 U.S.C. Section 2011 et seq).

(3) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Section 66260.10.

(b) Wastes which are not hazardous wastes. The following wastes are not hazardous wastes:

(1) Infectious waste which consists solely of the carcasses of animals, which is not otherwise hazardous, and which is handled, stored and disposed of according to all applicable requirements established by the Department of Food and Agriculture pursuant to

provisions of Chapter 1, Part 1, Division 5 and of Chapter 5, Part 3, Division 9 of the Food and Agricultural Code.

(2) Emptied household hazardous material and household pesticide containers of one gallon or less in capacity which are drained until there is no continuous flow of liquid.

(3) Materials which are exempted or excluded from classification as solid waste or hazardous waste pursuant to 40 CFR Section 261.4 if they do not exhibit a characteristic of a hazardous waste as set forth in Article 3 of this chapter.

(c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under this division or to the notification requirements of Health and Safety Code Section 25153.6 until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

(d) Samples.

(1) Except as provided in subsection (d)(2) of this section, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this division or to the notification requirements of Health and Safety Code Section 25153.6 when:

(A) The sample is being transported to a laboratory for the purpose of testing; or

(B) The sample is being transported back to the sample collector after testing; or

(C) The sample is being stored for less than 90 days by the sample collector before transport to a laboratory for testing; or

(D) The sample is being stored in a laboratory before testing; or

(E) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

(F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(2) In order to qualify for the exemption in subsections (d)(1)(A) and (d)(1)(B) of this section, a sample collector shipping samples

to a laboratory and a laboratory returning samples to a sample collector shall:

(A) Comply with California Highway Patrol (CHP), U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

(B) Comply with the following requirements if the sample collector determines that CHP, DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

1. Assure that the following information accompanies the sample:

a. The sample collector's name, mailing address, and telephone number;

b. The laboratory's name, mailing address, and telephone number;

c. The quantity of the sample;

d. The date of shipment; and

e. A description of the sample.

2. Package the sample so that it does not leak, spill, or vaporize from its packaging.

(3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subsection (d)(1) of this section.

NOTE: Authority cited: Sections 208, 25141, 25150 and 25159, Health and Safety Code.

Reference: Sections 25117, 25141, 25143, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.4.

66261.6. Requirements for Recyclable Materials.

(a) (1) Recyclable materials are subject to the applicable requirements for generators, transporters and facilities of Articles 1 and 2 of Chapter 16 of this division, except as specified otherwise for the materials listed in subsections (a)(2), (a)(3), (a)(4), (a)(5), and (a)(6) of this section.

(2) The following recyclable materials are also regulated under the articles (of Chapter 16 of this division) specified below, and all applicable provisions in Chapters 20 and 21 of this division:

(A) [RESERVED]

(B) Recyclable materials that are subject to the requirements for the management of used oil as specified in Article 13 (commencing with Section 25250), Chapter 6.5, Division 20 of the Health and Safety Code (including fuels and certain products derived from such materials) are also regulated under the applicable provisions of Articles 4 and 6 of Chapter 16 of this division.

(C) All other fuels derived from recyclable materials are regulated under Article 4 of Chapter 16 of this division.

(D) Spent lead-acid storage batteries that are being reclaimed are regulated under Article 7 of Chapter 16 of this division.

(E) Recyclable materials that are being used in agriculture are regulated under Article 8 of Chapter 16 of this division.

(F) Waste elemental mercury that is being recycled is regulated under Article 9 of Chapter 16 of this division.

(3) The following are not subject to regulation under this division, and are not subject to the notification requirements of Health and Safety Code Section 25153.6:

(A) Materials that can be shown to be recycled by methods identified in subdivisions (b), (c) or (d) of Health and Safety Code Section 25143.2; and

(B) Scrap metal as defined in Section 66260.10.

(C) Hazardous wastes that exhibit the characteristic of toxicity specified in Section 66261.24(a)(1) and do not exhibit any other characteristic of a hazardous waste specified in Article 3 of this chapter (commencing with Section 66261.20), are not listed in Article 4 of this chapter (commencing with Section 66261.30), and that qualify as one of the materials specified in 40 CFR Section 261.6(a)(3) (incorporated by reference in Section 66260.11).

(4) The following are prohibited as specified:

(A) The use of material (e.g., waste, used oil or other material) which is contaminated with dioxin or any other hazardous waste

(other than a waste identified solely on the basis of ignitability); for dust suppression or road treatment is prohibited.

(B) The use of used oil as a road oil, dust suppressant or weed control agent is prohibited, except as provided otherwise in Health and Safety Code Section 25250.5.

(5) The following hazardous waste, when recycled, is exempt from the restrictions concerning the materials used in a manner constituting disposal or used to produce products that are applied to the land, as provided in subdivision (e) of Health and Safety Code Section 25143.2. ↩

~~(A)~~ Spent catalyst generated from the fluid catalytic cracking (FCC) unit in a petroleum refinery when it is recycled at Portland cement kilns as a substitute for alumina and silica in the kiln. The concentration of the extractable heavy metals in the FCC catalyst shall not exceed the values given in Table I-C CCWE, Section 66268.106(a) except for nickel and vanadium. The total concentration of nickel and vanadium in the FCC catalyst shall not exceed 3,000 mg/kg, combined.

(6) Hazardous wastes that meet all the following criteria are not subject to regulation under this division but, instead, are subject to regulation as specified in 40 CFR Section 261.6(a)(2) (incorporated by reference in Section 66260.11):

(A) The hazardous waste exhibits the characteristic of a hazardous waste specified in Article 3 of this chapter (commencing with Section 66261.20);

(B) The hazardous waste does not exhibit any other characteristic of a hazardous waste specified in Article 3 of this chapter (commencing with Section 66261.20);

(C) The hazardous waste is not listed in Article 4 of this chapter (commencing with Section 66261.30); and

(D) The hazardous waste qualifies for regulation pursuant to 40 CFR Section 261.6(a)(2) (incorporated by reference in Section 66260.11):

NOTE: Authority cited: Sections 208, 25150, 25159 and 25250.22, Health and Safety Code.

Reference: Sections 25143, 25143.2, 25159.5 and 25250.5, Health and Safety Code; 40 CFR Sections 261.6 and 266.23.

66261.7. Contaminated containers.

(a) Except as provided in Health and Safety Code Section 25143.2(d)(5), Section 66300(e)(5) and subsections (d), (e) and (f) of this section, any container, or inner liner removed from a container, which previously held a hazardous waste or a hazardous material and which is empty as defined in subsection (b) of this section shall be exempt from regulation under this chapter and Chapter 6.5 of Division 20 of the Health and Safety Code if it is managed in accordance with subsection (c) of this section.

(b) A container, or an inner liner removed from a container, which previously held a hazardous waste or a hazardous material is empty if it meets the criteria below:

(1) The container or the inner liner removed from a container is empty as defined in 40 CFR Section 261.7(b) (revised as of 7/1/90), and

(2) The container or the inner liner removed from a container has been emptied by the generator as much as possible using methods commonly employed to remove waste or material from containers or inner liners, so that:

(A) If the material which the container or inner liner held is pourable, no material can be poured or drained from the container or inner liner when the container or inner liner is held in any orientation (e.g., tilted, inverted, etc.); or

(B) If the material which the container or inner liner held is not pourable, no material or waste remains in the container or inner liner that can feasibly be removed by scraping and chipping.

(c) To qualify for exemption under this section, an empty container or an inner liner removed from a container must be managed by one of the following methods:

(1) For a container of five gallons or less in capacity, or inner liner removed from a container of five gallons or less in capacity, by puncturing, shredding, crushing, or otherwise changing the container or inner liner to prevent subsequent use or reuse, and disposing of it at a solid waste facility, so long as the container or inner liner is packaged and transported in accordance with applicable U.S. Department of Transportation regulations; or

(2) For any container or inner liner, by puncturing, shredding, crushing, or otherwise changing the container or inner liner to prevent subsequent use or reuse, and reclaiming its scrap value onsite or shipping the container or inner liner to a person who reclaims its scrap value, so long as the container or inner liner is packaged and transported in accordance with applicable U.S. Department of Transportation regulations; or

(3) For any container or inner liner, by reconditioning or remanufacturing the container or inner liner onsite pursuant to 49 CFR Section 173.28 (c) and (d) (revised at 55 FR 52402 - 52729) for subsequent reuse, or shipping the container or inner liner to a

person who reconditions or remanufactures the container or inner liner pursuant to 49 CFR Section 173.28 (c) and (d) (revised at 55 FR 52402 - 52729)

(d) Except as provided in subsections (f)(2) and (f)(3) of this section, emptied household hazardous material and pesticide containers of one gallon or less in capacity, which are drained until there is no continuous flow of liquid, are not subject to the provisions of this chapter.

(e) Except as provided in subsection (f), a compressed gas cylinder is exempt from regulation under this chapter and Chapter 6.5 of Division 20 of the Health and Safety Code when the pressure in the container approaches atmospheric pressure if the container is handled and reused in compliance with applicable State and federal law.

(f) The following containers are not exempt from regulation under this chapter or Chapter 6.5 of Division 20 of the Health and Safety Code pursuant to this section:

(1) Containers made of wood, paper, cardboard, fabric, or any other similarly absorptive material if the container was in direct contact with a hazardous waste or a hazardous material.

(2) Spent aerosol containers.

(3) Compressed gas cylinders which cannot be reused or whose reuse is prohibited.

(g) Any container, or inner liner removed from a container, which previously held a hazardous waste or hazardous material and which is not empty as defined in subsection (b) of this section, or otherwise exempt from regulation as a hazardous waste under this chapter or Chapter 6.5 of Division 20 of the Health and Safety Code (commencing with Section 25100), shall be managed as a hazardous waste in accordance with this chapter and Chapter 6.5 of Division 20 of the Health and Safety Code (commencing with Section 25100).

(h) A person who treats a container or inner liner of five gallons or less at an onsite facility pursuant to subsection (b) of this section is authorized, for purposes of Health and Safety Code Section 25201, to perform such activities if any rinsate or other residue generated by the activities is completely captured, classified in accordance with the provisions of Section 66262.11 and managed accordingly.

NOTE: Authority cited: Sections 208, 25141, and 25150 Health and Safety Code.

Reference: Sections 25141, 25150, 25159.5, and 25143.2(d), Health and Safety Code, 40 CFR Section 261.7.

Article 2. Criteria for Identifying the Characteristics of
Hazardous Waste

66261.10. Criteria for identifying the characteristics of
hazardous waste.

(a) The Department shall identify and define a characteristic of
hazardous waste in Article 3 of this chapter only upon determining
that:

(1) A waste that exhibits the characteristic may:

(A) Cause, or significantly contribute to, an increase in mortality
or an increase in serious irreversible, or incapacitating
reversible, illness; or

(B) Pose a substantial present or potential hazard to human health
or the environment when it is improperly treated, stored,
transported, disposed of or otherwise managed; and

(2) The characteristic can be:

(A) Measured by an available standardized test method which is
reasonably within the capability of generators of waste or private
sector laboratories that are certified by the Department pursuant
to Chapter 44 of this division and available to serve generators of
waste; or

(B) Reasonably detected by generators of waste through their knowledge of their waste.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.10.

Article 3. Characteristics of Hazardous Waste

66261.20. General.

(a) A waste, as defined in Section 66261.2, which is not excluded from regulation as a hazardous waste pursuant to Section 66261.4(b), is a hazardous waste if it exhibits any of the characteristics identified in this article.

(b) A waste which is identified as a hazardous waste pursuant to one or more of the characteristics set forth in Section 66261.21, 66261.22(a)(1), 66261.22(a)(2), 66261.23 or 66261.24(a)(1) is assigned the EPA Hazardous Waste Number set forth in this article for each characteristic that is applicable to that waste. These numbers shall be used in complying with the notification requirements of Health and Safety Code Section 25153.6 and, where applicable, in the recordkeeping and reporting requirements under Chapters 12 through 15, 18 and 20 of this division.

(c) Sampling and sample management of wastes and other materials for analysis and testing pursuant to this article shall be in accord with the sampling planning, methodology and equipment, and the sample processing, documentation and custody procedures specified in Chapter Nine of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11 of this chapter). In addition to the sampling methods in Chapter Nine of SW-846, the Department will consider

samples obtained using any of the other applicable sampling methods specified in Appendix I of this chapter to be representative samples.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.20.

66261.21. Characteristic of Ignitability.

(a) A waste exhibits the characteristic of ignitability if representative samples of the waste have any of the following properties:

(1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see Section 66260.11), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see Section 66260.11), or as determined by an equivalent test method approved by the Department pursuant to Section 66260.21.

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(3) It is an ignitable compressed gas as defined in 49 CFR Section 173.300 (as amended September 30, 1982) and as determined by the test methods described in that regulation or equivalent test methods approved by the Department pursuant to Section 66260.21.

(4) It is an oxidizer as defined in 49 CFR Section 173.151 (as amended May 31, 1979).

(b) A waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.21.

66261.22. Characteristic of Corrosivity.

(a) A waste exhibits the characteristic of corrosivity if representative samples of the waste have any of the following properties:

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using either the EPA test method for pH or an equivalent test method approved by the Department pursuant to Section 66260.21. The EPA test method for pH is specified as Method 9040 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11).

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11) or an equivalent test method approved by the Department pursuant to Section 66260.21.

(3) It is not aqueous and, when mixed with an equivalent weight of water, produces a solution having a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using either Method 9040 in "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods," SW-846, 3rd edition, U.S.

Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11) or an equivalent test method approved by the Department pursuant to 66260.21.

(4) It is not a liquid and, when mixed with an equivalent weight of water, produces a liquid that corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11) or an equivalent test method approved by the Department pursuant to 66260.21.

(b) A waste that exhibits the characteristic of corrosivity specified in subsection (a)(1) or (a)(2) of this section has the EPA Hazardous Waste Number of D002.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.22.

66261.23. Characteristic of Reactivity.

(a) A waste exhibits the characteristic of reactivity if representative samples of the waste have any of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating.

(2) It reacts violently with water.

(3) It forms potentially explosive mixtures with water.

(4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(8) It is a forbidden explosive as defined in 49 CFR Section 173.51 (as amended April 20, 1987), or a Class A explosive as defined in 49 CFR Section 173.53 (as amended April 5, 1967) or a Class B explosive as defined in 49 CFR Section 173.88 (as amended May 19, 1980).

(b) A waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.23.

66261.24. Characteristic of Toxicity.

(a) A waste exhibits the characteristic of toxicity if representative samples of the waste have any of the following properties:

(1) When using the Toxicity Characteristic Leaching Procedure (TCLP) in Appendix I of Chapter 18 of this division or equivalent methods approved by the Department under the procedures set forth in Section 66260.21, the extracts from representative samples of the waste contain any of the contaminants listed in Table I of this section at a concentration equal to or greater than the respective value given in that table unless the waste is excluded from classification as a solid waste or hazardous waste or is exempted from regulation pursuant to 40 CFR Section 261.4. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this section.

(A) A waste that exhibits the characteristic of toxicity pursuant to subsection (a)(1) of this section has the EPA Hazardous Waste Number specified in Table I of this section which corresponds to the toxic contaminant causing it to be hazardous.

(B) Table I-Maximum Concentration of Contaminants for the Toxicity Characteristic

Hazardous Waste Number	Contaminant	Abstracts Service Number	Regulatory Level Mg/l
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	200.0 ¹
D024	m-Cresol	108-39-4	200.0 ¹
D025	p-Cresol	106-44-5	200.0 ¹
D026	Cresol		200.0 ¹
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0

D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0 ²
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

¹ If o-, m- and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

² Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

(2) It contains a substance listed in subsections (a)(2)(A) or (a)(2)(B) of this section at a concentration in milligrams per liter of waste extract, as determined using the Waste Extraction Test (WET) described in Appendix II of this chapter, which equals or exceeds its listed soluble threshold limit concentration or at a concentration in milligrams per kilogram in the waste which equals or exceeds its listed total threshold limit concentration.

(A) Table II - List of Inorganic Persistent and Bioaccumulative Toxic Substances and Their Soluble Threshold Limit Concentration

(STLC) and Total Threshold Limit Concentration (TTLC) Values.

Substance ^{**}	STLC	TTLC
	mg/l	Wet-Weight mg/kg
Antimony and/or antimony compounds	15	500
Arsenic and/or arsenic compounds	5.0	500
Asbestos		1.0
		(as percent)
Barium and/or barium compounds (excluding barite)	100	10,000 ⁺⁺
Beryllium and/or beryllium compounds	0.75	75
Cadmium and/or cadmium compounds	1.0	100
Chromium (VI) compounds	5	500
Chromium and/or chromium (III) compounds	5 ^{**}	2,500
Cobalt and/or cobalt compounds	80	8,000

Copper and/or copper compounds	25	2,500
Fluoride salts	180	18,000
Lead and/or lead compounds	5.0	1,000
Mercury and/or mercury compounds	0.2	20
Molybdenum and/or molybdenum compounds	350	3,500
Nickel and/or nickel compounds	20	2,000
Selenium and/or selenium compounds	1.0	100
Silver and/or silver compounds	5	500
Thallium and/or thallium compounds	7.0	700
Vanadium and/or vanadium compounds	24	2,400
Zinc and/or zinc compounds	250	5,000

* STLC and TTLC values are calculated on the concentrations of the elements, not the compounds.

** If the soluble chromium, as determined by the TCLP set forth in Appendix I of Chapter 18 of this division, is less than 5 mg/l, and the soluble chromium, as determined by the procedures set forth in Appendix II of Chapter 11, equals or exceeds 560 mg/l and the waste is not otherwise identified as a RCRA hazardous waste pursuant to Section 66261.100, then the waste is a non-RCRA hazardous waste.

+ In the case of asbestos and elemental metals, the specified concentration limits apply only if the substances are in a friable, powdered or finely divided state. Asbestos includes

chrysotile, amosite, crocidolite, tremolite, anthophyllite,
and actinolite.

++ Excluding barium sulfate.

(B) Table III - List of Organic Persistent and Bioaccumulative
Toxic Substances and Their Soluble Threshold Limit Concentration
(STLC) and Total Threshold Limit Concentration (TTLC) Values.

Substance	STLC	TTLC
	mg/l	Wet Weight mg/kg
Aldrin	0.14	1.4
Chlordane	0.25	2.5
DDT, DDE, DDD	0.1	1.0
2,4-Dichlorophenoxyacetic acid	10	100
Dieldrin	0.8	8.0
Dioxin (2,3,7,8-TCDD)	0.001	0.01
Endrin	0.02	0.2
Heptachlor	0.47	4.7
Kepone	2.1	21
Lead compounds, organic	--	13
Lindane	0.4	4.0
Methoxychlor	10	100
Mirex	2.1	21
Pentachlorophenol	1.7	17

Polychlorinated biphenyls (PCBs)	5.0	50
Toxaphene	0.5	5
Trichloroethylene	204	2,040
2,4,5-Trichlorophenoxypropionic acid	1.0	10

(3) It has an acute oral LD₅₀ less than 5,000 milligrams per kilogram.

(4) It has an acute dermal LD₅₀ less than 4,300 milligrams per kilogram.

(5) It has an acute inhalation LC₅₀ less than 10,000 parts per million as a gas or vapor.

(6) It has an acute aquatic 96-hour LC₅₀ less than 500 milligrams per liter when measured in soft water (total hardness 40 to 48 milligrams per liter of calcium carbonate) with fathead minnows (Pimephales promelas), rainbow trout (Salmo gairdneri) or golden shiners (Notemigonus crysoleucas) according to procedures described in Part 800 of the "Standard Methods for the Examination of Water and Wastewater (16th Edition)", American Public Health Association, 1985 and "Static Acute Bioassay Procedures for Hazardous Waste Samples," California Department of Fish and Game, Water Pollution Control Laboratory, revised November 1988 (incorporated by reference, see Section 66260.11), or by other test methods or test fish approved by the Department, using test samples prepared or meeting the conditions for testing as prescribed in subdivisions

(c) and (d) of Appendix II of this chapter, and solubilized, suspended, dispersed or emulsified by the cited procedures or by other methods approved by the Department.

(7) It contains any of the following substances at a single or combined concentration equal to or exceeding 0.001 percent by weight:

- (A) 2-Acetylaminofluorene (2-AAF)
- (B) Acrylonitrile
- (C) 4-Aminodiphenyl
- (D) Benzidine and its salts
- (E) bis (Chloromethyl) ether (BCME)
- (F) Methyl chloromethyl ether
- (G) 1,2-Dibromo-3-chloropropane (DBCP)
- (H) 3,3'-Dichlorobenzidine and its salts (DCB)
- (I) 4-Dimethylaminoazobenzene (DAB)
- (J) Ethyleneimine (EL)
- (K) alpha-Naphthylamine (1-NA)

- (L) beta-Naphthylamine (2-NA)
- (M) 4-Nitrobiphenyl (4-NBP)
- (N) N-Nitrosodimethylamine (DMN)
- (O) beta-Propiolactone (BPL)
- (P) Vinyl chloride (VCM).

(8) It has been shown through experience or testing to pose a hazard to human health or environment because of its carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties or persistence in the environment.

(b) A waste containing one or more materials which exhibit the characteristic of toxicity because the materials have the property specified in subsection (a) (5) of this section may be classified as nonhazardous pursuant to Section 66260.200 if the waste does not exhibit any other characteristic of this article and is not listed in Article 4 of this chapter and its head space vapor contains no such toxic materials in concentrations exceeding their respective acute inhalation LC_{50} or their LC_{LO} . The head space vapor of a waste shall be prepared, and two milliliters of it shall be sampled using a five milliliter gas-tight syringe, according to Method 5020 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982 (incorporated by reference, see Section 66260.11).

The quantity in milligrams of each material, which exhibits the characteristic of toxicity because it has the property specified in subsection (a)(5) of this section, in the sampling syringe shall be determined by comparison to liquid standard solutions according to the appropriate gas chromatographic procedures in Method 8010, 8015, 8020, 8030 or 8240 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11). The concentration of each material in the head space vapor shall be calculated using the following equation:

$$C_A = \frac{Q_A}{MW} \times \frac{29.8 \text{ ml}}{\text{mmole}} \times \frac{1}{2 \times 10^{-6} \text{ M}^3}$$

where C (in parts per million) is the concentration of material A in head space vapor, Q (in milligrams) is the quantity of material A in sampling syringe and MW (in milligrams per millimole) is the molecular weight of material A. Where an acute inhalation LC₅₀ is not available, an LC₅₀ measured for another time (t) may be converted to an eight-hour value with the following equation:

$$\text{Eight-hour LC}_{50} = (t/8) \times (t\text{-hour LC}_{50}).$$

(c) A waste containing one or more materials which exhibit the characteristic of toxicity because the materials have either of the properties specified in subsection (a)(3) or (a)(4) of this section may be classified as nonhazardous pursuant to Section 66260.200 if

the waste does not exhibit any other characteristic of this article and is not listed in Article 4 of this chapter and the calculated oral LD₅₀ of the waste mixture is greater than 5,000 milligrams per kilogram and the calculated dermal LD₅₀ is greater than 4,300 milligrams per kilogram by the following equation:

$$\text{Calculated oral or dermal LD}_{50} = \frac{100}{\sum_{x=1}^n \frac{\%A_x}{T_{Ax}}}$$

where %A_x is the weight percent of each component in the waste mixture and T_{Ax} is the acute oral or dermal LD₅₀ or the acute oral LD_{LO} of each component.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.24.

Article 4. Lists of RCRA Hazardous Wastes

66261.30. General.

(a) A waste is a RCRA hazardous waste if it is listed in this article, unless it has been excluded from this list pursuant to 40 CFR Sections 260.20 and 260.22 or is categorized as a non-RCRA hazardous waste pursuant to Section 66261.101. Wastes shall only be listed in this article if they are listed in 40 CFR Part 261 Subpart D.

(b) The Department will indicate the USEPA Administrator's basis for listing the classes or types of wastes listed in this article by employing one or more of the following Hazard Codes:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

Appendix VII of this chapter identifies the constituent which caused the USEPA Administrator to list the waste as a Toxic Waste (T) as included in Sections 66261.31 and 66261.32.

(c) Each RCRA hazardous waste listed in this article is assigned an EPA Hazardous Waste Number which precedes the name of the waste. This number shall be used in complying with the notification

requirements of Health and Safety Code Section 25153.6 and certain recordkeeping and reporting requirements under Chapters 12 through 15, 18, and 20 of this division.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25141, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.30.

66261.31. Hazardous Wastes from Non-Specific Sources.

The following wastes are listed hazardous wastes from non-specific sources unless they are excluded pursuant to 40 CFR Sections 260.20 and 260.22.

EPA

Hazardous Waste No.	Hazardous Waste	Hazard Code
------------------------	-----------------	----------------

F001....The following spent halogenated solvents used in (T)
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.

F002....The following spent halogenated solvents:

(T)

Tetrachloroethylene, methylene chloride,
trichloroethylene, 1,1,1-trichloroethane, chlorobenzene,

1,1,2-trichloro-1,2,2-trifluoroethane,
ortho-dichlorobenzene, 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.

F003....The following spent non-halogenated solvents:

(I)*

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:

(T)

Cresols 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:

(I,T)

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 (T)
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.
- F019....Wastewater treatment sludges from the chemical (T)
conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.
- F007....Spent cyanide plating bath solutions from (R,T)
electroplating operations.
- F008....Plating bath residues from the bottom of plating (R,T)
baths from electroplating operations where cyanides are used in the process.
- F009....Spent stripping and cleaning bath solutions from (R,T)
electroplating operations where cyanides are used in the process.
- F010....Quenching bath residues from oil baths from metal (R,T)
heat treating operations where cyanides are used in the process.
- F011....Spent cyanide solutions from salt bath pot (R,T)
cleaning from metal heat treating operations.
- F012....Quenching waste water treatment sludges from (T)
metal heat treating operations where cyanides are used in the process.
- F020....Wastes (except wastewater and spent carbon from (H)
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 and spent carbon from (H)

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 and spent carbon from (H)

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 and spent carbon from (H)

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 but not limited to, (T)

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 Section 66261.31 or 66261.32.).

F025....Condensed light ends, spent filters and filter aids, (T)

and spent dessicant 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 and spent carbon from (H)

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-, (H)

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 (T)

thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

F039....Leachate resulting from the treatment, storage, or (T)

disposal of wastes classified by more than one waste code under Article 4 of this chapter, or from a mixture of wastes classified under Articles 3 and 4 of this chapter. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F026, F027, and/or F028).

*(I) specifies mixtures containing ignitable constituents.

(I,T) specifies mixtures containing ignitable and toxic constituents.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.31.

66261.32. Hazardous Wastes from Specific Sources.

The following wastes are listed hazardous wastes from specific sources unless they are excluded pursuant to 40 CFR Sections 260.20 and 260.22.

EPA Hazardous Waste Number	Hazardous Waste	Hazard Code
-------------------------------------	-----------------	----------------

Wood preservation:

K001....Bottom sediment sludge from the treatment of (T)
wastewaters from wood preserving processes that use
creosote and/or pentachlorophenol.

Inorganic pigments:

K002....Wastewater treatment sludge from the production of (T)
chrome yellow and orange pigments.

K003....Wastewater treatment sludge from the production of (T)
molybdate orange pigments.

K004....Wastewater treatment sludge from the production of (T)
zinc yellow pigments.

K005....Wastewater treatment sludge from the production of (T)
chrome green pigments.

K006....Wastewater treatment sludge from the production of (T)
chrome oxide green pigments (anhydrous and

hydrated).

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

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

Organic chemicals:

K009....Distillation bottoms from the production of (T)
acetaldehyde from ethylene.

K010....Distillation side cuts from the production of (T)
acetaldehyde from ethylene.

K011....Bottom stream from the wastewater stripper in the (R,T)
production of acrylonitrile.

K013....Bottom stream from the acetonitrile column in the (R,T)
production of acrylonitrile.

K014....Bottoms from the acetonitrile purification column (T)
in the production of acrylonitrile.

K015....Still bottoms from the distillation of benzyl (T)
chloride.

K016....Heavy ends or distillation residues from the (T)
production of carbon tetrachloride.

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

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

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

K020....Heavy ends from the distillation of vinyl chloride (T)

in vinyl chloride monomer production.

- K021....Aqueous spent antimony catalyst waste from (T)
fluoromethanes production.
- K022....Distillation bottom tars from the production of (T)
phenol/acetone from cumene.
- K023....Distillation light ends from the production of (T)
phthalic anhydride from naphthalene.
- K024....Distillation bottoms from the production of (T)
phthalic anhydride from naphthalene.
- K093....Distillation light ends from the production of (T)
phthalic anhydride from ortho-xylene.
- K094....Distillation bottoms from the production of (T)
phthalic anhydride from ortho-xylene.
- K025....Distillation bottoms from the production of (T)
nitrobenzene by the nitration of benzene.
- K026....Stripping still tails from the production of (T)
methyl ethyl pyridines.
- K027....Centrifuge and distillation residues from toluene (R,T)
diisocyanate production.
- K028....Spent catalyst from the hydrochlorinator reactor (T)
in the production of 1,1,1-trichloroethane.
- K029....Waste from the product steam stripper in the (T)
production of 1,1,1-trichloroethane.
- K095....Distillation bottoms from the production of (T)
1,1,1-trichloroethane.
- K096....Heavy ends from the heavy ends column from the (T)
production of 1,1,1-trichloroethane.
- K030....Column bottoms or heavy ends from the combined (T)

production of trichloroethylene and perchloroethylene.

- K083....Distillation bottoms from aniline production. (T)
- K103....Process residues from aniline extraction from (T)
the production of aniline.
- K104....Combined wastewater streams generated from (T)
nitrobenzene/aniline production.
- K085....Distillation or fractionation column bottoms from (T)
the production of chlorobenzenes.
- K105....Separated aqueous stream from the reactor product (T)
washing step in the production of chlorobenzenes.
- K107....Column bottoms from product separation (C,T)
from the production of 1,1-dimethylhydrazine
(UDMH) from carboxylic acid hydrazines.
- K108....Condensed column overheads from product (I,T)
separation and condensed reactor vent gases from
the production of 1,1-dimethylhydrazine (UDMH)
from carboxylic acid hydrazides.
- K109....Spent filter cartridges from product (T)
purification from the production of
1,1-dimethylhydrazine (UDMH) from carboxylic acid
hydrazides.
- K110....Condensed column overheads from intermediate (T)
separation from the production of 1,1
dimethylhydrazine (UDMH) from carboxylic acid
hydrazides.
- K111....Product washwaters from the production of (C,T)
dinitrotoluene via nitration of toluene.
- K112....Reaction by-product water from the drying column (T)

in the production of toluenediamine via
hydrogenation of dinitrotoluene.

K113....Condensed liquid light ends from the purification (T)
of toluenediamine in the production of
toluenediamine via hydrogenation of
dinitrotoluene.

K114....Vicinals from the purification of toluenediamine (T)
in the production of toluenediamine via
hydrogenation of dinitrotoluene.

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

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

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

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

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

Inorganic chemicals:

K071....Brine purification muds from the mercury cell (T)

process in chlorine production, where separately prepurified brine is not used.

K073....Chlorinated hydrocarbon waste from the purification (T)
step of the diaphragm cell process using graphite
anodes in chlorine production.

K106....Wastewater treatment sludge from the mercury cell (T)
process in chlorine production.

Pesticides:

K031....By-product salts generated in the production of (T)
MSMA and cacodylic acid.

K032....Wastewater treatment sludge from the production (T)
of chlordane.

K033....Wastewater and scrub water from the chlorination (T)
of cyclopentadiene in the production of chlordane.

K034....Filter solids from the filtration of (T)
hexachlorocyclopentadiene in the production of
chlordane.

K097....Vacuum stripper discharge from the chlordane (T)
chlorinator in the production of chlordane.

K035....Wastewater treatment sludges generated in the (T)
production of creosote.

K036....Still bottoms from toluene reclamation (T)
distillation in the production of disulfoton.

K037....Wastewater treatment sludges from the production (T)
of disulfoton.

K038....Wastewater from the washing and stripping of (T)
phorate production.

- K039....Filter cake from the filtration of (T)
diethylphosphorodithioic acid in the production of
phorate.
- K040....Wastewater treatment sludge from the production of (T)
phorate.
- K041....Wastewater treatment sludge from the production of (T)
toxaphene.
- K098....Untreated process wastewater from the production (T)
of toxaphene.
- K042....Heavy ends or distillation residues from the (T)
distillation of tetrachlorobenzene in the
production of 2,4,5-T.
- K043....2,6-Dichlorophenol waste from the production (T)
of 2,4-D.
- K099....Untreated wastewater from the production (T)
of 2,4-D.
- K123....Process wastewater (including supernates, (T)
filtrates, and washwaters) from the production of
ethylenebisdithiocarbamic acid and its salt.
- K124....Reactor vent scrubber water from the production (C,T)
of ethylenebisdithiocarbamic acid and its salts.
- K125....Filtration, evaporation, and centrifugation (T)
solids from the production of ethylenebisdithiocarbamic
acid and its salts.
- K126....Baghouse dust and floor sweepings in milling and (T)
packaging operations from the production or formulation
of ethylenebisdithiocarbamic acid and its salts.
- K131....Wastewater from the reactor and spent sulfuric acid (C,T)

from the acid dryer from the production of methyl bromide.

K132....Spent absorbent and wastewater separator solids (T)
from the production of methyl bromide.

Explosives:

K044....Wastewater treatment sludges from the manufacturing (R)
and processing of explosives.

K045....Spent carbon from the treatment of wastewater (R)
containing explosives.

K046....Wastewater treatment sludges from the (T)
manufacturing, formulation and loading of
lead-based initiating compounds.

K047....Pink/red water from TNT operations. (R)

Petroleum refining:

K048....Dissolved air flotation (DAF) float from the (T)
petroleum refining industry.

K049....Slop oil emulsion solids from the petroleum (T)
refining industry.

K050....Heat exchanger bundle cleaning sludge from the (T)
petroleum refining industry.

K051....API separator sludge from the petroleum refining (T)
industry.

K052....Tank bottoms (leaded) from the petroleum refining (T)
industry.

Iron and steel:

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

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

Primary copper:

K064....Acid plant blowdown slurry/sludge resulting from (T)
the thickening of blowdown slurry from primary copper
production.

Primary lead:

K065....Surface impoundment solids contained in and dredged (T)
from surface impoundments at primary lead smelting
facilities.

Primary zinc:

K066....Sludge from treatment of process wastewater and/or (T)
acid plant blowdown from primary zinc production.

Primary aluminum:

K088....Spent potliners from primary aluminum reduction. (T)

Ferroalloys:

K090....Emission control dust or sludge from ferrochromium- (T)
silicon production.

K091....Emission control dust or sludge from ferrochromium (T)
production.

Secondary lead:

K069....Emission control dust/sludge from secondary lead (T)
smelting.

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

Veterinary pharmaceuticals:

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

K101....Distillation tar residues from the distillation (T)
of aniline-based compounds in the production of
veterinary pharmaceuticals from arsenic or
organo-arsenic compounds.

K102....Residue from the use of activated carbon for (T)
decolorization in the production of veterinary
pharmaceuticals from arsenic or organo-arsenic
compounds.

Ink formulation:

K086....Solvent washes and sludges, caustic washes and (T)
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 (T)

K087...Decanter tank tar sludge from coking operations (T)

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.32.

66261.33. 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 Section 66261.2(b).

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) of this section. 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 subsection (e) or (f) of this section. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in subsection (e) or (f) of this section, such waste will be listed in either Section 66261.31 or 66261.32 or will be identified as a hazardous waste by the characteristics set forth in Article 3 of this chapter.

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met

specifications, would have the generic name listed in subsection (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 subsections (e) or (f) of this section.

(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 subsection (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 subsection (e) or (f) of this section.

(e) The following commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in subsections (a) through (d) of this section, are Acute Hazardous Wastes (H). 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

EPA

Hazardous Chemical
Waste No. Abstracts No. Substances

P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate (1-), bis (cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl
P036	696-28-6	Arsonous dichloride, phenyl-

P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P001	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium dust
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, o-[(methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide Ca(CN) ₂
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl) thiourea
P027	542-76-7	3-Chloropropionitrile

P029	544-92-3	Copper cyanide Cu(CN)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropyl fluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene,1,2,3,4- ,10,10-hexachloro-1,4,4a,5,8,8a- hexahydro-, (1alpha,4alpha,4abeta, 5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b] oxirene,3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha, 7beta,7aalpha)-
P051	¹ 72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]

oxirene, 3,4,5,6,9,9-hexachloro-
 1a,2,2a,3,6,6a,7,7a-
 octahydro-, (1aalpha,2beta,
 2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-,

and metabolites

- P044 60-51-5 Dimethoate
- P046 122-09-8 alpha, alpha-Dimethylphenethylamine
- P047 ¹534-52-1 4,6-Dinitro-o-cresol and salts
- P048 51-28-5 2,4-Dinitrophenol
- P020 88-85-7 Dinoseb
- P085 152-16-9 Diphosphoramidate, octamethyl-
- Pl11 107-49-3 Diphosphoric acid, tetraethyl ester
- P039 298-04-4 Disulfoton
- P049 541-53-7 Dithiobiuret
- P050 115-29-7 Endosulfan
- P088 145-73-3 Endothall
- P051 72-20-8 Endrin
- P051 72-20-8 Endrin, and metabolites
- P042 51-43-4 Epinephrine
- P031 460-19-5 Ethanedinitrile
- P066 16752-77-5 Ethanimidothioic acid,
 N-[[(methylamino)
 carbonyl] oxy]-, methyl ester

- Pl01 107-12-0 Ethyl cyanide
- P054 151-56-4 Ethyleneimine
- P097 52-85-7 Famphur
- P056 7782-41-4 Fluorine
- P057 640-19-7 Fluoroacetamide

P058	62-74-8	Fluoroacetic acid, sodium salt
P065	628-86-4	Fulminic acid, mercury(2+)salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
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
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
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-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen, 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-
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
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl, Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	¹ 54-11-5	Nicotine and salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramidate
P087	20816-12-0	Osmium oxide OsO ₃ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	¹ 534-52-1	Phenol, 2-methyl-4,6-dinitro- and salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate

P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S- [2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1- methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O- (4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O- pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4- [(dimethylamino) sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester
Pl10	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O- [(methylamino)carbonyl]oxime
Pl01	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-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S) and salts
P114	12039-52-0	Selenious acid, dithallium (1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide Na(CN)
P107	1314-96-1	Strontium sulfide SrS
P108	¹ 57-24-9	Strychnidin-10-one, and salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	¹ 57-24-9	Strychnine and salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
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_2O_3

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	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
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-
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_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	¹ 81-81-2	Warfarin, and salts, when present at concentrations greater than 0.3%
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2 , when present at concentrations greater than 10% (R,T)

¹CAS Number given for parent compound only.

(f) The following commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical

products referred to in subsections (a) through (d) of this section, are Toxic Wastes (T). 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:

EPA

Hazardous Waste No.	Chemical Abstracts No.	Substances
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl
U240	'94-75-7	Acetic acid, (2-4-dichlorophenoxy)-, salts and esters
U112	141-78-6	Acetic acid, ethyl ester (I)
U144	301-04-2	Acetic acid, lead (2+) salt
U214	563-68-8	Acetic acid, thallium (1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene

U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino(2',3':3,4)pyrrolo [1,2-a]indole-4,7-dione,6- amino- 8-[(aminocarbonyl)oxy)methyl]- 1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5- methyl-[1aS-(1aalpha, 8beta, 8aalpha, 8balpha)]-
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3- methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl- 2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis [N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride

U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha- (4-chlorophenyl)- alpha-hydroxy, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl) amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis (2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-

U060	72-54-8	Benzene, 1, 1'-(2,2-dichloroethylidene)bis [4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2- trichloroethylidene)bis [4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis [4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	¹ 81-07-2	1,2-Benzisothiazol-3-(2H)-one, 1,1-

dioxide and salts

U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[<i>rst</i>]pentaphene
U248	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[<i>a</i>]pyrene
U197	106-51-4	<i>p</i> -Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal

U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*, 3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	¹ 111-54-6	Carbamodithioic acid, 1,2-ethanediybis-, salts and esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha and gamma isomers
U026	494-03-1	Chlornaphazine

U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
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 HCr_2O_4 , calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (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, 6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5- hexachloro-
U058	50-18-0	Cyclophosphamide
U240	¹ 94-75-7	2,4-D, salts and esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD

U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl-S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbestrol
U090	94-58-6	Dihydrosafrole

U091	119-90-4	3,3'-Dimethoxybenzidine	1199
U092	124-40-3	Dimethylamine (I)	8493
U093	60-11-7	p-Dimethylaminoazobenzene	8497
U094	57-97-6	7,12-Dimethylbenz[a]anthracene	8499
U095	119-93-7	3,3'-Dimethylbenzidine	8507
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)	8510
U097	79-44-7	Dimethylcarbamoyl chloride	8517
U098	57-14-7	1,1-Dimethylhydrazine	8518
U099	540-73-8	1,2-Dimethylhydrazine	8519
U101	105-67-9	2,4-Dimethylphenol	8527
U102	131-11-3	Dimethyl phthalate	8534
U103	77-78-1	Dimethyl sulfate	8535
U105	121-14-2	2,4-Dinitrotoluene	8539
U106	606-20-2	2,6-Dinitrotoluene	8540
U107	117-84-0	Di-n-octyl phthalate	8541
U108	123-91-1	1,4-Dioxane	8542
U109	122-66-7	1,2-Diphenylhydrazine	8543
U110	142-84-7	Dipropylamine (I)	8544
U111	621-64-7	Di-n-propylnitrosamine	8545
U041	106-89-8	Epichlorohydrin	8546
U001	75-07-0	Ethanal (I)	8547
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8548
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'- 2-pyridinyl-N'-(2-thienylmethyl)-	8549
U067	106-93-4	Ethane, 1,2-dibromo-	8550
U076	75-34-3	Ethane, 1,1-dichloro-	8551
U077	107-06-2	Ethane, 1,2-dichloro-	8552

U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis [2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis- (I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1- trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U359	110-80-5	Ethanol, 2-ethoxy
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U114	¹ 111-54-6	Ethylenebisdithiocarbamic acid, salts and esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether

U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylene thiourea
U117	60-29-7	Ethyl ether (I)
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro- (I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[c(methylnitrosoamino)-carbonyl]amino]-
0126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene

U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide H ₂ S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)

U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I,T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I,T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen- 2-one,1,1a,3,3a,4,5,5,5a,5b,6- 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-amino-2,3,6-trideoxy)-alpha-L-lyxo- hexopyranosyl)oxy]-7,8,9,10-tetrahydro- 6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
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'- [(3,3'-dimethyl [1,1'-biphenyl]-4,4'- diyl)]-bis(azo)bis(5-amino-4- hydroxy)-, tetrasodium salt
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(1+) 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-Nitrosodiethanolamine
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, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
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'-methylenebis[3,4,6- trichloro-
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	Phosphorous 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[1-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-Propenamide
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-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
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-chloroethyl)amino]-
U164	56-04-2	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	¹ 81-07-2	Saccharin and salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide SeS ₂ (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl

U217	10102-45-1	Thallium(I) nitrate	
U218	62-55-5	Thioacetamide	
U153	74-93-1	Thiomethanol (I,T)	
U244	137-26-8	Thioperoxydicarbonic diamide	
		$[(H_2N)C(S)]_2S_2$, tetramethyl-	
U219	62-56-6	Thiourea	
U244	137-26-8	Thiram	
U220	108-88-3	Toluene (I,T)	
U221	25376-45-8	Toluenediamine	
U223	26471-62-5	Toluene diisocyanate (R,T)	
U328	95-53-4	o-Toluidine	
U353	106-49-0	p-Toluidine	
U222	636-21-5	o-Toluidine hydrochloride	
U011	61-82-5	1H-1,2,4-Triazol-3-amine	
U227	79-00-5	1,1,2-Trichloroethane	
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	
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, and salts, when present at	

concentrations of 0.3% or less

U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17- dimethoxy- 18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3 beta, 16 beta, 17 alpha, 18 beta, 20 alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2 , when present at concentrations of 10% or less

¹ CAS Number given for parent compound only.

NOTE: Authority cited: Sections 208 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25159 and 25159.5, Health and Safety Code and 40 CFR Section 261.33.

Article 5. Categories of Hazardous Waste

66261.100. RCRA Hazardous Waste.

(a) A hazardous waste is a RCRA hazardous waste if it meets any of the following criteria:

(1) It exhibits any of the characteristics of ignitability, corrosivity, reactivity, or toxicity identified in Sections 66261.21, 66261.22(a)(1), 66261.22(a)(2), 66261.23, and 66261.24(a)(1).

(2) It is listed as a hazardous waste in Article 4 of this Chapter and has not been excluded by the USEPA Administrator from 40 CFR Part 261, Subpart D pursuant to 40 CFR Sections 260.20 and 260.22. Wastes excluded by the USEPA Administrator pursuant to 40 CFR Sections 260.20 and 260.22 are listed in 40 CFR Part 261, Appendix IX.

(3) It is identified as a hazardous waste pursuant to Section 66261.3(a)(2)(B), Section 66261.3(a)(2)(D), Section 66261.3(a)(2)(E), or Section 66261.3(c)(2).

(b) A hazardous waste is presumed to be a RCRA hazardous waste unless or until the generator determines that the waste is non-RCRA hazardous waste pursuant to Section 66261.101.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25120.2, 25141 and 25159, Health and Safety Code.

66261.101. Non-RCRA Hazardous Waste.

(a) A hazardous waste is a non-RCRA hazardous waste if it meets all of the following criteria:

(1) It does not exhibit any of the characteristics of ignitability, corrosivity, reactivity or toxicity as identified in Sections 66261.21, 66261.22(a)(1), 66261.22(a)(2), 66261.23 and 66261.24(a)(1).

(2) It exhibits any of the characteristics of corrosivity and toxicity identified in Sections 66261.22(a)(3), 66261.22(a)(4) and 66261.24(a)(2) through (a)(8) or otherwise meets the definition of a hazardous waste in Section 66261.3(a)(2)(C) or 66261.3(a)(2)(F).

(3) It is not listed as a hazardous waste in Article 4 of this chapter or is listed and has been excluded by the USEPA Administrator pursuant to 40 CFR Sections 260.20 and 260.22.

(b) A hazardous waste is a non-RCRA hazardous waste if it exhibits any characteristic set forth in Article 3 of this chapter and meets any of the following criteria:

(1) It is identified as a potential non-RCRA hazardous waste in Section 66261.2(d)(1)(B) or Section 66261.2(d)(2)(B), or is identified as a potential non-RCRA hazardous waste in Table 1 of Section 66261.2.

(2) It is excluded from classification as a solid waste or a hazardous waste in 40 CFR Section 261.4.

(c) A container, or an inner liner from a container, which is empty pursuant to 40 CFR Section 261.7, but is required to be managed as a hazardous waste pursuant to Section 66261.7 is a non-RCRA hazardous waste.

(d) A waste which is not classified as a non-RCRA hazardous waste pursuant to the criteria in subsections (a) through (c) of this section may be classified as a non-RCRA hazardous waste if the generator can otherwise determine that the waste would not be regulated as a hazardous waste pursuant to Subtitle C of RCRA or implementing regulations.

(e) The Department or the USEPA may request the following items from a person claiming that the hazardous waste generated or managed by that person is a non-RCRA hazardous waste:

(1) Documentation demonstrating that the waste meets the applicable criteria in subsection (a), (b), (c) or (d) of this section.

(2) Analytical information, from a laboratory certified by the Department pursuant to Chapter 44 of this division, demonstrating that the extracts from representative samples of the waste, developed using the Toxicity Characteristic Leaching Procedure in Appendix I of Chapter 18 of this division, contain none of the

substances in Section 66261.24(a)(1)(B) at a concentration which equals or exceeds the value for that substance in that section.

(3) Representative samples of that waste.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25117, 25117.9, 25141 and 25159, Health and Safety Code.

66261.107. Applicability of Extremely Hazardous Waste Criteria.

Any waste which is extremely hazardous pursuant to any of the criteria of Section 66261.110 or 66261.113 is an extremely hazardous waste and shall be managed in accordance with the specific provisions of this division pertaining to extremely hazardous waste.

NOTE: Authority cited: Sections 208 and 25141, Health and Safety Code.

Reference: Sections 25115, 25117 and 25141, Health and Safety Code.

66261.110. Extremely Hazardous Waste Criteria.

(a) A waste, or a material, is extremely hazardous if it:

(1) Has an acute oral LD_{50} less than or equal to 50 milligrams per kilogram; or

(2) Has an acute dermal LD_{50} less than or equal to 43 milligrams per kilogram; or

(3) Has an acute inhalation LC_{50} less than or equal to 100 parts per million as a gas or vapor; or

(4) Contains any of the substances listed in Section 66261.24(a)(7) at a single or combined concentration equal to or exceeding 0.1 percent by weight; or

(5) Has been shown through experience or testing that human exposure to the waste or material may likely result in death, disabling personal injury or serious illness because of the carcinogenicity, high acute or chronic toxicity, bioaccumulative properties, or persistence in the environment of the waste or material; or

(6) Is water-reactive.

(b) A waste containing one or more materials which are extremely hazardous according to any criterion of subsection (a)(1) or (a)(2)

of this section is not extremely hazardous if the generator determines that neither the calculated acute oral toxicity nor the calculated acute dermal toxicity of the waste using the equation in Section 66261.24(c) is numerically equal to or less than the toxicity limits prescribed in subsection (a)(1) or (a)(2) of this section and the waste is not extremely hazardous by any other criterion of this section.

NOTE: Authority cited: Sections 208 and 25141, Health and Safety Code.

Reference: Sections 25115, 25117 and 25141, Health and Safety Code.

66261.113. Total Threshold Limit Concentration Values of Persistent and Bioaccumulative Toxic Substances in Extremely Hazardous Wastes.

(a) Any waste containing a substance listed in subsection (b) of this section at a concentration equal to or exceeding its listed total threshold limit concentration is an extremely hazardous waste.

(b) List of Persistent and Bioaccumulative Toxic Substances and Their Total Threshold Limit Concentration (TTL) Values.

Substance	TTL (Wet-Weight in mg/kg)
Aldrin	140
Arsenic and/or arsenic compounds	50,000 (as As)
Beryllium and/or beryllium compounds*	7,500 (as Be)
Cadmium and/or cadmium compounds*	10,000 (as Cd)
Chlordane	250
2,4-Dichlorophenoxyacetic acid	10,000
Dieldrin	800
Dioxin (2,3,7,8-TCDD)	1
Endrin	20
Heptachlor	470
Kepone	2,100

Lead compounds, organic	1,300 (dry weight basis; as Pb)
Lindane	400
Mercury and/or mercury compounds	2,000 (as Hg)
Mirex	2,100
Polychlorinated biphenyls (PCBs)	5,000
Selenium and/or selenium compounds*	10,000 (as Se)
Thallium and/or thallium compounds*	70,000 (as Tl)
Toxaphene	500
2,4,5-Trichlorophenoxypropionic acid	1,000

* In the case of elemental metals, the specified concentration limits apply only if the metals are in a friable, powdered or finely divided state.

NOTE: Authority cited: Sections 208 and 25141, Health and Safety Code.

Reference: Sections 25115, 25117 and 25141, Health and Safety Code.

66261.120. List of Special Wastes.

(a) The following is a noninclusive list of wastes which may be classified as special wastes pursuant to Section 66261.122:

- (1) Ash from burning of fossil fuels, biomass and other combustible materials.
- (2) Auto shredder waste.
- (3) Baghouse and scrubber wastes from air pollution control.
- (4) Catalyst from petroleum refining and chemical plant processes.
- (5) Cement kiln dust.
- (6) Dewatered sludge from treatment of industrial process water.
- (7) Dewatered tannery sludge.
- (8) Drilling mud from drilling of gas and oil wells.
- (9) Refractory from industrial furnaces, kilns and ovens.
- (10) Sand from sandblasting.
- (11) Sand from foundry casting.

(12) Slag from coal gasification.

(13) Sulfur dioxide scrubber waste from flue gas emission control in combustion of fossil fuels.

(14) Tailings from the extraction, beneficiation and processing of ores and minerals.

NOTE: Authority cited: Sections 208 and 25140, Health and Safety Code.

Reference: Sections 25117 and 25140, Health and Safety Code.

66261.122. Criteria and Requirements of a Special Waste.

(a) A hazardous waste which meets all of the following criteria and requirements shall be classified as a special waste upon application pursuant to Section 66261.124:

(1) It is a solid, a water-based sludge or a water-based slurry of which the solid constituents are substantially insoluble in water.

(2) It is a hazardous waste only because:

(A) It contains a persistent or bioaccumulative substance listed in Section 66261.24(a)(2)(A) at a solubilized and extractable concentration exceeding its Soluble Threshold Limit Concentration (STLC), or at a total concentration exceeding its Total Threshold Limit Concentration (TTLC), as said STLC and TTLC values are set forth in Section 66261.24(a)(2)(A) and determined as prescribed in Appendix II of this chapter; except that

1. It shall contain no persistent or bioaccumulative substance listed in Section 66261.24(a)(2)(A) at a solubilized and extractable concentration in milligrams per kilogram of waste exceeding the TTLC value for the substance as set forth in Section 66261.24(a)(2)(A) and determined as prescribed in Appendix II of this chapter; and

2. It shall contain no persistent or bioaccumulative inorganic substance listed in Section 66261.113(b) at a concentration equal

to or exceeding the TTLC value of the substance as set forth in Section 66261.113(b).

(b) Special wastes do not include wastes which meet any of the following criteria:

(1) Wastes which are hazardous wastes pursuant to or because of:

(A) Any characteristic of a hazardous waste or other provision set forth in Sections 66261.21, Section 66261.22, Section 66261.23 or Section 66261.24(a)(3) through (a)(7); or

(B) Any criterion of an extremely hazardous waste or other provision set forth in Section 66261.110 or Section 66261.113; or

(C) Any constituent, except for a substance or material listed in Section 66261.24(a)(2)(A), which experience or testing has shown to pose a threat to human health or the environment because of its carcinogenicity, chronic toxicity, bioaccumulative properties or persistence in the environment; or

(D) The characteristic of toxicity, as this characteristic is set forth in Section 66261.24(a)(1) or

(E) The lists in Article 4 of this chapter, unless a waste is excluded by the USEPA Administrator from 40 CFR Part 261, Subpart D pursuant to 40 CFR Sections 260.20 and 260.22. Wastes excluded by

the USEPA Administrator pursuant to 40 CFR Sections 260.20 and 260.22 are listed in 40 CFR 261 Part 261, Appendix IX.

(2) Wastes which contain any of the following:

(A) More than 1.0 percent by weight of any organic substance or mixture of organic substance which is toxic pursuant to Section 66261.24(a)(3), Section 66261.24(a)(4), or Section 66261.24(a)(5); or

(B) More than 0.1 percent by weight of any organic substance or mixture of organic substance which is extremely hazardous pursuant to Appendix X of this chapter or Section 66261.110(a)(1), Section 66261.110(a)(2), Section 66261.110(a)(3), or Section 66261.110(a)(4); or

(C) Any organic substance listed in Section 66261.24(a)(2)(B) at a total concentration exceeding the STLC value given for that substance; or

(D) Any inorganic or organic material which is extraneous to the waste as it is normally produced by the producer of the waste, excepting material which are incidental to, or necessary for, the handling of the waste.

(3) Hazardous wastes for which there are land disposal restrictions set forth in Section 66268.32 and are defined in Health and Safety Code Section 25122.7.

NOTE: Authority cited: Sections 208 and 25141, Health and Safety Code.

Reference: Sections 25117 and 25141, Health and Safety Code.

66261.124. Classification of a Waste as a Special Waste.

(a) A person who wishes to classify and manage a hazardous waste as a special waste shall obtain prior written approval from the Department for such classification and management. A person seeking approval to classify and manage a hazardous waste as a special waste shall submit an application to the Department which includes all the following information:

(1) The name and address of the applicant and, if different, a billing address for receipt of the fee assessment required by Health and Safety Code Section 25205.8.

(2) The address where the waste is generated and located.

(3) A description of the waste which shall include its source, physical state, quantity and rate of generation.

(4) Chemical analysis data showing that the waste meets the requisites of a special waste pursuant to Section 66261.122(a)(2).

(5) Chemical analysis data, chemical and physical test data, and bioassay data, or factual information on the origin of the waste, which establish that it meets the criteria and requirements of special wastes in Section 66261.122(a)(1) and Section 66261.122(b). Data shall include analyses from a minimum of four representative samples as specified in Chapter Nine of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd

Edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11 of this chapter).

(b) The Department, within 30 days of receipt of an application for approval to classify and manage a waste as special waste pursuant to subsection (a) of this section, shall acknowledge in writing receipt of the application. Pending written approval from the Department, the applicant shall manage the waste in accordance with all provisions of this division.

(c) The Department, within 60 days of receipt of an application for approval to classify and manage a waste as special waste pursuant to subsection (a) of this section, shall notify the applicant in writing that classification of the waste as special waste is approved or disapproved or that the application is incomplete or inadequate and what additional information is needed.

(d) If the application is incomplete or inadequate, the Department, within 60 days of receipt of adequate additional information, shall notify the applicant in writing that classification of the waste as special waste is approved or disapproved.

(e) When the Department has notified the applicant in writing that the application is incomplete or inadequate and what additional information is needed, the application will be considered disapproved if the applicant fails to provide the additional information within 90 days from the date the information was requested.

(f) If the applicant cannot submit the additional information within the time frame specified in subsection (e) of this section, the applicant shall notify the Department in writing the reason for the delay and shall specify an additional time frame, up to 90 days, within which the information shall be submitted.

(g) The application will be considered disapproved if the applicant fails to provide the additional information by the end of the additional time frame specified in subsection (f) of this section.

(h) If the Department disapproves the application, the Department shall specify in writing the reason(s) for the disapproval.

(i) Notwithstanding the time frames specified above, the Department shall not notify the applicant of the approval or disapproval of an application until after the applicant submits payment of the fee assessed by the Board of Equalization pursuant to Health and Safety Code Section 25205.8.

(j) Upon receipt of written approval from the Department, the applicant may classify and manage the waste as special waste pursuant to Section 66261.126.

(k) For wastes which are continuously or repetitively generated at the same facility, from the same process, utilizing the same kinds of materials (with respect to origin, composition and properties), the requirements of this section can be met by the submission of the required information either for each separately generated

quantity of the waste or for a representative sample of the continuously or repetitively generated waste.

NOTE: Authority cited: Sections 208 and 25150, Health and Safety Code and Section 15367, Government Code.

Reference: Sections 25205.8 and 25150, Health and Safety Code and Section 15367, Government Code.

66261.126. Management of Special Wastes.

(a) A special waste may be disposed of at a landfill disposal facility which is not operated under a hazardous waste facility permit or an interim status document provided:

(1) The facility is operated under waste discharge requirements allowing disposal of the special waste which were issued by the Regional Water Quality Control Board with jurisdiction over the facility; and

(2) The owner or operator of the facility has been granted a variance pursuant to Section 66260.210 of this division which allows the special waste to be disposed of at the facility.

(b) Except as provided in subsection (c) of this section, the owner and operator of a landfill disposal facility which is not operated under a hazardous waste facility permit and where a special waste is disposed of are subject to all requirements of this division which are not specifically waived by a variance granted pursuant to Section 66260.210 of this division, including, but not limited to, enforcement, inspection, manifest, special measures, incompatible waste, reporting, and payment of land disposal fee requirements.

(c) The owner and operator of a landfill disposal facility authorized to dispose of a special waste pursuant to subsection (a) of this section shall be exempt from requirements implementing Health and Safety Code Sections 25245 and 25246 relative to closure

and postclosure plans and financial assurances so long as the facility does not handle, treat, store or dispose of any hazardous waste not specifically authorized by a variance issued by the Department or by Health and Safety Code Section 25143.7.

(d) The generator of a special waste shall be subject to all generator requirements of this division.

(e) The transporter of a special waste shall be subject to all transporter requirements of this division.

(f) The owner or operator of a facility for the recycling, storage or treatment of a special waste shall have a hazardous waste facility permit for the recycling, treatment or storage of the waste at the facility.

NOTE: Authority cited: Sections 208 and 25150, Health and Safety Code.

Reference: Sections 25117, 25143 and 25150, Health and Safety Code.

Appendix I-Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. In addition to the sampling methods described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, 1986 (incorporated by reference, see Section 66260.11), samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, will be considered by the Department to be representative of the waste.

Standard Practice for Sampling Bituminous Materials, (e.g., extremely viscous liquid), ASTM Standard D140-88

Standard Method of Collection and Preparation of Coke Samples for Laboratory Analysis, (e.g., crushed or powdered material), ASTM Standard D346-78

Standard Guide for Investigating and Sampling Soil and Rock, (e.g., soil or rock-like material), ASTM Standard D420-87

Standard Practice for Soil Investigation and Sampling by Auger Borings, (e.g., soil-like material), ASTM Standard D1452-80

Standard Methods for Collection of a Gross Sample of Coal, (e.g., fly Ash-like material), ASTM Standard D2234-82

[ASTM Standards are available from ASTM, 1916 Race St., Philadelphia, PA 19103] (incorporated by reference, see Section 66260.11).

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Section 25141, Health and Safety Code and 40 CFR Part 261 Appendix I.

Appendix II-Waste Extraction Test (WET) Procedures

(a) The Waste Extraction Test (WET) described in this appendix shall be used to determine the amount of extractable substance in a waste or other material as set forth in Section 66261.24(a)(2).

(b) Except as provided in subdivision (d) of this appendix, the WET shall be carried out if the total concentration in the waste, or other material, of any substance listed in Section 66261.24(a)(2) equals or exceeds the STLC value, but does not exceed the TTLC value, given for that substance. The total concentrations of substances listed in Section 66261.24(a)(2) shall be determined by analysis of samples of wastes, or other materials, which have been prepared, or meet the conditions, for analysis as set forth in subdivisions (c) and (d) of this appendix. Methods used for analysis for total concentrations of substances listed in Section 66261.24(a)(2) shall be those given in the following documents or alternate methods that have been approved by the Department pursuant to Section 66260.21:

(1) For metal elements and their compounds, the waste shall be digested according to the indicated methods described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 2nd edition, U.S. Environmental Protection Agency, 1982 (incorporated by reference, see Section 66260.11):

(A) All listed metal elements and their compounds, except hexavalent chromium: Method 3050.

(B) Hexavalent chromium: Method 3060.

(2) For all substances listed in Section 66261.24(a)(2), except organic lead compounds, the methods and references in which the methods can be found are listed in Appendix III, Table 4 of this chapter.

(3) The method used for analysis of organic lead compounds is given in Appendix XI of this chapter.

(c) Samples shall be prepared for analysis for total and extractable content of substances listed in Section 66261.24(a)(2)(A) and for extractable content of substances listed in Section 66261.24(a)(2)(B) as follows:

(1) Type i: If the waste or other material is a millable solid, the sample shall be passed directly, or shall be milled to pass, through a No. 10 (two millimeter) standard sieve before it is analyzed. If the sample contains non-friable solid particles which do not pass directly through a No. 10 sieve and which are extraneous and irrelevant as hazardous constituents to the waste or other material, they shall be removed to the extent feasible by mechanical means and discarded. Solids which remain in the waste or other material after removal of the aforesaid extraneous particles shall be milled to pass through a No. 10 sieve and shall then be combined and mixed well with the solids which passed through the sieve without milling. The reconstituted sample shall then be analyzed as prescribed in this appendix.

(2) Type ii: if the waste or other material is a filterable mixture of liquid and solids in which the solids constitute five-tenths (0.5) percent by weight or greater of the sample, the liquid and solids shall be separated by filtration through a 0.45 micron membrane filter. The filtrate so obtained is to be designated as Initial Filtrate. Its volume is determined, and it is retained. The separated solids shall be sieved in a No. 10 sieve and any nonfriable extraneous particles of the kinds described in subdivision (c)(1) of this appendix which do not pass through the sieve shall be removed to the extent feasible by mechanical means and discarded. The solids which remain after removal of the extraneous particles shall be milled to pass through a No. 10 sieve and shall be recombined with solids which passed through the sieve without milling. This recombined solid material shall be extracted following the procedure in subdivision (g) of this appendix. A ratio of 10 milliliters of extraction solution per gram of solid shall be utilized with appropriate modifications for extraction vessel size. After completion of solids extraction, the filtered extractant is combined with Initial Filtrate, mixed thoroughly and analyzed as described in subdivision (g)(3) of this appendix.

(3) Type iii: If the waste or other material is a nonfilterable and nonmillable sludge, slurry, or oily, tarry or resinous material, it shall be analyzed as received unless it contains non-friable extraneous and irrelevant solid particles of the kinds described in subdivision (c)(1) of this appendix. If it contains such solid particles and they are of such size as not to pass

through a No. 10 sieve, they shall be removed to the extent feasible by mechanical means and discarded. The remainder of the sample shall be analyzed as prescribed in this appendix.

(4) If it is necessary to dry a solid sample or the solids fraction of a sample before sieving, milling or removal of extraneous solids, or if a sample is dried prior to analysis, all weight losses due to drying shall be determined, and these losses and the conditions of drying shall be reported.

(d) Samples shall be prepared for analysis for total content of substances listed in Section 66261.24(a)(2)(B) as follows:

(1) Type i: If the waste or other material is a millable solid, the sample shall be passed directly, or shall be milled to pass, through a one-millimeter standard sieve before it is analyzed. If the sample contains non-friable solid particles which do not pass directly through a one-millimeter sieve and which are extraneous and irrelevant as hazardous constituents to the waste or other material, they shall be removed to the extent feasible by mechanical means and discarded. Solids which remain in the waste or other material after removal of the aforesaid extraneous particles shall be milled to pass through a one-millimeter sieve and shall then be combined and mixed well with the solids which passed through the sieve without milling. The reconstituted sample shall then be analyzed as prescribed in this appendix.

(2) Type ii: If the waste or other material is a filterable mixture of liquid and solids in which the solids constitute five-tenths (0.5) percent by weight or greater of the sample, the liquid and solids shall be separated by filtration through a 0.45 micron membrane filter. The filtrate so obtained is to be designated as Initial Filtrate. Its volume is determined, and it is retained. The separated solids shall be sieved in a one-millimeter sieve and any nonfriable extraneous particles of the kinds described in subdivision (d)(1) of this appendix which do not pass through the sieve shall be removed to the extent feasible by mechanical means and discarded. The solids which remain after removal of the extraneous particles shall be milled to pass through a one-millimeter sieve and shall be recombined with solids which passed through the sieve without milling. This recombined solid material shall be extracted following the procedure in subdivision (g) of this appendix. A ratio of 10 milliliters of extraction solution per gram of solid shall be utilized with appropriate modifications for extraction vessel size. After completion of solids extraction, the filtered extractant is combined with Initial Filtrate, mixed thoroughly and analyzed as described in subdivision (9)(3) of this appendix.

(3) Type iii: If the waste or other material is a nonfilterable and nonmillable sludge, slurry, or oily, tarry or resinous material, it shall be analyzed as received unless it contains non-friable extraneous and irrelevant solid particles of the kinds described in subdivision (d)(1) of this appendix. If it contains such solid particles and they are of such size as not to pass

through a one-millimeter sieve, they shall be removed to the extent feasible by mechanical means and discarded. The remainder of the sample shall be analyzed as prescribed in this appendix.

(4) If it is necessary to dry a solid sample or the solids fraction of a sample before sieving, milling or removal of extraneous solids, or if a sample is dried prior to analysis, all weight losses due to drying shall be determined, and these losses and the conditions of drying shall be reported.

(e) If the waste or other material is a liquid containing less than five-tenths (0.5) percent by weight of undissolved solids, it shall not be subject to the WET procedure, but shall be analyzed directly for the substances listed in Section 66261.24(a)(2). The waste shall be classified as a hazardous waste if the total concentration in the waste of any substances listed in Section 66261.24(a)(2) exceeds the TTLC value given for that substance. If, however, the total concentration is less than the TTLC but exceeds the STLC when expressed on a milligrams per liter basis, the waste or other material shall be filtered through a 0.45 micron membrane filter, the solids discarded and the filtrate shall be analyzed directly for the substances listed in Section 66261.24(a)(2). The waste shall be classified as a hazardous waste if the concentration in the filtrate of any of the substances listed in Section 66261.24(a)(2) exceeds the STLC value given for that substance.

(f) The WET extraction solution shall consist of 0.2 M sodium citrate at pH 5.0 ± 0.1 , which is prepared by titrating an

appropriate amount of analytical grade citric acid in deionized water with 4.0 N NaOH, except that the extraction solution for the determination of chromium (VI) shall consist of deionized water.

(g) The extraction procedure shall be as follows:

(1) Fifty grams of sample, or less if it is a type ii sample prepared pursuant to subdivision (c)(2) or (d)(2) of this appendix, obtained pursuant to subdivision (c), (d), or (e) of this appendix shall be placed in a clean polyethylene or glass container designated the Treatment, capable of physically withstanding the extraction procedure and which was rinsed previously with, in succession, an aqueous 1:1 ratio by volume nitric acid solution and deionized water. If the extract will be analyzed for any of the organic substances listed in Section 66261.24(a)(2), a glass container shall be used. Furthermore, a container of the same size, shape and material shall be used for an extraction designated as the Blank, which shall be carried through the same procedure as the Treatment, but without addition of the sample.

(2) Five hundred milliliters of extraction solution, or less if the waste sample is a type ii sample prepared pursuant to subdivision (c)(2) or (d)(2) of this appendix; shall be added to the Treatment and Blank containers, which shall be then fitted with covered air scrubbers extended well into the extraction solutions and flushed vigorously with nitrogen gas for 15 minutes so as to remove and exclude atmospheric oxygen from the extraction medium. If the sample is to be analyzed for any volatile substance, such as

trichloroethylene, the sample shall be added after deaeration with nitrogen to avoid volatilization loss. After deaeration the containers shall be quickly sealed with tightly fitting caps and agitated, using a table shaker, an overhead stirrer or a rotary extractor, operated at a speed which shall maintain the sample in a state of vigorously agitated suspension. Required equipment is described in test method 1310 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference, see Section 66260.11). The temperature during the extraction shall be maintained between 20 and 40 degrees centigrade. After 48 hours of extracting, the contents of the Treatment and Blank containers shall be either filtered directly or centrifuged and then filtered. Filtering shall be through a medium porosity prefilter and then through a 0.45 micron membrane filter, using a clean, thick-walled suction flask. For coarser solids, prefiltration shall not be necessary. Pressure filtration shall be an optional alternative to vacuum filtration. If the extracts are first centrifuged, glass or polyethylene bottles shall be used as prescribed for extraction. For very fine solids, centrifuging at as high as 10,000 X G may be necessary. After centrifugation, the liquids shall be decanted, prefiltered if necessary, and then passed through a 0.45 micron membrane filter. All filters shall be of low and identified extractable heavy metals, fluoride and organic chemicals content.

(3) If the filtered extracts are to be analyzed only for the metal elements listed in Section 66261.24(a)(2)(A), the filtered extracts from the Treatment and Blank shall be transferred to clean

polyethylene bottles and acidified with nitric acid to five percent by volume acid content soon after each extract is filtered. For those wastes or waste materials classified under subdivision (c)(2) or (d)(2) of this appendix, the Treatment shall be the Initial Filtrate combined with the extract generated by the WET extraction of the initially separated solids. Similarly the Blank in this instance shall be the filtrate generated by the WET Blank accompanying the initially separated solids, to which is subsequently added a volume of deionized water equivalent to that of the Initial Filtrate. These procedures shall be followed prior to acidification of Treatment and Blank solutions with nitric acid to five percent (by volume) acid content. The bottle shall then be stored at room temperature or frozen. If the extracts are also to be analyzed for the organic substances listed in Section 66261.24(a)(2)(B), or for the organic substances only, the filtered extracts shall be transferred to clean glass bottles. If the extracts are to be analyzed for fluoride, they shall be transferred to clean polyethylene bottles. These extracts, containing organic substances or fluoride, shall not be acidified, but shall be frozen soon after each extract is obtained and held frozen until the day of analysis, unless the extracts are analyzed within 24 hours.

(h) Sample analysis and data treatment shall be as follows:

(1) Each of the filtered extracts from the Treatment and Blank extractions shall have been acidified to five percent by volume nitric acid, and stored at room temperature or frozen in polyethylene bottles or kept frozen without addition of acid in

glass bottles until the day of analysis, as prescribed. Each of the extracts shall be thoroughly mixed just prior to being individually analyzed for the substances listed in Section 66261.24(a)(2) in order to determine whether the extractable concentration (EC) in the waste or other material exceeds the STLC for any of the substances listed. The extracts shall be analyzed according to the procedures identified in subdivisions (b)(2) and (b)(3) of this appendix.

(2) The net EC of a substance in the Treatment sample which is listed in Section 66261.24(a)(2) shall be calculated and reported as milligrams per liter of sample (mg/l). This value is derived after subtracting the concentration of the substance in the appropriate Blank extract from that concentration determined in the Treatment extract.

NOTE: Authority cited: Sections 208 and 25141, Health and Safety Code.

Reference: Section 25141, Health and Safety Code.

Appendix III-Chemical Analysis Test Methods

Tables 1, 2, and 3 specify the appropriate analytical procedures, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, U.S. Environmental Protection Agency (incorporated by reference, see Section 66260.11) which shall be used to determine whether a sample contains a given Appendix VII or Appendix VIII toxic constituent. Table 4 specifies the analytical methods and references which shall be used to determine whether a sample contains a given persistent and bioaccumulative toxic substance listed in Section 66261.24 (a)(2). Table 1 identifies each Appendix VII or Appendix VIII organic constituent along with the approved measurement method. Table 2 identifies the corresponding methods for inorganic species. Table 3 summarizes the contents of SW-846 and supplies specific section and method numbers for sampling and analysis methods.

Prior to final sampling and analysis method selection the analyst should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

Table 1-Analysis Methods for Organic Chemicals Contained in SW-846, Second Edition

	Second Edition
Compound	Method Numbers

Acetonitrile	8030, 8240
Acrolein	8030, 8240
Acrylamide	8015, 8240
Acrylonitrile	8030, 8240
2-Amino-1-methylbenzene (o-Toluidine)	8250
4-Amino-1-methylbenzene (p-Toluidine)	8250
Aniline	8250
Benzene	8020, 8024
Benz(a)anthracene	8100, 8250, 8310
Benzo(a)pyrene	8100, 8250, 8310
Benzotrichloride	8120, 8250
Benzyl chloride	8120, 8250
Benzo(b)fluoranthene	8100, 8250, 8310
Bis(2-chloroethoxymethane)	8010, 8240
Bis(2-chloroethyl) ether	8010, 8240
Bis(2-chloroisopropyl) ether	8010, 8240
Carbon disulfide	8015, 8240
Carbon tetrachloride	8010, 8240
Chlordane	8080, 8250
Chlorinated biphenyls	8080, 8250
Chlorinated dibenzo-p-dioxins	8280
Chlorinated dibenzofurans	8280
Chloroacetaldehyde	8010, 8240
Chlorobenzene	8020, 8240
Chloroform	8010, 8240

Chloromethane	8010, 8240
2-Chlorophenol	8040, 8250
Chrysene	8100, 8250, 8310
Creosote ¹	8100, 8250
Cresol(s)	8040, 8250
Cresylic Acid(s)	8040, 8250
Dichlorobenzene(s)	8010, 8120, 8250
Dichloroethane(s)	8010, 8240
Dichloromethane	8010, 8240
Dichlorophenoxyacetic acid	8150, 8250
Dichloropropanol	8120, 8250
1,1-Dimethylhydrazine (UDMH)	8250
2,4-Dimethylphenol	8040, 8250
Dinitrobenzene	8090, 8250
4,6-Dinitro-o-cresol	8040, 8250
2,4-Dinitrotoluene	8090, 8250
2,6-Dinitrotoluene	8060, 8250
Endrin	8080, 8250
2-Ethoxyethanol	8030, 8240
Ethyl ether	8015, 8240
Ethylene dibromide	8010, 8240
Ethylene thiourea	8250, 8330
Formaldehyde	8015, 8240
Formic acid	8250
Heptachlor	8080, 8250
Hexachlorobenzene	8120, 8250

Hexachlorobutadiene	8120, 8250
Hexachloroethane	8010, 8240
Hexachlorocyclopentadiene	8120, 8250
Lindane	8080, 8250
Maleic anhydride	8250
Methanol	8010, 8240
Methomyl	8250
Methyl ethyl ketone	8015, 8240
Methyl isobutyl ketone	8015, 8240
Napthalene	8100, 8250
Napthoquinone	8090, 8250
Nitrobenzene	8090, 8250
4-Nitrophenol	8040, 8240
2-Nitropropane	8030, 8240
Paraldehyde (trimer of acetaldehyde)	8015, 8240
Pentachlorophenol	8040, 8250
Phenol	8040, 8250
Phorate	8140
Phosphorodithioic acid esters	8140
Phthalic anhydride	8090, 8250
2-Picoline	8090, 8250
Pyridine	8090, 8250
Tetrachlorobenzene(s)	8120, 8250
Tetrachloroethane(s)	8010, 8240
Tetrachloroethene	8010, 8240
Tetrachlorophenol	8040, 8250
Toluene	8020, 8024
Toluene diisocyanate(s)	8250

Toluenediamine	8250
2,4-Toluenediamine	8250
2,6-Toluenediamine	8250
3,4-Toluenediamine	8250
Toxaphene	8080, 8250
Trichloroethane	8010, 8240
Trichloroethene(s)	8010, 8240
Trichlorofluoromethane	8010, 8240
Trichlorophenol(s)	8040, 8250
2,4,5-Trichlorophenoxy propionic acid	8150, 8250
Trichloropropane	8010, 8240
Vinyl chloride	8010, 8240
Vinylidene chloride	8010, 8240
Xylene	8020, 8240

¹Analyze for phenanthrene and carbazole; if these are present in a ratio between 1.4:1 and 5:1 creosote shall be deemed present.

Table 2-Analysis Methods for Inorganic Chemicals Contained in SW-846, Second and Third Editions

Compound	Third Edition Method(s)	Second Edition Method(s)
Aluminum	6010	
Antimony	6010	7040, 7041
Arsenic	6010	7060, 7061
Barium	6010	7080, 7081

Beryllium	6010, 7090, 7091	
Boron	6010	
Cadmium	6010	7130, 7131
Calcium	6010	
Chromium	6010	7190, 7191
Chromium, Hexavalent	7198	7195, 7196, 7197
Cobalt	6010	
Copper	6010, 7210, 7211	
Iron	6010, 7380, 7381	
Lead	6010	7420, 7471
Magnesium	6010	
Manganese	6010, 7460, 7461	
Mercury		7470, 7471
Molybdenum	6010	
Nickel	6010	7520, 7521
Osmium	7550	
Potassium	6010	
Selenium	6010	7740, 7741
Silicon	6010	
Silver	6010	7760, 7761
Sodium	6010, 7770	
Thallium	6010, 7840, 7841	
Vanadium	6010, 7910, 7911	
Zinc	6010, 7950, 7951	
Cyanides		9010
Total Organic Halides	9022	9020
Sulfides		9030
Sulfates	9035, 9036, 9038	

Total Organic		
Carbon	9060	
Phenolics	9065, *9066, 9067	
Oil and Grease	9070, 9071	
Total Coliform	9131, 9132	
Nitrate	9200	
Chlorides	9250, 9251, 9252	
Gross Alpha and		
Gross Beta	9310	
Alpha-Emitting		
Radium Isotopes	9315	
Radium-228	9320	

*When Method 9066 is used it must be preceded by the manual distillation specified in procedure 7.1 of Method 9065. Just prior to distillation in Method 9065, adjust the sulfuric acid-preserved sample to pH 4 with 1+9 NaOH. After the manual distillation is completed, the autoanalyzer manifold is simplified by connecting the re-sample line directly to the sampler.

Table 3-Sampling and Analysis Methods Contained in SW-846

	Third Edition	Second Edition
	section Method	section Method
Quality Control	1.0	10.0
Introduction	1.1	10.1

Quality Control	1.2		
Method Detection Limit	1.3		
Data Reporting	1.4		
Quality Control			
Documentation	1.5		
References	1.6		
Choosing the Correct			
Procedures	2.0		
Purpose	2.1		
Required Information	2.2		
Implementing the Guidance	2.3		
Characteristics	2.4		
Ground Water	2.5		
References	2.6		
Metallic Analytes	3.0		
Sampling Considerations	3.1		
Sample Preparation Methods	3.2		
Acid Digestion of Waters			
for Total Recoverable			
or Dissolved Metals			
for Analysis by			
Flame AAS or ICP	3.2	3005	
Acid Digestion of			
Aqueous Samples and			
Extracts for Total			
Metals for Analysis			
by Flame AAS or ICP	3.2	3010	4.1 3010
Acid Digestion of			

Aqueous Samples and Extracts for Total Metal for Analysis by Furnace AAS	3.2	3020	4.1	3020
Dissolution Procedure for Oils, Greases, or Waxes	3.2	3040	4.1	3040
Acid Digestion of Sediments, Sludges and Soils	3.2	3050	4.1	3050
Methods for the Determination of Metals	3.3			
Inductively Coupled Plasma Atomic Emissions Spectroscopy	3.3	*6010		
Atomic Absorption Methods	3.3	7000		
Aluminum, Flame AAS	3.3	7020		
Antimony, Flame AAS	3.3	7040	7.0	7040
Antimony, Furnace AAS	3.3	7041	7.0	7041
Arsenic, Furnace AAS	3.3	7060	7.0	7060
Arsenic, Gaseous Hydride AAS	3.3	7061	7.0	7061
Barium, Flame AAS	3.3	7080	7.0	7080
Barium, Furnace AAS	3.3	7081	7.0	7081
Beryllium, Flame AAS	3.3	*7090		

Beryllium, Furnace AAS	3.3	*7091		
Cadmium, Flame AAS	3.3	7130	7.0	7130
Cadmium, Furnace AAS	3.3	7131	7.0	7131
Calcium, Flame AAS	3.3	7140		
Chromium, Flame AAS	3.3	7190	7.0	7190
Chromium, Furnace AAS	3.3	7191	7.0	7191
Chromium, Hexavalent, Coprecipitation	3.3	7195	7.0	7195
Chromium, Hexavalent, Colorimetric	3.3	7196	7.0	7196
Chromium, Hexavalent, Chelation/Extraction	3.3	7197	7.7	7197
Chromium, Hexavalent, Differential Pulse Polarography	3.3	*7198		
Cobalt, Flame AAS	3.3	7200		
Cobalt, Furnace AAS	3.3	7201		
Copper, Flame AAS	3.3	*7210		
Copper, Furnace AAS	3.3	*7211		
Iron, Flame AAS	3.3	*7380		
Iron, Furnace AAS	3.3	*7381		
Lead, Flame AAS	3.3	7420	7.0	7420
Lead, Furnace AAS	3.3	7421	7.0	7421
Magnesium, Flame AAS	3.3	7450		
Manganese, Flame AAS	3.3	*7460		
Manganese, Furnace AAS	3.3	*7461		
Mercury in Liquid Waste, Manual Cold Vapor				

Technique	3.3	7470	7.0	7470
Mercury in Solid or Semisolid Waste, Manual Cold Vapor Technique	3.3	7471	7.0	7471
Molybdenum, Flame AAS	3.3	7480		
Molybdenum, Furnace AAS	3.3	7481		
Nickel, Flame AAS	3.3	7520	7.0	7520
Osmium, Flame AAS	3.3	*7550		
Potassium, Flame AAS	3.3	7610		
Selenium, Furnace AAS	3.3	7740		
Selenium, Gaseous Hydride AAS	3.3	7741	7.0	7741
Silver, Flame AAS	3.3	7760	7.0	7760
Silver, Furnace AAS	3.3	7761	7.0	7761
Sodium, Flame AAS	3.3	*7770		
Thallium, Flame AAS	3.3	*7840		
Thallium, Furnace AAS	3.3	*7841		
Tin, Flame AAS	3.3	7870		
Vanadium, Flame AAS	3.3	*7910		
Vanadium, Furnace AAS	3.3	*7911		
Zinc, Flame AAS	3.3	*7950		
Zinc, Furnace AAS	3.3	*7951		
Organic Analytes	4.0		8.0	
Sampling Considerations	4.1			
Sampling Preparation Methods	4.2			
Extractions and				

Preparations	4.2.1			
Organic Extraction and Sample Preparation	4.2.1	3500		
Separatory Funnel Liquid-Liquid Extraction	4.2.1	3510	4.2	3510
Continuous Liquid- Liquid Extraction	4.2.1	3520	4.2	3520
Soxhlet Extraction	4.2.1	3540	4.2	3540
Ultrasonic Extraction	4.2.1	3550	4.2	3550
Waste Dilution	4.2.1	3580		
Purge-and-Trap	4.2.1	5030	5.0	5030
Protocol for Analysis of Sorbent Cartridges from VOST	4.2.1	*5040		
Cleanup	4.2.2			
Cleanup	4.2.2	3600		
Alumina Column Cleanup	4.2.2	3610		
Alumina Column Cleanup and Separation of Petroleum Wastes	4.2.2	*3611		
Florisil Column Cleanup	4.2.2	3620		
Silica Gel Cleanup	4.2.2	3630		
Gel-Permeation Cleanup	4.2.2	3640		
Acid-Base Partition Cleanup	4.2.2	3650	4.2	3530
Sulfur Cleanup	4.2.2	3660		

Determination of Organic

Analytes	4.3		
Gas Chromatographic			
Methods	4.3.1		8.1
Gas Chromatography	4.3.1	8000	
Halogenated Volatile			
Organics	4.3.1	8010	8.1 8010
EDB and DBCP	4.3.1	8011	
Nonhalogenated Volatile			
Organics	4.3.1	8015	8.1 8015
Aromatic Volatile			
Organics	4.3.1	8020	8.1 8020
Volatile Organic Compounds			
in Water by Purge-			
and-Trap Capillary			
Column GC with PID			
and Electrolytic			
Conductivity Detector			
in Series	4.3.1	8021	
Acrolein, Acrylonitrile,			
Acetonitrile	4.3.1	8030	8.1 8030
Phenols	4.3.1	8040	8.1 8040
Phthalate Esters	4.3.1	8060	8.1 8060
Nitrosamines	4.3.1	8070	
Organochlorine Pesticides			
and PCBs as Aroclors	4.3.1	8080	8.1 8080
Nitrosamines and Cyclic			
Ketones	4.3.1	8090	8.1 8090

Polynuclear Aromatic				
Hydrocarbons	4.3.1	8100	8.1	8100
Haloethers	4.3.1	8110		
Chlorinated Hydrocarbons	4.3.1	8120	8.1	8120
Organophosphorus				
Pesticides	4.3.1	8140	8.1	8140
Organophosphorus				
Pesticides:				
Capillary Column	4.3.1	8141		
Chlorinated Herbicides	4.3.1	8150	8.1	8150
Gas Chromatographic/				
Mass Spectroscopic				
Methods	4.3.2		8.2	
GC/MS Volatiles	4.3.2	8240	8.2	8240
GC/MS Semivolatiles,				
Packed Column	4.3.2	8250	8.2	8250
GC/MS for Volatiles				
Capillary Column	4.3.2	8260		
GC/MS Semivolatiles,				
Capillary Column	4.3.2	8270	8.2	8270
Analysis of Chlorinated				
Dioxins and				
Dibenzofurans	4.3.2	8280		
High Performance Liquid				
Chromatographic				
Methods (HPLC)	4.3.3		8.3	
Polynuclear Aromatic				
Hydrocarbons	4.3.3	8310	8.3	8310

Miscellaneous Screening

Methods 4.4

Headspace 4.4 3810 5.0 5020

Hexadecane Extraction

and Screening of

Purgeable Organics 4.4 3820

Miscellaneous Test

Methods 5.0 9.0

Total and Amenable

Cyanide (Colorimetric,

Manual) 5.0 9010 9.0 9010

Total and Amenable

Cyanide (Colorimetric,

Automated) 5.0 9012

Total Organic Halides

(TOX) 5.0 9020 9.0 9020

Purgeable Organic

Halides (POX) 5.0 9021

Total Organic

Halides (TOX) by

Neutron Activation

Analysis 5.0 *9022

Acid-Soluble and

Acid-Insoluble

Sulfides 5.0 9030 9.0 9030

Extractable Sulfides 5.0 9031

Sulfate, (Colorimetric,

Automated,

Chloranilate)	5.0	*9035
Sulfate, (Colorimetric, Automated, Methylthymol Blue, AAII)	5.0	*9036
Sulfate, (Turbidimetric)	5.0	*9038
Total Organic Carbon	5.0	*9060
Phenolics, (Spectrophotometric, Manual 4-AAP)	5.0	*9065
Phenolics, (Colorimetric, Automated 4-AAP)	5.0	**9066
Phenolics, (Spectrophotometric, MBTH)	5.0	*9067
Total Recoverable Oil and Grease (Gravimetric, Separatory Funnel Extraction)	5.0	*9070
Oil and Grease Extraction Method for Sludge Samples	5.0	*9071
Total Coliform: Multiple Tube Fermentation	5.0	*9131
Total Coliform: Membrane Filter	5.0	*9132

Nitrate	5.0	*9200	
Chloride (Colorimetric, Automated Ferricyanide AAI)	5.0	*9250	
Chloride (Colorimetric, Automated Ferricyanide AAI)	5.0	*9251	
Chloride (Titrimetric, Mercuric Nitrate)	5.0	*9252	
Properties	6.0		
Multiple Extraction Procedure	6.0	*1320	
Extraction Procedure for Oily Wastes	6.0	*1330	
pH Electrometric Measurement	6.0	9040	9.0 9040
pH Paper Method	6.0	9041	
Soil pH	6.0	9045	
Specific Conductance	6.0	9050	
Cation-Exchange Capacity of Soils (Ammonium Acetate)	6.0	*9080	
Cation-Exchange Capacity of Soils (Sodium Acetate)	6.0	*9081	
Compatibility Test for Wastes and Membrane Liners	6.0	9090	

Paint Filter Liquids

Test 6.0 9095 9.0 9095

Saturated Hydraulic

Conductivity,

Saturated Leachate

Conductivity, and

Intrinsic

Permeability 6.0 *9100

Gross Alpha and Gross

Beta 6.0 *9310

Alpha-Emitting Radium

Isotopes 6.0 *9315

Radium-228 6.0 *9320

Introduction and

Regulatory

Definitions 7.0 2.0

Ignitability 7.1 2.1.1

Corrosivity 7.2 2.1.2

Reactivity 7.3 2.1.3

Test Method to Determine

Hydrogen Cyanide

Released from Wastes 7.3

Test Method to Determine

Hydrogen Sulfide

Released from Wastes 7.3

Extraction Procedure

Toxicity 7.4 2.1.4

Methods for Determining

Characteristics	8.0		2.0	
Ignitability	8.1		2.1.1	
Pensky-Martens Closed				
Cup Method	8.1	1010	2.1.1	1010
Setaflash Closed Cup				
Method	8.1	1020	2.1.1	1020
Corrosivity	8.2		2.1.2	
Corrosivity Toward Steel	8.2	1110	2.1.2	1110
Reactivity	8.3		2.1.3	
Toxicity	8.4		2.1.4	
Extraction Procedure				
(EP) Toxicity Test				
Method and Structural				
Integrity Test	8.4	1310	2.1.4	1310
Sampling Plan	9.0		1.0	
Design and Development	9.1		1.0, 1.1	
Implementation	9.2		1.2, 1.3,	
			and 1.4	
Sampling Methods	10.0			
Modified Method 5				
Sampling Train,				
Appendix A and B	10.0	*0010		
Source Assessment				
Sampling System				
(SASS)	10.0	*0020		
Volatile Organic				
Sampling Train	10.0	*0030		
Ground Water Monitoring	11.0			

Background and	
Objectives	11.1
Relationship to the	
Regulations and to	
Other Documents	11.2
Revisions and Additions	11.3
Acceptable Designs and	
Practices	11.4
Unacceptable Designs	
and Practices	11.5
Land Treatment Monitoring	12.0
Background	12.1
Treatment Zone	12.2
Regulatory Definition	12.3
Monitoring and Sampling	
Stragegy	12.4
Analysis	12.5
References and	
Bibliography	12.6
Incineration	13.0
Introduction	13.1
Regulatory Definition	13.2
Waste Characterization	
Strategy	13.3
Stack-Gas Effluent	
Characterization	
Strategy	13.4
Additional Effluent	

Characterization

Strategy 13.5

Selection of Specific

Sampling and

Analysis Methods 13.6

References 13.7

* This Method may be used in conjunction with or in addition to the methods found in the Second Edition of SW-846 as amended by Updates I and II.

+ When Method 9066 is used it must precede the manual distillation specified in procedure 7.1 of Method 9065. Just prior to distillation in Method 9065, adjust the sulfuric acid-preserved sample to pH 4 with 1+9 NaOH. After the manual distillation is completed, the autoanalyzer manifold is simplified by connecting the re-sample line directly to the sampler.

Table 4-Analysis Methods for Persistent and Bioaccumulative Toxic Substances

Compound(s)	Method No.	Reference
Antimony	7040, 7041, or 6010	1
Arsenic	7060, 7061, or 6010	1
Asbestos		2
Barium	7080 or 6010	1
Beryllium	7090, 7091, or 6010	1
Cadmium	7130, 7131, or 6010	1

Chromium (VI)	7195, 7196, or 7197	1
Chromium (Total/III)	7190, 7191, or 6010	1
Cobalt	7200, 7201, or 6010	1
Copper	7210 or 6010; 7211	1;3
Fluoride	300.0, 340.1, 340.2, or 340.3	4
Lead	7420, 7421, or 6010	1
Mercury	7470 or 7471	1
Molybdenum	7480, 7481, or 6010	1
Nickel	7520 or 6010	1
Selenium	7740 or 7741	1
Silver	7760 or 6010; 7761	1;3
Thallium	7840, 7841, or 6010	1
Vanadium	7910, 7911, or 6010	1
Zinc	7950 or 6010; 7951	1;3
Aldrin	8080, 8250, or 8270	1
Chlordane	8080, 8250, or 8270	1
DDT, DDE, DDD	8080, 8250, or 8270	1
2,4-Dichlorophenoxyacetic acid	8150	1
Dieldrin	8080, 8250, or 8270	1
Dioxin (2,3,7,8-TCDD)	8280	1
Endrin	8080, 8250, or 8270	1
Heptachlor	8080, 8250, or 8270	1
Kepone	Section 5, A, (5), (a)	5
Lead, organic	See Appendix XI	
Lindane	8080, 8250, or 8270	1
Methoxychlor	8080, 8250, or 8270	1

Mirex	8080, 8250, or 8270	1
Pentachlorophenol	8040, 8250, or 8270	1
Polychlorinated biphenyls (PCBs)	8080, 8250, or 8270	1
Toxaphene	8080, 8250, or 8270	1
Trichloroethylene	8010 or 8240	1
2,4,5-Trichlorophenoxypropionic acid	8150	1

- 1 -- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd Edition, U.S. Environmental Protection Agency, 1986.
- 2 -- "Interim Method of the Determination of Asbestos in Bulk Insulation Samples," 40 CFR Part 763, Subpart F, Appendix A.
- 3 -- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 2nd Edition, U.S. Environmental Protection Agency, 1982.
- 4 -- "Methods for Chemical Analysis of Water and Wastes," "EPA-600/4-79-020, U.S. Environmental Protection Agency, 1979.
- 5 -- "Manual of Analytical Methods for the Analysis of Pesticides in Humans and Environmental Samples," EPA-600/8-80-038, U.S. Environmental Protection Agency, 1980.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25141 and 25159, Health and Safety Code and 40 CFR Part 261 Appendix III.

Appendix VII-Basis for Listing Hazardous Waste

EPA

Hazardous

Waste No. Hazardous constituents for which listed

F001 Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.

F002 Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.

F003 N.A.

F004 Cresols and cresylic acid, nitrobenzene.

F005 Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.

F006 Cadmium, hexavalent chromium, nickel, cyanide (complexed).

F007 Cyanide (salts).

F008 Cyanide (salts).

F009 Cyanide (salts).

F010 Cyanide (salts).

F011 Cyanide (salts).

F012 Cyanide (complexed).

F019 Hexavalent chromium, cyanide (complexed).

- F020 Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
- F021 Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
- F022 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
- F023 Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
- F024 Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.

F025 Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chlorethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichlorethylene, 1,1-dichloroethylene, 1,1,1-trichlorethane, 1,1,2-trichlorethane, trichlorethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, benzene, chlorobenzene, dichlorobenzene, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.

F026 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.

F027 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.

F028 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.

F039 All constituents which treatments standards are specified for multi-source leachate (wastewaters and nonwastewaters) under Section 66268.43(a), Table CCW.

K001 Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol,

trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a) pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a) anthracene, acenaphthalene.

- K002 Hexavalent chromium, lead.
- K003 Hexavalent chromium, lead.
- K004 Hexavalent chromium.
- K005 Hexavalent chromium, lead.
- K006 Hexavalent chromium.
- K007 Cyanide (complexed), hexavalent chromium.
- K008 Hexavalent chromium.
- K009 Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
- K010 Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
- K011 Acrylonitrile, acetonitrile, hydrocyanic acid.
- K013 Hydrocyanic acid, acrylonitrile, acetonitrile.
- K014 Acetonitrile, acrylamide.
- K015 Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
- K016 Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
- K017 Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols.
- K018 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.

- K019 Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
- K020 Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
- K021 Antimony, carbon tetrachloride, chloroform.
- K022 Phenol, tars (polycyclic aromatic hydrocarbons).
- K023 Phthalic anhydride, maleic anhydride.
- K024 Phthalic anhydride, 1,4-naphthoquinone.
- K025 Meta-dinitrobenzene, 2,4-dinitrotoluene.
- K026 Paraldehyde, pyridines, 2-picoline.
- K027 Toluene diisocyanate, 2,4-toluenediamine.
- K028 1,1,1-trichloroethane, vinyl chloride.
- K029 1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
- K030 Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
- K031 Arsenic.
- K032 Hexachlorocyclopentadiene.
- K033 Hexachlorocyclopentadiene.

K034	Hexachlorocyclopentadiene.	
K035	Creosote, chrysene, naphthalene, fluoranthene, benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.	
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.	
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.	
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.	
K039	Phosphorodithioic and phosphorothioic acid esters.	
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.	
K041	Toxaphene.	
K042	Hexachlorobenzene, ortho-dichlorobenzene.	
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.	
K044	N.A.	
K045	N.A.	
K046	Lead.	
K047	N.A.	
K048	Hexavalent chromium, lead.	
K049	Hexavalent chromium, lead.	
K050	Hexavalent chromium.	
K051	Hexavalent chromium, lead.	
K052	Lead.	
K060	Cyanide, naphthalene, phenolic compounds, arsenic.	
K061	Hexavalent chromium, lead, cadmium.	

K062 Hexavalent chromium, lead.

K064 Lead, cadmium.

K065 Lead, cadmium.

K066 Lead, cadmium.

K069 Hexavalent chromium, lead, cadmium.

K071 Mercury.

K073 Chloroform, carbon tetrachloride, hexachloroethane,
trichloroethane, tetrachloroethylene, dichloroethylene,
1,1,2,2-tetrachloroethane.

K083 Aniline, diphenylamine, nitrobenzene, phenylenediamine.

K084 Arsenic.

K085 Benzene, dichlorobenzenes, trichlorobenzenes,
tetrachlorobenzenes, pentachlorobenzene,
hexachlorobenzene, benzyl chloride.

K086 Lead, hexavalent chromium.

K087 Phenol, naphthalene.

K088 Cyanide (complexes).

K090 Chromium.

K091 Chromium.

K093 Phthalic anhydride, maleic anhydride.

K094 Phthalic anhydride.

K095 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane,
1,1,2,2-tetrachloroethane.

K096 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-
trichloroethane.

K097 Chlordane, heptachlor.

K098 Toxaphene.

K099 2,4-dichlorophenol, 2,4,6-trichlorophenol.

K100 Hexavalent chromium, lead, cadmium.

K101 Arsenic.

K102 Arsenic.

K103 Aniline, nitrobenzene, phenylenediamine.

K104 Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.

K105 Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.

K106 Mercury.

K107 1,1-Dimethylhydrazine (UDMH).

K108 1,1-Dimethylhydrazine (UDMH).

K109 1,1-Dimethylhydrazine (UDMH).

K110 1,1-Dimethylhydrazine (UDMH).

K111 2,4-Dinitrotoluene.

K112 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.

K113 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.

K114 2,4-Toluenediamine, o-toluidine, p-toluidine.

K115 2,4-Toluenediamine.

K116 Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.

K117 Ethylene dibromide.

K118 Ethylene dibromide.

K123 Ethylene thiourea.

K124 Ethylene thiourea.

K125 Ethylene thiourea.

K126 Ethylene thiourea.

K131 Dimethyl sulfate, methyl bromide.

K132 Methyl bromide.

K136 Ethylene dibromide.

N.A.-Waste is hazardous because it exhibits the characteristic of ignitability, corrosivity or reactivity.

NOTE: Authority cited: Sections 208, 25141 and 25159, Health and Safety Code.

Reference: Sections 25141 and 25159, Health and Safety Code and 40 CFR Part 261 Appendix VII.

Appendix VIII-Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA
			Haz. Waste No.
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminefluarone	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime	116-06-3	P070
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,	309-00-2	P004

	8alpha)-		
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propene, 3-chloro	107-05-1	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	
5-(Aminomethyl)-3- isoxazolol	3(2H)-Isoxazolone, 5- (aminomethyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119
Aniline	Benzenamine	62-53-3	U012
Antimony	Same	7440-36-0	
Antimony compounds,	N.O.S. ¹		
Aramite	Sulfurous acid, 2-chloro ethyl 2-[4-(1,1-dimethyl ethyl)phenoxy]-1-methyl- ethyl ester	140-57-8	
Arsenic	Same	7440-38-2	
Arsenic compounds,	N.O.S. ¹		
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	PO10
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	PO11
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	PO12
Auramine	Benzenamine, 4,4'- carbonimidoylbis[N,N-dimethyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015

Barium	Same	7440-39-3	
Barium compounds,	N.O.S. ¹		
Barium cyanide	Same	542-62-1	P013
Benz[c]acridine	Same	225-51-4	U016
Benz[a]anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzeneearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	[1,1'-Biphenyl]-4,4'- diamine	92-87-5	U021
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2	
Benzo[j]fluoranthene	Same	205-82-3	
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4- dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium dust	Same	7440-41-7	P015
Beryllium compounds,	N.O.S. ¹		
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4- phenoxy	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3- dimethoxy	357-57-3	P018
Butyl benzyl	1,2-Benzenedicarboxylic	85-68-7	

phthalate	acid, butyl phenylmethyl ester		
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds,	N.O.S. ¹		
Calcium chromate	Chromic acid, H ₂ CrO ₄ , calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide Ca(CN) ₂	592-01-8	P021
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4- [bis(2-chloroethyl)amino]-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene,1,2, 4,5,6,7,8,8-octachloro-2, 3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chlordane (alpha and gamma isomers)			U036
Chlorinated benzenes,	N.O.S. ¹		
Chlorinated ethane,	N.O.S. ¹		
Chlorinated fluoro- carbons,	N.O.S. ¹		
Chlorinated naphtha- lene,	N.O.S. ¹		
Chlorinated phenol,			

N.O.S.¹

Chlornaphazine	Naphthalenamine, N,N'-bis (2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S. ¹			
p-Chloroaniline	Benzenamine, 4-chloro	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4- chloro-alpha-(4-chloro- phenyl)-alpha-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
beta-Chloro- naphthalene	Napthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl) thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropio- nitrile	Propanenitrile, 3-chloro-	542-76-7	P027

Chromium	Same	7440-47-3	
Chromium compounds, N.O.S. ¹			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-[(2,5- dimethoxyphenyl)azo]-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Creosote	Same		U051
Cresol (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
Cyanides (soluble salts and complexes) N.O.S. ¹			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7	
2-Cyclohexyl-4,6- dinitrophenol	Phenol, 2-cyclohexyl-4, 6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin- 2-amine, N,N-bis(2-chloro- ethyl)tetrahydro-, 2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichloro- phenoxy)-	94-75-7	U240

2,4-D, salts and esters			U240
Daunomycin	5,12-Naphthacenedione, 8-acety1-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3	U059
DDD	Benzene, 1,1'-(2,2-dichloroethylethylidene)bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2-trichloroethylethylidene)bis[4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h]acridine	Same	226-36-8	
Dibenz[a,j]acridine	Same	224-42-0	
Dibenz[a,h]anthracene	Same	53-70-3	U063
7H-Dibenzo[c,g]carbazole	Same	194-59-2	
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4	
Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0	
Dibenzo[a,i]pyrene	Dibenzo[rst]pentaphene	189-55-9	U064

1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutylester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S. ¹	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S. ¹	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'-oxybis [2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis [1-chloro-	108-60-1	U027
Dichloromethoxy	Ethane, 1,1'-[methylenebis	111-91-1	U024

ethane	(oxy)]bis[2-chloro-		
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenyl-arsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S. ¹	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S. ¹	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S. ¹	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6, 9,9-hexachloro-1a,2,2a,3, 6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha, 7beta,7aalpha)-	60-57-1	P037
1,2:3,4-Diepoxy butane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl	1,2-Benzenedicarboxylic	117-81-7	U028

phthalate	acid, bis(2-ethylhexyl) ester		
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl	1615-80-1	U086
O,O-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyra- zinyl phosphoro- thioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl- 1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropyl- fluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2- (methylamino)-2- oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxy Benzidine	[1,1'-Biphenyl]-4,4'- diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazo-	Benzenamine, N,N-dimethyl-	60-11-7	U093

benzene	4-(phenylazo)-		
7,12-Dimethylbenz[a]	Benz[a]anthracene,	57-97-6	U094
anthracene	7,12-dimethyl-		
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,	119-93-7	U095
	4'-diamine, 3,3'-dimethyl-		
Dimethylcarbamoyl	Carbamic chloride,	79-44-7	U097
chloride	dimethyl-		
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
alpha, alpha-Dimethyl-	Benzeneethanamine, alpha,	122-09-8	P046
phenethylamine	alpha-dimethyl-		
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethyl phthalate	1,2-Benzenedicarboxylic	131-11-3	U102
	acid, dimethyl ester		
Dimethyl sulfat	Sulfuric acid, dimethyl	77-78-1	U103
	ester		
Dinitrobenzene,	Benzene, dinitro-	25154-54-5	
N.O.S. ¹			
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-	534-52-1	P047
	dinitro-		
4,6-Dinitro-o-cresol			P047
salts			
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-	121-14-2	U105
	dinitro-		
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-	606-20-2	U106

	dinitro-		
Dinoseb	Phenol, 2-(1-methylpropyl)- 4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U017
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitros- amine	1-Propanamine, N-nitroso-N- propyl-	621-64-7	U111
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethyl- thio)ethyl] ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH	541-53-7	P049
Endosulfan	6,9-Methano-2,4,3- benzodioxathiepin, 6,7,8, 9,10,10-hexachloro-1,5,5a, 6,9,9a-hexahydro-, 3- oxide	115-29-7	P050
Endothall	7-Oxabicyclo[2.2.1]heptane- 2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6, 9,9-hexachloro-1a,2,2a,3, 6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,	72-20-8	P051

3alpha,6alpha,6abeta, 7beta, 7aalpha)-			
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4- [1-hydroxy-2-(methylamino) ethyl]-, (R)-	51-43-4	P042
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	Pl01
Ethylenebisdithiocar- bamic acid	Carbamodithioic acid, 1,2- ethanediylbis-	111-54-6	U114
Ethylenebisdithiocar- bamic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2- methyl-, ethyl ester	97-63-2	U118

Ethyl methanesul- fonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Famphur	Phosphorothioic acid, 0-[4- [(dimethylamino) sulfonyl] phenyl] 0,0-dimethyl ester	52-85-7	P097
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro- sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formic acid	Same	64-18-6	U123
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S. ¹			
Heptachlor	4,7-Methano-1H-indene, 1,4, 5,6,7,8,8-heptachloro-3a, 4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno [1,2-b]oxirene, 2,3,4,5,6, 7,7-heptachloro-1a,1b,5,5a, 6,6a-hexahydro-(1aalpha, 1bbeta,2alpha,5alpha, 5abeta,6beta,6aalpha)-	1024-57-3	
Heptachlor epoxide (alpha, beta, and gamma isomers)			

Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4, 4-hexachloro-	87-68-3	U128
Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2, 3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzo-furans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis [3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3,- hexachloro-	1888-71-7	U243
Hexaethyl tetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H ₂ S	7783-06-4	U135
Indeno[1,2,3-cd]-pyrene	Same	193-39-5	U137
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-	465-73-6	P060

	hexahydro-, (1alpha, 4alpha,4abeta,5beta,8beta, 8abeta)-		
Isosafrole	1,3-Benzodioxole, 5- (1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta [cd]pentalen-2-one,1,1a, 3,3a,4,5,5,5a,5b,6-deca- chlorooctahydro-	143-50-0	U142
Lasiocarpine	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2- (1-methoxyethyl)-3-methyl- oxobutoxy]methyl]-2,3,5, 7a-tetrahydro-1H-pyrroli- zin-1-yl ester,[1S-[1alpha (Z),7(2S*,3R*),7aalpha]]-	303-34-4	U143
Lead	Same	7439-92-1	
Lead compounds N.O.S. ¹			
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O) tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6- hexachloro-, (1alpha,	58-89-9	U129

	2alpha,3beta,4alpha, 5alpha,6beta)		
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2- dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Melphalan	L-Phenylalanine, 4-[bis(2- chloroethyl) amino]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S. ¹			
Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4	P065
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N- dimethyl-N'-2-pyridinyl- N'-(2-thienylmethyl)-	91-80-5	U155
Methomyl	Ethanimidothioic acid, N- [[(methylamino) carbonyl] oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-tri- chloroethylidene)bis [4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045

Methyl	Carbonochloridic acid,	79-22-1	U156
	chlorocarbonate methyl ester		
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-	56-49-5	U157
	dihydro-3-methyl-		
4,4'-Methylenebis	Benzenamine, 4,4'-methy-	101-14-4	U158
	(2-chloroaniline) lenebis[2-chloro-		
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone	2-Butanone	78-93-3	U159
	(MEK)		
Methyl ethyl ketone	2-Butanone, peroxide	1338-23-4	U160
	peroxide		
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methylactonitrile	Propanenitrile, 2-hydroxy-	75-86-5	P069
	2-methyl-		
Methyl methacrylate	2-Propenoic acid, 2-	80-62-6	U162
	methyl-, methyl ester		
Methyl methanesul-	Methanesulfonic acid,	66-27-3	
fonate	methyl ester		
Methyl parathion	Phosphorothioic acid, 0,0-	298-00-0	P071
	dimethyl 0-(4-nitrophenyl)		
	ester		
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-	56-04-2	U164

	dihydro-6-methyl-2-thioxo-		
Mitomycin C	Azirino[2,3':3,4]pyrrolo	50-07-7	U010
	[1,2-a]indole-4,7-dione,		
	6-amino-8-[[(aminocarbonyl) oxy]methyl]-		
	1,1a,2,8,8a,		
	8b-hexahydro-8a-methoxy-		
	5-methyl-, [1aS-(1aalpha,		
	8beta,8aalpha,8balpha)]-		
MNNG	Guanidine, N-methyl-N'-	70-25-7	U163
	nitro-N-nitroso-		
Mustard gas	Ethane, 1,1'-thiobis[2-	505-60-2	
	chloro-		
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
alpha-Naphthylamine	1-Naphthalenamine	134-32-7	U167
beta-Naphthylamine	2-Naphthalenamine	91-59-8	U168
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S. ¹			
Nickel carbonyl	Nickel carbonyl Ni(CO) ₄ ,	13463-39-3	P073
	(T-4)-		
Nickel cyanide	Nickel cyanide Ni(CN) ₂	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-	54-11-5	P075
	pyrrolidinyl)-, (S)-		
Nicotine salts			P075

Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169
Nitrogen dioxide	Nitrogen oxide NO ₂	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N- (2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N- (2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S. ¹		35576-91-1	
N-Nitrosodi-n- butylamine	1-Butanamine, N-butyl-N- nitroso-	924-16-3	U172
N-Nitrosodiethanol- amine	Ethanol, 2,2'-(nitroso- imino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N- nitroso-	55-18-5	U174
N-Nitrosodimethyl-	Methanamine, N-methyl-N-	62-75-9	P082

amine	nitroso-		
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethyl- amine	Ethanamine, N-methyl-N- nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methyl- urethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinyl- amine	Vinylamine, N-methyl-N- nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosornicotine	Pyridine, 3-(1-nitroso-2- pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N- nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5- nitro-	99-55-8	U181
Octamethylpyrophos- phoramide	Diphosphoramidate, octam- ethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO ₄ , (T-4)-	20816-12-0	P087
Paraldehyde	1,3,5-Trioxane, 2,4,6- trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, 0,0-	56-38-2	P089

diethyl 0-(4-nitrophenyl)

ester

Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p- dioxins			
Pentachlorodibenzo- furans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitro- benzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxy- phenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
Phenylmercury acetate	Mercury, (acetato-O) phenyl	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio) methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S. ¹			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191

Polychlorinated

biphenyls N.O.S.¹

Potassium cyanide	Potassium cyanide K(CN)	151-50-8	P098
Potassium silver cyanide	Argentate(1-), bis (cyano-C)-, potassium	506-61-6	P099
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thio-	51-52-5	
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
Saccharin salts			U202

Safrole	1,3-Benzodioxole, 5-	94-59-7	U203
	(2-propenyl)-		
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S. ¹			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS ₂	7488-56-4	U205
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds N.O.S. ¹			
Silver cyanide	Silver cyanide Ag(CN)	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-	93-72-1	See F027
	trichlorophenoxy)-		
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9	P106
Streptozotocin	D-Glucose, 2-deoxy-2-	18883-66-4	U206
	[[(methylnitrosoamino)		
	carbonyl]amino]-		
Strontium sulfide	Strontium sulfide SrS	1314-96-1	P107
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
TCDD	Dibenzo[b,e][1,4]dioxin,	1746-01-6	
	2,3,7,8-tetrachloro-		
1,2,4,5-Tetrachloro-	Benzene, 1,2,4,5-tetra-	95-94-3	U207
benzene	chloro		
Tetrachlorodibenzo-p-			

dioxins

Tetrachlorodibenzo-
furans

Tetrachloroethane, N.O.S. ¹	Ethane, tetrachloro- N.O.S.	25322-20-7	
1,1,1,2-Tetrachloro- ethane	Ethane, 1,1,1,2-tetra- chloro	630-20-6	U208
1,1,2,2-Tetrachloro- ethane	Ethane, 1,1,2,2-tetra- chloro	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachloro- phenol	Phenol, 2,3,4,6-tetra- chloro-	58-90-2	See F027
Tetraethyldithiopyro- pyrophosphate	Thiodophosphoric acid, tetraethyl ester	3689-24-5	P109
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds, N.O.S. ¹			
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8	U214
Thallium(I) carbonate	Carbonic acid, dithallium (1+) salt	6533-73-9	U215
Thallium(I) chloride	Thallium chloride $TlCl$	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217

Thallium selenite	Selenious acid, dithallium (1+) salt	12039-52-0	P114
Thallium(I) sulfate	Sulfuric acid, dithallium (1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiofanox	2-Butanone, 3,3-dimethyl- 1-(methylthio)-,O-[(methyl- amino)carbonyl]oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219
Thiram	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-	137-26-8	U244
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar- methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4- methyl	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2- methyl	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4- methyl	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanato- methyl-	26471-62-5	U223

o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro	79-00-5	U227
Trichloroethylene	Ethene, trichloro	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoro- methane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5- trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S. ¹		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
O,O,O-Triethyl phos- phorothioate	Phosphorothioic acid, O,O, O-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5,-trinitro	99-35-4	U234
Tris(1-aziridinyl) phosphine sulfide	Aziridine, 1,1',1"-phos- phinothioylidynetris-	52-24-4	
Tris(2,3-dibromo- propyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic	72-57-1	U236

	acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]- 4,4'-diyl)bis(azo)]bis [5-amino-4-hydroxy-, tetrasodium salt		
Uracil mustard	2,4-(1H,3H)-Pyrimidine- dione,5-[bis(2-chloroethyl) amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1	P120
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4- hydroxy-3-(3-oxo-1- phenylbutyl)-, when present at concentrations of 0.3% or less	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4- hydroxy-3-(3-oxo-1- phenylbutyl)-, when present at concentrations greater than 0.3%	81-81-2	POOL
Warfarin salts when present at concen- trations of 0.3% or less			U248
Warfarin salts when present at concen- trations greater than 0.3%			POOL

Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide Zn_3P_2 ,	1314-84-7	P122
	when present at concentra-		
	tions greater than 10%		
Zinc phosphide	Zinc phosphide Zn_3P_2	1314-84-7	U249
	when present at concentra-		
	tions of 10% or less		

¹-The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

NOTE: Authority cited: Sections 208, 25140 and 25159, Health and Safety Code.

Reference: Sections 25140 and 25159, Health and Safety Code and 40 CFR Part 261 Appendix VIII.

Appendix X-List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials

(a) This subdivision sets forth a list of chemicals which create a presumption that a waste is a hazardous waste. If a waste consists of or contains a chemical listed in this subdivision, the waste is presumed to be a hazardous waste unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in Section 66262.11. The hazardous characteristics which serve as a basis for listing the chemicals are indicated in the list as follows: (X) toxic, (C) corrosive, (I) ignitable and (R) reactive. A chemical denoted with an asterisk is presumed to be an extremely hazardous waste unless it does not exhibit any of the criteria set forth in Section 66261.110 and Section 66261.113. Trademark chemical names are indicated by all capital letters.

1. Acetaldehyde (X,I)
2. Acetic acid (X,C,I)
3. Acetone, Propanone (I)
4. *Acetone cyanohydrin (X)
5. Acetonitrile (X,I)
6. *2-Acetylaminofluorene, 2-AAF (X)
7. Acetyl benzoyl peroxide (X,I,R)
8. *Acetyl chloride (X,C,R)
9. Acetyl peroxide (X,I,R)
10. Acridine (X)
11. *Acrolein, Aqualin (X,I)
12. *Acrylonitrile (X,I)

13. *Adiponitrile (X)
14. *Aldrin; 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo-exodimethanonaphthalene (X)
15. *Alkyl aluminum chloride (C,I,R)
16. *Alkyl aluminum compounds (C,I,R)
17. Allyl alcohol, 2-Propen-1-ol (X,I)
18. Allyl bromide, 3-Bromopropene (X,I)
19. Allyl chloride, 3-Chloropropene (X,I)
20. Allyl chlorocarbonate, Allyl chloroformate (X,I)
21. *Allyl trichlorosilane (X,C,I,R)
22. Aluminum (powder) (I)
- 23A. Aluminum chloride (X,C)
- 23B. *Aluminum chloride (anhydrous) (X,C,R)
24. Aluminum fluoride (X,C)
25. Aluminum nitrate (X,I)
26. *Aluminum phosphide, PHOSTOXIN (X,I,R)
27. *4-Aminodiphenyl, 4-ADP (X)
28. *2-Aminopyridine (X)
29. *Ammonium arsenate (X)
30. *Ammonium bifluoride (X,C)
31. Ammonium chromate (X,I)
32. Ammonium dichromate, Ammonium bichromate (X,C,I)
33. Ammonium fluoride (X,C)
34. Ammonium hydroxide (X,C)
35. Ammonium molybdate (X)
36. Ammonium nitrate (I,R)
37. Ammonium perchlorate (I,R)
38. Ammonium permanganate (X,I,R)

39. Ammonium persulfate (I,R)
40. Ammonium picrate (I,R)
41. Ammonium sulfide (X,C,I,R)
42. n-Amyl acetate, 1-Acetoxypentane (and isomers) (X,I)
43. n-Amylamine, 1-Aminopentane (and isomers) (X,I)
44. n-Amyl chloride, 1-Chloropentane (and isomers) (X,I)
45. n-Amylene, 1-Pentene (and isomers) (X,I)
46. n-Amyl mercaptan, 1-Pentanethiol (and isomers) (X,I)
47. n-Amyl nitrite, n-Pentyl nitrite (and isomers) (X,I)
48. *Amyl trichlorosilane (and isomers) (X,C,R)
49. Aniline, Aminobenzene (X)
50. Anisoyl chloride (X,C)
51. Anthracene (X)
52. Antimony (X)
53. Antimony compounds (X)
54. *Antimony pentachloride (X,C,R)
55. *Antimony pentafluoride (X,C,R)
56. Antimony pentasulfide (X,I)
57. Antimony potassium tartrate (X)
58. Antimony sulfate, Antimony trisulfate (X,I)
59. Antimony trichloride, Antimony chloride (X,C)
60. Antimony trifluoride, Antimony fluoride (X,C)
61. Antimony trioxide, Antimony oxide (X)
62. Antimony trisulfide, Antimony sulfide (X,I,R)
63. *Arsenic (X)
64. *Arsenic acid and salts (X)
65. *Arsenic compounds (X)
66. *Arsenic pentaselenide (X)

67. *Arsenic pentoxide, Arsenic oxide (X)
68. *Arsenic sulfide, Arsenic disulfide (X)
69. *Arsenic tribromide, Arsenic bromide (X)
70. *Arsenic trichloride, Arsenic chloride (X)
71. *Arsenic triiodide, Arsenic iodide (X)
72. *Arsenic trioxide, Arsenious oxide (X)
73. *Arsenious acid and salts (X)
74. *Arsines (X)
75. Asbestos (including chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite) (X)
76. *AZODRIN, 3-Hydroxy-N-cis-crotonamide (X)
77. Barium (X,I)
78. Barium azide (I,R)
79. Barium bromide (X)
80. Barium carbonate (X)
81. Barium chlorate (X,C,I,R)
82. Barium chloride (X)
83. Barium chromate (X)
84. Barium citrate (X)
85. Barium compounds (soluble) (X)
86. *Barium cyanide (X)
87. Barium fluoride (X)
88. Barium fluosilicate (X)
89. Barium hydroxide (X)
90. Barium iodide (X)
91. Barium manganate (X)
92. Barium nitrate (X,I)
93. Barium oxide, Barium monoxide (X)

94. Barium perchlorate (X,I,R)
95. Barium permanganate (X,I,R)
96. Barium peroxide (X,I,R)
97. Barium phosphate (X)
98. Barium stearate (X)
99. Barium sulfide (X)
100. Barium sulfite (X)
101. Benzene (X,I)
102. *Benzene hexachloride, BHC; 1,2,3,4,5,6-Hexachlorocyclohexane
(X)
103. *Benzenephosphorous dichloride (I,R)
104. Benzenesulfonic acid (X)
105. *Benzidine and salts (X)
106. *Benzotrifluoride, Trifluoromethylbenzene (X,I)
107. *Benzoyl chloride (X,C,R)
108. Benzoyl peroxide, Dibenzoyl peroxide (X,I,R)
109. Benzyl bromide, alpha-Bromotoluene (X,C)
110. Benzyl chloride, alpha-Chlorotoluene (X)
111. *Benzyl chlorocarbonate, Benzyl chloroformate (X,C,R)
112. *Beryllium (X,I)
113. *Beryllium chloride (X)
114. *Beryllium compounds (X)
115. *Beryllium copper (X)
116. *Beryllium fluoride (X)
117. *Beryllium hydride (X,C,I,R)
118. *Beryllium hydroxide (X)
119. *Beryllium oxide (X)
120. *BIDRIN, Dicrotophos, 3-(Dimethylamino)-1-methyl-3-oxo-1-

- propenyldimethyl phosphate (X)
121. *bis (Chloromethyl) ether, Dichloromethylether, BCME (X)
122. Bismuth (X,I)
123. *bis (Methylmercuric) sulfate, CEREWET, Ceresan liquid (X)
124. Bismuth chromate (X)
125. *BOMYL, Dimethyl 3-hydroxyglutaconate dimethyl phosphate (X)
126. *Boranes (X,I,R)
127. *Bordeaux arsenites (X)
128. *Boron trichloride, Trichloroborane (X,C,R)
129. *Boron trifluoride (X,C,R)
130. Bromic acid (X)
131. *Bromine (X,C,I)
132. *Bromine pentafluoride (X,C,I,R)
133. *Bromine trifluoride (X,C,I,R)
134. *Brucine, Dimethoxystrychnine (X)
135. 1,2,4-Butanetriol trinitrate (R)
136. n-Butyl acetate, 1-Acetoxybutane (and isomers) (X)
137. n-Butyl alcohol, 1-Butanol (and isomers) (X)
138. n-Butyl amine, 1-Aminobutane (and isomers) (X)
139. n-Butyl formate (and isomers) (X)
140. tert-Butyl hydroperoxide (and isomers) (X,I)
141. *n-Butyllithium (and isomers) (X,C,I,R)
142. n-Butyl mercaptan, 1-Butanethiol (and isomers) (X,I)
143. tert-Butyl peroxyacetate, tert-Butyl peracetate (I,R)
144. tert-Butyl peroxybenzoate, tert-Butyl perbenzoate (I,R)
145. tert-Butyl peroxyvalerate (I,R)
146. *n-Butyltrichlorosilane (C,I,R)
147. para-tert-Butyl toluene (X)

148. n-Butyraldehyde, n-Butanal (and isomers) (X,I)
149. *Cacodylic acid, Dimethylarsinic acid (X)
150. *Cadmium (powder) (X,I)
151. Cadmium chloride (X)
152. *Cadmium compounds (X)
153. *Cadmium cyanide (X)
154. Cadmium fluoride (X)
155. Cadmium nitrate (X,I,R)
156. Cadmium oxide (X)
157. Cadmium phosphate (X)
158. Cadmium sulfate (X)
159. *Calcium (I,R)
160. *Calcium arsenate, PENSAL (X)
161. *Calcium arsenite (X)
162. *Calcium carbide (C,I,R)
163. Calcium chlorate (I,R)
164. Calcium chlorite (I)
165. Calcium fluoride (X)
166. *Calcium hydride (C,I,R)
167. Calcium hydroxide, Hydrated lime (C)
168. *Calcium hypochlorite, Calcium oxychloride (dry) (X,C,I,R)
169. Calcium molybdate (X)
170. Calcium nitrate, Lime nitrate, Nitrocalcite (I,R)
171. Calcium oxide, Lime (C)
172. Calcium permanganate (X,I)
173. Calcium peroxide, Calcium dioxide (C,I)
174. *Calcium phosphide (X,I,R)
175. Calcium resinate (I)

176. Caprylyl peroxide, Octyl peroxide (I)
177. *Carbanolate, BANOL, 2-Chloro-4,5-dimethylphenyl methylcarbamate (X)
178. Carbon disulfide, Carbon bisulfide (X,I)
179. Carbon tetrachloride, Tetrachloromethane (X)
180. *Carbophenothion, TRITHION, S[[[4-Chlorophenyl] thio]methyl] 0,0-diethyl phosphorodithioate (X)
181. Chloral hydrate, Trichloroacetaldehyde (hydrated) (X)
182. *Chlordane; 1,2,4,5,6,7,8,8-Octachloro-4,7-methano-3a,4,7,7a-tetra- hydro- indane; (X)
183. *Chlorfenvinphos, Compound 4072, 2-Chloro-1-(2,4-dichlorophenyl) vinyl diethyl phosphate (X)
184. *Chlorine (X,C,I,R)
185. *Chlorine dioxide (X,C,I,R)
186. *Chlorine pentafluoride (X,C,I,R)
187. *Chlorine trifluoride (X,C,I,R)
188. *Chloroacetaldehyde (X,C)
189. *alpha-Chloroacetophenone, Phenyl chloromethyl ketone (X)
190. *Chloroacetyl chloride (X,C,R)
191. Chlorobenzene (X,I)
192. para-Chlorobenzoyl peroxide (I,R)
193. *ortho-Chlorobenzylidene malonitrile, OCMB (X)
194. Chloroform, Trichloromethane (X)
195. *Chloropicrin, Chloropicrin, Trichloronitromethane (X)
196. *Chlorosulfonic acid (X,C,I,R)
197. Chloro-ortho-toluidine, 2-Amino-4-chlorotoluene (X)
198. Chromic acid, Chromium trioxide, Chromic anhydride (X,C,I)
199. Chromic chloride, Chromium trichloride (X)

- 200. Chromic fluoride, Chromium trifluoride (X)
- 201. Chromic hydroxide, Chromium hydroxide (X)
- 202. Chromic oxide, Chromium oxide (X)
- 203. Chromic sulfate, Chromium sulfate (X)
- 204. Chromium compounds (X,C,I)
- 205. *Chromyl chloride, Chlorochromic anhydride (X,C,I,R)
- 206. Cobalt (powder) (X,I)
- 207. Cobalt compounds (X)
- 208. Cobaltous bromide, Cobalt bromide (X)
- 209. Cobaltous chloride, Cobalt chloride (X)
- 210. Cobaltous nitrate, Cobalt nitrate (X,I)
- 211. Cobaltous resinate, Cobalt resinate (X,I)
- 212. Cobaltous sulfate, Cobalt sulfate (X)
- 213. Cocculus, Fishberry, Picrotoxin (X)
- 215. *Copper acetoarsenite, Paris green (X)
- 216. Copper acetylde (I,R)
- 217. *Copper arsenate, Cupric arsenate (X)
- 218. *Copper arsenite, Cupric arsenite (X)
- 219. Copper chloride, Cupric chloride (X)
- 220. Copper chlorotetrazole (I,R)
- 221. Copper compounds (X)
- 222. *Copper cyanide, Cupric cyanide (X)
- 223. Copper nitrate, Cupric nitrate (X,I,R)
- 224. Copper sulfate, Cupric sulfate, Blue vitriol (X)
- 225. *Coroxon; ortho,ortho-Diethyl-ortho-(3-chloro-4-methylcoumarin-7-yl) phosphate (X)
- 226. *Coumafuryl, FUMARIN, 3-[1-(2-Furanyl)-3-oxobutyl]
1-4-hydroxy-2H-1-benzopyran-2-one (X)

227. *Coumatetralyl, BAYER 25634, RACUMIN 57, 4-Hydroxy-3-(1,2,3,4-tetrahydro-1-naphthalenyl)-2H-1-benzopyran-2-one (X)
228. *Crimidine, CASTRIX, 2-Chloro-4-dimethylamino-6-methylpyrimidine (X)
229. *Crotonaldehyde, 2-Butenal (X)
230. Cumene, Isopropyl benzene (X,I)
231. Cumene hydroperoxide; alpha,alpha-Dimethylbenzyl hydroperoxide (X,I)
232. Cupriethylene diamine (X)
233. *Cyanide salts (X)
234. Cyanoacetic acid, Malonic nitrile (X)
235. *Cyanogen (X,I,R)
236. Cyanogen bromide, Bromine cyanide (X)
237. Cyanuric triazide (I,R)
238. Cycloheptane (X,I)
239. Cyclohexane (X,I)
240. Cyclohexanone peroxide (I)
241. *Cyclohexenyltrichlorosilane (X,C,R)
242. *Cycloheximide, ACTIDIONE (X)
243. *Cyclohexyltrichlorosilane (X,C,R)
244. Cyclopentane (X,I)
245. Cyclopentanol (I)
246. Cyclopentene (X,I)
247. DDT; 1,1,1-Trichloro-2,2-bis(chlorophenyl) ethane (X)
248. *DDVP, Dichlorvos, VAPONA, Dimethyl dichlorovinyl phosphate (X)
249. *Decaborane (X,I,R)
250. DECALIN, Decahydronaphthalene (X)

251. *Demeton, SYSTOX (X)
252. *Demeton-S-methyl sulfone, METAISOSYSTOX-SULFON, S-[2-(ethyl-sulfonyl) ethyl] O,O-dimethyl phosphorothioate (X)
253. Diazodinitrophenol, DDNP, 2-Diazo-4,6-dinitrobenzene-1-oxide (I,R)
254. *Diborane, Diboron hexahydride (I,R)
255. *1,2-Dibromo-3-chloropropane, DBCP, Fumazone, nemagon (X)
256. n-Dibutyl ether, Butyl ether (and isomers) (X,I)
257. Dichlorobenzene (ortho, meta, para) (X)
258. *3,3-Dichlorobenzidine and salts, DCB (X)
259. 1,2-Dichloroethylene; 1,2-Dichloroethene (X,I)
260. Dichloroethyl ether, Dichloroether (X,I)
261. Dichloroisocyanuric acid, Dichloro-S-triazine-2,4,6-tri-one (X,I)
262. Dichloromethane, Methylene chloride (X)
263. *2,4-Dichlorophenoxyacetic acid; 2,4-D (X)
264. 1,2-Dichloropropane, Propylene dichloride (X,I)
265. 1,3-Dichloropropylene; 1,3-Dichloropropene (X,I)
266. Dicumyl peroxide (I,X)
267. *Dieldrin; 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, exo-5,8-dimethanonaphthalene (X)
268. *Diethylaluminum chloride, Aluminum diethyl monochloride, DEAC (I,R)
269. Diethylamine (X,I)
270. *Diethyl chlorovinyl phosphate, Compound 1836 (X)
271. *Diethyldichlorosilane (X,C,I,R)
272. Diethylene glycol dinitrate (I,R)
273. Diethylene triamine (X)

274. *O,O-Diethyl-S-(isopropylthiomethyl) phosphorodithioate (X)
275. *Diethylzinc, Zinc ethyl (C,I,R)
276. *Difluorophosphoric acid (X,C,R)
277. *Diglycidyl ether, bis(2,3-Epoxypropyl) ether (X)
278. Diisopropylbenzene hydroperoxide (X,I)
279. Diisopropyl peroxydicarbonate, Isopropyl percarbonate (X,C,I,R)
280. *Dimefox, Hanane, Pextox 14, Tetramethylphosphorodiamidic fluoride (X)
281. Dimethylamine, DMA (X,I)
282. *Dimethylaminoazobenzene, Methyl yellow (X)
283. *Dimethyldichlorosilane, Dichlorodimethylsilane (X,C,I,R)
284. 2,5-Dimethylhexane-2,5-Dihydroperoxide (I)
285. *1,1-Dimethylhydrazine, UDMH (X,I)
286. *Dimethyl sulfate, Methyl sulfate (X)
287. *Dimethyl sulfide, Methyl sulfide (X,I,R)
288. 2,4-Dinitroaniline (X)
289. *Dinitrobenzene (ortho, meta, para) (I,R)
290. Dinitrochlorobenzene, 1-Chloro-2,4-dinitrobenzene (I,R)
291. *4,6-Dinitro-ortho-cresol, DNPC, SINOX, EGETOL 30 (X)
292. *Dinitrophenol(2,3-;2,4-;2,6-isomers) (I,R)
293. 2,4-Dinitrophenylhydrazine (X,I,R)
294. Dinitrotoluene (2,4-;3,4-;3,5-isomers) (X,I,R)
295. *DINOSEB; 2,4-Dinitro-6-sec-butylphenol (X)
296. 1,4-Dioxane; 1,4-Diethylene dioxide (X,I,R)
297. *Dioxathion, DELNAV; S,S-1,4-dioxane-2,3-diyl bis(O,O-diethyl phosphorodithioate) (X)
298. Dipentaerythritol hexanitrate (R)

299. *Diphenyl, Biphenyl, Phenylbenzene (X)
300. Diphenylamine, DPA, N-Phenylaniline (X)
301. *Diphenylamine chloroarsine, Phenarsazine chloride (X)
302. *Diphenyldichlorosilane (X,C,R)
303. Dipicrylamine, Hexanitrodiphenyl amine (I,R)
304. Dipropyl ether (X,I)
305. *Disulfoton, DI-SYSTON; O,O-Diethyl S-[2-(ethylthio) ethyl] phosphorodithioate (X)
306. *Dodecyltrichlorosilane (X,C,R)
307. *DOWCO-139, ZECTRAN, Mexacarbate, 4-(Dimethylamino)-3,5-dimethylphenyl methylcarbamate (X)
309. *DYFONATE, Fonofos, O-Ethyl-S-phenylethyl phosphonodithio-ate (X)
310. *Endosulfan, THIODAN; 6,7,8,9,10,10-Hexachlor-1,5,5a,6,9, 9a-hexa-hydro-6,9-methano-2,4,3-benzo-dioxathiepin-3-oxide (X)
311. *Endothal, 7-Oxabicyclo [2.2.1]heptane-2,3-dicarboxylic acid (X)
312. *Endothion, EXOTHION, S-[(5-Methoxy-4-oxo-4H-pyran-2-yl)-methyl] O,O-dimethyl phosphorothioate (X)
313. *Endrin; 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4,4a,5,6,7,8,8a-octahydro-1,4-endo-endo-5,8-dimethanonaphthalene (X)
314. Epichlorohydrin, Chloropropylene oxide (X,I)
315. *EPN; O-Ethyl O-para-nitrophenyl phenylphosphonothioate (X)
316. *Ethion, NIALATE; O,O,O',O'-Tetraethyl-S,S-methylenediphosphorodithioate (X)
317. Ethyl acetate (X,I)
318. Ethyl alcohol, Ethanol (X,I)
319. Ethylamine, Aminoethane (X,I)

320. Ethylbenzene, Phenylethane (X,I)
321. Ethyl butyrate, Ethyl butanoate (I)
322. Ethyl chloride, Chloroethane (X,I)
323. *Ethyl chloroformate, Ethyl chlorocarbonate (X,C,I,R)
324. *Ethyl dichloroarsine, Dichloroethylarsine (I,R)
325. *Ethyl dichlorosilane (X,C,I,R)
326. *Ethylene cyanohydrin, beta-Hydroxypropionitrile (I,R)
327. Ethylene diamine (X)
328. Ethylene dibromide; 1,2-Dibromoethane (X)
329. Ethylene dichloride; 1,2-Dichloroethane (X,I)
330. *Ethyleneimine, Aziridine, EI (X,I,R)
331. Ethylene oxide, Epoxyethane (X,I,R)
332. Ethyl ether, Diethyl ether (I,R)
333. Ethyl formate (X,I)
334. *Ethyl mercaptan, Ethanethiol (X,I,R)
335. Ethyl nitrate (I,R)
336. Ethyl nitrite (I,R)
337. *Ethylphenyldichlorosilane (X,C,R)
338. Ethyl propionate (I)
339. *Ethyltrichlorosilane (I,R)
340. *Fensulfothion, BAYER 25141, DASANIT, O,O-Diethyl-O-[4-(methyl-sulfinyl)phenyl] phosphorothioate (X)
341. *Ferric arsenate (X)
342. Ferric chloride, Iron (III) chloride (X,C)
343. *Ferrous arsenate, Iron arsenate (X)
344. *Fluoboric acid, Fluoroboric acid (X,C)
345. Fluoride salts (X)
346. *Fluorine (X,C,R)

- 347. *Fluoroacetanilide, AFL 1082 (X)
- 348. *Fluoroacetic acid and salts, Compound 1080 (X)
- 349. *Fluorosulfonic acid, Fluosulfonic acid (X,C,R)
- 350. Formaldehyde, Methanal (X,I)
- 351. Formic acid, Methanoic acid (X,C)
- 352. Fulminate of mercury, Mercuric cyanate (I,R)
- 353. *FURADAN, NIA 10,242, Carbofuran; 2,3-Dihydro-2,2-dimethyl-7-benzofuranylmethylcarbamate (X)
- 354. Furan, Furfuran (X,I,R)
- 355. Gasoline (I)
- 356. *GB, O-Isopropyl methyl phosphoryl fluoride (X)
- 357. Glutaraldehyde (X)
- 358. Glycerolmonolactate trinitrate (R)
- 359. Glycol dinitrate, Ethylene glycol dinitrate (R)
- 360. Gold fulminate, Gold cyanate (R)
- 361. Guanidine nitrate (I,R)
- 362. Guanyl nitrosaminoguanylidene hydrazine (R)
- 363. *Guthion; O,O-Dimethyl-S-4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl phosphorodithioate (X)
- 364. Hafnium (I,X,R)
- 365. *Heptachlor; 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene (X)
- 366. n-Heptane (and isomers) (X,I)
- 367. 1-Heptene (and isomers) (X,I)
- 368. *Hexadecyltrichlorosilane (X,C,R)
- 369. Hexaethyl tetraphosphate, HETP (X)
- 370. Hexafluorophosphoric acid (X,C)
- 371. Hexamethylenediamine; 1,6-Diaminohexane (X)

- 372. n-Hexane (and isomers) (X,I)
- 373. 1-Hexene (and isomers) (X,I)
- 374. n-Hexylamine, 1-Aminohexane (and isomers) (X,I)
- 375. *Hexyltrichlorosilane (X,C,R)
- 376. *Hydrazine, Diamine (X,I)
- 377. Hydrazine azide (I,R)
- 378. Hydrazoic acid, Hydrogen azide (I,R)
- 379. *Hydriodic acid, Hydrogen iodide (X,C,R)
- 380. *Hydrobromic acid, Hydrogen bromide (X,C,R)
- 381. *Hydrochloric acid, Hydrogen chloride, Muriatic Acid (X,C,R)
- 382. *Hydrocyanic acid, Hydrogen cyanide (X,I,R)
- 383. *Hydrofluoric acid, Hydrogen fluoride (X,C,R)
- 384. Hydrofluosilicic acid, Fluosilicic acid (X,C)
- 385. Hydrogen peroxide (X,C,I,R)
- 386. *Hydrogen selenide (X,I)
- 387. *Hydrogen sulfide (X,I)
- 388. *Hypochlorite compounds (X,C,I,R)
- 389. Indium (X)
- 390. Indium compounds (X)
- 391. Iodine monochloride (X,C,R)
- 392. Isooctane; 2,2,4-Trimethylpentane (X,I)
- 393. Isooctene (mixture of isomers) (I)
- 394. Isopentane, 2-Methylbutane (I)
- 395. Isoprene, 2-Methyl-1,3-butadiene (X,I,R)
- 396. Isopropanol, Isopropyl alcohol, 2-Propanol (X,I)
- 397. Isopropyl acetate (X,I)
- 399. Isopropylamine, 2-Aminopropane (X,I)
- 400. Isopropyl chloride, 2-Chloropropane (I)

401. Isopropyl ether, Diisopropyl ether (I,R)
402. Isopropyl mercaptan, 2-Propanethiol (X,I)
404. *meta-Isopropylphenyl-N-methylcarbamate, Ac 5,727 (X)
- 405A. *Kepone; 1,1a,3,3a,4,5,5,5a,5b,6-Decachlorooctahydro-1,2,4-metheno-2H-cyclobuta (cd) pentalen-2-one, Chlorecone (X)
- 405B. Lauroyl peroxide, Di-n-dodecyl peroxide (X,C,I,R)
406. Lead compounds (X)
407. Lead acetate (X)
408. *Lead arsenate, Lead orthoarsenate (X)
409. *Lead arsenite (X)
410. Lead azide (I,R)
411. Lead carbonate (X)
412. Lead chlorite (I,R)
413. *Lead cyanide (X)
414. Lead 2,4-dinitroresorcinate (I,R)
415. Lead mononitroresorcinate (I,R)
416. Lead nitrate (X,I)
417. Lead oxide (X)
418. Lead styphnate, Lead trinitroresorcinate (I,R)
419. *Lewisite, beta-Chlorovinyl-dichloroarsine (X)
420. *Lithium (C,I,R)
421. *Lithium aluminum hydride, LAH (C,I,R)
422. *Lithium amide (C,I,R)
423. *Lithium ferrosilicon (I,R)
424. *Lithium hydride (C,I,R)
425. *Lithium hypochlorite (X,C,I,R)
426. Lithium peroxide (C,I,R)
427. Lithium silicon (I,R)

428. *London purple, Mixture of arsenic trioxide, aniline, lime, and ferrous oxide (X)
429. *Magnesium (I,R)
430. *Magnesium arsenate (X)
431. *Magnesium arsenite (X)
432. Magnesium chlorate (I,R)
433. Magnesium nitrate (I,R)
434. Magnesium perchlorate (X,I,R)
435. Magnesium peroxide, Magnesium dioxide (I)
436. *Maleic anhydride (X)
437. Manganese (powder) (I)
438. Manganese acetate (X)
439. *Manganese arsenate, Manganous arsenate (X)
440. Manganese bromide, Manganous bromide (X)
441. Manganese chloride, Manganous chloride (X)
442. Manganese methylcyclopentadienyl tricarbonyl (X)
443. Manganese nitrate, Manganous nitrate (X,I)
444. Mannitol hexanitrate, Nitromannite (R)
445. *MECARBAM; O,O-Diethyl S-(N-ethoxycarbonyl N-methylcarbamoyl-methyl) phosphorodithioate (X)
446. *Medinoterb acetate, 2-tert-Butyl-5-methyl-4,6-dinitrophenyl acetate (X)
447. para-Menthane hydroperoxide, Paramenthane hydroperoxide (I)
448. Mercuric acetate, Mercury acetate (X)
449. Mercuric ammonium chloride, Mercury ammonium chloride (X)
450. Mercuric benzoate, Mercury benzoate (X)
451. Mercuric bromide, Mercury bromide (X)
452. *Mercuric chloride, Mercury chloride (X)

- 453. *Mercuric cyanide, Mercury cyanide (X)
- 454. Mercuric iodide, Mercury iodide (X)
- 455. Mercuric nitrate, Mercury nitrate (X,I)
- 456. Mercuric oleate, Mercury oleate (X)
- 457. Mercuric oxide (red and yellow) (X,I)
- 458. Mercuric oxycyanide (I,R)
- 459. Mercuric-potassium iodide, Mayer's reagent (X)
- 460. Mercuric salicylate, Salicylated mercury (X)
- 461. Mercuric subsulfate, Mercuric dioxysulfate (X)
- 462. Mercuric sulfate, Mercury sulfate (X)
- 463. Mercuric thiocyanide, Mercury thiocyanate (X)
- 464. Mercuriol, Mercury nucleate (X)
- 465. Mercurous bromide (X)
- 466. Mercurous gluconate (X)
- 467. Mercurous iodide (X)
- 468. Mercurous nitrate (I,R)
- 469. Mercurous oxide (X)
- 470. Mercurous sulfate, Mercury bisulfate (X)
- 472. *Mercury (X)
- 473. *Mercury compounds (X)
- 474. Metal carbonyls (X)
- 475. *Metal hydrides (I,R)
- 476. Metal powders (X,I)
- 477A. *Methomyl, LANNATE, S-Methyl-N-((methyl-carbamoyl) oxy) thioacetimidate (X)
- 477B. *Methoxychlor; 1,1,1-Trichloro-2, -bis(p-methoxyphenyl) ethane, CHEMFLORM, MARLATE (X)
- 478. *Methoxyethylmercuric chloride, AGALLOL, ARETAN (X)

479. Methyl acetate (X,I)
480. Methyl acetone (Mixture of acetone, methyl acetate, and methylalcohol) (X,I)
481. Methyl alcohol, Methanol (X,I)
482. *Methylaluminum sesquibromide (I,R)
483. *Methylaluminum sesquichloride (I,R)
484. Methylamine, Aminomethane (X,I)
485. n-Methylaniline (X)
486. *Methyl bromide, Bromomethane (X)
487. 2-Methyl-1-butene (I)
488. 3-Methyl-1-butene (I)
489. Methyl butyl ether (and isomers) (X,I)
490. Methyl butyrate (and isomers) (X,I)
491. Methyl chloride, Chloromethane (X,I)
492. *Methyl chloroformate, Methyl chlorocarbonate (X,I,R)
493. *Methyl chloromethyl ether, CMME (X,I)
494. Methylcyclohexane (X,I)
495. *Methyldichloroarsine (X)
496. *Methyldichlorosilane (X,I,R)
497. *4,4-Methylene bis(2-chloroaniline), MOCA (X)
498. Methyl ethyl ether (X,I)
499. Methyl ethyl ketone, 2-Butanone (X,I)
500. Methyl ethyl ketone peroxide (X,I)
501. Methyl formate (X,I)
502. *Methyl hydrazine, Monomethyl hydrazine, MMH (X,I)
503. *Methyl isocyanate (X,I)
504. Methyl isopropenyl ketone, 3-Methyl-3-butene-2-one (X,I)
505. *Methylmagnesium bromide (C,I,R)

- 506. *Methylmagnesium chloride (C,I,R)
- 507. *Methylmagnesium iodide (C,I,R)
- 508. Methyl mercaptan, Methanethiol (X,I)
- 509. Methyl methacrylate (monomer) (X,I)
- 510. *Methyl parathion; O,O-Dimethyl-O-para-nitrophenylphosphorothioate (X)
- 511. Methyl propionate (I)
- 512. *Methyltrichlorosilane (X,C,I,R)
- 513. Methyl valerate, Methyl pentanoate (and isomers) (I)
- 514. Methyl vinyl ketone, 3-Butene-2-one (X,I)
- 515A. *Mevinphos, PHOSDRIN, 2-Carbomethoxy-1-methylvinyl dimethyl phosphate (X)
- 515B. *Mirex; 1,1a,2,2,3,3a,4,5,5,5a,5b,6-Dodecachlorooctahydro-1,3,4-metheno-1H-cyclobuta (cd) pentalene, Dechlorane (X)
- 516. *MOCAP, O-Ethyl-S,S-dipropyl phosphorodithioate (X)
- 517. Molybdenum (powder) (I)
- 518. Molybdenum trioxide, Molybdenum anhydride (X)
- 519. Molybdic acid and salts (X)
- 520. Monochloroacetic acid, Chloroacetic acid, MCA (X,C)
- 521. Monochloroacetone, Chloroacetone, 1-Chloro-2-propanone (X)
- 522. Monofluorophosphoric acid (X,C)
- 523. Naphtha (of petroleum or coal tar origin), Petroleum ether, Petroleum naphtha (X,I)
- 524. Naphthalene (X)
- 525. *alpha-Naphthylamine, 1-NA (X)
- 526. *beta-Naphthylamine, 2-NA (X)
- 527. Neohexane; 2,2-Dimethylbutane (X,I)
- 528. Nickel (powder) (X,I)

- 529. Nickel acetate (X)
- 530. Nickel antimonide (X)
- 531. *Nickel arsenate, Nickelous arsenate (X)
- 532. *Nickel carbonyl, Nickel tetracarbonyl (X)
- 533. Nickel chloride, Nickelous chloride (X)
- 534. *Nickel cyanide (X)
- 535. Nickel nitrate, Nickelous nitrate (X,I,R)
- 536. Nickel selenide (X)
- 537. Nickel sulfate (X)
- 538. Nicotine, beta-pyridyl-alpha-N-methyl pyrrolidine (X)
- 539. Nicotine salts (X)
- 540. Nitric acid (X,C,I)
- 541. Nitroaniline, Nitraniline (ortho, meta, para) (I,R)
- 542. *Nitrobenzol, Nitrobenzene (X)
- 543. *4-Nitrobiphenyl, 4-NBP (X)
- 544. Nitro carbo nitrate (I,R)
- 545. Nitrocellulose, Cellulose nitrate, Guncotton, Pyroxylin,
Collodion, Pyroxylin (nitrocellulose) in ether and alcohol
(I,R)
- 546. Nitrochlorobenzene, Chloronitrobenzene (ortho,meta,para) (X)
- 547. Nitrogen mustard (X,C)
- 548. Nitrogen tetroxide, Nitrogen dioxide (X,I)
- 549. Nitroglycerin, Trinitroglycerin (X,I,R)
- 550. Nitrohydrochloric acid, Aqua regia (X,C,I)
- 551. *Nitrophenol (ortho, meta, para) (X)
- 552. *N-Nitrosodimethylamine, Dimethyl nitrosoamine (X)
- 553. Nitrosoguanidine (R)
- 554. Nitrostarch, Starch nitrate (I,R)

555. Nitroxylol, Nitroxylene, Dimethylnitrobenzene (2,4-;3,4-; 2,5-
isomers) (X)
556. 1-Nonene, 1-Nonylene (and isomers) (X,I)
557. *Nonyltrichlorosilane (I,R)
558. *Octadecyltrichlorosilane (I,R)
559. n-Octane (and isomers) (X,I)
560. 1-Octene, 1-Caprylene (X,I)
561. *Octyltrichlorosilane (I,R)
563. *Oleum, Fuming sulfuric acid (X,C,R)
565. Osmium compounds (X)
566. Oxalic acid (X)
567. *Oxygen difluoride (X,C,R)
568. *Para-oxon, MINTACOL; O,O-Diethyl-O-para-nitrophenyl
phosphate (X)
569. *Parathion; O,O-Diethyl-O-para-nitrophenyl phosphorothioate
(X)
- 570A. *Pentaborane (X,I,R)
- 570B. Pentachlorophenol, PCP, DOWICIDE 7 (X)
571. Pentaerythrite tetranitrate, Pentaerythritol tetranitrate (R)
572. n-Pentane (and isomers) (X,I)
573. 2-Pentanone, Methyl propyl ketone (and isomers) (X,I)
574. Peracetic acid, Peroxyacetic acid (X,C,I,R)
575. Perchloric acid (X,C,I,R)
576. Perchloroethylene, Tetrachloroethylene (X)
577. *Perchloromethyl mercaptan, Trichloromethylsulfenyl chloride
(X)
578. Perchloryl fluoride (X,C,I)
580. Phenol, Carboic acid (X,C)

581. *Phenyldichloroarsine (X)
582. Phenylenediamine, Diaminobenzene (ortho,meta,para) (X)
583. Phenylhydrazine hydrochloride (X)
584. *Phenylphenol, Orthozenol, DOWICIDE I (X)
585. *Phenyltrichorosilane (I,R)
586. *Phorate, THIMET; O,O-Diethyl-S-[(Ethylthio)methyl] phosphorodithioate (X)
587. *Phosfolan, CYOLAN, 2-(Diethoxyphosphinylimino)-1,3-dithiolane (X)
588. *Phosgene, Carbonyl chloride (I,R)
589. *Phosphamidon, DIMECRON, 2-Chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphate (X)
590. *Phosphine, Hydrogen phosphide (X,I)
591. Phosphoric acid (C)
592. Phosphoric anhydride, Phosphorus pentoxide (C,I)
593. Phosphorus (amorphous, red) (X,I,R)
594. *Phosphorus (white or yellow) (X,I,R)
595. *Phosphorus oxybromide, Phosphoryl bromide (X,C,R)
596. *Phosphorus oxychloride, Phosphoryl chloride (X,C,R)
597. *Phosphorus pentachloride, Phosphoric chloride (X,C,I,R)
598. *Phosphorus pentasulfide, Phosphoric sulfide (X,C,I,R)
599. *Phosphorus sesquisulfide, tetraphosphorus trisulfide (X,C,I,R)
600. *Phosphorus tribromide (X,C,R)
601. *Phosphorus trichloride (X,C,R)
602. Picramide, Trinitroaniline (I,R)
603. Picric acid, Trinitrophenol (I,R)
604. Picryl chloride, 2-Chloro-1,3,5-trinitrobenzene (I,R)

- 605. *Platinum compounds (X)
- 606. *Polychlorinated biphenyls, PCB, Askarel, aroclor, chlorextol, inerteen, pyranol (X)
- 607. Polyvinyl nitrate (I,R)
- 608. Potasan; O,O-Diethyl-O-(4-methylumbelliferone) phosphoro-thioate (X)
- 609. *Potassium (C,I,R)
- 610. *Potassium arsenate (X)
- 611. *Potassium arsenite (X)
- 612. *Potassium bifluoride, Potassium acid fluoride (X,C)
- 613. Potassium binoxalate, Potassium acid oxalate (X)
- 614. Potassium bromate (X,I)
- 615. *Potassium cyanide (X)
- 616. Potassium dichloroisocyanurate (X,I)
- 617. Potassium dichromate, Potassium bichromate (X,C,I)
- 619. Potassium fluoride (X)
- 620. *Potassium hydride (C,I,R)
- 621. Potassium hydroxide, Caustic potash (X,C)
- 622. Potassium nitrate, Saltpeter (I,R)
- 623. Potassium nitrite (I,R)
- 624. Potassium oxalate (X)
- 625. Potassium perchlorate (X,I,R)
- 626. Potassium permanganate (X,C,I)
- 627. Potassium peroxide (C,I,R)
- 628. Potassium sulfide (X,I)
- 629. *Propargyl bromide, 3-Bromo-1-propyne (X,I)
- 630. *beta-Propiolactone, BPL (X)
- 631. Propionaldehyde, Propanal (X,I)

632. Propionic acid, Propanoic acid (X,C,I)
633. n-Propyl acetate (X,I)
634. n-Propyl alcohol, 1-Propanol (X,I)
635. n-Propylamine (and isomers) (X,I)
636. *Propyleneimine, 2-Methylaziridine (X,I)
637. Propylene oxide (X,I)
638. n-Propyl formate (X,I)
639. n-Propyl mercaptan, 1-Propanethiol (X,I)
640. *n-Propyltrichlorosilane (X,C,I,R)
641. *Prothoate, FOSTION, FAC; O,O-Diethyl-S-carboethoxyethyl
phosphorodithioate (X)
642. Pyridine (X,I)
643. *Pyrosulfuryl chloride, Disulfuryl chloride (X,C,R)
644. *Quinone; 1,4-Benzoquinone (X)
645. Raney nickel (I)
646. *Schradan, Octamethyl pyrophosphoramidate, OMPA (X)
- 647A. *Selenium (X)
- 647B. *Selenium compounds (X)
648. *Selenium fluoride (X)
649. *Selenous acid, Selenious acid and salts (X)
650. *Silicon tetrachloride, Silicon chloride (X,C,R)
651. *Silver acetylide (I,R)
652. Silver azide (I,R)
653. Silver compounds (X)
654. Silver nitrate (X)
655. Silver styphnate, Silver trinitroresorcinate (I,R)
656. Silver tetrazene (I,R)
657. *Sodium (C,I,R)

- 658. Sodium aluminate (C)
- 659. *Sodium aluminum hydride (C,I,R)
- 660. *Sodium amide, Sodamide (C,I,R)
- 661. *Sodium arsenate (X)
- 662. *Sodium arsenite (X)
- 663. Sodium azide (I,R)
- 664. *Sodium bifluoride, Sodium acid fluoride (X,C)
- 665. Sodium bromate (X,I)
- 666. *Sodium cacodylate, Sodium dimethylarsenate (X)
- 667. Sodium carbonate peroxide (I)
- 668. Sodium chlorate (X,I)
- 669. Sodium chlorite (X,I)
- 670. Sodium chromate (X,C)
- 671. *Sodium cyanide (X)
- 672. Sodium dichloroisocyanurate (I)
- 673. Sodium dichromate, Sodium bichromate (X,C,I)
- 674. Sodium fluoride (X)
- 675. *Sodium hydride (X,C,I,R)
- 676. Sodium hydrosulfite, Sodium hyposulfite (I)
- 677. Sodium hydroxide, Caustic soda, Lye (X,C)
- 678. *Sodium hypochlorite (X,I,R)
- 679. *Sodium methylate, Sodium methoxide (C,I,R)
- 680. Sodium molybdate (X)
- 681. Sodium nitrate, Soda niter (X,I,R)
- 682. Sodium nitrite (X,I,R)
- 683. Sodium oxide, Sodium monoxide (X,C)
- 684. Sodium perchlorate (X,I,R)
- 685. Sodium permanganate (X,I)

686. *Sodium peroxide (X,I,R)
687. Sodium picramate (X,I,R)
688. *Sodium potassium alloy, NaK, Nack (C,I,R)
689. *Sodium selenate (X)
690. Sodium sulfide, Sodium hydrosulfide (X,I)
691. Sodium thiocyanate, Sodium sulfocyanate (X)
692. Stannic chloride, Tin tetrachloride (X,C)
693. *Strontium arsenate (X)
694. Strontium nitrate (X,I,R)
695. Strontium peroxide, Strontium dioxide (I,R)
696. *Strychnine and salts (X)
697. Styrene, Vinylbenzene (X,I)
698. Succinic acid peroxide (X,I)
699. Sulfide salts (soluble) (X)
700. *Sulfotepp, DITHIONE, BLACAFUM, Tetraethyl dithiopyrophosphate, TEDP (X)
701. *Sulfur chloride, Sulfur monochloride (X,C,R)
702. *Sulfur mustard (X,C,R)
703. *Sulfur pentafluoride (X,C)
704. Sulfur trioxide, Sulfuric anhydride (X,C,I)
705. Sulfuric acid, Oil of vitriol, Battery acid (X,C)
706. Sulfurous acid (X,C)
707. *Sulfuryl chloride, Sulfonyl chloride (X,C,R)
708. *Sulfuryl fluoride, Sulfonyl fluoride (X,C,R)
709. *SUPRACIDE, ULTRACIDE, S-[(5-Methoxy-2-oxo-1,3,4-thiazolidin-2-yl) methyl] -O,O-dimethyl phosphorodithioate (X)
710. *SURECIDE, Cyanophenphos, O-para-Cyanophenyl-O-ethyl phenyl phosphonothioate (X)

711. *Tellurium hexafluoride (X,C)
712. *TELODRIN, Isobenzan; 1,3,4,5,6,7,8,8-Octachloro-1,3,3a,4,7,7a-hexahydro-4,7-methanoisobenzofuran (X)
713. *TEMIK, Aldicarb, 2-Methyl-2(methylthio) propionaldehyde-O-(methylcarbamoyl) oxime (X)
714. *2,3,7,8-Tetrachlorodibenzo-para-dioxin, TCDD, Dioxin (X)
715. sym-Tetrachloroethane (X)
717. *Tetraethyl lead, TEL (and other organic lead) (X,I)
718. *Tetraethyl pyrophosphate, TEPP (X)
- 719A. Tetrahydrofuran, THF (X,I)
- 719B. Tetrahydrophthalic anhydride, Memtetrahydrophthalic anhydride (X)
720. TETRALIN, Tetrahydronaphthalene (X)
721. Tetramethyl lead, TML (X,I)
722. *Tetramethyl succinonitrile (X)
723. *Tetranitromethane (X,I,R)
724. *Tetrasul, ANIMERT V-101, S-para-Chlorophenyl-2,4,5-trichlorophenyl sulfide (X)
725. Tetrazene, 4-Amidino-1-(nitrosamino-amidino)-1-tetra-zene (I,R)
726. *Thallium (X)
727. *Thallium compounds (X)
728. *Thallos sulfate, Thallium sulfate, RATOX (X)
729. *Thiocarbonylchloride, Thiophosgene (X,C,R)
730. *Thionazin, ZINOPHOS; O,O-Tetramethylthiuram monosulfide (X)
731. *Thionyl chloride, Sulfur oxychloride (X,C,R)
732. *Thiophosphoryl chloride (X,C,R)
733. Thorium (powder) (I)

734. Tin compounds (organic) (X)
735. Titanium (powder) (I)
736. Titanium sulfate (X)
737. *Titanium tetrachloride, Titanic chloride (X,C,R)
738. Toluene, Methylbenzene (X,I)
739. *Toluene-2,4-diisocyanate, TDI (I,R)
- 740A. Toluidine, Aminotoluene (ortho,meta,para) (X)
- 740B. *Toxaphene, Polychlorocamphene (X)
741. *TRANID, exo-3-Chloro-endo-6-cyano-2-norbornanone-O-(methylcarbamoyl) oxime (X)
743. 1,1,2-Trichloroethane (X)
744. Trichloroethylene; Trichlorethene (X)
745. Trichloroisocyanuric acid (X,I)
746. *2,4,5-Trichlorophenoxyacetic acid; 2,4,5-T (X)
747. *Trichlorosilane, Silicochloroform (X,C,I,R)
748. Trimethylamine, TMA (X,I)
749. Trinitroanisole; 2,4,6-Trinitrophenyl methyl ether (I,R)
750. 1,3,5-Trinitrobenzene, TNB (I,R)
751. 2,4,6-Trinitrobenzoic acid (I,R)
752. Trinitronaphthalene, Naphtite (I,R)
753. 2,4,6-Trinitroresorcinol, Styphnic acid (I,R)
754. 2,4,6-Trinitrotoluene, TNT (X,I,R)
755. *tris(1-Aziridinyl) phosphine oxide, Triethylenephosphoramide, TEPA (X)
756. Tungstic acid and salts (X)
757. Turpentine (X,I)
758. Uranyl nitrate, Uranium nitrate (X,I,R)
759. Urea nitrate (X,I,R)

- 760. n-Valeraldehyde, n-Pentanal (and isomers) (X,I)
- 761. Vanadic acid salts (X)
- 762. Vanadium oxytrichloride (X,C)
- 763. *Vanadium pentoxide, Vanadic acid anhydride (X)
- 764. Vanadium tetrachloride (X,C)
- 765. Vanadium tetraoxide (X)
- 766. Vanadium trioxide, Vanadium sesquioxide (X)
- 767. Vanadyl sulfate, Vanadium sulfate (X)
- 768. Vinyl acetate (I,X)
- 769. *Vinyl chloride (X,I)
- 770. Vinyl ethyl ether (I)
- 771. Vinylidene chloride, VC (X,I)
- 772. Vinyl isopropyl ether (I)
- 773. *Vinyltrichlorosilane (X,C,I,R)
- 774. VX, O-Ethyl methyl phosphoryl N,N-diisopropyl thiocholine (X)
- 775. *WEPSYN 155, WP 155, Triamiphos, para-(5-Amino-3-phenyl-1H-1,2,4-triazol-1-yl)-N,N,N',N'-tetramethyl phosphonic diamide (X)
- 776. Xylene, Dimethylbenzene (ortho,meta,para) (X,I)
- 777. Zinc (powder) (I)
- 778. Zinc ammonium nitrate (X,I)
- 779. *Zinc arsenate (X)
- 780. *Zinc arsenite (X)
- 781. Zinc chloride (X,C)
- 782. Zinc compounds (X)
- 783. *Zinc cyanide (X)
- 784. Zinc nitrate (X,I,R)
- 785. Zinc permanganate (X,I)

- 786. Zinc peroxide, Zinc dioxide (X,I,R)
 - 787. *Zinc phosphide (X,I,R)
 - 788. Zinc sulfate (X)
 - 789. Zirconium (powder) (I)
 - 790. *Zirconium chloride, Zirconium tetrachloride (X,C,R)
 - 791. Zirconium picramate (I)
-

(b) This subdivision sets forth a list of common names of wastes which are presumed to be hazardous wastes unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in Section 66262.11. The hazardous characteristics which serve as a basis for listing the common names of wastes are indicated in the list as follows: (X) toxic, (C) corrosive, (I) ignitable and (R) reactive.

- Acetylene sludge (C)
- Acid and water (C)
- Acid sludge (C)
- AFU Floc (X)
- Alkaline caustic liquids (C)
- Alkaline cleaner (C)
- Alkaline corrosive battery fluid (C)
- Alkaline corrosive liquids (C)
- Asbestos waste (X)
- Ashes (X,C)
- Bag house wastes (X)
- Battery acid (C)

Beryllium waste (X)
Bilge water (X)
Boiler cleaning waste (X,C)
Bunker Oil (X,I)
Catalyst (X,I,C)
Caustic sludge (C)
Caustic wastewater (C)
Cleaning solvents (I)
Corrosion inhibitor (X,C)
Data processing fluid (I)
Drilling fluids (X,C)
Drilling mud (X)
Dyes (X)
Etching acid liquid or solvent (C,I)
Fly ash (X,C)
Fuel waste (X,I)
Insecticides (X)
Laboratory waste (X,C,R,I)
Lime and sulfur sludge (C)
Lime and water (C)
Lime sludge (C)
Lime wastewater (C)
Liquid cement (I)
Mine tailings (X,R)
Obsolete explosives (R)
Oil and water (X)
Oil Ash (X,C)
Paint (or varnish) remover or stripper (I)

Paint thinner (X,I)
Paint waste (or slops) (X,I)
Pickling liquor (C)
Pigments (X)
Plating waste (X,C)
Printing Ink (X)
Retrograde explosives (R)
Sludge acid (C)
Soda ash (C)
Solvents (I)
Spent acid (C)
Spent caustic (C)
Spent (or waste) cyanide solutions (X,C)
Spent mixed acid (C)
Spent plating solution (X,C)
Spent sulfuric acid (C)
Stripping solution (X,I)
Sulfonation oil (I)
Tank bottom sediment (X)
Tanning sludges (X)
Toxic chemical toilet wastes (X)
Unrinsed pesticide containers (X)
Unwanted or waste pesticides -- an unusable portion of active
ingredient or undiluted formulation (X)
Waste epoxides (X,I)
Waste (or slop) oil (X)
Weed Killer (X)

NOTE: Authority cited: Sections 208, 25140 and 25141, Health and Safety Code.

Reference: Sections 25115, 25117, 25140 and 25141, Health and Safety Code.

Appendix XI-Organic Lead Test Method

1.0 Scope and Application

1.1 This method is used to determine the sum of organic lead compounds ("organolead") in liquids, solids or sludges. The method detection limit for a 50 g sample is 0.5 ug/g (as lead); the method detection limit for 200 ml water samples is 0.1 mg/l (as lead).

2.0 Summary of Method

2.1 Organolead is separated from the sample matrix by extraction with xylene. The organolead in the extract is reacted with Aliquat 336 and iodine and the solution is made up to volume with MIBK. Lead contained in this mixture is determined by flame atomic absorption spectrometry (FAAS). If the original sample is completely soluble in xylene, the extraction step is omitted.

3.0 Safety

3.1 Some organic lead compounds are volatile and toxic. Therefore, samples must be processed in a well-ventilated hood. Antiknock lead compounds are particularly poisonous and must not be inhaled or ingested or come into contact with the skin. Antiknock lead compounds should never be exposed to elevated temperatures (above 50 °C) or to acids and oxidizing agents. Whenever organic lead compounds are handled outside of a well-ventilated hood,

protective respiratory equipment, protective clothing and rubber gloves must be worn. The material safety data sheets (MSDS) for organolead standards must be read.

3.2 The solvents used in this method are flammable. Proper precautions must be taken to prevent contact with sparks or open flames (other than the AAS flame).

4.0 Interferences

4.1 To reduce loss of organic lead compounds which are very volatile and sensitive to oxygen, samples must not be exposed to elevated temperatures or to air for extended periods of time. Such losses shall be minimized by adhering to the sample collection, preservation and handling procedures in subdivisions 7.2 - 7.4 and 8.1.1 of this appendix.

4.2 If the samples are moist, there may be poor wettability with xylene.

5.0 Apparatus and Materials

5.1 Flame atomic absorption spectrometer (FAA spectrometer) with background corrector and recorder or integrator.

5.2 Lead hollow cathode lamp or electrodeless discharge lamp.

5.3 Nebulizer with impact bead.

The standard rubber gasket in the nebulizer must be replaced with a cork gasket because the organic solvents used in this method attack rubber.

5.4 Air, acetylene and appropriate AAS burner head.

5.5 Erlenmeyer flasks, 250 ml and 100 ml, with ground glass stoppers.

5.6 Mechanical shaker.

5.7 Glass filter funnel and filter paper (Whatman #40, #42 or equivalent).

5.8 Separatory funnels, > 250 ml capacity.

5.9 Volumetric flasks, 250 ml, 100 ml, and 50 ml.

6.0 Reagents

All solvents and reagents must be at least analytical reagent grade, if available.

6.1 Xylene (use p-xylene if available).

6.2 Methyl isobutyl ketone (MIBK, 4-methyl-2-pentanone).

6.3 Iodine solution: Dissolve 3.0 g of elemental iodine in toluene and make up to 100 ml with the same solvent. Store in a brown bottle in a refrigerator.

6.4 Aliquat 336 (Tri-capryl methyl ammonium chloride), available from Aldrich, Milwaukee, WI, or from McKesson Co., Minneapolis, MN. Aliquat is a registered trademark of Henkel Corporation.

Prepare two solutions, one containing 10 percent weight to volume ratio (w/v) and one containing 1 percent (w/v) in MIBK. Store in a refrigerator.

6.5 Anhydrous sodium sulfate, granular.

6.6 Lead chloride, crystals; dry at 105 °C for 3 hours before use.

6.6.1 Prepare a stock solution containing 1000 mg/l of lead (Pb) by dissolving 0.3356 g of lead chloride in 10 percent Aliquat 336 in MIBK and dilute to 250 ml. Store in a brown bottle in a refrigerator.

6.6.2 Prepare an intermediate Pb standard by pipetting 10 ml of the stock standard into a volumetric flask and diluting to 100 ml with a 40 percent volume to volume ratio (v/v) solution of xylene in MIBK. Store in a brown bottle in a refrigerator.

6.7 Sodium chloride (NaCl).

7.0 Sample Collection, Preservation, and Handling

7.1 For safety precautions, see subdivision 3.0 of this appendix.

7.2 Liquid samples must be collected in amber glass bottles (preferably 500 ml size) with Teflon-lined caps without leaving any headspace. During sampling, contact of the sample with air must be minimized.

7.3 Solid samples must be collected in glass jars (preferably 250 ml size) with airtight, Teflon-lined lids. The jars must be filled to capacity.

7.4 All samples must be transported and stored at refrigerator temperature (approximately 5 °C.).

8.0 Procedure

The order of addition of the reagents must be followed explicitly. Aliquat 336 must not be added before the addition of iodine because it retards the formation of the alkyl lead iodide-Aliquat 336 complex, giving erroneous results.

8.1 Extraction of Solid and Sludge Samples

8.1.1 Weigh out (to the nearest 0.1 g) about 50 g of homogenized sample into an Erlenmeyer flask, add 100 ml of xylene, stopper the flask and shake on a mechanical shaker for 30 minutes (min). The extraction efficiency may vary depending on the moisture content of the sample.

Stirring of the sample with a mechanical or magnetic stirrer must not be substituted for shaking since it can result in loss of organolead due to oxidation by air oxygen. For the same reason, extraction times of more than 30 min must be avoided.

8.1.2 After extraction, filter the xylene phase through filter paper holding about 10 g of anhydrous sodium sulfate.

8.1.3 Pipet 20 ml of MIBK and 20 ml of the filtered extract into a 50 ml volumetric flask and mix.

8.1.4 To the same flask, add 0.1 ml of iodine solution and mix again. Let react for approximately 1 min.

8.1.5 To the same flask, add 5 ml of 1 percent Aliquat 336 in MIBK, dilute to volume with MIBK and mix.

8.2 Extraction of Liquid Samples

8.2.1 Place 200 ml of the sample and 50 ml of xylene into a separatory funnel, close the funnel and shake for 1 - 2 min. Allow 5 - 10 min for phase separation.

If less than 200 ml of sample is available, the miscibility with xylene may be tested with a smaller aliquot.

8.2.2 If a single liquid phase is obtained (i.e., if the sample is completely soluble in xylene), discard the sample/xylene mixture and pipet 20 ml of neat sample into a 50 ml volumetric flask, add

20 ml of MIBK, mix, and continue as described in subdivision 8.1.4 above.

8.2.3 If an emulsion is obtained which requires more time for phase separation, add about 5 g of NaCl to the separatory funnel, shake briefly, and let the mixture settle for 20 min.

8.2.4 After separation of the xylene phase from the sample solvent phase (e.g., water), drain off the lower phase into a second separatory funnel and collect the xylene extract in a 100 ml flask with ground glass stopper.

8.2.5 Add 25 ml of xylene to the sample solvent phase, shake for 1-2 min and allow 5 - 10 min for phase separation.

8.2.6 Repeat subdivision 8.2.4, adding the xylene phase to the first extract. Then repeat subdivisions 8.2.5 and 8.2.4 with another 25 ml of xylene.

8.2.7 Filter the combined extract through filter paper holding about 10 g of anhydrous sodium sulfate.

8.2.8 Pipet 20 ml of MIBK and 20 ml of the filtered extract into a 50 ml volumetric flask and mix. Continue as described in subdivision 8.1.4 above.

8.3 Standard and Blank Preparation

Prepare a blank and a minimum of three appropriate working standards from the intermediate organolead standard containing 100 mg/l as Pb.

8.3.1 Place 40 ml of xylene into a 100 ml volumetric flask and add the correct amount of the 100 mg/l standard to prepare the desired concentration.

8.3.2 Immediately add 0.2 ml of iodine solution and mix well.

8.3.3 Add 10 ml of 1 percent Aliquat 336 solution, dilute to volume with MIBK and mix well.

8.3.4 The blank is prepared in the same way as the calibration standards (subdivisions 8.3.1 - 8.3.3 of this appendix), except that no organolead intermediate standard is added.

8.4 Flame Atomic Absorption Measurements

Since certain organolead compounds are very volatile, their vapors may remain in the nebulizer or drain tube for considerable periods of time and affect subsequent readings. Therefore, sufficient time must be allowed between readings for all vapors to clear the system. Analyzing a blank between samples can check on the system.

8.4.1 The FAA spectrometer is set up according to the manufacturer's instructions. The nebulizer is equipped with the impact bead and a cork gasket is installed.

Ensure that the drain tube to the waste container drains properly. Tygon tubing is affected by the organic solvents used in this method and drainage properties will be different from those observed with aqueous samples. If desired, a waste container dedicated to receive organolead waste may be connected.

8.4.2 While aspirating water into the flame, adjust the acetylene flow to 8.5 l/min and the air flow to 25 l/min.

8.4.3 Aspirate MIBK containing 40 percent xylene into the flame, reduce the acetylene flow to approximately 4.8 l/min and fine adjust to produce an even flame with no yellow luminescence.

8.4.4 Measure the absorbance of the method blank, working standards, and samples.

8.4.5 If sample readings fall outside the calibrated range, the solutions to be aspirated into the nebulizer must be diluted with a 40 percent (v/v) solution of xylene in MIBK and analyzed again.

9.0 Calculations

Depending on the type of sample analyzed and the method of sample preparation, one of the following three formulas is used to calculate the concentration of organolead in the sample:

9.1 Solid and Sludge Samples

$$\text{Conc (ug/g)} = \text{FAA-Result (mg/l)} \times \frac{100\text{ml}}{W \text{ (g)}} \times \frac{50\text{ml}}{20\text{ml}} \times F$$

where W (g) is the sample mass in grams (usually 50 g) and F is the dilution factor.

9.2 Liquid Samples not Soluble in Xylene

$$\text{Conc (mg/l)} = \text{FAA-Result (mg/l)} \times \frac{100\text{ml}}{V(\text{ml})} \times \frac{50\text{ml}}{20\text{ml}} \times F$$

where V (ml) is the sample volume in ml (usually 200 ml) and F is the dilution factor.

9.3 Xylene-Soluble Liquid Samples

$$\text{Conc (mg/l)} = \text{FAA-Result (mg/l)} \times \frac{100\text{ml}}{V(\text{ml})} \times \frac{50\text{ml}}{20\text{ml}} \times F$$

where V (ml) is the sample volume in ml (usually 20 ml) and F is the dilution factor.

10.0 Quality Control

10.1 Analyze a method blank along with each batch of ten samples (or less). If the blank indicates a significant contamination (more than twice the method detection limit), repeat all procedures with samples and blank.

10.2 Analyze a duplicate sample with each batch of ten samples or less.

10.3 Analyze a spiked sample with each batch of ten samples or less. The level of spiking must be about twenty times the method detection limit. If the sample contains measurable organic lead, the spike level must be at least four times the measured level.

10.4 Leaded gasoline with known concentration of organolead must be used as spiking solution for all sample types.

11.0 Method Performance

11.1 The analysis of four replicates of water samples spiked with leaded gasoline gave a mean result of 3.23 mg/l, a standard deviation of 0.032 mg/l, and a relative standard deviation (RSD) of 0.99%. The mean recovery was 3.23 mg/l for a recovery of 67.7%.

11.2 The instrument detection limit (IDL) was determined by the analysis of eleven replicates, blanks and standards. The IDL was based on three times the standard deviation which was 0.09 mg/l.

11.3 The analysis of six replicates of soil samples spiked with gasoline gave a mean result of 3.16 mg/kg, a standard deviation of 0.025 mg/kg, and a RSD of 0.80%. The mean recovery was 3.16 mg/kg for a 66.2% recovery.

NOTE: Authority cited: Sections 208 and 25141, Health and Safety Code.

Reference: Section 25141, Health and Safety Code.

Appendix XII-California Hazardous Waste Codes

(a) Subdivisions (b) and (c) of this appendix establish the California Hazardous Waste Code Numbers assigned to wastes which have been identified as hazardous wastes pursuant to the characteristics of hazardous waste as set forth in Article 3 of this chapter or pursuant to the lists of hazardous wastes in Article 4 of this chapter. These Waste Code Numbers shall be used in complying with the notification requirements of Health and Safety Code Section 25153.6 and, where applicable, in the recordkeeping and reporting requirements under Chapters 12 through 15, 18, and 20 of this division.

(1) In cases where hazardous wastes may have both an EPA Hazardous Waste Number and a California Hazardous Waste Code Number, both numbers shall be used in complying with the notification requirements of Health and Safety Code Section 25153.6 and the recordkeeping and reporting requirements under Chapters 12 through 15, 18, and 20 of this division.

(2) If both a California Hazardous Waste Code from the "California Restricted Wastes" category and a code from another category of California Hazardous Waste Codes apply to a specific hazardous waste, the Code from the "California Restricted Wastes" category shall be used.

(b) List of California Hazardous Waste Codes arranged in numerical order:

Waste

Code

Number Waste Description

(1) Inorganics

121 Alkaline solution (pH \leq 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

122 Alkaline solution without metals (pH $>$ 12.5)

123 Unspecified alkaline solution

131 Aqueous solution ($2 < \text{pH} < 12.5$) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)

132 Aqueous solution with metals (restricted levels and see waste code 121 for a list of metals)

133 Aqueous solution with 10% or more total organic residues

134 Aqueous solution with less than 10% total organic residues

135 Unspecified aqueous solution

141 Off-specification, aged, or surplus inorganics

151 Asbestos-containing waste

161 Fluid-cracking catalyst (FCC) waste

162 Other spent catalyst

171 Metal sludge (see 121)

172 Metal dust (see 121) and machining waste

181 Other inorganic solid waste

(2) Organics

211 Halogenated solvents (chloroform, methyl chloride,
perchloroethylene, etc.)

212 Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

213 Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

214 Unspecified solvent mixture

221 Waste oil and mixed oil

222 Oil/water separation sludge

223 Unspecified oil-containing waste

231 Pesticide rinse water

232 Pesticides and other waste associated with pesticide production

241 Tank bottom waste

251 Still bottoms with halogenated organics

252 Other still bottom waste

261 Polychlorinated biphenyls and material containing PCB's

271 Organic monomer waste (includes unreacted resins)

272 Polymeric resin waste

281 Adhesives

291 Latex waste

311 Pharmaceutical waste

321 Sewage sludge

322 Biological waste other than sewage sludge

331 Off-specification, aged, or surplus organics

341 Organic liquids (nonsolvents) with halogens

342 Organic liquids with metals (see 121)

343 Unspecified organic liquid mixture

351 Organic solids with halogens

352 Other organic solids

(3) Sludges

- 411 Alum and gypsum sludge
- 421 Lime sludge
- 431 Phosphate sludge
- 441 Sulfur sludge
- 451 Degreasing sludge
- 461 Paint sludge
- 471 Paper sludge/pulp
- 481 Tetraethyl lead sludge
- 491 Unspecified sludge waste

(4) Miscellaneous

- 511 Empty pesticide containers 30 gallons or more
- 512 Other empty containers 30 gallons or more
- 513 Empty containers less than 30 gallons
- 521 Drilling mud
- 531 Chemical toilet waste
- 541 Photochemicals/photoprocessing waste
- 551 Laboratory waste chemicals
- 561 Detergent and soap
- 571 Fly ash, bottom ash, and retort ash
- 581 Gas scrubber waste
- 591 Baghouse waste
- 611 Contaminated soil from site clean-ups
- 612 Household waste
- 613 Auto shredder waste

(5) California Restricted Wastes

- 711 Liquids with cyanides \geq 1000 mg/l
- 721 Liquids with arsenic \geq 500 mg/l
- 722 Liquids with cadmium \geq 100 mg/l
- 723 Liquids with chromium (VI) \geq 500 mg/l
- 724 Liquids with lead \geq 500 mg/l
- 725 Liquids with mercury \geq 20 mg/l
- 726 Liquids with nickel \geq 134 mg/l
- 727 Liquids with selenium \geq 100 mg/l
- 728 Liquids with thallium \geq 130 mg/l
- 731 Liquids with polychlorinated biphenyls \geq 50 mg/l
- 741 Liquids with halogenated organic compounds \geq 1000 mg/l
- 751 Solids or sludges with halogenated organic compounds \geq
1000mg/kg
- 791 Liquids with pH \leq 2
- 792 Liquids with pH \leq 2 with metals
- 801 Waste potentially containing dioxins

(c) List of California Hazardous Waste Codes arranged
alphabetically within each numbered category in this subdivision.

Waste

Code

Number Waste Description

(1) Inorganics

121 Alkaline solution (pH \geq 12.5) with metals (antimony,

arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

- 122 Alkaline solution without metals (pH \geq 12.5)
- 131 Aqueous solution ($2 < \text{pH} < 12.5$) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)
- 133 Aqueous solution with 10% or more total organic residues
- 134 Aqueous solution with less than 10% total organic residues
- 132 Aqueous solution with metals (restricted levels and see waste code 121 for a list of metals)
- 151 Asbestos-containing waste
- 161 Fluid-cracking catalyst (FCC) waste
- 172 Metal dust (see 121) and machining waste
- 171 Metal sludge (see 121)
- 141 Off-specification, aged, or surplus inorganics
- 181 Other inorganic solid waste
- 162 Other spent catalyst
- 123 Unspecified alkaline solution
- 135 Unspecified aqueous solution
- (2) Organics
- 281 Adhesives
- 322 Biological waste other than sewage sludge
- 211 Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
- 213 Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
- 291 Latex waste
- 331 Off-specification, aged, or surplus organics

222 Oil/water separation sludge
341 Organic liquids (nonsolvents) with halogens
342 Organic liquids with metals (see 121)
271 Organic monomer waste (includes unreacted resins)
351 Organic solids with halogens
352 Other organic solids
252 Other still bottom waste
212 Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
231 Pesticide rinse water
232 Pesticides and other waste associated with pesticide
production
311 Pharmaceutical waste
261 Polychlorinated biphenyls and material containing PCBs
272 Polymeric resin waste
321 Sewage sludge
251 Still bottoms with halogenated organics
241 Tank bottom waste
223 Unspecified oil-containing waste
343 Unspecified organic liquid mixture
214 Unspecified solvent mixture
221 Waste oil and mixed oil
(3) Sludges
411 Alum and gypsum sludge
451 Degreasing sludge
421 Lime sludge
461 Paint sludge
471 Paper sludge/pulp
431 Phosphate sludge

- 441 Sulfur sludge
- 481 Tetraethyl lead sludge
- 491 Unspecified sludge waste

(4) Miscellaneous

- 613 Auto shredder waste
- 591 Baghouse waste
- 531 Chemical toilet waste
- 611 Contaminated soil from site clean-ups
- 561 Detergent and soap
- 521 Drilling mud
- 513 Empty containers less than 30 gallons
- 511 Empty pesticide containers 30 gallons or more
- 571 Fly ash, bottom ash, ad retort ash
- 581 Gas scrubber waste
- 612 Household waste
- 551 Laboratory waste chemicals
- 512 Other empty containers 30 gallons or more
- 541 Photochemical/photoprocessing waste

(5) California Restricted Wastes

- 721 Liquids with arsenic \geq 500 mg/l
- 722 Liquids with cadmium \geq 100 mg/l
- 723 Liquids with chromium (VI) \geq 500 mg/l
- 711 Liquids with cyanides \geq 1000 mg/l
- 741 Liquids with halogenated organic compounds \geq 1000 mg/l
- 724 Liquids with lead \geq 500 mg/l
- 725 Liquids with mercury \geq 20 mg/l

- 726 Liquids with nickel \geq 134 mg/l
- 791 Liquids with pH \leq 2
- 792 Liquids with pH \leq 2 with metals
- 731 Liquids with polychlorinated biphenyls \geq 50 mg/l
- 727 Liquids with selenium \geq 100 mg/l
- 728 Liquids with thallium \geq 130 mg/l
- 751 Solids or sludges with halogenated organic compounds \geq 1000
mg/l
- 801 Waste potentially containing dioxins

NOTE: Authority cited: Sections 208 and 25150, Health and Safety Code.

Reference: Sections 25117.9, 25122.7, and 25150, Health and Safety Code.

