

## Chapter 18.-Land Disposal Restrictions

### Article 1. General

#### 66268.1. Purpose, Scope and Applicability.

(a) This Chapter identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

(b) Except as specifically provided otherwise in this Chapter or Chapter 11 of this division, the requirements of this Chapter apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.

(c) Restricted wastes may continue to be land disposed as follows:

(1) Where persons have been granted an extension from the effective date of a prohibition under Article 3 of this Chapter or pursuant to Section 66268.5, with respect to those wastes covered by the extension;

(2) reserved

(3) Where persons who own or operate a land treatment facility have been granted by the Department an exemption allowing the disposal of restricted hazardous waste in the land treatment facility pursuant to Health and Safety Code Section 25179.12.

(4) Where persons who own or operate a surface impoundment have been granted by the Department an exemption allowing the treatment of restricted waste in the surface impoundment in accordance with Health and Safety Code Section 25179.11.

(5) Where restricted hazardous waste in lab packs has not been restricted or prohibited by the USEPA pursuant to RCRA Section 3004 (42 U.S.C. Section 6924), as amended, and the lab packs are disposed of in accordance with Section 66268.32(1) of this Chapter.

(d) The requirements of this Chapter shall not affect the availability of a waiver under Section 121(d)(4) of CERCLA (42 U.S.C. Section 9621).

(e) The following hazardous wastes are not subject to any provision of Chapter 18:

(1) Waste pesticides that a farmer disposes of pursuant to Section 66262.70.

(2) Solid hazardous wastes generated in the clean up or decontamination of any site contaminated only by hazardous wastes which have not been restricted or prohibited by the USEPA pursuant to Section 3004 of the RCRA (42 U.S.C. Section 6924), as amended, and which have complied with California Health and Safety Code Section 25179.6(a)(2).

(f) Effective May 8, 1990, all hazardous wastes are subject to land disposal restrictions including, but not limited to, the wastes listed under Article 2 and Article 3 of this Chapter.

(g) Effective May 8, 1990, all hazardous wastes are prohibited from land disposal unless the wastes have been exempted, granted a variance or granted an extension under this Chapter or pursuant to California Health and Safety Code Sections 25179.6, 25179.7, 25179.8, 25179.9, 25179.10, 25179.11 and 25179.12, or unless the wastes meet the treatment standards specified under Article 4 and Article 11 of this Chapter.

(h) Effective May 8, 1990, all hazardous wastes without applicable treatment standards, as specified in Article 4 and Article 11 of this Chapter, are prohibited from land disposal unless the waste is treated as defined in Health and Safety Code Section 25179.3(1).

(i) Effective May 8, 1990, all RCRA hazardous wastes not listed in

Sections 66268.10, 66268.11 and 66268.12 of this Chapter are prohibited from land disposal unless the waste has been exempted, granted a variance or granted an extension under this Chapter or pursuant to health and Safety Code Sections 25179.6, 25179.7, 25179.8, 25179.9, 25179.10, 25179.11 or 25179.12, or unless the wastes meet applicable treatment standards specified in Article 4 and Article 11 of this Chapter, or treatment standards in 40 CFR 268.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5, 25179.3, 25179.6, 25179.7, 25179.8, 25179.9, 25179.10, 25179.11 and 25179.12, Health and Safety Code; 40 CFR Section 268.1.

66268.2. Definitions Applicable in this Chapter.

Definitions of terms applicable in this Chapter are provided under Section 66260.10.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5, Health and Safety Code.; 40 CFR Section 268.2

66268.3. Dilution Prohibited as a Substitute for Treatment.

No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Article 4 or Article 11 of this chapter, to circumvent the effective date of a prohibition in Article 3 or Article 10 of this chapter, to otherwise avoid a prohibition in Article 3 or Article 10 of this chapter, or to circumvent a land disposal prohibition imposed by RCRA Section 3004 (42 U.S.C. Section 6924) or Section 66268.1(h) of this Chapter.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159 and 25159.5, Health and Safety Code; 40 CFR Section 268.3.

66268.5. Procedures for Case-By-Case Extensions to an Effective Date.

(a) Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the Department for an extension to the effective date of any applicable restriction established under Article 3 of this chapter.

(b) Each applicant for an extension shall demonstrate that the applicant has received from the USEPA Administrator an approved petition for a case-by-case extension pursuant to 40 CFR Section 268.5 for the waste or demonstrate that the waste is not subject to USEPA land disposal restriction or treatment standards under 40 CFR Part 268.

(c) Each applicant for an extension shall demonstrate that all of the following conditions apply to the waste:

(1) The hazardous waste cannot be recycled, reused, or treated to meet the standards adopted by the Department pursuant to Section 25179.6, California Health and Safety Code, at a commercial off-site hazardous waste facility in the state.

(2) Recycling or treatment alternatives cannot be provided at the site of generation.

(3) Measures have been, or will be, taken to reduce the generation of the hazardous waste.

(4) Land disposal of the hazardous waste is in compliance with all existing statutes and regulations.

(5) Circumstances beyond the control of the applicant, such as delays in the issuance of a permit, have prevented the development of the needed capacity by the date established under this Chapter.

(d) An extension will apply only to the waste generated at the individual facility covered by the application and will not apply to restricted waste from any other facility.

(e) On the basis of the information referred to in subsections (a), (b), and (c) of this Section, the Department may grant an extension of up to 1 year from the effective date. The Department may renew this extension for up to 1 additional year upon the request of the applicant if the demonstration required in subsections (a), (b), and (c) of this Section can still be made. In no event will an extension extend beyond 24 months from the applicable effective date specified in Article 3 of Chapter 18. The length of any extension authorized will be determined by the Department based on the time required to construct or obtain the type of capacity needed by the applicant. For RCRA hazardous waste subject to land disposal restrictions under this chapter, in no event may the

Department grant an extension under this Section which exceeds the length of the extension granted by the USEPA Administrator as provided in Section 66268.5(b).

(f) Any person granted an extension under this Section shall immediately notify the Department, and for RCRA hazardous wastes, the USEPA Administrator, as soon as the person has knowledge of any change in the conditions certified to in the application.

(9) Any person granted an extension under this Section shall submit written progress reports to the Department, and for RCRA hazardous wastes, the USEPA Administrator, at intervals designated by the USEPA Administrator and the Department. Such reports shall describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity, shall identify any event which may cause or has caused a delay in the development of the capacity, and shall summarize the steps taken to mitigate the delay. The USEPA Administrator or the Department can revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the USEPA or the Department denies or revokes any required permit, if conditions certified in the application change, or for any violation of this division.

(h) Whenever the Department establishes an extension to an effective date under this Section, during the period for which such

extension is in effect:

(1) The storage restrictions under Section 66268.50(a) do not apply; and

(2) Such hazardous waste may be disposed in a landfill or surface impoundment only if such unit is in compliance with the technical requirements of the following provisions regardless of whether such unit is existing, new or a replacement or lateral expansion:

(A) The landfill, if in interim status, is in compliance with the requirements of Article 6 of Chapter 15 and Section 66265.301(a), (c), and (d) of this division; or,

(B) The landfill, if permitted, is in compliance with the requirements of Article 6 of Chapter 14 and Section 66264.301(c), (d) and (e) of this division;

(C) The surface impoundment, if in interim status, is in compliance with the requirements of Article 6 of Chapter 15, Section 66265.221(a), (c), and (d) of this division, and RCRA Section 3005(j)(1); or

(D) The surface impoundment, if permitted, is in compliance with the requirements of Article 6 of Chapter 14 and Section 66264.221(c), (d) and (e) of this division and California Health

and Safety Code, Division 20, Chapter 6.5 Article 9.5.

(E) The landfill, if disposing of containerized liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm, is also in compliance with the requirements of 40 CFR Section 761.75 and Chapters 14 and 15 of this division.

(i) Pending a decision on the application, the applicant is required to comply with all restrictions on land disposal under this chapter once the effective date for the waste has been reached.

(j) After receiving an application for an extension, the Department may request any additional information which it deems necessary to evaluate the application. Within 45 days of the receipt of the application, the Department shall inform the applicant, in writing, that the application is complete and accepted for filing, or that the application is deficient and what specific information is required.

(k) The Department shall make a decision on an application for an extension within 120 days of the filing of a completed application.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.8, Health and Safety Code; 40 CFR Section 268.5.; Section 15376, Government Code.

66268.7. Waste Analysis and Recordkeeping.

(a) Except as specified in Section 66268.32, Section 66268.43, or Section 66268.110 of this Chapter, the generator shall test the generator's waste, or test an extract developed using the test method specified in Section 66268.41 or Section 66268.106 of this Chapter, or use knowledge of the waste, to determine if the waste is restricted from land disposal under this Chapter.

(1) If a generator determines that the generator is managing a restricted waste under this Chapter and the waste does not meet the applicable treatment standards set forth in Article 4 or Article 11 of this Chapter, or exceeds the applicable prohibitions set forth in Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)), with each shipment of waste the generator shall notify the treatment or storage facility in writing of the appropriate treatment standards set forth in Article 4 and Article 11 of this Chapter and any: applicable prohibitions set forth in Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)). The notice shall include the following information:

(A) EPA Hazardous Waste Number or California Waste Code and Non-RCRA Hazardous Waste listed in Section 66268.29.

(B) The corresponding treatment standards for wastes FO01-F005, F039, and wastes prohibited pursuant to Section 66268.32 or RCRA

Section 3004(d) (42 U.S.C. Section 6924(d)). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability groups(s) of the waste(s), and the CCR section(s) and subsections where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Section 66268.42, the applicable five-letter treatment code found in Table 1 of Section 66268.42 (e.g., INCIN, WETOX) also must be listed on the notification.

(C) The manifest number associated with the shipment of waste; and

(D) Waste analysis data, where available.

(2) If a generator determines that the generator is managing a restricted waste under this Chapter, and determines that the waste can be land disposed without further treatment, with each shipment of waste the generator shall submit, to the treatment, storage or land disposal facility, a notice and a certification stating that the waste meets the applicable treatment standards set forth in Article 4 and Article 11 of this Chapter and the applicable prohibitions set forth in Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)).

(A) The notice shall include the following information:

1. EPA Hazardous Waste Number or California Hazardous Waste Code and Non-RCRA Hazardous Waste listed in Section 66268.29.

2. The corresponding treatment standards for wastes FO01-F005, F039, and wastes prohibited pursuant to Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability groups(s) of the waste(s), and the CCR section(s) and subsections where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Section 66268.42, the applicable five-letter treatment code found in Table 1 of Section 66268.42 (e.g., INCIN, WETOX) also must be listed on the notification.

3. The manifest number associated with the shipment of waste;

4. Waste analysis data, where available.

(B) The certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification,

that the waste complies with the treatment standards specified in CCR Title 22, Division 4.5, Chapter 18, Article 4 and Article 11 and all applicable prohibitions set forth in CCR Title 22, Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(3) If a generator's waste is subject to an exemption from a prohibition on the type of land disposal method utilized for the waste (such as, but not limited to, a case-by-case extension under Section 66268.5, a nationwide capacity variance under Article 3, or an extension to the implementation date under Health and Safety Code Section 25179.7), with each shipment of waste, the generator must submit a notice to the facility receiving his waste stating that the waste is not prohibited from land disposal. The notice must include the following information:

(A) EPA Hazardous Waste Number or California Hazardous Waste Code and Non-RCRA Hazardous Waste listed in Section 66268.29.

(B) The corresponding Treatment standards for wastes F001-F005, F039, and wastes prohibited pursuant to Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)). Treatment standards for all other restricted wastes may be referenced by including on

the notification the subcategory of the waste, the treatability groups(s) of the waste(s), and the CCR section(s) and subsections where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Section 66268.42, the applicable five-letter treatment code found in Table 1 of Section 66268.42 (e.g., INCIN, WETOX) also must be listed on the notification.

- (C) The manifest number associated with the shipment of waste;
- (D) Waste analysis data, where available; and
- (E) The date the waste is subject to the prohibitions.

(4) Reserved

(5) If a generator determines whether the waste is restricted based solely on the generator's knowledge of the waste, all supporting data used to make this determination shall be retained onsite in the generator's files. If a generator determines whether the waste is restricted based on testing this waste or an extract developed using the test method specified in Section 66268.41 or Section 66268.106 of this Chapter, all waste analysis data shall be retained onsite in the generator's files.

(6) Generators shall retain onsite a copy of all notices, certifications, demonstrations, waste analysis data and other

documentation produced pursuant to this section for at least five years from the date that the waste that is the subject of such documentation was last sent to onsite or offsite treatment, storage or disposal. The five-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Department or USEPA Administrator.

(7) If a generator is managing a lab pack that contains wastes identified in Appendix IV of this Chapter and wishes to use the alternate treatment standard under Section 66268.42, with each shipment of waste, the generator must submit a notice to the treatment facility in accordance with subsection (a)(1) of this Section. The generator must also comply with the requirements in subsections (a)(5) and (a)(6) of this Section, and must submit the following certification, which must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only the wastes specified in Appendix IV to Chapter 18 or solid wastes not subject to regulation under Chapter 11 of Division 4.5, Title 22, CCR. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(8) If a generator is managing a lab pack that contains RCRA organic wastes specified in Appendix V of this Chapter and wishes to use the alternate treatment standards under Section 66268.42, with each shipment of waste, the generator must submit a notice to the treatment facility in accordance with subsection (a)(1) of this Section. The generator also must comply with the requirements in subsection (a)(5) and (a)(6) of this Section, and must submit the following certification which must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and that the lab pack contains only organic RCRA waste specified in Appendix V to Chapter 18 or solid wastes not subject to regulation under Chapter 11 of Division 4.5, Title 22, CCR. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(9) Small quantity of generators of RCRA hazardous wastes with milkrun agreements pursuant to Section 66263.41(b)(1) or (b)(2) shall comply with the applicable notification and certification requirements of subsection (a) of this Section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the milkrun agreement, for at least three years after

termination or expiration of the agreement. The three-year retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Department.

(10) Generators of non-RCRA hazardous wastes totaling less than 100 kilograms per calendar month who have a variance issued pursuant to Section 66264.41(b)(3), or generators of non-RCRA used oil who are subject to Section 25250.8, Health and Safety Code, shall comply with the applicable notification and certification requirements of subsection (a) of this Section for the initial shipment of the waste subject to the agreement. The waste generator and milkrun transporter operating in accordance with Section 66263.41 or Section 25250.8, Health and Safety Code, shall comply with the notification and certification requirements of subsection (a) for the non-RCRA waste. Such generators and transporters shall retain a copy of the notification and certification, together with the milkrun agreement and the variance if applicable, for at least three years after termination or expiration of the milkrun agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Department.

(b) Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by Section 66264.13 or Section 66265.13. Such testing shall be

performed as provided in subsections (b)(1), (b)(2) and (b)(3) of this section.

(1) For wastes with treatment standards expressed as concentrations in the waste extract (Section 66268.41 or Section 66268.106), the owner or operator of the treatment facility shall test the treatment residues, or an extract of such residues developed using the test method specified in Section 66268.41 or Section 66268.106 of this Chapter, to assure that the treatment residues or extract meet the applicable treatment standards.

(2) For wastes that are prohibited under Section 66268.32 of this Chapter or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)) but not subject to any treatment standards under Article 4 or Article 11 of this Chapter, the owner or operator of the treatment facility shall test the treatment residues according to the generator testing requirements specified in Section 66268.32 to assure that the treatment residues comply with the applicable prohibitions.

(3) For wastes with treatment standards expressed as concentrations in the waste (Section 66268.43 or Section 66268.107), the owner or operator of the treatment facility shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.

(4) A notice shall be sent with each waste shipment to the land

disposal facility which includes the following information:

(A) EPA Hazardous Waste Number or California Hazardous Waste Code and Non-RCRA Hazardous Waste listed in Section 66268.29.

(B) The corresponding treatment standards for wastes F001-F005, F039, and wastes prohibited pursuant to Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability group(s) of the waste(s), and the CCR section(s) and subsections where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Section 66268.42, the applicable five-letter treatment code found in Table 1 of Section 66268.42 (e.g., INCIN, WETOX) also must be listed on the notification.

(C) The manifest number associated with the shipment of waste; and

(D) Waste analysis data, where available.

(5) The treatment facility shall submit a certification with each shipment of waste or treatment residue of a restricted waste, to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the applicable performance standards specified in Article 4 and Article 11 of this

Chapter, and the applicable prohibitions set forth in Section 66268.32 or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)).

(A) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (Section 66268.41 Section 66268.43, Section 66268.106 or Section 66268.107) or for wastes prohibited under Section 66268.32 of this Chapter or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)) which are not subject to any treatment standards under Article 4 and Article 11 of this Chapter, the certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in Article 4 and Article 11 of Chapter 18, Division 4.5, Title 22, CCR and all applicable prohibitions set forth in Section 66268.32 or RCRA section 3004(d) (42 U.S.C. Section 6924(d)) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(B) For wastes with treatment standards expressed as technologies (Section 66268.42 or Section 66268.108), the certification shall be signed by an authorized representative and shall state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of CCR Title 22, Section 66268.42 and Section 66268.108. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(C) For wastes with treatment standards expressed as concentrations in the waste, if compliance with Article 4 or Article 11 treatment standards is based in part or in whole on the analytical detection limit alternative specified in Section 66268.43(c), the certification also must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with Chapter 14 or Chapter 15 of Division 4.5, Title 22, CCR, or by combustion

in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(6) If the waste or treatment residue will be further managed at a different treatment or storage facility, the treatment, storage or disposal facility sending the waste or treatment residue offsite shall comply with the notice and certification requirements applicable to generators under this section.

(c) The owner or operator of any land disposal facility disposing any waste subject to restrictions under this Chapter shall:

(1) Have copies of the notice and certifications specified in subsection (a) or (b) of this section, and the certification specified in Section 66268.8 if applicable.

(2) Test the waste, or an extract of the waste or treatment residue developed using the test method specified in Section 66268.41 or Section 66268.106 of this Chapter or using any methods required by generators under Section 66268.32 of this Chapter, to assure that the wastes or treatment residues are in compliance with the

applicable treatment standards set forth in Article 4 and Article 11 of this Chapter and all applicable prohibitions set forth in Section 66268.32 of this Chapter or in RCRA Section 3004(d) (42 U.S.C. Section 6924(d)). Such testing shall be performed according to the frequency specified in the facility's waste analysis plan as required by Section 66264.13 or Section 66265.13.

(3) Where the owner or operator is disposing of any waste that is subject to the prohibitions under Section 66268.33(f) of this Chapter but not subject to the prohibitions set forth in Section 66268.32, the owner or operator shall ensure that such waste is the subject of a certification according to the requirements of Section 66268.8 prior to disposal in a landfill or surface impoundment unit, and that such disposal is in accordance with the requirements of Section 66268.5(h)(2). The same requirement applies to any waste that is subject to the prohibitions under Section 66268.33(f) of this Chapter and also is subject to the statutory prohibitions in RCRA Section 3004(d) (42 U.S.C. Section 6924(d)) or the codified prohibitions in Section 66268.32 of this Chapter.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 AND 25179.7, Health and Safety Code; 40 CFR Section 268.7.

66268.9. Special Rules Regarding Wastes That Exhibit a Characteristic.

(a) The initial generator of a solid waste must determine each waste code applicable to the waste in order to determine the applicable treatment standards under Article 4 of this Chapter. For purposes of this Chapter, the RCRA hazardous waste will carry a waste code designation for any applicable listing under Article 4, Chapter 11, and also one or more waste code designations under Article 3, Chapter 11 where the waste exhibits the relevant characteristic.

(b) Where a prohibited waste is both listed under Article 4, Chapter 11 and exhibits a characteristic under Article 3, Chapter 11, the treatment standard for the waste code listed in Article 4, Chapter 11 will operate in lieu of the standard for the waste code under Article 3, Chapter 11, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the RCRA waste must meet the treatment standards for all applicable listed and characteristic waste codes. A RCRA hazardous waste which exhibits characteristics of corrosivity, reactivity or ignitability as defined in Article 3, Chapter 11 and is not listed in Article 4, Chapter 11 which is also hazardous pursuant to Section 66261.24, Chapter 11, shall meet both applicable treatment standards for RCRA waste under Article 4 and the applicable

treatment standards for non-RCRA waste under Article 11 of this Chapter.

(c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under Article 3, Chapter 11 may be land disposed unless the waste complies with the treatment standards under Article 4, Chapter 18.

(d) The RCRA wastes that exhibit a characteristic are also subject to Section 66268.7 requirements, except that once the waste is no longer hazardous, for each shipment of such wastes to a 40 CFR Subtitle D facility, the initial generator or the treatment facility need not send a Section 66268.7 notification to such facility. In such circumstances, a notification and certification must be sent to the appropriate EPA Regional Administrator (or his delegated representative) or the Department upon authorization to implement 40 CFR, Part 268.

(1) The notification must include the following information:

(A) The name and address of the 40 CFR Subtitle D facility receiving the waste shipment;

(B) A description of the waste as initially generated, including the applicable EPA Hazardous Waste Number(s) and treatability groups(s);

(C) The treatment standards applicable to the waste at the

initial point of generation.

(2) The certification must be signed by an authorized representative and must state the language found in Section 66268.7(b)(5)(A).

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Section 268.9.

Article 2. Schedule for Land Disposal Prohibition and  
Establishment of Treatment Standards

66268.10. Identification of Wastes to be Evaluated by August 8,  
1988.

U.S. EPA will take action under Section 3004(g)(5) and 3004(m) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(g)(5) and 6924(m)), by August 8, 1988 for the wastes listed in this subsection (for ease of understanding, the wastes have been listed by the subsection of Section 66261 under which they were listed). If USEPA fails to take action for any of these wastes by August 8, 1988, the provisions of Section 3004(g)(6)(A) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(g)(6)(A)) will apply to those wastes for which USEPA has failed to take action. If USEPA fails to take action for any of these wastes by May 8, 1990, the provisions of Section 3004(g)(6)(C) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(g)(6)(C)) will apply to those wastes for which USEPA has failed to take action.

(a) Section 66261.31 Wastes

F006--Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating# (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

F007--Spent cyanide plating bath solutions from electroplating operations.

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

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

F019--Wastewater treatment sludges from the chemical conversion coating of aluminum.

(b) Section 66261.32 Wastes

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

K004--Wastewater treatment sludge from the production of zinc yellow pigments.

K008--Over residue from the production of chrome oxide green pigments.

K011--Bottom stream from the wastewater stripper in the production of acrylonitrile.

K013--Bottom stream from the acetonitrile column in the production of acrylonitrile.

K014--Bottoms from the acetonitrile purification column in the production of acrylonitrile.

K015--Still bottoms from the distillation of benzyl chloride.

K016--Heavy ends or distillation residues from the production of carbon tetrachloride.

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

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

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

K021--Aqueous spent antimony catalyst waste from fluoromethanes production.

K022--Distillation bottom tars from the production of phenol/acetone from cumane.

K024--Distillation bottoms from the production of phthalic anhydride from naphthalene.

K030--Column bottom or heavy ends from the combined production of trichloroethylene and perchloroethylene.

K031--By-products salts generated in the production of MSMA and cacodylic acid.

K035--Wastewater treatment sludges generated in the production of creosote.

K036--Still bottoms from toluene reclamation distillation in the production of disulfoton.

K037--Wastewater treatment sludge from the production of

disulfoton.

K044--Wastewater treatment sludges from the manufacturing and processing of explosives.

K045--Spent carbon from the treatment of wastewater containing explosives.

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

K047--Pink/red water from TNT operations.

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

K049--Slop oil emulsion solids from the petroleum refining industry.

K050--Heat exchange bundle cleaning sludge from the petroleum refining industry.

K051--API separator sludge from the petroleum refining industry.

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

K060--Ammonia still lime sludge from coking operations.

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

K062--Spent pickle liquor from steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).

K069--Emission control dust/sludge from secondary lead smelting.

K071--Brine purification muds from the mercury cells process in chlorine production, where separately prepurified brine is not used.

K073--Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes.

K083--Distillation bottoms from aniline production.

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

K085--Distillation of fractionation column bottoms from the production of chlorobenzenes.

K086--Solvent washes and sludges; caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and

stabilizers containing chromium and lead.

K087--Decanter tank tar sludge from coking operations.

K099--Untreated wastewater from the production of 2,4-D.

K101--Distillation tar residues from the distillation 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 decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

K103--Process residues from aniline extraction from the production of aniline.

K104--Combined wastewater streams generated from nitrobenzene/aniline production.

K106--Wastewater treatment sludge from the mercury cell process in chlorine production.

(c) Section 66261.33(e) Wastes

P001--Warfarin, when present at concentration greater than 0.3%

P004--Aldrin

P005--Allyl alcohol

P010--Arsenic acid

P011--Arsenic (V) oxide

P012--Arsenic (III) oxide

P015--Beryllium dust

P016--Bis-(chloromethyl) ether

P018--Brucine

P020--Dinoseb

P030--Soluble cyanide salts not elsewhere specified P036--

Dichlorophenylarsine

P037--Dieldrin

P039--Disulfoton

P041--Diethyl-p-nitrophenyl phosphate

P048--2,4-Dinitrophenol

P050--Endosulfan

P058--Fluoroacetic acid, sodium salt

P059--Heptachlor

P063--Hydrogen cyanide

P068--Methyl hydrazine

P069--2-Methylactonitrile

P070--Aldicarb

P071--Methyl parathion

P081--Nitroglycerine

P082--N-Nitrosodimethylamine

P084--N-Nitrosomethylvinylamine  
P087--Osmium tetroxide  
P089--Parathion  
P092--Phenylmercuric acetate  
P094--Phorate  
P097--Famphur  
P102--Propargyl alcohol  
P105--Sodium azide  
P108--Strychnine and salts  
P110--Tetraethyl lead  
P115--Thallium (I) sulfate  
P120--Vanadium pentoxide  
P122--Zinc phosphide, when present at concentrations greater than  
10%  
P123--Toxaphene

(d) Section 66261.33(f) Wastes

U007--Acrylamide  
U009--Acrylonitrile  
U010--Mitomycin C  
U012--Aniline  
U016--Benz(c)acridine  
U018--Benz(a)anthracene  
U019--Benzene  
U022--Benzo(a)pyrene  
U029--Methyl bromide  
U031--n-Butanol  
U036--Chlordane, technical  
U037--Chlorobenzene  
U041--n-Chloro-2,3-epoxypropane  
U043--Vinyl chloride  
U044--Chloroform  
U046--Chloromethyl methyl ether  
U050--Chrysene  
U051--Creosote  
U053--Crotonaldehyde  
U061--DDT  
U063--Dibenzo(a, h)anthracene  
U064--1,2:7,8 Dibenzopyrene  
U066--Dibromo-3-chloropropane 1,2-  
U067--Ethylene dibromide  
U074--1,4-Dichloro-2-butene  
U077--Ethane, 1,2-dichloro-

U078--Dichloroethylene, 1,1-  
U086--N,N Diethylhydrazine  
U089--Diethylstilbestrol  
U103--Dimethyl sulfate  
U105--2,4-Dinitrotoluene  
U108--Dioxane, 1,4-  
U115--Ethylene oxide  
U122--Formaldehyde  
U124--Furan  
U129--Lindane  
U130--Hexachlorocyclopentadiene  
U133--Hydrazine  
U134--Hydrofluoric acid  
U137--Indeno(1,2,3-cd)pyrene  
U151--Me#cury  
U154--Methanol  
U155--Methapyrilene  
U157--3-Methylcholanthrene  
U158--4,4-Methylene-bis-(2-chloroaniline)  
U159--Methyl ethyl ketone  
U171--Nitropropane, 2-  
U177--N-Nitroso-N-methylurea  
U180--N-Nitrosopyrrolidine  
U185--Pentachloronitrobenzene  
U188--Phenol  
U192--Pronamide  
U200--Reserpine  
U209--Tetrachloroethane, 1,1,2,2-

U210--Tetrachloroethylene

U211--Carbon tetrachloride

U219--Thiourea

U220--Toluene

U221--Toluenediamine

U223--Toluene diisocyanate

U226--Methylchloroform

U227--Trichloroethane, 1,1,2-

U228--Trichloroethylene

U237--Uracil mustard

U238--Ethyl carbamate

U248--Warfarin, when present at concentrations of 0.3% or less

U249--Zinc phosphide, when present at concentrations of 10% or less

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Section 268.10.

66268.11. Identification of Wastes to be Evaluated by  
June 8, 1989.

USEPA will take action under Section 3004(9)(5) and 3004(m) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(9)(5) and 6924(m)), by June 8, 1989 for the wastes listed in this subsection (for ease of understanding, the wastes have been listed by the subsection of Section 66261 under which they were listed). If USEPA fails to take action for any of these wastes by June 8, 1989, the provisions of Section 3004(9)(6)(B) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(g)(6)(B)) will apply to those wastes for which USEPA has failed to take action. If USEPA fails to take action for any of these wastes by May 8, 1990, the provisions of Section 3004(g)(6)(C) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(9)(6)(C)) will apply to those wastes for which USEPA has failed to take action.

(a) Section 66261.31 Wastes

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

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

F012--Quenching wastewater treatment sludges from metal heat operations where cyanides are used in the process.

F024--Wastes including but not limited to, distillation residues, heavy ends, tars and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. [This listing does not include light ends, spent filters and filter aids, spent desiccants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Section 66261.32].

(b) Section 66261.32 Wastes

K009--Distillation bottoms from the production of acetaldehyde from ethylene.

K010--Distillation side cuts from the productions of acetaldehyde from ethylene.

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

K025--Distillation bottoms from the production of nitrobenzene by the nitration of benzene.

K027--Centrifuge and distillation residues from toluene diisocyanate production.

K028--Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.

K029--Waste from the product steam stripper in the production of 1,1,1-trichloroethane.

K038--Wastewater from the washing and stripping of phorate production.

K039--Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.

K040--Wastewater treatment sludge from the production of phorate.

K041--Wastewater treatment sludge from the production of toxaphene.

K042--Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.

K043--2,6-Dichlorophenol waste from the production of 2,4-D.

K095--Distillation bottoms from the production of 1,1,1-trichloroethane.

K096--Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.

K097--Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.

K098--Untreated process wastewater from the production of toxaphene.

K105--Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.

(c) Section 66261.33(e) Wastes

P002--1-Acetyl-2-thiourea  
P003--Acrolein  
P007--5-(Aminoethyl)-3-isoxazolol  
P008--4-Aminopyridine  
P014--Thiophenol  
P026--1-(o-Chlorophenyl)thiourea  
P027--Propanenitrile, 3-chloro  
P029--Copper cyanides  
P040--0,0-Diethyl o-pyrazinyl phosphorothioate  
P043--Diisopropyl fluorophosphate  
P044--Dimethoate  
P049--2,4-Dithiobiuret  
P054--Aziridine  
P057--Fluoracetamide  
P060--Isodrin  
P062--Hexaethyltetraphosphate  
P066--Methomyl  
P067--2-Methylaziridine  
P072--Alpha-naphthylthiourea (ANTU)  
P074--Nickel cyanide  
P085--Octamethylpyrophosphoramidate  
P098--Potassium cyanide  
P104--Silver cyanide  
P106--Sodium cyanide  
P107--Strontium sulfide  
P111--Tetraethylpyrophosphate

P112--Tetranitromethane

P113--Thallic oxide

P114--Thallium (I) selenite

(d) Section 66261.33(f) Wastes

U002--Acetone

U003--Acetonitrile

U005--o-Acetylaminofluorene

U008--Acrylic acid

U011--Amitrole

U014--Auramine

U015--Azaserine

U020--Benzenesulfonyl chloride

U021--Benzidine

U023--Benzotrichloride

U025--Dichloroethyl ether

U026--Chlornaphazine

U028--Bis-(2-ethylhexyl)phthalate

U032--Calcium chromate

U035--Chlorambucil

U047--Beta-chloronaphthalene

U049--4-Chloro-o-toluidine, hydrochloride

U057--Cyclohexanone

U058--Cyclophosphamide

U059--Daunomycin

U060--DDD

U062--Diallate

U070--o-Dichlorobenzene

U073--Dichlorobenzidene, 3,3'-

U080--Methylene chloride

U083--Dichloropropane, 1,2-

U092--Dimethylamine  
U093--Dimethylaminoazobenzene  
U094--Dimethylbenz(a)anthracene,7,12-  
U095--Dimethylbenzidine,3,3'-  
U097--Dimethylcarbamoyl chloride  
U098--Dimethylhydrazine, 1,1-  
U099--Dimethylhydrazine, 1,2-  
U101--Dimethylphenol, 2,4-  
U106--Dinitrotoluene, 2,6-  
U107--Di-n-octyl phthalate  
U109--1,2,-Diphenylhydrazine  
U110--Dipropylamine  
U111--Di-N-Propylnitrosamine  
U114--Ethylenebis-(dithiocarbamic acid)  
U116--Ethylene thiourea  
U119--Ethyl methanesulfonate  
U127--Hexachlorobenzene  
U128--Hexachlorobutadiene  
U131--Hexachloroethane  
U135--Hydrogen sulfide  
U138--Methyl iodide  
U140--Isobutyl alcohol  
U142--Kepone  
U143--Lasiocarpine  
U144--Lead acetate  
U146--Lead subacetate  
U147--Maleic anhydride  
U149--Malononitrile

U150--Melphalan  
U161--Methyl isobutyl ketone  
U162--Methyl methacrylate  
U163--N-Methyl-N-nitro-N-nitrosoguanidine  
U164--Methylthiouracil  
U165--Naphthalene  
U168--Naphthylamine, 2-  
U169--Nitrobenzene  
U170--p-Nitrophenol  
U172--N-Nitroso-di-n-butylamine  
U173--N-Nitroso-diethanolamine  
U174--N-Nitroso-diethylamine  
U176--N-Nitroso-N-ethylurea  
U178--N-Nitroso-N-methylurethane  
U179--N-Nitrosopiperidine  
U189--Phosphorus sulfide  
U193--1,3-Propane sultone  
U196--Pyridine  
U203--Safrole  
U205--Selenium disulfide  
U206--Streptozotocin  
U208--Terachloroethane, 1,1,1,2-  
U213--Tetrahydrofuran  
U214--Thallium (I) acetate  
U215--Thallium (I) carbonate  
U216--Thallium (I) chloride  
U217--Thallium (I) nitrate  
U218--Thioacetamide

U235--Tris (2,3-Dibromopropyl) phosphate

U239--Xylene

U244--Thiram

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6,  
Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health  
and Safety Code; 40 CFR Section 268.11.

66268.12. Identification of Wastes to be Evaluated by  
May 8, 1990.

(a) U.S. EPA will take action under Section 3004(g)(5) and 3004(m) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(g)(5) and 6924(m)), by May 8, 1990 for the wastes listed in this subsection (for ease of understanding, the wastes have been listed by the subsection of Section 66261 under which they were listed). If USEPA fails to take action for any of these wastes by May 8, 1990, the provisions of Section 3004(g)(6)(C) of the Resource Conservation and Recovery Act (42 U.S.C. Section 6924(9)(6)(C)) will apply to those wastes for which USEPA has failed to take action.

(1) Section 66261.32 Wastes

K002--Wastewater treatment sludge from the production of chrome yellow and orange pigments.

K003--Wastewater treatment sludge from the production of molybdate orange pigments.

K005--Wastewater treatment sludge from the production of chrome green pigments.

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

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

K023--Distillation light ends from the production of phthalic anhydride from naphthalene.

K026--Stripping still tails from the production of methyl ethyl pyridines.

K032--Wastewater treatment sludge from the production of chlordane.

K033--Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.

K034--Filter solids from the hexachlorocyclopentadiene in the production of chlordanes.

K093--Distillation light ends from the production of phthalic anhydride from ortho-xylene.

K094--Distillation bottoms from the production of phthalic anhydride from ortho-xylene.

K100--Waste leaching solution from acid leaching of emissions control dust/sludge from secondary lead smelting.

(2) Section 66261.33(e) Wastes

P006--Aluminum phosphide  
P009--Ammonium picrate  
P013--Barium cyanide  
P017--Bromoacetone  
P021--Calcium cyanide  
P022--Carbon disulfide  
P023--Chloroacetaldehyde  
P024--p-Chloroaniline  
P028--Benzyl chloride  
P031--Cyanogen  
P033--Cyanogen chloride  
P034--4,6-Dinitro-o-cyclohexylphenol  
P038--Diethylarsine  
P042--Epinephrine  
P045--Thiofanox  
P046--Alpha, alpha-Dimethylphenethylamine  
P047--4,6-Dinitro-o-cresol and salts  
P051--Endrin  
P056--Fluorine  
P064--Methyl isocyanate  
P065--Mercury fulminate  
P073--Nickel carbonyl  
P075--Nicotine and salts  
P076--Nitric oxide  
P077--p-Nitroaniline  
P078--Nitrogen dioxide

P088--Endothall

P093--N-Phenylthiourea

P095--Phosgene

P096--Phosphine

P099--Potassium silver cyanide

P101--Propanenitrile

P103--Selenourea

P109--Tetraethyldithiopyrophosphate

P116--Thiosemicarbazide

P118--Trichloromethanethiol

P119--Ammonium vanadate

P121--Zinc cyanide

(3) Section 66261.33(f) Wastes

U001--Acetaldehyde  
U004--Acetophenone  
U006--Acetyl chloride  
U017--Benzal chloride  
U024--Bis(2-chloroethoxy)methane  
U027--Bis(2-chloroisopropyl) ether  
U030--Benzene, 1-bromo-4-phenoxy  
U033--Carbonyl fluoride  
U034--Chloral  
U038--Ethyl-4-4' dichlorobenzilate  
U039--4-Chloro-m-cresol  
U042--Vinyl ether, 2-chloroethyl  
U045--Methyl chloride  
U048--o-Chlorophenol  
U052--Cresols  
U055--Cumene  
U056--Cyclohexane  
U068--Methane, dibromo  
U069--Dibutyl phthalate  
U071--m-Dichlorobenzene  
U072--p-Dichlorobenzene  
U075--Dichlorodifluoromethane  
U076--Ethane, 1,1-dichloro-  
U079--1,2-Dichlorethylene  
U081--2,4-Dichlorophenol  
U082--2,6-Dichlorophenol

U084--1,3-Dichloropropene  
U085--2,2'Bioxirane  
U087--0,0,-Diethyl-S-methyl-dithiophosphate  
U088--Diethyl phthalate  
U090--Dihydrosafrole  
U091--3,3' Dimethoxybenzidine  
U096--alpha,alpha-Dimethylbenzylhydroperoxide  
U102--Dimethyl phthalate  
U112--Ethyl acetate  
U113--Ethyl acrylate  
U117--Ethyl ether  
U118--Ethylmethacrylate  
U120--Fluoranthene  
U121--Trichloromonofluoromethane  
U123--Formic acid  
U125--Furfural  
U126--Glycidylaldehyde  
U132--Hexachlorophene  
U136--Cacodylic acid  
U139--Iron dextran  
U141--Isosafrole  
U145--Lead phosphate  
U148--Maleic hydrazide  
U152--Methacrylonitrile  
U153--Methanethiol  
U156--Methyl chlorocarbonate  
U160--Methyl ethyl ketone peroxide  
U166--1,4-Naphthaquinone

U167--1-Naphthylamine  
U181--5-Nitro-o-toluidine  
U182--Paraldehyde  
U183--Pentachlorobenzene  
U184--Pentachloroethane  
U186--1,3-Pentadiene  
U187--Phenacetin  
U190--Phthalic anhydride  
U191--2-Picoline  
U194--1-Propanamine  
U197--p-Benzoquinone  
U201--Resorcinol  
U202--Saccharin and salts  
U204--Selenious acid  
U207--1,2,4,5-tetrachlorobenzene  
U222--o-Toluidine hydrochloride  
U225--Bromoform  
U234--Sym-Trinitrobenzene  
U236--Trypan blue  
U240--2,4-D, salts and esters  
U243--Hexachloropropene  
U246--Cyanogen bromide  
U247--Methoxychlor

(4) Wastes identified as hazardous based on a characteristic alone (i.e., corrosivity, reactivity, ignitability and EP toxicity).

(b) Wastewater residues (less than 1 percent total organic carbon and less than 1 percent suspended solids) resulting from the following well-designed and well-operated treatment methods for wastes listed in Section 66268.10 and Section 66268.11 for which USEPA has not promulgated wastewater treatment standards: metals recovery, metals precipitation, cyanide destruction, carbon adsorption, chemical oxidation, steam stripping, biodegradation, and incineration or other direct thermal destruction.

(c) Hazardous wastes listed in Sections 66268.10 and 66268.11 which are mixed hazardous/radioactive wastes.

(d) Multi-source leachate that is derived from disposal of any listed waste, except from Hazardous Wastes F020, F021, F022, F023, F026, F027, or F028.

(e) Nonwastewater forms of wastes listed in Section 66268.10 that were originally disposed before August 17, 1988 and for which U.S. EPA has promulgated "no land disposal" as the treatment standard (Section 66268.43, Table CCW, No Land Disposal Subtable). This provision does not apply to waste codes K044, K045, K047, and K061 (high zinc subcategory).

(f) Nonwastewater forms of wastes listed in Section 66268.10 for which U.S. EPA has promulgated "no land disposal" as the treatment standard (Section 66268.43, Table CCW, No Land Disposal Subtable) that are generated in the course of treating wastewater

forms of the wastes. This provision does not apply to waste codes K044, K045, K047 and K061 (high zinc subcategory).

(g) Nonwastewater forms of waste codes K015 and K083.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.12.

66268.13. Schedule for Wastes Identified or Listed After  
November 8, 1984.

In the case of any hazardous waste identified or listed under  
Section 3001 of the Resource Conservation and Recovery Act  
(42 U.S.C. Section 6921) after November 8, 1984, the U.S. EPA  
Administrator shall make a land disposal prohibition  
determination within 6 months after the date of identification or  
listing.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6,  
Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health  
and Safety Code and 40 CFR Section 268.13.

66268.29 List of Restricted Non-RCRA Hazardous Wastes.

The following non-RCRA hazardous wastes are subject to land disposal restrictions and treatment standards specified in Articles 1-5 and Articles 10-12 of this chapter.

(a) Metal-containing aqueous waste that contains any metals or metal compounds identified in Section 66261.24(a)(2)(A). For the purpose of this article, an aqueous waste is defined as a waste containing water, and less than or equal to one weight percent of suspended solids.

(b) Wastes containing polychlorinated biphenyls (PCBs)

(c) Auto shredder waste.

For the purpose of this article, auto shredder waste is defined as the hazardous waste generated from the shredding of metallic materials including, but not limited to automobiles and appliances.

(d) Nonwastewater solvent waste. For the purpose of this article, nonwastewater solvent waste is defined as a solvent-containing liquid waste containing greater than or equal to one percent by weight Total Organic Carbon (TOC). TOC concentration in the waste shall be determined with the use of Method 9060 described in "Test Methods for Evaluating solid Wastes, Physical/Chemical Methods/SW-846, "Third Edition, U.S. Environmental

Protection Agency, September 1986. The waste is determined to be liquid or nonliquid at the point of generation with the use of Method 9095 described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods/SW-846, "Third Edition, U.S. Environmental Protection Agency, September 1986. The provisions of "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods/SW 846, "Third Edition, U.S. Environmental Protection Agency, September 1986 are hereby incorporated by reference.

- (e) Hazardous waste foundry sand. For the purpose of this article, hazardous waste foundry sand is defined as waste sand or waste sand residue, generated by foundries using a sand molding process, that is considered hazardous according to the provisions of Chapter 11.
- (f) [Reserved for oily petroleum wastes]
- (g) Metal-containing solid waste that contains any of the metals or metal compounds identified in Section 66261.24(a)(2). For the purposes of this paragraph, a solid waste is defined as a waste containing greater than one percent of nonfilterable (suspended) solids by weight as measured by Method 209D described in "Standard Methods for the Examination of Water and Wastewater", 15th Edition, published jointly by the American Public Health Association, the American Water Works Association and the

American Pollution Control Federation, 1980.

- (h) Fly ash, bottom ash, retort ash or baghouse waste from sources other than foundries that contains any of the metals or metal compounds identified in Section 66261.24(a)(2). For the purposes of this Article: "fly ash" means ash that is entrained in exhaust gases leaving the combustion equipment and which is captured in air pollution control equipment; "bottom ash" means ash remaining in the combustion equipment after incineration and includes boiler slag and oversized aggregated material; "retort ash" means ash from retorting such as from oil shale, zinc ore or coal carbonization; "baghouse waste from sources other than foundries" means dust that is collected in the baghouse or other dry air pollution control devices of facilities that are not foundries.
- (i) Baghouse waste from foundries that contains any of the metals or metal compounds identified in Section 66261.24(a)(2). For the purposes of this Article: "Baghouse waste from foundries" means dust that is collected in the baghouse or other dry air pollution control devices at ferrous and non-ferrous foundries.
- (j) Aqueous and liquid organic wastes that contain any organic compound measured by EPA Test Methods 8080, 8140, 8150, 8240 and 8270 described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical

Methods/SW-846", third edition, incorporated by reference in Section 66260.11. For the purposes of this paragraph, an aqueous or liquid waste is defined as a waste containing water or other liquid, and less than or equal to one percent of nonfilterable (suspended) solids by weight as measured by Method 209D described in "Standard Methods for the Examination of Water and Wastewater", 15th Edition, published jointly by the American Public Health Association, the American Water Works Association and the American Pollution Control Federation, 1980.

- (k) Solid hazardous waste containing any organic compound measured by EPA test methods 8080, 8140, 8150, 8240, and 8270 described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods/SW-846", third edition, incorporated by reference in Section 66260.11. For the purposes of this paragraph, solid hazardous waste is defined as hazardous waste that contains greater than one percent nonfilterable (suspended) solids by weight as measured by Method 209D described in "Standard Methods for the Examination of Water and Wastewater", 15th Edition, published jointly by the American Public Health Association, the American Water Works Association and the American Pollution Control Federation, 1980.

(l) [Reserved for liquid redox with metals]

(m) [Reserved for asbestos]

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6,  
Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5, 25179.3 and 25179.6,  
Health and Safety Code.

Article 3. Prohibitions on Land Disposal

66268.30. Waste Specific Prohibitions--Solvent Wastes.

(a) Effective November 8, 1986, the spent solvent wastes specified in Section 66261.31 of Chapter 11 as EPA Hazardous Waste Nos. F001, F002, F003, F004, and F005, are prohibited under this chapter from land disposal unless one or more of the following conditions apply:

(1) The solvent waste is generated from any response action taken under CERCLA (42 U.S.C. Section 9604 et seq.) or any corrective action taken under RCRA (42 U.S.C. Section 6921 et seq.), except where the waste is contaminated soil or debris; or

(2) The initial generator's solvent waste is a solvent-water mixture, solvent-containing sludge or solid, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of Section 66268.41 of this chapter; or

(3) The solvent waste is a residue from treating a waste described in subsections (a)(1) or (a)(2), of this section; or the solvent waste is a residue from treating a waste not described in subsections (a)(1) or (a)(2) of this section provided such residue belongs to a different treatability group than the waste as

initially generated, and wastes belonging to such a treatability group are described in subsection (a)(2) of this section.

(b) Effective November 8, 1988, the F001-F005 solvent wastes listed in subsections (a)(1), (2), or (3) of this section are prohibited from land disposal.

(c) Effective November 8, 1990, the F001-F005 solvent wastes which are contaminated soil and debris resulting from a response action taken under Section 104 or 106 of CERCLA (42 U.S.C. Section 9604 or 9606), or a corrective action required under Subtitle C of RCRA (42 U.S.C. Section 6921 et seq.) and the residues from treating these wastes are prohibited from land disposal. Between November 8, 1988 and November 8, 1990, these wastes may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2).

(d) The requirements of subsections (a), (b), and (c) of this section do not apply if:

(1) The wastes meet the standards of Article 4 of this chapter; or

(2) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5, with respect to those wastes and units covered by the extension.

**NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.**

**Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.30.**

66268.31. Waste Specific Prohibitions--Dioxin-Containing Wastes.

(a) Effective November 8, 1988, the dioxin-containing wastes specified in Section 66261.31 of Chapter 11 as EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, F027 and F028, are prohibited from land disposal unless the following condition applies:

(1) The F020-F023 and F026-F028 dioxin-containing waste is contaminated soil and debris resulting from a response action taken under Section 104 or 106 of CERCLA or a corrective action taken under Subtitle C of RCRA.

(b) Effective November 8, 1990, the F020-F023 and F026-F028 dioxin-containing wastes listed in subsection (a)(1) of this section are prohibited from land disposal.

(c) Between November 8, 1988 and November 8, 1990, wastes included in subsection (a)(1) of this section may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2) and all other applicable requirements of Chapters 14 and 15 of this division.

(d) The requirements of subsections (a) and (b) of this section do not apply if:

(1) The wastes meet the standards of Article 4 of this chapter; or

(2) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5, with respect to those wastes covered by the extension.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.31.

66268.32. Waste Specific Prohibitions--California List Wastes.

(a) The following hazardous wastes are prohibited from land disposal effective on the specified date:

(1) Effective January 1, 1984, liquid hazardous wastes having a pH less than or equal to two (2.0);

(2) Effective January 1, 1984, liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm;

(3) Effective June 1, 1983, liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1000 mg/l.

(4) Effective January 1, 1984, liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following dissolved metals (or elements), or compounds of these metals (or elements), at concentrations greater than or equal to those specified below:

Arsenic and/or compounds (as As)	500 mg/l
Cadmium and/or compounds (as Cd)	100 mg/l
Chromium (VI) and/or compounds (as Cr+VI)	500 mg/l
Lead and/or compounds (as Pb)	500 mg/l

Mercury and/or compounds (as Hg)	20 mg/l
Nickel and/or compounds (as Ni)	134 mg/l
Selenium and/or compounds (as Se)	100 mg/l
Thallium and/or compounds (as Th)	130 mg/l

(b)-(c) [Reserved]

(d) The requirements of subsections (a) and (e) of this section do not apply until:

(1) July 8, 1989 where the wastes are contaminated soil or debris not resulting from a response action taken under Section 104 or 106 of the CERCLA (42 U.S.C. Section 9604 or 9606) or a corrective action taken under Subtitle C of the RCRA (42 U.S.C. Section 6921 et seq.). Between July 8, 1987 and July 8, 1989, the wastes may be disposed in a landfill or surface impoundment only if such disposal is in compliance with the requirements specified in Section 66268.5(h)(2).

(2) November 8, 1990 where the wastes are contaminated soil or debris resulting from a response action taken under Section 104 or 106 of CERCLA (42 U.S.C. Section 9604 or 9606) or a corrective action taken under Subtitle C of RCRA (42 U.S.C. Section 6921 et seq.). Between November 8, 1988 and November 8, 1990, the wastes may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section

66268.5(h)(2).

(e) The following hazardous wastes are prohibited from land disposal effective on the specified date:

(1) Effective January 1, 1985, liquid hazardous wastes that contain HOCs listed in Appendix III and Appendix III-A of this Chapter, in total concentration greater than or equal to 1,000 mg/l; and

(2) Effective November 8, 1988, nonliquid RCRA hazardous wastes containing HOCs listed in Appendix III of this Chapter, in total concentration greater than or equal to 1,000 mg/kg and are not wastes described in subsection (d) of this section.

(f) Between July 8, 1987 and November 8, 1988, the wastes included in subsection (e)(2) of this section may be disposed in a landfill only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2).

(9) The requirements of paragraphs (a), (d) and (e) of this section do not apply if:

(1) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5 with respect to those wastes covered by the extension; or

(2) The wastes meet the applicable standards specified in Article 4 of this Chapter, or, where treatment standards are not specified, the wastes are in compliance with the applicable prohibitions set forth in this section or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)).

(h) The prohibitions and effective dates specified in subsections (a)(3), (d) and (e) of this section do not apply where the waste is subject to a Chapter 18, Article 3 prohibition and effective date for a specified HOC (such as a hazardous waste chlorinated solvent, see e.g., Section 66268.30(a)).

(i) To determine whether or not a waste is a liquid under paragraphs (a) and (e) of this section and under RCRA Section 3004(d) (42 U.S.C. Section 6924(d)), the following test shall be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA Publication No. SW-846, Third Edition. (Incorporated by reference, in Section 66260.11(a) of this division.)

(j) Except as otherwise provided in this subsection, the waste analysis and recordkeeping requirements of Section 66268.7 are applicable to wastes prohibited under this Chapter or RCRA Section 3004(d) (42 U.S.C. Section 6924(d)):

(1) The initial generator of a liquid hazardous waste shall test the waste (not an extract or filtrate) in accordance with the procedures specified in Section 66261.22(a)(1), or use knowledge of the waste, to determine if the waste has a pH less than or equal to two (2.0). If the liquid waste has a pH less than or equal to two (2.0), it is restricted from land disposal and all requirements of Chapter 18 are applicable, except as otherwise specified in this section.

(2) The initial generator of either a liquid hazardous waste containing polychlorinated biphenyls (PCBs) or a liquid or nonliquid hazardous waste containing halogenated organic compounds (HOCs), shall test the waste (not an extract or filtrate), or use knowledge of the waste, to determine whether the concentration levels in the waste equal or exceed the prohibition levels specified in this section. If the concentration of PCBs or HOCs in the waste is greater than or equal to the prohibition levels specified in this section, the waste is restricted from land disposal and all requirements of Chapter 18 are applicable, except as otherwise specified in this section.

(3) The initial generator of liquid hazardous wastes containing free cyanides or dissolved metals (or elements) shall test the extract or filtrate to determine whether the concentration levels in the waste equal or exceed the prohibition levels specified in this section. If the concentration of free cyanides or dissolved

metals (or elements) is greater than or equal to the prohibition levels specified in this section, the waste is restricted from land disposal and all requirements of Chapter 18 are applicable, except as otherwise specified in this section.

(k) Effective July 8, 1992, nonliquid non-RCRA hazardous wastes containing halogenated organic compounds (HOCs) listed in Appendix III and Appendix III-A of this Chapter in total concentration greater or equal to 1,000 mg/kg HOC are prohibited from land disposal. Non-RCRA hazardous waste is defined in Section 66261.101 of Chapter 11.

(1) Lab packs containing non-RCRA hazardous wastes identified in subsection (k) of this section may be placed in a landfill until July 8, 1992 if the following requirements are met:

(1) Restricted hazardous wastes in the lab packs do not include restricted hazardous wastes identified under Article 3 of this Chapter except as provided in subsection (m) of this section.

(2) Restricted hazardous waste shall be packaged in inside containers which are nonleaking, tightly and securely sealed, and of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the waste held therein. The inside containers shall be of the size and type specified in the Department of Transportation (DOT) hazardous

materials regulations (49 CFR Parts 173 and 178, Subparts A and B as they existed on October 1, 1989), if those regulations specify a particular inside container for the waste.

(3) The inside containers shall be overpacked in an open head DOT-specification steel shipping container (49 CFR Part 178, Subpart D, as it existed on October 1, 1989) of no more than 110 gallon capacity and surrounded by, at a minimum, a sufficient quantity of absorbent material to completely absorb all of the liquid contents of the inside containers. The metal outer container shall be full after packing with inside containers and absorbent materials.

(4) The absorbent material used shall not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers.

(5) Incompatible wastes, as defined by Section 66260.10 shall not be placed in the same outside containers.

(m) Lab packs containing restricted hazardous wastes identified under Article 3 of this Chapter, other than that hazardous waste identified in subsection (1) of this section, may be placed in a landfill if the lab packs are disposed pursuant to requirements described in subsection (1) of this section, and:

(1) The restricted hazardous wastes in the lab pack are not subject

to land disposal restrictions imposed by the USEPA Administrator pursuant to 40 CFR Part 268 or;

(2) The restricted hazardous wastes in the lab pack are removed before disposal or;

(3) The restricted hazardous wastes in the lab pack have been treated in accordance with the applicable treatment standards specified in Article 4 of this Chapter.

(n) The following wastes, if they are non-RCRA hazardous wastes, are exempt from land disposal restrictions contained in this section:

(1) Drilling fluids, produced waters and other fluids or materials which are brought to the surface in conjunction with the exploration, development or production of crude oil or natural gas, and which are reinjected.

(2) Mining overburden as defined by the Surface Mining and Reclamation Act, Public Resources Code, Section 2732 deposited within the mining permit area pursuant to a Surface Mining and Reclamation Act permit.

(3) Contaminated soil from cleanup of any hazardous waste site pursuant to approval by the Department, unless the Department

determines that a recycling or treatment process is technically and economically feasible to render the contaminated soil no longer a listed restricted hazardous waste.

(o) Hazardous wastes or land disposal methods that are exempt from the land disposal restrictions of this section remain subject to all of the other provisions of this Chapter.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.32.

66268.33. Waste Specific Prohibitions--First Third Wastes

(a) Effective August 8, 1988, the waste specified in Section 66261.32 of Chapter 11 as EPA Hazardous Waste Nos. F006 (nonwastewater), K001, K004 wastes specified in Section 66268.43(a), K008 wastes specified in Section 66268.43(a), K016, K018, K019, K020, K021 wastes specified in Section 66268.43(a), K022 (nonwastewater), K024, K025 nonwastewaters specified in Section 66268.43(a), K030, K036 (nonwastewater), K037, K044, K045, nonexplosive K046 (nonwastewater), K047, K060 (nonwastewater), K061 (nonwastewater containing less than 15 percent zinc), K062, nonCaS04 K069 (nonwastewater), K086 (solvent washes), K087, K099, K100 nonwastewaters specified in Section 66268.43(a), K101 (wastewater), K101 (nonwastewater, low arsenic subcategory--less than 1 percent total arsenic), K102 (wastewater), K102 (nonwastewater, low arsenic subcategory--less than 1 percent total arsenic), K103, and K104 are prohibited from land disposal.

(1) Effective August 8, 1988 and continuing until August 7, 1990, K061 wastes containing 15 percent zinc or greater are prohibited from land disposal pursuant to the treatment standards specified in Section 66268.41 applicable to K061 wastes that contain less than 15 percent zinc.

(b) Effective August 8, 1990, the wastes specified in Section 66261.32 of Chapter 11 as EPA Hazardous Waste Nos. K048, K049,

K050, K051, K052, K061 (containing 15 percent zinc or greater), and K071 are prohibited from land disposal.

(c) Effective August 8, 1990, the wastes specified in Section 66268.10 of this chapter having a treatment standard in Article 4 of this chapter based on incineration and which are contaminated soil and debris, are prohibited from land disposal.

(d) Between November 8, 1988 and August 8, 1990, wastes included in subsections (b) and (c) of this section may be disposed of in a landfill only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2).

(e) The requirements of subsections (a), (b), (c), and (d) of this section do not apply if:

(1) The wastes meet the applicable standards specified in Article 4 of chapter; or

(2) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5, with respect to those wastes covered by the extension.

(f) Between August 8, 1988 and May 8, 1990, the wastes specified in Section 66268.10 for which treatment standards under Article 4 of this chapter have not been promulgated including those wastes which

are subject to the statutory prohibitions of RCRA Section 3004(d) or codified prohibitions under Section 66268.32 of this chapter, but not including wastes subject to a treatment standard under Section 66268.42 of this chapter, are prohibited from disposal in a landfill or surface impoundment unless a demonstration and certification have been submitted pursuant to Section 66268.8.

(g) To determine whether a hazardous waste listed in Section 66268.10 exceeds the applicable treatment standards specified in Section 66268.41 and Section 66268.43, the initial generator shall test a representative sample of the waste extract or the entire waste depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Article 4 levels, the waste is prohibited from land disposal and all requirements of Chapter 18 are applicable, except as otherwise specified.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.33.

66268.34. Waste Specific Prohibitions--Second Third Waste.

(a) Effective June 8, 1989, the following wastes specified in Section 66261.31 as EPA Hazardous Waste Nos. F010, F024; the wastes specified in Section 66261.32 as EPA Hazardous Waste Nos. K005, K007; K009 (nonwastewaters), K010, K023, K027, K028, K029 (nonwastewaters), K036 (wastewaters), K038, K039, K040, K043, K093, K094, K095 (nonwastewaters), K096 (nonwastewaters), K113, K114, K115, K116; and the wastes specified in Section 66261.33 as EPA Hazardous Waste Nos. P013, P021, P029, P030, P039, P040, P041, P043, P044, P062, P063, P071, P074, P085, P089, P094, P097, P098, P099, P104, P106, P109, P111, P121, U028, U058, U069, U087, U088, U102, U107, U221, U223 and U235 are prohibited from land disposal.

(b) Effective June 8, 1989, the following wastes specified in Section 66261.32 as EPA Hazardous Waste Nos. K009 (wastewaters), K011 (nonwastewaters), K013 (nonwastewaters), and K014 (nonwastewaters) are prohibited from land disposal.

(c) Effective July 8, 1989, the wastes specified in Section 66261.31 as EPA Hazardous Waste Nos. F006--cyanide (nonwastewater), F008, F009, F011 (wastewaters) and F012 (wastewaters) are prohibited from land disposal.

(1) Effective July 8, 1989, the following waste specified in Section 66261.31 as EPA Hazardous Waste No. F007 is prohibited from

land disposal .

(2) Effective July 8, 1989 and continuing until December 8, 1989, F011 (nonwastewaters) and F012 (nonwastewaters) are prohibited from land disposal pursuant to the treatment standards specified in Sections 66268.41 and 66268.43 applicable to F007, F008, and F009 nonwastewaters. Effective December 8, 1989 F011 (nonwastewaters) and F012 (nonwastewaters) are prohibited from land disposal pursuant to the treatment standards specified in Sections 66268.41 and 66268.43 applicable to F011 (nonwastewaters) and F012 (nonwastewaters).

(d) Effective June 8, 1991, the wastes specified in this section having a treatment standard in Article 4 of this chapter based on incineration, and which are contaminated soil and debris are prohibited from land disposal.

(e) Between June 8, 1989 and June 8, 1991, (for wastes F007, F008, F009, F011, and F012 between June 8, 1989 and July 8, 1989) wastes included in subsections (c) and (d) of this section may be disposed in a landfill or surface impoundment, regardless whether such unit is a new, replacement, or lateral expansion unit, only if such unit is in compliance with the technical requirements specified in Section 66268.5(h)(2).

(f) The requirements of subsection (a), (b), (c), and (d) of this

section do not apply if:

(1) The wastes meet the applicable standards specified in Article 4 of this chapter.

(g) The requirements of subsections (a), (b), and (c) of this section do not apply if persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5, with respect to those wastes covered by the extension.

(h) Between June 8, 1989 and May 8, 1990, the wastes specified in Section 66268.11 for which treatment standards under Article 4 of this chapter are not applicable, including California list wastes subject to the statutory prohibitions of RCRA Section 3004(d) (42 U.S.C. Section 6924(d)) or codified prohibitions under Section 66268.32, are prohibited from disposal in a landfill or surface impoundment unless the wastes are the subject of a valid demonstration and certification pursuant to Section 66268.8.

(i) To determine whether a hazardous waste listed in Sections 66268.10, 66268.11, and 66268.12 exceeds the applicable treatment standards specified in Sections 66268.41 and 66268.43, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste

contains constituents in excess of the applicable Article 4 levels, the waste is prohibited from land disposal and all requirements of Chapter 18 are applicable, except as otherwise specified.

**NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.**

**Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Section 268.1.**

66268.35. Waste Specific Prohibitions--Third Third Waste.

(a) Effective August 8, 1990, the following wastes specified in Section 66261.31 as EPA Hazardous Waste Numbers F006 (wastewaters), F019, and F039 (wastewaters); the wastes specified in Section 66261.32 as EPA Hazardous Waste Numbers K002; K003; K004 (wastewaters); K005 (wastewaters); K006; K008 (wastewaters); K011 (wastewaters); K013 (wastewaters); K014 (wastewaters); K017; K021 (wastewaters); K022 (wastewaters); K025 (wastewaters); K026; K029 (wastewaters); K031 (wastewaters); K032; K033; K034; K035; K041; K042; K046 (wastewaters); K048 (wastewaters); K049 (wastewaters); K050 (wastewaters); K051 (wastewaters); K052 (wastewaters); K060 (wastewaters); K061 (wastewaters); K069 (wastewaters); K073; K083 (wastewaters); K084 (wastewaters); K085; K095 (wastewaters); K096 (wastewaters); K097; K098; K100 (wastewaters); K101 (wastewaters); K102 (wastewaters); K105; and K106 (wastewaters); the wastes specified in Section 66261.33 as EPA Hazardous Waste Numbers P001; P002; P003; P004; P005; P006; P007; P008; P009; P010 (wastewaters); P011 (wastewaters); P012 (wastewaters); P014; P015; P016; P017; P018 (wastewaters); P019; P020; P022; P023; P024; P026; P027; P028; P031; P033; P034; P036 (wastewaters); P037; P038 (wastewaters); P042; P045; P046; P047; P048; P049; P050; P051; P054; P056; P057; P058; P059; P060; P064; P065 (wastewaters); P066; P067; P068; P069;

P070; P072; P073; P075; P076; P077; P078; P081; P082; P084; P088;  
P092 (wastewaters); P093; P095; P096; P101; P102; P103; P105; P108;  
P109; P110; P112; P113; P114; P115; P116; P118; P119; P120; P122;  
and P123; and the wastes specified in Section 66261.33 as EPA  
Hazardous Waste Numbers U001; U002; U003; U004; U005; U006; U007;  
U008; U009; U010;  
  
U011; U012; U014; U015; U016; U017; U018; U019; U020; U021; U022;  
U023; U024; U025; U026; U027; U029; U030; U031; U032; U033; U034;  
U035; U036; U037; U038; U039; U041; U042; U043; U044; U045; U046;  
U047; U048; U049; U050; U051; U052; U053; U055; U056; U057; U059;  
U060; U061; U062; U063; U064; U066; U067; U068; U070; U071; U072;  
U073; U074; U075; U076; U077; U078; U079; U080; U081; U082; U083;  
U084; U085; U086; U089; U090; U091; U092; U093; U094; U095; U096;  
U097; U098; U099; U101; U103; U105; U106; U108; U109; U110; U111;  
U112; U113; U114; U115; U116; U117; U118; U119; U120 (wastewaters);  
U121; U122; U123; U124; U125; U126; U127; U128; U129; U130; U131;  
U132; U133; U134; U135; U136 (wastewaters); U137; U138; U140; U141;  
U142; U143; U144; U145; U146; U147; U148; U149; U150; U151  
(wastewaters); U152; U153; U154; U155; U156; U157; U158; U159;  
U160; U161; U162; U163; U164; U165; U166; U167; U168; U169; U170;  
U171; U172; U173; U174; U176; U177; U178; U179; U180; U181; U182;  
U183; U184; U185; U186; U187; U188; U189; U191; U192; U193; U194;  
U196; U197; U200; U201; U202; U203; U204; U205; U206; U207; U208;  
U209; U210; U211; U213; U214; U215; U216; U217; U218; U219; U220;  
U222; U225; U226; U227; U228; U234; U236; U237; U238; U239; U240;  
U243; U244; U246; U247; U248; U249; and the following wastes

identified as hazardous based on a characteristic alone; D001; D002; D003; D004 (wastewaters); D005; D006; D007; D008 (except for lead materials stored before secondary smelting); D009 (wastewaters); D010; D011; D012; D013; D014; D015; D016; and D017 are prohibited from land disposal.

(b) Effective November 8, 1990, the following wastes specified in Section 66261.32 as EPA Hazardous Waste Numbers K048 (nonwastewaters), K049 (nonwastewaters), K050 (nonwastewaters), K051 (nonwastewaters), and K052 (nonwastewaters) are prohibited from land disposal.

(c) Effective May 8, 1992, the following waste specified in Section 66261.31 as EPA Hazardous Waste Number F039 (nonwastewaters); the wastes specified in Section 66261.32 as EPA Hazardous Waste Numbers K031 (nonwastewaters); K084 (nonwastewaters); K101 (nonwastewaters); K102 (nonwastewaters); K106 (nonwastewaters); the wastes specified in Section 66261.33 as EPA Hazardous Waste Numbers P010 (nonwastewaters); P011 (nonwastewaters); P012 (nonwastewaters); P015 (nonwastewaters); P019 (nonwastewaters); P036 (nonwastewaters); P038 (nonwastewaters); P065 (nonwastewater); P073 (nonwastewaters); P087 (nonwastewaters); P092 (nonwastewaters); P103 (nonwastewaters); P114 (nonwastewaters); the wastes specified in Section 66261.33 as EPA Hazardous Waste Numbers U136 (nonwastewaters); U151 (nonwastewaters); U204 (nonwastewaters); and U025 (nonwastewaters);

the following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters); D008 (lead materials stored before secondary smelting); and D009 (nonwastewaters); inorganic solids debris as defined in Section 66268.2 (which also applies to chromium refractory bricks carrying the EPA Hazardous Waste Numbers K048--K052); and RCRA hazardous wastes that contain naturally occurring radioactive materials are prohibited from land disposal.

(d) Effective May 8, 1992, hazardous wastes listed in Section 66268.12 that are mixed radioactive/hazardous wastes are prohibited from land disposal.

(e) Effective May 8, 1992, the wastes specified in this Section having a treatment standard in Article 4 of this Chapter based on incineration, mercury retorting, vitrification, or wet-air oxidation, and which are contaminated soil or debris, are prohibited from land disposal.

(f) Between May 8, 1990 and August 8, 1990, the wastes included in subsection (a) of this Section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2).

(g) Between May 8, 1990 and November 8, 1990, wastes included in subsection (b) of this Section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2).

(h) Between May 8, 1990 and May 8, 1992, wastes included in subsections (c), (d) and (e) of this Section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 66268.5(h)(2).

(i) The requirements of subsections (a), (b), (c), (d) and (e) of this Section do not apply if:

(1) The wastes meet the applicable standards specified in Article 4 of this Chapter;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section 66268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate standards established pursuant to a petition granted under Section 66268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5, with respect to these wastes covered by the extension.

(j) To determine whether a hazardous waste listed in Section 66268.10, 66268.11 and 66268.12 exceeds the applicable treatment standards specified in Article 4, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Article 4 levels, the waste is prohibited from land disposal, and all requirements of this Chapter

are applicable, except as otherwise specified.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6,  
Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and  
Safety Code; 40 CFR Section 268.35.

#### Article 4. Treatment Standards

##### 66268.40. Applicability of Treatment Standards.

(a) A restricted waste identified in Section 66268.41 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using the test method in Appendix I of this chapter does not exceed the value shown in Table CCWE of Section 66268.41 for any hazardous constituent listed in Table CCWE for that waste, with the following exceptions: D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136.

(1) Wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the test method in Appendix 1 of this Chapter or the test method in Appendix II of Chapter 11 does not exceed the value shown in Table CCWE of Section 66268.41 for any hazardous constituent listed in Table CCWE for that waste.

(b) A restricted waste for which a treatment technology is specified under Section 66268.42 (a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Department under the procedures set forth in Section 66268.42 (b).

(c) Except as otherwise specified in Section 66268.43(c), a

restricted waste identified in Section 66268.43 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Table CCW of Section 66268.43 for any hazardous constituent listed in Table CCW for that waste.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.40.

66268.41. Treatment Standards Expressed as Concentrations in Waste Extract.

(a) Table CCWE identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Appendix I of this chapter for the allowable land disposal of such wastes, with the exception of wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136. Table CCWE identifies the restricted wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136 and the concentrations of their associated constituents which may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Appendix I of this Chapter for the allowable land disposal of such wastes. (Appendix II of this chapter provides Department guidance on treatment methods that have been shown to achieve the Table CCWE levels for the respective wastes. Appendix II is not a regulatory requirement but is provided to assist generators and owners/operators in their selection of appropriate treatment methods.) Compliance with these concentrations is required based upon grab samples.

[INSERT TABLE CCWE]

Table CCME - Constituent Concentrations in Waste Extract

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
D004	Table CCW in 66268.43	Arsenic	7440-38-2	NA	5.0#
D005	Table CCW in 66268.43	Barium	7440-39-3	NA	100
D006	Table CCW in 66268.43	Cadmium	7440-43-9	NA	1.0
D007	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	5.0
D008	Table CCW in 66268.43	Lead	7439-92-1	NA	5.0
D009 (Low Mercury Subcategory-less than 260 mg/kg Mercury)	Table 2 in 66268.42 and Table CCW in 66268.43	Mercury	7439-97-6	NA	0.20
D010	Table CCW in 66268.43	Selenium	7782-49-2	NA	5.7
D011	Table CCW in 66268.43	Silver	7440-22-4	NA	5.0
F001-F005 spent solvents	Table 2 in 66268.42 and Table CCW in 66268.43	Acetone	67-64-1	0.05	0.59
		n-Butyl alcohol	71-36-3	5.0	5.0
		Carbon disulfide	75-15-0	1.05	4.81
		Carbon tetrachloride	56-23-5	0.05	0.96
		Chlorobenzene	108-90-7	0.15	0.05
		Cresols (and cresylic acid)		2.82	0.75
		Cyclohexanone	108-94-1	0.125	0.75
		1,2-Dichlorobenzene	95-50-1	0.65	0.125
		Ethyl acetate	141-78-6	0.05	0.75
		Ethylbenzene	100-41-4	0.05	0.053
		Ethyl ether	60-29-7	0.05	0.75
		Isobutanol	78-83-1	5.0	5.0
		Methanol	67-56-1	0.25	0.75
		Methylene chloride	75-9-2	0.20	0.96
		Methyl ethyl ketone	78-93-3	0.05	0.75
		Methyl isobutyl ketone	108-10-1	0.05	0.33

Table CCME - Constituent Concentrations in Waste Extract (cont'd)

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
		Nitrobenzene	98-95-3	0.66	0.125
		Pyridine	110-86-1	1.12	0.33
		Tetrachloroethylene	127-18-4	0.079	0.05
		Toluene	108-88-3	1.12	0.33
		1,1,1-Trichloroethane	71-55-6	1.05	0.41
		1,1,2-Trichloro-1,2,2-Tetrifluorethane	76-13-1	1.05	0.96
		Trichloroethylene	79-01-6	0.062	0.091
		Trichlorofluoromethane	75-69-4	0.05	0.96
		Xylene		0.05	0.15
F006	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F007	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F008	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F009	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072

Table CCME - Constituent Concentrations in Waste Extract (cont'd)

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/L)	Non-wastewaters concentration (mg/L)
F011	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F012	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F019	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	5.2
F020-F023 and F026-F028 dioxin containing wastes.*		HxCDD-All Hexachlorodibenzo-p-dioxins		<1 ppb	<1 ppb
		HxCDF-All Hexachlorodibenzofurans		<1 ppb	<1 ppb
		PeCDD-All Pentachlorodibenzo-p-dioxins		<1 ppb	<1 ppb
		PeCDF-All Pentachlorodibenzofurans		<1 ppb	<1 ppb
		TCDD-All Tetrachlorodibenzo-p-dioxins		<1 ppb	<1 ppb
		TCDF-All Tetrachlorodibenzofurans		<1 ppb	<1 ppb
		2,4,5-Trichlorophenol	95-95-4	<0.05 ppm	<0.05 ppm
		2,4,6-Trichlorophenol	88-06-2	<0.05 ppm	<0.05 ppm
	2,3,4,6-Tetrachlorophenol	58-90-2	<0.05 ppm	<0.05 ppm	
	Pentachlorophenol	87-86-5	<0.01 ppm	<0.01 ppm	
F024	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	0.021
		Nickel	7440-02-0	NA	0.088

Table CCWE - Constituent Concentrations in Waste Extract (cont'd)

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/L)	Non-wastewaters concentration (mg/L)
F039	Table CCW in 66268.43	Antimony	7440-36-0	NA	0.23
		Arsenic	7440-38-2	NA	5.0
		Barium	7440-39-3	NA	52
		Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Mercury	7439-97-6	NA	0.025
		Nickel	7440-02-0	NA	0.32
		Selenium	7782-49-2	NA	5.7
		Silver	7440-22-4	NA	0.072
K001	Table CCW in 66268.43	Lead	7439-92-1	NA	0.51
K002	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K003	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K004	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K005	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (anhydrous)	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (hydrated)	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	5.2
K007	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K008	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K015	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	1.7
		Lead	7439-92-1	NA	0.2

Table CCME - Constituent Concentrations in Waste Extract (cont'd)

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
K021	Table CCW in 66268.43	Antimony	7440-36-0	NA	0.23#
K022	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	5.2
		Nickel	7440-02-2	NA	0.32
K028	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	0.021
		Nickel	7440-02-0	NA	0.088
K031	Table CCW in 66268.43	Arsenic	7440-38-2	NA	5.6#
K046	Table CCW in 66268.43	Lead	7439-92-1	NA	0.18
K048	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K049	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K050	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K051	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K052	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K061 (Low Zinc Subcategory-Less than 15% Total Zinc)	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.14
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.24
		Nickel	7440-02-0	NA	0.32
K062	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37

Table CCWE - Constituent Concentrations in Waste Extract (cont'd)

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
K069 (Calcium Sulfate Subcategory)	Table 2 in 66268.42 and Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.14
		Lead	7439-92-1	NA	0.24
K071 (Low Mercury Subcategory-less than 16 mg/kg Mercury)	Table CCW in 66268.43	Mercury	7439-97-6	NA	0.025
K083	Table CCW in 66268.43	Nickel	7440-02-0	NA	0.088
K084	Table CCW in 66268.43	Arsenic	7440-38-2	NA	5.6#
K086	Table CCW in 66268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K087	Table CCW in 66268.43	Lead	7439-92-1	NA	0.51
K100	Table CCW in 66268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
K101	Table CCW in 66268.43	Arsenic	7440-38-2	NA	5.6#
K102	Table CCW in 66268.43	Arsenic	7440-38-2	NA	5.6#
K106 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)	Table 2 in 66268.42 and Table CCW in 66268.43	Mercury	7439-97-6	NA	0.20
K106 (Low Mercury Subcategory--less than 260 mg/kg Mercury--that are not residues from RMERC)	Table 2 in 66268.42 and Table CCW in 66268.43	Mercury	7439-97-6	NA	0.025
K115	Table CCW	Nickel	7440-02-0	NA	0.32

# - These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.

\* - These waste codes are not subcategorized into wastewaters and nonwastewaters.

NA - Not Applicable.

Table CCME - Constituent Concentrations in Waste Extracts (cont'd)

Waste code	See also	Commercial chemical name	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Waste-waters concentration (mg/L)	Non-waste-waters concentration (mg/L)
P010	Table CCW in 66268.43	Arsenic acid	Arsenic	7440-38-2	NA	5.6
P011	Table CCW in 66268.43	Arsenic pentoxide	Arsenic	7440-38-2	NA	5.6
P012	Table CCW in 66268.43	Arsenic trioxide	Arsenic	7440-38-2	NA	5.6
P013	Table CCW in 66268.43	Barium cyanide	Barium	7440-39-3	NA	52
P036	Table CCW in 66268.43	Dichlorophenylarsine	Arsenic	7440-38-2	NA	5.6
P038	Table CCW in 66268.43	Diethylarsine	Arsenic	7440-38-2	NA	5.6
P065 (Low Mercury Subcategory-- less than 260 mg/kg Mercury-residues from RMERC).	Table 2 in 66268.42 and Table CCW in 66268.43	Mercury fulminate	Mercury	7439-97-6	NA	0.20
P065 (Low Mercury Subcategory-- less than 260 mg/kg Mercury-incinerator residues (and are not residues from RMERC)).	Table 2 in 66268.42 and Table CCW in 66268.43	Mercury fulminate	Mercury	7439-97-6	NA	0.025
P073	Table CCW in 66268.43	Nickel carbonyl	Nickel	7440-02-0	NA	0.32
P074	Table CCW in 66268.43	Nickel cyanide	Nickel	7440-02-0	NA	0.32
P092 (Low Mercury Subcategory-- less than 260 mg/kg Mercury residues from RMERC).	Table 2 in 66268.42 and Table CCW in 66268.43	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.20
P092 (Low Mercury Subcategory-- less than 260 mg/kg Mercury-incinerator residues (and are not residues from RMERC)).	Table 2 in 66268.42 and Table CCW in 66268.43	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.025
P099	Table CCW in 66268.43	Potassium silver cyanide	Silver	7440-22-4	NA	0.072
P103	Table CCW in 66268.43	Selenourea	Selenium	7782-49-2	NA	5.7

Table CCME - Constituent Concentrations in Waste Extracts (cont'd)

Waste code	See also	Commercial chemical name	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Waste-waters concentration (mg/L)	Non-waste-waters concentration (mg/L)
P104	Table CCW in 66268.43	Silver cyanide	Silver	7740-22-4	NA	0.072
P110	Table CCW in 66268.43	Tetraethyl lead	Lead	7439-92-1	NA	0.51
P114	Table CCW in 66268.43	Thallium selenite	Selenium	7782-49-2	NA	5.7
U032	Table CCW in 66268.43	Calcium chromate	Chromium (Total)	7440-47-32	NA	0.094
U051	Table CCW in 66268.43	Creosote	Lead	7439-92-1	NA	0.51
U136	Table CCW in 66268.43	Cacodylic acid	Arsenic	7440-38-2	NA	5.6
U144	Table CCW in 66268.43	Lead acetate	Lead	7439-92-1	NA	0.51
U145	Table CCW in 66268.43	Lead phosphate	Lead	7439-92-1	NA	0.51
U146	Table CCW in 66268.43	Lead subacetate	Lead	7439-92-1	NA	0.51
U151 (Low Mercury Subcategory-- less than 260 mg/kg Mercury-- residues from RMERC).	Table CCW in 66268.43 and in Table 2 in 66268.42	Mercury	Mercury	7439-97-6	NA	0.20
U151 (Low Mercury Subcategory-- less than 260 mg/kg Mercury-- that are not residues from RMERC).	Table CCW in 66268.43 and Table 2 in 66268.42	Mercury	Mercury	7439-97-6	NA	0.025
U204	Table CCW in 66268.43	Selenium dioxide	Selenium	7782-49-2	NA	5.7
U205	Table CCW in 66268.43	Selenium sulfide	Selenium	7782-49-2	NA	5.7

-- These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.

\* - These waste codes are not subcategorized into wastewaters and nonwastewaters.

NA - Not Applicable.

(b) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue shall meet the lowest treatment standard for the constituent of concern.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.41.

66268.42. Treatment Standards Expressed as Specified Technologies.

(a) The following wastes in paragraphs (1) and (2) of this subsection and in Table 2 and Table 3 of this Section shall be treated using the technology or technologies specified in paragraphs (1) and (2) and Table 1 of this Section.

(1) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm but less than 500 ppm shall be incinerated in accordance with the technical requirements of 40 CFR 761.70 or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60.

Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 500 ppm shall be incinerated in accordance with the technical requirements of 40 CFR 761.70. Thermal treatment under this section shall also be in compliance with applicable regulations in Chapters 14, 15, and 16.

(2) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/kg and liquid HOC-containing wastes that are prohibited under Section 66268.32(e)(1) of this chapter shall be incinerated in accordance with the requirements of Chapter 14, Article 15 or Chapter 15, Article 15. These treatment standards do not apply where the waste is subject to a Chapter 18, Article 3 treatment standard for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under Section

66268.41(a)).

(b) Any person may submit an application to the Department demonstrating that an alternative treatment method will result in a level of performance substantially equivalent or greater than that achievable using the method or methods specified in paragraph (a), (c) and (d) of this section. The applicant shall demonstrate that the US EPA Administrator has approved the use of the alternative treatment method. The approval shall demonstrate to the satisfaction of the Department that the method is in compliance with all federal, state and local requirements and is protective of human health and the environment. On the basis of such information, and any other available information, the Department may approve the use of the alternative treatment method if the Department finds that the alternative treatment method will result in a level of performance substantially equivalent or greater than that achievable using the methods specified in subsection (a), (c) and (d) of this section. Any approval shall be stated in writing and may contain such provisions and conditions as the Department deems appropriate. The person to whom such approval is issued shall comply with all limitations contained in such a determination.

(c) As an alternative to the otherwise applicable Article 4 treatment standards, lab packs are eligible for land disposal provided the following requirements are met:

(1) The lab packs comply with the applicable provisions of Section

Table 1. -- Technology Codes and Description of Technology-Based Standards

Technology code	Description of technology-based standard
ADGAS	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid) -- venting can be accomplished through physical release utilizing valves/piping; physical penetration of the container; and/or penetration through detonation.
AMLGM	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG	Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).
CARBN	Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., Total Organic Carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.
CHOXD	Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations of reagents: (1) Hypochlorite (e.g. bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permangantes; and/or (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.
CHRED	Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents: (1) Sulfur dioxide; (2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.
DEACT	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/or reactivity.
FSUBS	Fuel substitution in units operated in accordance with applicable technical operating requirements.
HLVIT	Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.
IMERC	Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of 40 CFR part 264, subpart 0 and 40 CFR part 265, subpart 0. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
INCIN	Incineration in units operated in accordance with the technical operating requirements of 40 CFR part 264, subpart 0 and 40 CFR part 265, subpart 0.
LLEXT	Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.
MACRO	Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to 40 CFR 260.10.
NEUTR	Neutralization with the following reagents (or waste reagents) or combinations of reagents: (1) Acids; (2) bases; or (3) water (including wastewaters) resulting in a pH greater than 2 but less than 12.5 as measured in the aqueous residuals.
NLDBR PRECP	No land disposal based on recycling. Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination: (1) Lime (i.e., containing oxides and/or hydroxides of calcium and/or magnesium); (2) caustic (i.e., sodium and/or potassium hydroxides); (3) soda ash (i.e., sodium carbonate); (4) sodium sulfide; (5) ferric sulfate or ferric chloride; (6) alum; or (7) sodium sulfate. Additional flocculating, coagulation, or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use.
RBERY	Thermal recovery of Beryllium.

**Table 1.--Technology Codes and Description of Technology-Based Standards (cont'd)**

Technology code	Description of technology-based standard
RCGAS	Recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale; filtering/adsorption of impurities; remixing for direct reuse of resale; and use of the gas as a fuel source.
RCORR	Recovery of acids or bases utilizing one or more of the following recovery technologies: (1) Distillation (i.e., thermal concentration); (2) ion exchange; (3) resin or solid adsorption; (4) reverse osmosis; and/or (5) incineration for the recovery of acid -- Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RLEAD RMERC	Thermal recovery of lead in secondary lead smelters. Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following: (a) A National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury; (b) a Best Available Control Technology (BACT) or a Lowest Achievable Emission Rate (LAER) standard for mercury imposed pursuant to a Prevention of Significant Deterioration (PSD) permit; or (c) a state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
RMETL	Recovery of metals or inorganics utilizing one or more of the following direct physical/removal technologies: (1) Ion exchange; (2) resin or solid (i.e., zeolites) adsorption; (3) reverse osmosis; (4) chelation/solvent extraction; (5) freeze crystallization; (6) ultrafiltration; and/or (6) simple precipitation (i.e., crystallization) -- Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RORGS	Recovery of organics utilizing one or more of the following technologies: (1) Distillation; (2) thin film evaporation; (3) steam stripping; (4) carbon adsorption; (5) critical fluid extraction; (6) liquid-liquid extraction; (7) precipitation/crystallization (including freeze crystallization); or (8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals); Note: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RTHRM	Thermal recovery of metals or inorganics from nonwastewaters in units defined in 40 CFR 260.10, paragraphs (1), (6), (7), (11), and (12), under the definition of "industrial furnaces".
RZINC	Resmelting in for the purpose of recovery of zinc high temperature metal recovery units.
STABL	Stabilization with the following reagents (or waste reagents) or combinations of reagents: (1) Portland cement; or (2) lime/pozzolans (e.g., fly ash and cement kiln dust) -- this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set/cure time and/or compressive strength, or to overall reduce the leachability of the metal or inorganic.
SSTRP	Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and an extracted wastewater that must undergo further treatment as specified in the standard.
WETOX	Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).
WTRRX	Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic/ignitable levels of gases released during the reaction.

Note 1: When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in Section 66268.42, Table 2 by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on.

Note 2: When more than one technology (or treatment train) are specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "OR". This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

Table 2 - Technology-Based Standards by RCRA Waste Code

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
D001		Ignitable Liquids based on 66261.21(a)(1) - Wastewaters.	NA	DEACT	NA.
D001		Ignitable Liquids based on 66261.21(a)(1) - Low TOC Ignitable Liquids Subcategory - Less than 10% total organic carbon.	NA	NA	DEACT.
D001		Ignitable Liquids based on 66261.21(a)(1) - High TOC Ignitable Liquids Subcategory - Greater than or equal to 10% total organic carbon.	NA	NA	FSUBS; RORGS; OR INCIN.
D001		Ignitable compressed gases based on 66261.21(a)(3).	NA	NA	DEACT**.
D001		Ignitable reactives 66261.21(a)(2)	NA	NA	DEACT.
D001		Oxidizers based on 66261.21(a)(4)	NA	DEACT	DEACT.
D002		Acid subcategory based on 66261.22(a)(1)	NA	DEACT	DEACT.
D002		Alkaline subcategory based on 66261.22(a)(1)	NA	DEACT	DEACT.
D002		Other corrosives based on 66261.22(a)(2)	NA	DEACT	DEACT.
D003		Reactive sulfides based on 66261.23(a)(5)	NA	DEACT	DEACT.
D003		Explosives based on 66261.23(a)(6), (7), and (8)	NA	DEACT	DEACT.
D003		Water reactives based on 66261.23(a)(2), (3), and (4).	NA	NA	DEACT.
D003		Other reactives based on 66261.23(a)(1)	NA	DEACT	DEACT.
D006		Cadmium containing batteries	7440-43-9	NA	RTHRM.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
D008		Lead acid batteries (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of 40 CFR 268 or exempted under other EPA regulations (see 40 CFR 266.80).)	7439-92-1	NA	RLEAD.
D009	Table CCWE in 66268.41 and Table CCW in 66268.43.	Mercury: (High Mercury Subcategory - greater than or equal to 260 mg/kg total Mercury - contains mercury and organics (and are not incinerator residues)).	7439-97-6	NA	IMERC; or RMERC.
D009	Table CCWE in 66268.41 and Table CCW in 66268.43.	Mercury: (High Mercury Subcategory - greater than or equal to 260 mg/kg total Mercury - inorganics (including incinerator residues and residues from RMERC)).	7439-97-6	NA	RMERC.
D012	Table CCW in 66268.43.	Endrin	72-20-8	BIODG; or INCIN	NA.
D013	Table CCW in 66268.43.	Lindane	58-89-9	CARBN; or INCIN	NA.
D014	Table CCW in 66268.43.	Methoxychlor	72-43-5	WETOX; or INCIN	NA.
D015	Table CCW in 66268.43.	Toxaphene	8001-35-1	BIODG; or INCIN	NA.
D016	Table CCW in 66268.43.	2,4-D	94-75-7	CHOXD; BIODG; or INCIN	NA.
D017	Table CCW in 66268.43.	2,4,5-TP	93-72-1	CHOXD; or INCIN	NA.
F005	Table CCWE in 66268.41 and Table CCW in 66268.43.	2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
F005	Table CCWE in 66268.41 and Table CCW in 66268.43.	2-Ethoxyethanol	110-80-5	BIODG; or INCIN	INCIN.
F024	Table CCWE in 66268.41 and Table CCW in 66268.43.		NA	INCIN	INCIN.
K025		Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	NA	LLEXT fb SSTRP fb CARBN; or INCIN	INCIN.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
K026		Stripping still tails from the production of methyl ethyl pyridines.	NA	INCIN	INCIN.
K027		Centrifuge and distillation residues from toluene diisocyanate production.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K039		Filter cake from the filtration of diethylphosphorodithioc acid in the production of phorate.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K044		Wastewater treatment sludges from the manufacturing and processing of explosives.	NA	DEACT	DEACT.
K045		Spent carbon from the treatment of wastewater containing explosives.	NA	DEACT	DEACT.
K047		Pink/red water from TNT operations	NA	DEACT	DEACT.
K061	Table CCW in 66268.43	Emission control dust/sludge from the primary production of steel in electric furnaces (High Zinc Subcategory - greater than or equal to 15% total Zinc).	NA	NA	NLDDBR.
K069	Table CCWE in 66268.41 and Table CCW in 66268.43.	Emission control dust/sludge from secondary lead smelting; Non-Calcium Sulfate Subcategory	NA	NA	RLEAD.
K106	Table CCWE in 66268.41 and Table CCW in 66268.43.	Wastewater treatment sludge from the mercury cell process in chlorine production: (High Mercury Subcategory-greater than or equal to 260 mg/kg total mercury).	NA	NA	RMERC.
K113		Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K114		Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	NA	CARBN; or INCIN	FSUBS; or INCIN.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
K115		Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	NA	CARBN; or INCIN	FSUBS; or INCIN.
K116		Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine	NA	CARBN; or INCIN	FSUBS; or INCIN.
P001		Warfarin (>0.3%)	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P002		1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P003		Acrolein	107-02-8	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P005		Allyl alcohol	107-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P006		Aluminum phosphide	20859-73-8	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.
P007		5-Aminoethyl 3-isoxazolol	2763-96-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P008		4-Aminopyridine	504-24-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P009		Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; OR INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P014		Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P015		Beryllium dust	7440-41-7	NA	RMETL; or RTHRM.
P016		Bis(chloromethyl)ether	542-88-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P017		Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P018		Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P022	Table CCW in 66268.43	Carbon disulfide	75-15-0	NA	INCIN.
P023		Chloroacetaldehyde	107-20-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P026		1-(o-Chlorophenyl) thiourea	5344-82-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P027		3-Chloropropionitrile	542-76-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
P028		Benzyl chloride	100-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P031		Cyanogen	460-19-5	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN.
P033		Cyanogen chloride	506-77-4	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN.
P034		2-Cyclohexyl-4,6-dinitrophenol	131-89-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P040		0,0-Diethyl 0-pyrazinyl phosphorothioate	297-97-2	CARBN; or INCIN	FSUBS; or INCIN.
P041		Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or INCIN	FSUBS; or INCIN.
P042		Epinephrine	51-43-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P043		Diisopropylfluorophosphate (DFP)	55-91-4	CARBN; or INCIN	FSUBS; or INCIN.
P044		Dimethoate	60-51-5	CARBN; or INCIN	FSUBS; or INCIN.
P045		Thiofanox	39196-18-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P046		alpha, alpha-Dimethylphenethylamine	122-09-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P047		4,6-Dinitro-o-cresol salts	534-52-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P049		2,4-Dithiobiuret	541-53-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P054		Aziridine	151-56-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P056	Table CCW in 66268.43	Fluorine	7782-41-4	NA	ADGAS fb NEUTR.
P057		Fluoroacetamide	640-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P058		Fluoroacetic acid, sodium salt	62-74-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P062		Hexaethyltetraphosphate	757-58-4	CARBN; or INCIN	FSUBS; or INCIN.
P064		Isocyanic acid, ethyl ester	624-83-9	(WETOX or CHOXD) fb CARBN; or INCIN.	INCIN.
P065	Table CCWE in 66268.41 and Table CCW in 66268.43	Mercury fulminate: (High Mercury Subcategory - greater than or equal to 260 mg/kg total Mercury - either incinerator residues or residues from RMERC)	628-86-4	NA	RMERC.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
P065	Table CCWE in 66268.41 and Table CCW in 66268.43	Mercury fulminate: (All nonwastewaters that are not incinerator residues from RMERC; regardless of Mercury Content)	628-86-4	NA	IMERC.
P066		Methomyl	16752-77-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P067		2-Methylaziridine	75-55-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P068		Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIOGD; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P069		Methylactonitrile	75-86-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P070		Aldicarb	116-06-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P072		1-Naphthyl-2-thiourea	86-88-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P075		Nicotine and salts	54-11-5*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P076		Nitric oxide	10102-43-9	ADGAS	ADGAS.
P078		Nitrogen dioxide	10102-44-0	ADGAS	ADGAS.
P081		Nitroglycerin	55-63-0	CHOXD; CHRED; CARBN; BIOGD; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P082	Table CCW in 66268.43	N-Nitrosodimethylamine	62-75-9	NA	INCIN.
P084		N-Nitrosomethylvinylamine	4549-40-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P085		Octamethylpyrophosphoramide	152-16-9	CARBN; or INCIN	FSUBS; or INCIN.
P087		Osmium tetroxide	20816-12-0	NA	RMETL; or RTHRM.
P088		Endothall	145-73-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P092	Table CCWE in 66268.41 and Table CCW in 66268.43	Phenyl mercury acetate: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-either incinerator residues or residues from RMERC)	62-38-4	NA	RMERC.
P092	Table CCWE in 66268.41 and Table CCW in 66268.43	Phenyl mercury acetate: (All nonwastewaters that are not incinerator residues and are not residues from RMERC; regardless of Mercury Content)	62-38-4	NA	IMERC; or RMERC.
P093		N-Phenylthiourea	103-85-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
P095		Phosgene	75-44-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P096		Phosphine	7803-51-2	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.
P102		Propargyl alcohol	107-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
P105		Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIOGD; or INCIN	FSUBS; CHOXD; CHRED; or INCINP108Strychnine and salts57-24- 9*(WETOX or CHOXD) fb CARBN; or INCININCIN
P109		Tetraethyldithiopyro- phosphate	3689-24-5	CARBN; or INCIN	FSUBS; or INCIN
P112		Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIOGD; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
P113	Table CCW in 66268.43	Thallic oxide	1314-32-5	NA	RTHRM; or STABL
P115	Table CCW in 66268.43	Thallium (I) sulfate	7446-18-6	NA	RTHRM; or STABL
P116		Thiosemicarbazide	79-19-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P118		Trichloromethanethiol	75-70-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P119	Table CCW in 66268.43	Ammonium vanadate	7803-55-6	NA	STABL
P120	Table CCW in 66268.43	Vanadium pentoxide	1314-62-1	NA	STABL
P122		Zinc Phosphide (<10%)	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN
U001		Acetaldehyde	75-07-0	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U003	Table CCW in 66268.43	Acetonitrile	75-05-8	NA	INCIN
U006		Acetyl Chloride	75-36-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U007		Acrylamide	79-06-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U008		Acrylic acid	79-10-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U010		Mitomycin C	50-07-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U011		Amitrole	61-82-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U014		Auramine	492-80-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U015		Azaserine	115-02-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U016		Benz(c)acridine	225-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U017		Benzal chloride	98-87-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U020		Benzenesulfonyl chloride	98-09-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U021		Benzidine	92-87-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U023		Benzotrichloride	98-07-7	CHOXD; CHRED; CARBN; BIOOG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U026		Chlornaphazin	494-03-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U033		Carbonyl fluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U034		Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U035		Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U038	Table CCW in 66268.43	Chlorobenzilate	510-15-6	NA	INCIN
U041		1-Chloro-2,3-epoxypropane (Epichlorohydrin)	106-89-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U042	Table CCW in 66268.43	2-Chloroethyl vinyl ether	110-75-8	NA	INCIN
U046		Chloromethyl methyl ether	107-30-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U049		4-Chloro-o-toluidine hydrochloride	3165-93-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U053		Crotonaldehyde	4170-30-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U055		Cumene	98-82-8	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U056		Cyclohexane	110-82-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U057	Table CCW in 66268.43	Cyclohexanone	108-94-1	NA	FSUBS; or INCIN
U058		Cyclophosphamide	50-18-0	CARBN; or INCIN	FSUBS; or INCIN
U059		Daunomycin	20830-81-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U062		Diallate	2303-16-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U064		1,2,7,8-Dibenzopyrene	189-55-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U073		3,3'-Dichlorobenzidine	91-94-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U074		cis-1,4-Dichloro-2-butene trans-1,4-Dichloro-2-butene	1476-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN INCIN
U085		1,2:3,4-Diepoxybutane	1464-53-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U086		N,N-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U087		0,0-Diethyl S-methylidithiophosphate	3288-58-2	CARBN; or INCIN	FSUBS; or INCIN
U089		Diethyl stilbestrol	56-53-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U090		Dihydrosafrole	94-58-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U091		3,3'-Dimethoxybenzidine	119-90-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U092		Dimethylamine	124-40-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U093	Table CCW in 66268.43	p-Dimethylaminoazobenzene	621-90-9	NA	INCIN
U094		7,12-Dimethyl benz(a)anthracene	57-97-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U095		3,3'-Dimethylbenzidine	119-93-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U096		a,a-Dimethyl benzyl hydroperoxide	80-15-9	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U097		Dimethylcarbonyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U098		1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U099		1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U103		Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U109		1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U110		Dipropylamine	142-84-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U113		Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U114		Ethylene bis-dithiocarbamic acid	111-54-6	(WETOX or CHOXD) fb CARBN or INCIN	INCIN
U115		Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or INCIN	CHOXD; or INCIN
U116		Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U119		Ethyl methane sulfonate	62-50-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U122		Formaldehyde	50-00-0	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U123		Formic acid	64-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U124		Furan	110-00-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U125		Furfural	98-01-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U126		Glycidaldehyde	765-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U132		Hexachlorophenene	70-30-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U133		Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIOG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN
U134	Table CCW in 66268.43	Hydrogen Flouride	7664-39-3	NA	ADGAS fb NEUTR; or NEUTR
U135		Hydrogen Sulfide	7783-06-4	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN
U143		Lasiocarpine	303-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U147		Maleic anhydride	108-31-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN
U148		Maleic hydrazide	123-33-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U149		Malononitrile	109-77-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U150		Melphalan	148-82-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U151	Table CCWE in 66268.41 and Table CCW in 66268.43	Mercury: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury)	7439-97-6	NA	RMERC.
U153		Methane thiol	74-93-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U154		Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U156		Methyl chlorocarbonate	79-22-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U160		Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U163		N-Methyl N'-nitro N-Nitrosoguanidine	70-25-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U164		Methylthiouracil	56-04-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U166		1,4-Naphthoquinone	130-15-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U167		1-Naphthylamine	134-32-7	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN
U168	Table CCW in 66268.43	2-Naphthylamine	91-59-8	NA	INCIN.
U171		2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U173		N-Nitroso-di-n- ethanolamine	1116-54-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U176		N-Nitroso-N-ethylurea	759-73-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U177		N-Nitroso-N-methylurea	684-93-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U178		N-Nitroso-N- methylurethane	615-53-2	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U182		Paraldehyde	123-63-7	(WETOX or CHOXD) fb CARBN; OR INCIN	FSUBS; or INCIN.
U184		Pentachloroethane	76-01-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U186		1,3-Pentadiene	504-60-9	(WETOX or CHOXD) fb CARBN; OR INCIN	FSUBS; or INCIN.
U189		Phosphorus sulfide	1314-80-3	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.
U191		2-Picoline	109-06-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U193		1,3-Propane sultone	1120-71-4	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U194		n-Propylamine	107-10-8	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U197		p-Benzoquinone	106-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.

Table 2 - Technology-Based Standards by RCRA Waste Code (cont'd)

Waste Code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U200		Reserpine	50-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U201		Resorcinol	108-46-3	(WETOX or CHOXD) fb CARBN; OR INCIN	FSUBS; OR INCIN.
U202		Saccharin and salts	81-07-2*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U206		Streptozatocin	18883-66-4	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U213		Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U214	Table CCW in 66268.43	Thallium (I) acetate	563-68-8	NA	RTHRM; or STABL.
U215	Table CCW in 66268.43	Thallium (I) carbonate	6533-73-9	NA	RTHRM; or STABL.
U216	Table CCW in 66268.43	Thallium (I) chloride	7791-12-0	NA	RTHRM; or STABL.
U217	Table CCW in 66268.43	Thallium (I) nitrate	10102-45-1	NA	RTHRM; or STABL.
U218		Thioacetamide	62-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U219		Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U221		Toluenediamine	25376-45-8	CARBN; or INCIN	FSUBS; or INCIN.
U222		o-Toluidine hydrochloride	636-21-5	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U223		Toluene diisocyanate	26471-62-5	CARBN; or INCIN	FSUBS; or INCIN
U234		sym-Trinitrobenzene	99-35-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U236		Trypan Blue	72-57-1	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U237		Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U238		Ethyl carbamate	51-79-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U240		2,4-Dichlorophenoxyacetic (salts and esters)	94-75-7*	(WETOX or CHOXD) fb CARBN; OR INCIN	INCIN.
U244		Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U246		Cyanogen bromide	506-68-3	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN.
U248		Warfarin (greater than or equal to 3%)	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U249		Zinc Phosphide (<10%)	1314-84-7	CHOXD; CHRED; or INCIN.	CHOXD; CHRED; or INCIN

\* CAS Number given for parent compound only.

\*\* This waste code exists in gaseous form and is not categorized as wastewater or nonwastewater forms.

NA - Not Applicable.

Table 3 -- Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste

Waste code	Waste descriptions and/or treatment subcategory	CAS Number	Technology code	
			Wastewaters	Nonwastewaters
D002	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D004	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D005	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D006	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D007	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D008	Radioactive Lead Solids Subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding, and other elemental forms of lead. These lead solids do not include treatment residues such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic/stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash).	7439-92-1	NA	MACRO
D008	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D009	Elemental mercury contaminated with radioactive materials.	7439-97-6	NA	AMLGM
D009	Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.	7439-97-6	NA	INCIN
D009	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D010	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D011	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
U151	Mercury: Elemental mercury contaminated with radioactive materials.	7439-97-6	NA	AMLGM

NA - Not Applicable.

66264.316 and Section 66265.316;

(2) All hazardous wastes contained in such lab packs are specified in Appendix IV or Appendix V to Chapter 18;

(3) The lab packs are incinerated in accordance with the requirements of Article 15, Chapter 14 or Article 15, Chapter 15 and;

(4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in Article 4, Chapter 18.

(d) Radioactive hazardous mixed wastes with treatment standards specified in Table 3 of this Section are not subject to any treatment standards specified in Section 66268.41, Section 66268.43, or Table 2 of this Section. Radioactive hazardous mixed wastes not subject to treatment standards in Table 3 of this Section remain subject to all applicable treatment standards specified in Section 66268.41, Section 66268.43 and Table 2 of this Section.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.42.

66268.43. Treatment Standards Expressed as Waste Concentrations.

(a) Table CCW identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the waste or treatment residual (not an extract of such waste or residual) for the allowable land disposal of such waste or residual. Compliance with these concentrations is required based on grab samples, unless otherwise noted in the following Table CCW.

[INSERT TABLE CCW]

Table CCW - Constituent Concentrations in Wastes

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
D003 (Reactive cyanides subcategory-based on 66261.23(a)(5))		Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	Reserved 0.86	#590 30
D004	Table CCWE in 66268.41	Arsenic	7440-38-2	5.0	NA
D005	Table CCWE in 66268.41	Barium	7440-39-3	100	NA
D006	Table CCWE in 66268.41	Cadmium	7440-43-9	1.0	NA
D007	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	5.0	NA
D008	Table CCWE in 66268.41	Lead	7439-92-1	5.0	NA
D009	Table CCWE in 66268.41	Mercury	7439-97-6	0.20	NA
D010	Table CCWE in 66268.41	Selenium	7782-49-2	1.0	NA
D011	Table CCWE in 66268.41	Silver	7440-22-4	5.0	NA
D012	Table 2 in 66268.42	Endrin	720-20-8	NA	0.13
D013	Table 2 in 66268.42	Lindane	58-89-9	NA	0.066
D014	Table 2 in 66268.42	Methoxychlor	72-43-5	NA	0.18
D015	Table 2 in 66268.42	Toxaphene	8001-35-1	NA	1.3
D016	Table 2 in 66268.42	2,4-D	94-75-7	NA	10.0
D017	Table 2 in 66268.42	2,4,5-TP Silvex	93-76-5	NA	7.9
F001-F005 spent solvents	Table CCWE in 66268.41 and Table 2 in 66268.42	1,1,2-Trichloroethane	71-55-6	0.030	@ 7.6
		Benzene	71-43-2	0.070	@ 3.7
F001-F005 spent solvents (Pharmaceutical industry wastewater subcategory)		Methylene chloride	75-09-2	0.44	NA
F006	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.2	590
		Cyanides (Amenable)	57-12-5	0.86	30
		Cadmium	7440-43-9	1.6	NA
		Chromium	7440-47-32	0.32	NA
		Lead	7439-92-1	0.040	NA
		Nickel	7440-02-0	0.44	NA
F007	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	590
		Cyanides (Amenable)	57-12-5	0.1	30
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)		
F008	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	590		
		Cyanides (Amenable)	57-12-5	0.1	30		
		Chromium	7440-47-32	0.32	NA		
		Lead	7439-92-1	0.04	NA		
		Nickel	7440-02-0	0.44	NA		
F009	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	590		
		Cyanides (Amenable)	57-12-5	0.1	30		
		Chromium	7440-47-32	0.32	NA		
		Lead	7439-92-1	0.04	NA		
		Nickel	7440-02-0	0.44	NA		
F010		Cyanides (Total)	57-12-5	1.9	1.5		
		Cyanides (Amenable)	57-12-5	0.1	NA		
F011	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	110		
		Cyanides (Amenable)	57-12-5	0.1	9.1		
		Chromium (Total)	7440-47-32	0.32	NA		
		Lead	7439-92-1	0.04	NA		
		Nickel	7440-02-0	0.44	NA		
F012	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	110		
		Cyanides (Amenable)	57-12-5	0.1	9.1		
		Chromium (Total)	7440-47-32	0.32	NA		
		Lead	7439-92-1	0.04	NA		
		Nickel	7440-02-0	0.44	NA		
F019	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.2	# 590		
		Cyanides (Amenable)	57-12-5	0.86	# 30		
		Chromium (Total)	7440-47-32	0.32	NA		
F024	Table CCWE in 66268.41 and Table 2 in 66268.42 (Note: F024 organic standards must be treated via incineration (INCIN))	2-Chloro-1,3-butadiene	126-99-8	≈0.28	≈0.28		
		3-Chloropropene	107-05-1	≈0.28	≈0.28		
		1,1-Dichloroethane	75-34-3	≈0.014	≈0.014		
		1,2-Dichloroethane	107-06-2	≈0.014	≈0.014		
		1,2-Dichloropropane	78-87-5	≈0.014	≈0.014		
		cis-1,3-Dichloropropene	10061-01-5	≈0.014	≈0.014		
		trans-1,3-Dichloropropene	10061-02-6	≈0.014	≈0.014		
		Bis(2-ethylhexyl)phthalate	117-81-7	≈0.036	≈ 1.8		
		Hexachloroethane	67-72-1	≈0.036	≈ 1.8		
		Chromium (Total)	7440-47-32	0.35	NA		
		Nickel	7440-02-0	0.47	NA		
		F025 (Light ends subcategory)		Chloroform	67-66-3	*0.046	≈ 6.2
				1,2-Dichloroethane	107-06-2	* 0.21	≈ 6.2
1,1-Dichloroethylene	75-35-4			*0.025	≈ 6.2		
Methylene chloride	75-9-2			*0.089	≈ 31		
Carbon tetrachloride	56-23-5			*0.057	≈ 6.2		
1,1,2-Trichloroethane	79-00-5			*0.054	≈ 6.2		
Trichloroethylene	79-01-6			*0.054	≈ 5.6		
Vinyl chloride	75-01-4			*0.27	≈ 33		

Table CCW - Constituent Concentrations in Wastes (cont'd)

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08-31-90  
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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)		
F025 (Spent filters/aids and desiccants subcategory)		Chloroform	67-66-3	*0.046	@ 6.2		
		Methylene chloride	75-9-2	*0.089	@ 31		
		Carbon tetrachloride	56-23-5	*0.057	@ 6.2		
		1,1,2-Trichloroethane	79-00-5	*0.054	@ 6.2		
		Trichloroethylene	79-01-6	*0.054	@ 5.6		
		Vinyl Chloride	75-01-4	*0.27	@ 33		
		Hexachlorobenzene	118-74-1	*0.055	@ 37		
		Hexachlorobutadiene	87-68-3	*0.055	@ 28		
		Hexachloroethane	67-72-1	*0.055	@ 30		
		F039	Table CCWE in 66268.41	Acetone	67-64-1	*0.28	@ 160
				Acenaphthalene	208-96-8	*0.059	@ 3.4
Acenaphthene	83-32-9			*0.059	@ 4.0		
Acetonitrile	75-05-8			*0.17	NA		
Acetophenone	96-86-2			*0.010	@ 9.7		
2-Acetylaminofluorene	53-96-3			*0.059	@ 140		
Acrylonitrile	107-13-1			*0.24	@ 84		
Aldrin	309-00-2			*0.021	@ 0.066		
4-Aminobiphenyl	92-67-1			*0.13	NA		
Aniline	62-53-3			*0.81	@ 14		
Anthracene	120-12-7			*0.059	@ 4.0		
Aroclor 1016	12674-11-2			*0.013	@ 0.92		
Aroclor 1221	11104-28-2			*0.014	@ 0.92		
Aroclor 1232	11141-16-5			*0.013	@ 0.92		
Aroclor 1242	53469-21-9			*0.017	@ 0.92		
Aroclor 1248	12672-29-6			*0.013	@ 0.92		
Aroclor 1254	11097-69-1			*0.014	@ 1.8		
Aroclor 1260	11096-82-5			*0.014	@ 1.8		
alpha-BHC	319-84-6			*0.00014	@ 0.066		
beta-BHC	319-85-7			*0.00014	@ 0.066		
delta-BHC	319-86-8			*0.023	@ 0.066		
gamma-BHC	58-89-9			*0.0017	@ 0.066		
Benzene	71-43-2			*0.14	@ 36		
Benzo(a)anthracene	56-55-3			*0.059	@ 8.2		
Benzo(b)fluoranthene	205-99-2			*0.055	@ 3.4		
Benzo(k)fluoranthene	207-08-9			*0.059	@ 3.4		
Benzo(g,h,i)perylene	191-24-2			*0.0055	@ 1.5		
Benzo(a)pyrene	50-32-8			*0.061	@ 8.2		
Bromodichloromethane	75-27-4			*0.35	@ 15		
Bromoform	75-25-2			*0.63	@ 15		
Bromomethane (methyl bromide)	74-83-9			*0.11	@ 15		
4-Bromophenyl phenyl ether	101-55-3			*0.055	@ 15		
n-Butyl alcohol	71-36-3			*5.6	@ 2.6		
Butyl benzyl phthalate	85-68-7			*0.017	@ 7.9		
2-sec-Butyl-4,6-dinitrophenol	88-85-7			*0.066	@ 2.5		
Carbon tetrachloride	56-23-5			*0.057	@ 5.6		
Carbon disulfide	75-15-0			*0.014	NA		
Chlordane	57-74-9			*0.0033	@ 0.13		
p-Chloroaniline	106-47-8			*0.46	@ 16		
Chlorobenzene	108-90-7			*0.057	@ 5.7		
Chlorobenzilate	510-15-6			*0.10	@ NA		
Chlorodibromomethane	124-48-1			*0.057	@ 16		
Chloroethane	75-00-3			*0.27	@ 6.0		
bis(2-Chloroethoxy)methane	111-91-1			*0.036	@ 7.2		
bis(2-Chloroethyl) ether	111-44-4			*0.033	@ 7.2		
2-Chloroethyl vinyl ether				*0.057	NA		
Chloroform	67-66-3			*0.046	@ 5.6		

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		bis(2-Chloroisopropyl) ether	39638-32-9	*0.055	@ 7.2
		p-Chloro-m-cresol	59-50-7	*0.018	@ 14
		Chloromethane (Methyl chloride)	74-87-3	*0.19	@ 33
		2-Chloronaphthalene	91-8-7	*0.055	@ 5.6
		2-Chlorophenol	95-57-8	*0.044	@ 5.7
		3-Chloropropene	107-05-1	*0.036	@ 28
		Chrysene	218-01-9	*0.059	@ 8.2
		o-Cresol	95-48-7	*0.11	@ 5.6
		Cresol (m-and p-isomers)		*0.77	@ 3.2
		Cyclohexanone	108-94-1	*0.36	NA
		1,2-Dibromo-3-chloropropane	96-12-8	*0.11	@ 15
		1,2-Dibromoethane (Ethylene dibromide)	106-93-4	*0.028	@ 15
		Dibromomethane	74-95-3	*0.11	@ 15
		2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	*0.72	@ 10
		o,p'-DDD	53-19-0	*0.023	@0.087
		p,p'-DDD	72-54-8	*0.023	@0.087
		o,p'-DDE	3424-82-6	*0.031	@0.087
		p,p'-DDE	72-55-9	*0.031	@0.087
		o,p'-DDT	789-02-6	*0.0039	@0.087
		p,p'-DDT	50-29-3	*0.0039	@0.087
		Dibenzo(a,h)anthracene	53-70-3	*0.055	@ 8.2
		m-Dichlorobenzene	541-73-1	*0.036	@ 6.2
		o-Dichlorobenzene	95-50-1	*0.088	@ 6.2
		p-Dichlorobenzene	106-46-7	*0.090	@ 6.2
		Dichlorodifluoromethane	75-71-8	*0.23	@ 7.2
		1,1-Dichloroethane	75-34-3	*0.059	@ 7.2
		1,2-Dichloroethane	107-06-2	*0.21	@ 7.2
		1,1-Dichloroethylene	75-35-4	*0.025	@ 33
		trans-1,2-Dichloroethene		*0.054	@ 33
		2,4-Dichlorophenol	120-83-2	*0.044	@ 14
		2,6-Dichlorophenol	87-65-0	*0.044	@ 14
		1,2-Dichloropropane	78-87-5	*0.85	@ 18
		cis-1,3-Dichloropropene	10061-01-5	*0.036	@ 18
		trans-1,3-Dichloropropene	10061-02-6	*0.036	@ 18
		Dieldrin	60-57-1	*0.017	@ 0.13
		Diethyl phthalate	84-66-2	*0.20	@ 28
		p-Dimethylaminoazobenzene	60-11-3	*0.13	NA
		2,4-Dimethyl phenol	105-67-9	*0.036	@ 14
		Dimethyl phthalate	131-11-3	*0.047	@ 28
		Di-n-butyl phthalate	84-74-2	*0.057	@ 28
		1,4-Dinitrobenzene	100-25-4	*0.32	@ 2.3
		4,6-Dinitro-o-cresol	534-52-1	*0.28	@ 160
		2,4-Dinitrophenol	51-28-5	*0.12	@ 160
		2,4-Dinitrotoluene	121-14-2	*0.32	@ 140
		2,6-Dinitrotoluene	606-20-2	*0.55	@ 28
		Di-n-octyl phthalate	117-84-0	*0.017	@ 28
		Di-n-propylnitrosoamine	621-64-7	*0.40	@ 14
		1,2-Diphenylhydrazine		*0.087	NA
		1,4-Dioxane	123-91-1	*0.12	@ 170
		Disulfoton	298-04-4	*0.017	@ 6.2
		Endosulfan I	939-98-8	*0.023	@0.066

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Endosulfan II	33213-6-5	*0.029	@ 0.13
		Endosulfan sulfate	1-31-07-8	*0.029	@ 0.13
		Endrin	7-20-8	*0.0028	@ 0.13
		Endrin aldehyde	7421-93-4	*0.025	@ 0.13
		Ethyl acetate	141-78-6	*0.34	@ 33
		Ethyl cyanide		*0.24	NA
		Ethyl benzene	100-41-4	*0.057	@ 6.0
		Ethyl ether	60-29-7	*0.12	@ 160
		bis(2-Ethylhexyl) phthalate	117-81-7	*0.28	@ 28
		Ethyl methacrylate	97-63-2	*0.14	@ 160
		Ethylene oxide	75-21-8	*0.12	NA
		Famphur	52-85-7	*0.017	@ 15
		Fluoranthene	206-44-0	*0.068	@ 8.2
		Fluorene	86-73-7	*0.059	@ 4.0
		Fluorotrichloro-methane	75-69-4	*0.020	@ 33
		Heptachlor	76-44-8	*0.0012	@ 0.066
		Heptachlor epoxide	1024-57-3	*0.016	@ 0.066
		Hexachlorobenzene	118-74-1	*0.055	@ 37
		Hexachlorobutadiene	87-68-3	*0.055	@ 28
		Hexachlorocyclopentadiene	77-47-4	*0.057	@ 3.6
		Hexachlorodibenzofurans		*0.000063	@ 0.001
		Hexachlorodibenzo-p-dioxins		*0.000063	@ 0.001
		Hexachloroethane	67-72-1	*0.055	@ 28
		Hexachloropropene	1888-71-7	*0.035	@ 28
		Indeno(1,2,3,-c,d)pyrene	193-39-5	*0.0055	@ 8.2
		Iodomethane	74-88-4	*0.019	@ 65
		Isobutanol	78-83-1	*5.6	@ 170
		Isodrin	465-73-6	*0.021	@ 0.066
		Isosafrole	120-58-1	*0.081	@ 2.6
		Kepone	143-50-8	*0.0011	@ 0.13
		Methacrylonitrile	126-98-7	*0.24	@ 84
		Methapyrilene	91-80-5	*0.081	@ 1.5
		Methoxychlor	72-43-5	*0.25	@ 0.18
		3-Methylcholanthrene	56-49-5	*0.0055	@ 15
		4,4-Methylene-bis-(2-chloroaniline)	101-14-4	*0.50	@ 35
		Methylene chloride	75-09-2	*0.089	@ 33
		Methyl ethyl ketone	78-93-3	*0.28	@ 36
		Methyl isobutyl ketone	108-10-1	*0.14	@ 33
		Methyl methacrylate	80-62-6	*0.14	@ 160
		Methyl methansulfonate		*0.018	NA
		Methyl parathion	298-00-0	*0.014	@ 4.6
		Naphthalene	91-20-3	*0.059	@ 3.1
		2-Naphtylamine	91-59-8	*0.52	NA
		p-Nitroaniline	100-01-6	*0.028	@ 28
		Nitrobenzene	98-95-3	*0.068	@ 14
		5-Nitro-o-toluidine	99-55-8	*0.32	@ 28
		4-Nitrophenol	100-02-7	*0.12	@ 29
		N-Nitrosodiethylamine	55-18-5	*0.40	@ 28
		N-Nitrosodimethylamine	62-75-9	*0.40	NA
		N-Nitroso-di-n-butylamine	924-16-3	*0.40	@ 17
		N-Nitrosomethyl-ethylamine	10595-95-6	*0.40	@ 2.3
		N-Nitrosomorpholine	59-89-2	*0.40	@ 2.3
		N-Nitrosopiperidine	100-75-4	*0.013	@ 35
		N-Nitrosopyrrolidine	930-55-2	*0.013	@ 35

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Parathion	56-38-2	*0.017	24.6
		Pentachlorobenzene	608-93-5	*0.055	237
		Pentachlorodibenzofurans		*0.000035	20.001
		Pentachlorodibenzo-p-dioxins		*0.000063	20.001
		Pentachloronitrobenzene	82-68-8	*0.055	24.8
		Pentachlorophenol	87-86-5	*0.089	27.4
		Phenacetin	62-44-2	*0.081	216
		Phenanthrene	85-01-8	*0.059	23.1
		Phenol	108-95-2	*0.039	26.2
		Phorate	298-02-2	*0.021	24.6
		Propanenitrile (ethyl cyanide)	107-12-0	*0.24	2360
		Pronamide	23950-58-5	*0.093	21.5
		Pyrene	129-00-0	*0.067	28.2
		Pyridine	110-86-1	*0.014	216
		Safrole	94-59-7	*0.081	222
		Silvex (2,4,5-TP)	93-72-1	*0.72	27.9
		2,4,5-T	93-76-5	*0.72	27.9
		1,2,4,5,-Tetrachlorobenzene	95-94-3	*0.055	219
		Tetrachlorodibenzofurans		*0.000063	20.001
		Tetrachlorodibenzo-p-dioxins		*0.000063	20.001
		2,3,7,8-Tetrachlorodibenzo-p-dioxin		*0.000063	NA
		1,1,1,2-Tetrachloroethane	630-20-6	*0.057	242
		1,1,2,2-Tetrachloroethane	79-34-6	*0.057	242
		Tetrachloroethene	127-18-4	*0.056	25.6
		2,3,4,6-Tetrachlorophenol	58-90-2	*0.030	237
		Toluene	108-88-3	*0.080	228
		Toxaphene	8001-35-1	*0.0095	21.3
		1,2,4-Trichlorobenzene	120-82-1	*0.055	219
		1,1,1-Trichloroethane	71-55-6	*0.054	25.6
		1,1,2-Trichloroethane	79-00-5	*0.054	25.6
		Trichloroethylene	79-01-6	*0.054	25.6
		2,4,5-Trichlorophenol	95-95-4	*0.18	237
		2,4,6-Trichlorophenol	88-06-2	*0.035	237
		1,2,3-Trichloropropane	96-18-4	*0.85	228
		1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	*0.057	228
		Vinyl chloride	75-01-4	*0.27	233
		Xylene(s)		*0.32	228
		Cyanides (Total)	57-12-5	*1.2	21.8
		Cyanides (Amenable)	57-12-5	*0.86	NA
		Fluoride	16964-48-8	*35	NA
		Sulfide	8496-25-8	*14	NA
		Antimony	7440-36-0	*1.9	NA
		Arsenic	7440-38-2	*5.0	NA
		Barium	7440-39-3	*1.2	NA
		Beryllium	7440-41-7	*0.82	NA
		Cadmium	7440-43-9	*0.20	NA
		Chromium (Total)	7440-47-32	*0.37	NA

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Copper	7440-50-8	*1.3	NA
		Lead	7439-92-1	*0.28	NA
		Mercury	7439-97-6	*0.15	NA
		Nickel	7440-02-0	*0.55	NA
		Selenium	7782-49-2	*0.82	NA
		Silver	7440-22-4	*0.29	NA
		Vanadium	7440-62-2	*0.042	NA
K001	Table CCWE in 66268.41	Naphthalene	91-20-3	@0.031	@1.5
		Pantachlorophenol	87-86-5	@0.031	@1.5
		Phenanthrene	85-01-8	@0.031	@1.5
		Pyrene	129-00-0	@0.028	@1.5
		Toluene	108-88-3	@0.028	@28
		Xylenes (Total)		@0.032	@33
		Lead	7439-92-1	@0.037	NA
K002	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
K003	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
K004	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
K005	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
		Cyanides (Total)	57-12-5	*0.74	(4)
K006	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
K007	Table CCWE	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
		Cyanides (Total)	57-12-5	*0.74	
K008	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	*2.9	NA
		Lead	7439-92-1	*3.4	NA
K009		Chloroform	67-66-3	0.1	@6.0
K010		Chloroform	67-66-3	0.1	6.0
K011		Acetonitrile	75-05-8	38	1.8
		Acrylonitrile	107-13-1	0.06	1.4
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.02	0.03
		Cyanide (Total)	57-12-5	21	57
K013		Acetonitrile	75-05-8	38	@1.8
		Acrylonitrile	107-13-1	0.06	@1.4
		Acrylamide	79-06-1	19	@23
		Benzene	71-43-2	0.02	@0.03
		Cyanide (Total)	57-12-5	21	57
K014		Acetonitrile	75-05-8	38	@1.8
		Acrylonitrile	107-13-1	0.06	@1.4
		Acrylamide	79-06-1	19	@23
		Benzene	71-43-2	0.02	@0.03
		Cyanide (Total)	57-12-5	21	57

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
K015	Table CCWE in 66268.41	Anthracene	120-12-7	1.0	23.4
		Benzal chloride	98-87-3	0.28	26.2
		Sum of Benzo(b)fluoranthene and Benzo(k)fluoranthene	207-08-9	0.029	3.4
		Phenanthrene	85-01-8	0.27	23.4
		Toluene	108-88-3	0.15	26.0
		Chromium (Total)	7440-47-32	0.32	NA
		Nickel	7440-02-0	0.44	NA
		K016		Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3			20.007	25.6
Hexachlorocyclopentadiene	77-47-4			20.007	25.6
Hexachloroethane	67-72-1			20.033	28
K017		Tetrachloroethene	127-18-4	20.007	26.0
		1,2-Dichloropropane	78-87-5	*20.85	18
K018		1,2,3-Trichloropropane	96-18-4	*20.85	28
		Bis(2-chloroethyl)ether	111-44-4	*20.033	27.2
		Chloroethane	75-00-3	20.007	26.0
K019		1,1-Dichloroethane	75-34-3	20.007	26.0
		1,2-Dichloroethane	107-06-2	20.007	26.0
		Hexachloroethane	67-72-1	20.007	28
		Hexachlorobutadiene	87-68-3	20.033	25.6
		Hexachloroethane	67-72-1	20.007	28
		Pentachloroethane	76-01-7	20.007	25.6
		1,1,1-Trichloroethane	71-55-6	20.007	26.0
		Bis(2-chloroethyl)ether	111-44-4	20.007	25.6
		Chlorobenzene	108-90-7	20.006	26.0
		Chloroform	67-66-3	20.007	26.0
K020		p-Dichlorobenzene	106-46-7	20.008	NA
		1,2-Dichloroethane	107-06-2	20.007	26.0
		Fluorene	86-73-7	20.007	NA
		Hexachloroethane	67-72-1	20.033	28
		Naphthalene	91-20-3	20.007	25.6
		Phenanthrene	85-01-8	20.007	25.6
		1,2,4,5-Tetrachlorobenzene	95-94-3	20.017	NA
		Tetrachloroethene	127-18-4	20.007	26.0
		1,2,4-Trichlorobenzene	120-82-1	20.023	219
		1,1,1-Trichloroethane	71-55-6	20.007	26.0
		1,2-Dichloroethane	106-93-4	20.007	26.0
		1,1,2,2-Tetrachloroethane	79-34-6	20.007	25.6
K021	Table CCWE in 66268.41	Tetrachloroethene	127-18-4	20.007	26.0
		Chloroform	67-66-3	*0.046	26.2
		Carbon tetrachloride	56-23-5	*0.057	26.2
		Antimony	7440-36-0	*0.60	NA

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/L)	Non-wastewaters concentration (mg/kg)		
K022	Table CCWE in 66268.41	Toluene	108-88-3	*0.080	∅0.034		
		Acetophenone	96-86-2	0.010	∅19		
		Diphenylamine	22-39-4	*0.52	NA		
		Diphenylnitrosamine	86-30-6	*0.40	NA		
		Sum of Diphenylamine and Diphenylnitrosamine		NA	∅13		
		Phenol	108-95-2	0.039	∅12		
		Chromium (Total)	7440-47-32	0.35	NA		
		Nickel	7440-02-0	0.47	NA		
		K023		Phthalic anhydride (measured as Phthalic acid)	85-44-9	∅0.54	∅28
		K024		Phthalic anhydride (measured as Phthalic acid)	85-44-9	∅0.54	∅28
K028	Table CCWE in 66268.41	1,1-Dichloroethane	75-34-3	∅0.007	∅6.0		
		trans-1,2-Dichloroethane		∅0.033	∅6.0		
		Hexachlorobutadiene	87-68-3	∅0.007	∅5.6		
		Hexachloroethane	67-72-1	∅0.033	∅28		
		Pentachloroethane	76-01-7	∅0.033	∅5.6		
		1,1,1,2-Tetrachloroethane	630-20-6	∅0.007	∅5.6		
		1,1,2,2-Tetrachloroethane	79-34-6	∅0.007	∅5.6		
		1,1,1-Trichloroethane	71-55-6	∅0.007	∅6.0		
		1,1,2-Trichloroethane	79-00-5	∅0.007	∅6.0		
		Tetrachloroethylene	127-18-4	∅0.007	∅6.0		
		Cadmium	7440-43-9	6.4	NA		
		Chromium (Total)	7440-47-32	0.35	NA		
		Lead	7439-92-1	0.037	NA		
		Nickel	7440-02-0	0.47	NA		
		K029		Chloroform	67-66-3	0.46	∅6.0
	1,2-Dichloroethane		107-06-2	0.21	∅6.0		
	1,1-Dichloroethylene		75-35-4	0.025	∅6.0		
	1,1,1-Trichloroethane		71-55-6	0.054	∅6.0		
	Vinyl chloride		75-01-4	0.27	∅6.0		
K030		o-Dichlorobenzene	95-50-1	∅0.008	NA		
		p-Dichlorobenzene	106-46-7	∅0.008	NA		
		Hexachlorobutadiene	87-68-3	∅0.007	∅5.6		
		Hexachloroethane	67-72-1	∅0.033	∅28		
		Hexachloropropene	1888-71-7	NA	∅19		
		Pentachlorobenzene	608-93-5	NA	∅28		
		Pentachloroethane	76-01-7	∅0.007	∅5.6		
		1,2,4,5-Tetrachlorobenzene	95-94-3	∅0.017	∅14		
		Tetrachlorobenzene					
		Tetrachloroethane	127-18-4	∅0.007	∅6.0		
	1,2,4-Trichlorobenzene	120-82-1	∅0.023	∅19			
K031	Table CCWE in 66268.41	Arsenic	7440-38-2	0.79	NA		
K032		Hexachloropentadiene	77-47-4	*0.057	∅2.4		
		Chlordane	57-74-9	*0.0033	∅0.26		
		Heptachlor	76-44-8	*0.012	∅0.066		
		Heptachlor epoxide	1024-57-3	*0.016	∅0.066		

Table CCV - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
K033		Hexachlorocyclopentadiene	77-47-4	*0.057	22.4
K034		Hexachlorocyclopentadiene	77-47-4	*0.057	22.4
K035		Acenaphthene	83-32-9	NA	23.4
		Anthracene	120-12-7	NA	23.4
		Benz(a)anthracene	56-55-3	*0.059	23.4
		Benzo(a)pyrene	50-32-8	NA	23.4
		Chrysene	218-01-9	*0.059	23.4
		Dibenz(a,h)anthracene	53-70-3	NA	23.4
		Fluoranthene	206-44-0	*0.068	23.4
		Fluorene	86-73-7	NA	23.4
		Indeno(1,2,3-cd)pyrene	193-39-5	NA	23.4
		Cresols (m- and p-isomers)		*0.77	NA
		Naphthalene	91-20-3	*0.059	23.4
		o-cresol	95-48-7	*0.11	NA
		Phenanthrene	85-01-8	*0.059	23.4
		Phenol	108-95-2	0.039	NA
		Pyrene	129-00-0	*0.067	28.2
K036		Disulfoton	298-04-4	*0.025	20.1
K037		Disulfoton	298-04-4	*0.025	20.1
		Toluene	108-88-3	*0.080	228
K038		Phorate	298-02-2	0.025	20.1
K040		Phorate	298-02-2	0.025	20.1
K041		Toxaphene	8001-35-1	*0.0095	22.6
K042		1,2,4,5-Tetrachlorobenzene	95-94-3	*0.055	24.4
		o-Dichlorobenzene	95-50-1	*0.088	24.4
		p-Dichlorobenzene	106-46-7	*0.090	24.4
		Pentachlorobenzene	608-93-5	*0.055	24.4
		1,2,4-Trichlorobenzene	120-82-1	*0.055	24.4
K043		2,4-Dichlorophenol	120-83-2	20.049	20.38
		2,6-Dichlorophenol	87-65-0	20.013	20.34
		2,4,5-Trichlorophenol	95-95-4	20.016	28.2
		2,4,6-Trichlorophenol	88-06-2	20.039	27.6
		Tetrachlorophenols (Total)		20.018	20.68
		Pentachlorophenol	87-86-5	20.22	21.9
		Tetrachloroethene	79-01-6	20.006	21.7
		Hexachlorodibenzo-p-dioxins		20.001	20.001
		Hexachlorodibenzofurans		20.001	20.001
		Pentachlorodibenzo-p-dioxins		20.001	20.001
		Pentachlorodibenzofurans		20.001	20.001
		Tetrachlorodibenzo-p-dioxins		20.001	20.001
		Tetrachlorodibenzofurans		20.001	20.001

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
K046	Table CCWE in 66268.41	Lead	7439-92-1	0.037	NA
K048	Table CCWE in 66268.41	Benzene	71-43-2	∞0.011	∞14
		Benzo(a)pyrene	50-32-8	∞0.047	∞12
		Bis(2-ethylhexyl)phthalate	117-81-7	∞0.043	∞7.3
		Chrysene	218-01-9	∞0.043	∞15
		Di-n-butyl phthalate	84-74-2	∞0.06	∞3.6
		Ethylbenzene	100-41-4	∞0.011	∞14
		Fluorene	86-73-7	∞0.05	NA
		Naphthalene	91-20-3	∞0.033	∞42
		Phenanthrene	85-01-8	∞0.039	∞34
		Phenol	108-95-2	∞0.047	∞3.6
		Pyrene	129-00-0	∞0.045	∞36
		Toluene	108-88-3	∞0.011	∞14
		Xylene(s)		∞0.011	∞22
		Cyanides (Total)	57-12-5	∞0.028	∞1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K049	Table CCWE in 66268.41	Anthracene	120-12-7	∞0.039	∞28
		Benzene	71-43-2	∞0.011	∞14
		Benzo(a)pyrene	50-32-8	∞0.047	∞12
		Bis(2-ethylhexyl)phthalate	117-81-7	∞0.043	∞7.3
		Carbon disulfide	75-15-0	∞0.011	NA
		Chrysene	2218-01-9	∞0.043	∞15
		2,4-Dimethylphenol	105-67-9	∞0.033	NA
		Ethylbenzene	100-41-4	∞0.011	∞14
		Naphthalene	91-20-3	∞0.033	∞42
		Phenanthrene	85-01-8	∞0.039	∞34
		Phenol	108-95-2	∞0.047	∞3.6
		Pyrene	129-00-0	∞0.045	∞36
		Toluene	108-88-3	∞0.011	∞14
		Xylene(s)		∞0.011	∞22
		Cyanides (Total)	57-12-5	∞0.028	∞1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K050	Table CCWE in 66268.41	Benzo(a)pyrene	50-32-8	∞0.047	∞12
		Phenol	108-95-2	∞0.047	∞3.6
		Cyanides (Total)	57-12-5	∞0.028	∞1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K051	Table CCWE in 66268.41	Acenaphthene	208-96-8	∞0.05	NA
		Anthracene	120-12-7	∞0.039	∞28
		Benzene	71-43-2	∞0.011	∞14
		Benzo(a)anthracene	50-32-8	∞0.043	∞20
		Benzo(a)pyrene	117-81-7	∞0.047	∞12
		Bis(2-ethylhexyl)phthalate	75-15-0	∞0.043	∞7.3
		Chrysene	2218-01-9	∞0.043	∞15
		Di-n-butyl phthalate	105-67-9	∞0.06	∞3.6
		Ethylbenzene	100-41-4	∞0.011	∞14
		Fluorene	86-73-7	∞0.05	NA
		Naphthalene	91-20-3	∞0.033	∞42
		Phenanthrene	85-01-8	∞0.039	∞34
		Phenol	108-95-2	∞0.047	∞3.6
		Pyrene	129-00-0	∞0.045	∞36
		Toluene	108-88-3	∞0.011	∞14
		Xylene(s)		∞0.011	∞22
		Cyanides (Total)	57-12-5	∞0.028	∞1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
K052	Table CCWE in 66268.41	Benzene	71-43-2	@0.011	@14
		Benzo(a)pyrene	50-32-8	@0.047	@12
		o-Cresol	95-48-7	@0.011	@6.2
		p-Cresol	106-44-5	@0.011	@6.2
		2,4-Dimethylphenol	105-67-9	@0.033	NA
		Ethylbenzene	100-41-4	@0.011	@14
		Naphthalene	91-20-3	@0.033	@42
		Phenanthrene	85-01-8	@0.039	@34
		Phenol	108-95-2	@0.047	@3.6
		Toluene	108-88-3	@0.011	@14
		Xylenes		@0.011	@22
		Cyanides (Total)	57-12-5	@0.028	@1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K060		Benzene	71-43-2	*@0.17	@0.071
		Benzo(a)pyrene	50-32-8	*@0.035	@3.6
		Naphthalene	91-20-3	*@0.028	@3.4
		Phenol	108-95-2	*@0.042	@3.4
		Cyanides (Total)	57-12-5	1.9	1.2
K061	Table CCWE in 66268.41 and Table 2 in 66268.42	Cadmium	7440-43-9	1.61	NA
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.51	NA
		Nickel	7440-02-0	0.44	NA
K062	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
K069	Table CCWE in 66268.41 and Table 2 in 66268.42	Cadmium	7440-43-9	1.6	NA
		Lead	7439-92-1	0.51	NA
K071	Table CCWE in 66268.41	Mercury	7439-97-6	0.030	NA
K073		Carbon tetrachloride	56-23-5	*0.057	@6.2
		Chloroform	67-66-3	*0.046	@6.2
		Hexachloroethane	67-72-1	*0.055	@30
		Tetrachloroethene	127-18-4	*0.056	@6.2
		1,1,1-Trichloroethane	71-55-6	*0.054	@6.2
K083	Table CCWE in 66268.41	Benzene	71-43-2	*0.14	@6.6
		Aniline	62-53-3	*0.81	@14
		Diphenylamine	22-39-4	*0.52	NA
		Diphenylnitrosamine	86-30-6	*0.40	NA
		Sum of Diphenylamine and Diphenylnitrosamine		NA	@14
		Nitrobenzene	98-95-3	*0.068	@14
		Phenol	108-95-2	0.039	@5.6
		Cyclohexanone	108-94-1	0.36	@30
		Nickel	7440-02-0	0.47	NA
K084		Arsenic	7440-38-2	0.79	NA

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)		
K085		Benzene	71-43-2	0.14	24.4		
		Chlorobenzene	108-90-7	*0.057	24.4		
		o-Dichlorobenzene	95-50-1	*0.088	24.4		
		m-Dichlorobenzene	541-73-1	*0.036	24.4		
		p-Dichlorobenzene	106-46-7	*0.090	24.4		
		1,2,4-Trichlorobenzene	120-82-1	*0.055	24.4		
		1,2,4,5-Tetrachlorobenzene	95-94-3	*0.055	24.4		
		Pentachlorobenzene	608-93-5	0.055	24.4		
		Hexachlorobenzene	118-74-1	*0.055	24.4		
		Aroclor 1016	12674-1, 2	*0.013	20.92		
		Aroclor 1221	11104-28-2	*0.014	20.92		
		Aroclor 1232	11141-16-5	*0.013	20.92		
		Aroclor 1242	53469-21-9	*0.017	20.92		
		Aroclor 1248	12672-29-6	*0.013	20.92		
		Aroclor 1254	11097-69-1	*0.014	21.8		
		Aroclor 1260	11096-82-5	*0.014	21.8		
		K086	Table CCWE in 66268.41	Acetone	67-64-1	0.28	2160
				Acetophenone	96-86-2	0.010	29.7
				Bis(2-ethylhexyl)phthalate	117-81-7	*0.28	28
				n-Butyl alcohol	71-36-3	5.6	22.6
Butylbenzylphthalate	85-68-7			*0.017	27.9		
cyclohexanone	108-94-1			0.36	NA		
1,2-Dichlorobenzene	95-50-1			0.088	26.2		
Diethyl phthalate	84-66-2			*0.20	28		
Dimethyl phthalate	131-11-3			*0.047	28		
Di-n-butyl phthalate	84-74-2			*0.057	28		
Di-n-octyl phthalate	117-84-0			*0.017	28		
Ethyl acetate	141-78-6			*0.34	233		
Ethylbenzene	100-41-4			*0.057	26.0		
Methanol	67-56-1			*5.6	NA		
Methyl isobutyl ketone	108-10-1			0.14	233		
Methyl ethyl ketone	78-93-3			0.28	236		
Methylene chloride	75-09-2			*0.089	233		
Naphthalene	91-20-3			*0.059	23.1		
Nitrobenzene	98-95-3			*0.068	214		
Toluene	108-88-3			*0.080	28		
1,1,1-Trichloroethane	71-55-6			*0.054	25.6		
Trichloroethylene	79-01-6			*0.054	25.6		
Xylenes (Total)				*0.32	28		
Cyanides (Total)	57-12-5			1.9	1.5		
Chromium (Total)	7440-47-32			0.32	NA		
Lead	7439-92-1			0.037	NA		
K087	Table CCWE in 66268.41			Acenaphthalene	208-96-8	20.028	3.4
				Benzene	71-43-2	20.014	20.071
				Chrysene	218-01-9	20.028	23.4
				Fluoranthene	206-44-0	20.028	23.4
		Indeno(1,2,3-cd)pyrene	193-39-5	20.028	23.4		
		Naphthalene	91-20-3	20.028	23.4		
		Phenanthrene	85-01-8	20.028	23.4		
		Toluene	108-88-3	20.008	20.65		

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Xylenes		∅0.014	∅0.07
K093		Lead	7439-92-1	0.037	NA
		Phthalic anhydride (measured as Phthalic acid)	85-44-9	∅0.54	∅28
K094		Phthalic anhydride (measured as Phthalic acid)	85-44-9	∅0.54	∅28
K095		1,1,1,2-Tetrachloroethane	630-20-6	0.057	∅5.6
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	∅5.6
		Tetrachloroethene	127-18-4	0.056	∅6.0
		1,1,2-Trichloroethane	79-00-5	0.054	∅6.0
		Trichloroethylene	79-01-6	0.054	∅5.6
		Hexachloroethane	67-72-1	0.055	∅28
		Pentachloroethane	76-01-7	0.055	∅5.6
K096		1,1,1,2-Tetrachloroethane	630-20-6	0.057	∅5.6
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	∅5.6
		Tetrachloroethene	127-18-4	0.056	∅6.0
		1,1,2-Trichloroethane	79-00-5	0.054	∅6.0
		Trichloroethene	79-01-6	0.054	∅5.6
		1,3-Dichlorobenzene	541-73-1	0.036	∅5.6
		Pentachloroethane	76-01-7	0.055	∅5.6
		1,2,4-Trichlorobenzene	120-82-1	0.055	∅19
K097		Hexachlorocyclopentadiene	77-47-4	*0.057	2.4
		Chlordane	57-74-9	*0.0033	∅0.26
		Heptachlor	76-44-8	*0.0012	∅0.066
		Heptachlor epoxide	1024-57-3	*0.016	∅0.066
K098		Toxaphene	8001-35-1	*0.0095	∅2.6
K099		2,4-Dichlorophenoxyacetic acid	94-75-7	∅1	∅1
		Hexachlorodibenzo-p-dioxins		∅0.001	∅0.001

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/L)	Non-wastewaters concentration (mg/kg)
		Hexachlorodibenzofurans		≈0.001	≈0.001
		Pentachlorodibenzop-dioxins		≈0.001	≈0.001
		Pentachlorodibenzofurans		≈0.001	≈0.001
		Tetrachlorodibenzop-dioxins		≈0.001	≈0.001
		Tetrachlorodibenzofurans		≈0.001	≈0.001
K100	Table CCWE in 66268.41	Cadmium	7440-43-9	1.6	NA
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.51	NA
K101		o-Nitroaniline		≈0.27	≈14
		Arsenic	7440-38-2	0.79	NA
		Cadmium	7440-43-9	0.24	NA
		Lead	7439-92-1	0.17	NA
		Mercury	7439-97-6	0.082	NA
K102	Table CCWE in 66268.41	o-Nitrophenol		≈0.028	≈13
		Arsenic	7440-38-2	0.79	NA
		Cadmium	7440-43-9	0.24	NA
		Lead	7439-92-1	0.17	NA
		Mercury	7439-97-6	0.082	NA
K103		Aniline	62-53-3	≈4.5	5.6
		Benzene	71-43-2	≈0.15	≈6.0
		2,4-Dinitrophenol	51-28-5	≈0.61	≈5.6
		Nitrobenzene	98-95-3	≈0.073	≈5.6
		Phenol	108-95-2	≈1.4	≈5.6
K104		Aniline	62-53-3	≈4.5	≈5.6
		Benzene	71-43-2	≈0.15	≈6
		2,4-Dinitrophenol	51-28-5	≈0.61	≈5.6
		Nitrobenzene	98-95-3	≈0.073	≈5.6
		Phenol	108-95-2	≈1.4	≈5.6
		Cyanides (Total)	57-12-5	2.7	≈1.8
K105		Benzene	71-43-2	0.14	≈4.4

Table CCW - Constituent Concentrations in Wastes (cont'd)

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Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Chlorobenzene	108-90-7	0.057	24.4
		o-Dichlorobenzene	95-50-1	0.088	24.4
		p-Dichlorobenzene	106-46-7	0.090	24.4
		2,4,5-Trichlorophenol	95-95-4	0.18	24.4
		2,4,6-Trichlorophenol	88-06-2	0.035	24.4
		2-Chlorophenol	95-57-8	0.044	24.4
		Phenol	108-95-2	0.039	24.4
K106	Table CCWE in 66268.41 and Table 2 in 66268.42	Mercury	7439-97-6	0.030	NA
K115	Table CCWE in 66268.41	Nickel	7440-02-0	0.47	NA

@ Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 40 CFR Part 264 Subpart O or Part 265 Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in 40 CFR Section 268.7.

\* Based on analysis of composite samples.

# As analyzed using SW-846 Method 9010; sample size: 0.5-10; distillation time: one hour to one hour and fifteen minutes.

NA = Not Applicable.

Table CCM - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/l)	Non-waste-waters concentration (mg/kg)
P004	Aldrin		Aldrin	309-00-2	*0.21	0.066
P010	Arsenic acid	Table CCWE in 66268.41	Arsenic	7440-38-2	0.79	NA
P011	Arsenic pentoxide	Table CCWE in 66268.41	Arsenic	7440-38-2	0.79	NA
P012	Arsenic trioxide	Table CCWE in 66268.41	Arsenic	7440-38-2	0.79	NA
P013	Barium cyanide	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
P020	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)		2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	≈2.5
P021	Calcium cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
P022	Carbon disulfide	Table 2 in 66268.42	Carbon disulfide	75-15-0	0.014	NA
P024	p-Chloroaniline		p-Chloroaniline	106-47-8	0.46	≈16
P029	Copper cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
P030	Cyanides (soluble salts and complexes)		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
P036	Dichlorophenylarsine	Table CCWE in 66268.41	Arsenic	7440-38-2	0.79	NA
P037	Dieldrin		Dieldrin	60-57-1	*0.017	≈0.13
P038	Diethylarsine	Table CCWE in 66268.41	Arsenic	7740-38-2	0.79	NA
P039	Disulfoton		Disulfoton	298-04-4	0.017	≈0.1
P047	4,6-Dinitro-o-cresol		4,6-Dinitro-o-cresol	534-52-1	*0.28	≈160
P048	2,4-Dinitrophenol		2,4-Dinitrophenol	51-28-5	*0.12	≈160
P050	Endosulfan		Endosulfan I	939-98-8	*0.023	≈0.066
			Endosulfan II	33213-6-5	*0.029	≈0.13
			Endosulfan sulfate	1031-07-8	*0.029	≈0.13
P051	Endrin		Endrin	72-20-8	*0.0028	≈0.13
			Endrin aldehyde	7421-93-4	*0.025	≈0.13
P056	Fluoride	Table 2 in 66268.42	Fluoride	16964-48-8	35	NA
P059	Heptachlor		Heptachlor	76-44-8	*0.0012	≈0.066

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/L)	Non-waste-waters concentration (mg/kg)
			Heptachlor epoxide	1024-57-3	*0.016	20.066
P060	Isodrin		Isodrin	465-73-6	*0.021	20.066
P063	Hydrogen cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
P065	Mercury fulminate	Table CCWE in 66268.41 and Table 2 in 66268.42	Mercury	7439-97-6	0.030	NA
P071	Methyl parathion		Methyl parathion	298-00-0	0.025	20.1
P073	Nickel carbonyl	Table CCWE in 66268.41	Nickel	7440-02-0	0.44	NA
P074	Nickel cyanide	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
			Nickel	7440-02-0	0.44	NA
P077	p-Nitroaniline		p-Nitroaniline	100-01-6	*0.028	28
P082	N-Nitrosodimethylamine	Table 2 in 66268.42	N-Nitrosodimethylamine	62-75-9	*0.40	NA
P089	Parathion		Parathion	56-38-2	0.025	20.1
P092	Phenylmercury acetate	Table CCWE in 66268.41 and Table 2 in 66268.42	Mercury	7439-97-6	0.030	NA
P094	Phorate		Phorate	298-02-2	0.025	20.1
P097	Famphur		Famphur	52-85-7	0.025	20.1
P098	Potassium cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
P099	Potassium silver cyanide	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
			Silver	7440-22-4	0.29	NA
P101	Ethyl cyanide (Propanenitrile)		Ethyl cyanide (Propanenitrile)	107-12-0	*0.24	2360
P103	Selenourea	Table CCWE in 66268.41	Selenium	7782-49-2	*1.0	NA
P104	Silver cyanide	Table CCWE in 66268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
			Silver	7440-22-4	0.29	NA
P106	Sodium cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/l)	Non-waste-waters concentration (mg/kg)
P110	Tetraethyl lead	Table CCWE in 66268.41 and Table 2 in 66268.42	Lead	7439-92-1	0.040	NA
P113	Thallic oxide	Table 2 in 66268.42	Thallium	7440-28-0	*0.14	NA
P114	Thallium selenite	Table CCWE in 66268.41	Selenium	7782-49-2	1.0	NA
P115	Thallium(I)sulfate	Table 2 in 66268.42	Thallium	7440-28-0	*0.14	NA
P119	Ammonia vanadate	Table 2 in 66268.42	Vanadium	7440-62-2	*28	NA
P120	Vanadium pentoxide	Table 2 in 66268.42	Vanadium	7440-62-2	*28	NA
P121	Zinc cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
P123	Toxaphene		Toxaphene	8001-35-1	*0.0095	@1.3
U002	Acetone		Acetone	67-64-1	0.28	@160
U003	Acetonitrile	Table 2 in 66268.42	Acetonitrile	75-05-8	017	NA
U004	Acetophenone		Acetophenone	98-86-2	@0.010	@9.7
U005	2-Acetylaminofluorene		2-Acetylaminofluorene	53-96-3	*0.059	@140
U009	Acrylonitrile		Acrylonitrile	107-13-1	*0.24	@84
U012	Aniline		Aniline	62-53-3	0.81	@14
U018	Benz(a)anthracene		Benz(a)anthracene	56-55-3	*0.059	@8.2
U019	Benzene		Benzene	71-43-2	*0.14	@36
U022	Benzo(a)pyrene		Benzo(a)pyrene	50-32-8	*0.061	@8.2
U024	Bis(2-chloroethoxy)methane		Bis(2-chloroethoxy)methane	111-91-1	0.036	@7.2
U025	Bis(2-chloroethyl)ether		Bis(2-chloroethyl)ether	111-44-4	0.033	@7.2
U027	Bis(2-chloroisopropyl) ether		Bis(2-chloroisopropyl) ether	39638-32-9	*0.055	@7.2
U028	Bis(2-ethylhexyl)phthalate		Bis(2-ethylhexyl)phthalate	117-81-7	@0.54	@28
U029	Bromomethane (Methyl bromide)		Bromomethane (Methyl bromide)	74-83-9	*0.11	@15
U030	4-Bromophenyl phenyl ether		4-Bromophenyl phenyl ether	101-55-3	*0.055	@15

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/L)	Non-waste-waters concentration (mg/kg)
U031	n-Butyl alcohol		n-Butyl alcohol	71-36-3	5.6	@2.6
U032	Calcium chromate	Table CCWE in 66268.41	Chromium (Total)	7440-47-32	0.32	NA
U036	Chlordane (alpha and gamma)		Chlordane (alpha and gamma)	57-74-9	*0.0033	@0.13
U037	Chlorobenzene		Chlorobenzene	108-90-7	*0.057	@5.7
U038	Chlorobenzilate	Table 2 in 66268.42	Chlorobenzilate	510-15-6	*0.10	NA
U039	p-Chloro-m-cresol		p-Chloro-m-cresol	59-50-7	*0.018	@14
U042	2-Chloroethyl vinyl	Table 2 in 66268.42	2-Chloroethyl vinyl	110-75-8	0.057	NA
U043	Vinyl chloride		Vinyl chloride	75-01-4	*0.27	@33
U044	Chloroform		Chloroform	67-66-3	*0.046	@5.6
U045	Chloromethane (Methyl chloride)		Chloromethane (Methyl chloride)	74-87-3	*0.19	@33
U047	2-Chloronaphthalene		2-Chloronaphthalene	91-58-7	*0.055	@5.6
U048	2-Chlorophenol		2-Chlorophenol	95-57-8	*0.044	@5.7
U050	Chrysene		Chrysene	218-01-9	*0.059	@8.2
U051	Creosote	Table CCWE in 66268.41	Naphthalene	91-20-3	@0.031	@1.5
			Pentachlorophenol	87-86-5	@0.18	@7.4
			Phenanthrene	85-01-8	@0.031	@1.5
			Pyrene	129-00-0	@0.028	@28
			Toluene	108-88-3	@0.028	@33
			Xylenes (Total)	7439-92-1	@0.032	NA
			Lead		@0.037	
U052	Cresols (Cresylic acid)		o-Cresol	95-48-7	*0.11	@5.6
			Cresols (m- and p-isomers)		*0.77	@3.2
U057	Cyclohexanone	Table 2 in 66268.42	Cyclohexanone	108-94-1	0.36	NA
U060	DDD		o,p'-DDD	53-19-0	0.023	@0.087
			p,p'-DDD	72-54-8	0.023	@0.087

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/l)	Non-waste-waters concentration (mg/kg)
U061	DDT		o,p'-DDT p,p'-DDT o,p'-DDD p,p'-DDD o,p'-DDE p,p'-DDE	789-02-6 50-29-3 53-19-0 72-54-8 3424-82-6 72-55-9	*0.0039 *0.0039 *0.023 *0.023 *0.031 *0.031	∞0.087 ∞0.087 ∞0.087 ∞0.087 ∞0.087 ∞0.087
U063	Dibenzo(a,h)anthracene		Dibenzo(a,h)anthracene	53-70-3	*0.055	∞8.2
U066	1,2-Dibromo-3-chloropropane		1,2-Dibromo-3-chloropropane	96-12-8	*0.11	∞15
U067	1,2-Dibromoethane (Ethyl-enedibromide)		1,2-Dibromoethane (Ethylene dibromide)	106-93-4	*0.028	15
U068	Dibromonethane		Dibromonethane	74-95-3	*0.11	15
U069	Di-n-butyl phthalate		Di-n-butyl phthalate	84-74-2	∞0.54	∞28
U070	o-Dichlorobenzene		o-Dichlorobenzene	95-50-1	*0.088	∞6.2
U071	m-Dichlorobenzene		m-Dichlorobenzene	541-73-1	0.036	6.2
U072	p-Dichlorobenzene		p-Dichlorobenzene	104-46-7	*0.090	∞6.2
U075	Dichlorodifluoromethane		Dichlorodifluoromethane	75-71-8	*0.23	∞7.2
U076	1,1-Dichloroethane		1,1-Dichloroethane	75-34-3	*0.059	7.2
U077	1,2-Dichloroethane		1,2-Dichloroethane	107-06-2	*0.21	∞7.2
U078	1,1-Dichloroethylene		1,1-Dichloroethylene	75-35-4	*0.025	∞33
U079	1,2-Dichloroethylene		trans-1,2-Dichloroethylene	156-60-5	*0.054	133
U080	Methylene chloride		Methylene chloride	75-09-2	20.089	133
U081	2,4-Dichlorophenol		2,4-Dichlorophenol	120-83-2	20.044	114
U082	2,6-Dichlorophenol		2,6-Dichlorophenol	87-65-0	20.044	114
U083	1,2-Dichloropropane		1,2-Dichloropropane	78-87-5	20.85	118
U084	1,3-Dichloropropene		cis-1,3-Dichloropropylene trans-1,3-Dichloropropylene	10061-01-5 10061-02-6	20.036 20.036	118 118
U088	Diethyl phthalate		Diethyl phthalate	84-66-2	10.54	128
U093	p-Dimethylaminoazobenzene	Table 2 in 66268.42	p-Dimethylaminoazobenzene	60-11-7	20.13	NA
U101	2,4-Dimethylphenol		2,4-Dimethylphenol	105-67-9	20.036	114
U102	Dimethyl phthalate		Dimethyl phthalate	131-11-3	10.54	128
U105	2,4-Dinitrotoluene		2,4-Dinitrotoluene	121-14-2	20.32	1140
U106	2,6-Dinitrotoluene		2,6-Dinitrotoluene	606-20-2	20.55	128
U107	Di-n-octyl phthalate		Di-n-octyl phthalate	117-84-0	10.54	128

Table CCM - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/l)	Non-waste-waters concentration (mg/kg)
U108	1,4-Dioxane		1,4-Dioxane	123-91-1	20.12	1170
U111	Di-n-propylnitrosoamine		Di-n-propylnitrosoamine	621-64-7	20.40	114
U112	Ethyl acetate		Ethyl acetate	141-78-6	20.34	133
U117	Ethyl ether		Ethyl ether	60-29-7	20.12	1160
U118	Ethyl methacrylate		Ethyl methacrylate	97-63-2	20.14	1160
U120	Fluoranthene		Fluoranthene	206-44-0	20.068	18.2
U121	Trichloromonofluoromethane		Trichloromonofluoromethane	75-69-4	20.020	133
U127	Hexachlorobenzene		Hexachlorobenzene	118-74-1	20.055	137
U128	Hexachlorobutadiene		Hexachlorobutadiene	87-68-3	20.055	128
U129	Lindane		alpha-BHC beta-BHC Delta-BHC gamma-BHC (Lindane)	319-84-6 319-85-7 319-86-8 58-89-9	20.00014 0.00014 0.023 0.0017	10.066 10.066 10.066 10.066
U130	Hexachlorocyclopentadiene		Hexachlorocyclopentadiene	77-47-7	20.057	13.6
U131	Hexachloroethane		Hexachloroethane	67-72-1	20.055	128
U134	Hydrogen fluoride	Table 2 in 66268.42	Fluoride	16964-48-8	35	NA
U136	Cacodylic acid	Table CCWE in 66268.41	Arsenic	7440-38-2	0.79	NA
U137	Indeno(1,2,3-c,d)pyrene		Indeno(1,2,3-c,d)pyrene	193-39-5	20.0055	18.2
U138	Iodomethane		Iodomethane	74-88-4	20.19	165
U140	Isobutyl alcohol		Isobutyl alcohol	78-83-1	5.6	1170
U141	Isosafrole		Isosafrole	120-58-1	0.081	12.6
U142	Kepone		Kepone	143-50-8	0.0011	10.13
U144	Lead acetate	Table CCWE in 66268.41	Lead	7439-92-1	0.040	NA
U145	Lead phosphate	Table CCWE in 66268.41	Lead	7439-92-1	0.040	NA
U146	Lead subacetate	Table CCWE in 66268.41	Lead	7439-92-1	0.040	NA
U151	Mercury	Table CCWE in 66268.41 and Table 2 in 66268.42	Mercury	7439-97-6	0.030	NA
U152	Methacrylonitrile		Methacrylonitrile	126-98-7	20.24	184
U155	Methapyrilene		Methapyrilene	91-80-5	0.081	11.5

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/l)	Non-waste-waters concentration (mg/kg)
U157	3-Methylchloanthrene		3-Methylchloanthrene	56-49-5	20.0055	115
U158	4,4'-Methylenebis(2-chloroaniline)		4,4'-Methylenebis(2-chloroaniline)	101-14-4	20.50	135
U159	Methyl ethyl ketone		Methyl ethyl ketone	78-93-3	0.28	136
U161	Methyl isobutyl ketone		Methyl isobutyl ketone	108-10-1	0.14	133
U162	Methyl methacrylate		Methyl methacrylate	80-62-6	0.14	1160
U165	Naphthalene		Naphthalene	91-20-3	20.059	13.1
U168	2-Naphthylamine	Table 2 in 66268.42	2-Naphthylamine	91-59-8	20.52	NA
U169	Nitrobenzene		Nitrobenzene	98-95-3	20.068	114
U170	4-Nitrophenol		4-Nitrophenol	100-02-7	20.12	129
U172	n-Nitrosodi-n-butylamine		n-Nitrosodi-n-butylamine	924-16-3	20.40	117
U174	N-Nitrosodiethylamine		n-Nitrosodiethylamine	55-18-5	20.40	128
U179	N-Nitrosopiperidine		n-Nitrosopiperidine	100-75-4	20.013	135
U180	N-Nitrosopyrrolidine		n-Nitrosopyrrolidine	930-55-2	20.013	135
U181	5-Nitro-o-toluidine		5-Nitro-o-toluidine	99-55-8	20.32	128
U183	Pentachlorobenzene		Pentachlorobenzene	608-93-5	20.055	137
U185	Pentachloronitrobenzene		Pentachloronitrobenzene	82-68-8	20.055	14.8
U187	Phenacetin		Phenacetin	62-44-2	0.081	116
U188	Phenol		Phenol	108-95-2	0.039	16.2
U190	Phthalic anhydride (measured as Phthalic acid)		Phthalic anhydride (measured as Phthalic acid)	85-44-9	10.54	128
U192	Pronamide		Pronamide	23950-58-5	0.093	11.5
U196	Pyridine		Pyridine	110-86-1	20.014	116
U203	Safrole		Safrole	94-59-7	0.081	122
U204	Selenium dioxide	Table CCWE in 66268.41	Selenium	7782-49-2	1.0	NA
U205	Selenium Sulfide	Table CCWE in 66268.41	Selenium	7782-49-2	1.0	NA
U207	1,2,4,5-Tetrachlorobenzene		1,2,4,5-Tetrachlorobenzene	95-94-3	20.055	119

Table CCW - Constituent Concentrations in Wastes (cont'd)

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Waste-waters concentration (mg/l)	Non-waste-waters concentration (mg/kg)
U208	1,1,1,2-Tetrachloroethane		1,1,1,2-Tetrachloroethane	630-20-6	0.057	<sup>1</sup> 42
U209	1,1,1,2-Tetrachloroethane		1,1,1,2-Tetrachloroethane	79-34-5	<sup>2</sup> 0.057	<sup>1</sup> 42
U210	Tetrachloroethylene		Tetrachloroethylene	127-18-4	<sup>2</sup> 0.056	15.6
U211	Carbon Tetrachloride		Carbon Tetrachloride	56-23-5	<sup>2</sup> 0.057	15.6
U214	Thallium(I)acetate	Table 2 in 66268.42	Thallium	7440-28-0	<sup>2</sup> 0.14	NA
U215	Thallium(I)carbonate	Table 2 in 66268.42	Thallium	7440-28-0	<sup>2</sup> 0.14	NA
U216	Thallium(I)chloride	Table 2 in 66268.42	Thallium	7440-28-0	<sup>2</sup> 0.14	NA
U217	Thallium(I)nitrate	Table 2 in 66268.42	Thallium	7440-28-0	<sup>2</sup> 0.14	NA
U220	Toluene		Toluene	108-88-3	<sup>2</sup> 0.080	<sup>1</sup> 28
U225	Tribromomethane (Bromoform)		Tribromomethane (Bromoform)	75-25-2	<sup>2</sup> 0.63	<sup>1</sup> 15
U226	1,1,1-Trichloroethane		1,1,1-Trichloroethane	71-55-6	<sup>2</sup> 0.054	15.6
U227	1,1,2-Trichloroethane		1,1,2-Trichloroethane	79-00-5	<sup>2</sup> 0.054	15.6
U228	Trichloroethylene		Trichloroethylene	79-01-6	<sup>2</sup> 0.054	15.6
U235	tris-(2,3-Dibromopropyl)-phosphate		tris-(2,3-Dibromopropyl)-phosphate	126-72-7	0.025	<sup>1</sup> 0.10
U239	Xylenes		Xylenes		<sup>2</sup> 0.32	<sup>1</sup> 28
U240	2,4-Dichlorophenoxy-acetic acid		2,4-Dichlorophenoxy-acetic acid	94-75-7	0.72	<sup>1</sup> 10
U243	Hexachloropropene		Hexachloropropene	1888-71-7	<sup>2</sup> 0.035	28
U247	Methoxychlor		Methoxychlor	72-43-5	<sup>2</sup> 0.25	<sup>1</sup> 0.18

<sup>1</sup>Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 40 CFR Part 264 Subpart O or Part 265 Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in Section 66268.7.

<sup>2</sup>Based on analysis of composite samples.

<sup>3</sup>As analyzed using SW-846 Method 9010; sample size: 0.5-10; distillation time: one hour to one hour fifteen minutes.

NA - Not Applicable.

(b) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue shall meet the lowest treatment standard for the constituent of concern.

(c) Notwithstanding the prohibitions specified in subsection (a) of this section, treatment and disposal facilities may demonstrate (and certify pursuant to Section 66268.7(b)(5)) compliance with the treatment standards for organic constituents specified in this section provided the following conditions are satisfied:

(1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of Article 15, Chapter 14, or Article 15, Chapter 15, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(2) The organic constituents have been treated using the methods referenced in subsection (c)(1) of this section; and

(3) The treatment or disposal facility has been unable to detect the organic constituents despite using its best good-faith efforts as defined by applicable Department guidance or standards. Until such guidance or standards are developed, such good-faith efforts may be demonstrated where the treatment or disposal facility has detected the organic constituents at levels within an order of

magnitude of the treatment standard specified in this section.

**NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.**

**Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code and 40 CFR Section 268.43.**

66268.44. Variance From a Treatment Standard.

(a) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may petition the Department for a variance from the treatment standard. The petitioner shall demonstrate that because the physical or chemical properties of the waste differs significantly from wastes analyzed in developing the treatment standard, the waste cannot be treated to specified levels or by the specified methods.

(b) Each petitioner shall demonstrate that the waste has received from the US EPA Administrator a variance from a treatment standard pursuant to 40 CFR Section 268.44 or demonstrate that the waste is not subject to the US EPA land disposal restriction or treatment standard regulations under 40 CFR Part 268.

(c) Each petitioner shall demonstrate that all the following conditions apply to the waste:

(1) The hazardous waste cannot be recycled, reused, or treated to meet the standards adopted by the department pursuant to Section 25179.6 California Health and Safety Code at a commercial offsite hazardous waste facility in the state.

(2) Recycling or treatment alternatives cannot be provided at the

site of generation.

(3) Measures have been, or will be, taken to reduce the generation of the hazardous waste.

(4) Land disposal of the hazardous waste is in compliance with all existing statutes and regulations.

(d) A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment standards shall comply with the waste analysis requirements for restricted wastes found under Section 66268.7.

(e) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this chapter once the effective date for the waste has been reached.

(f) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste generated under conditions specific to only one site cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may apply to the USEPA Administrator, or delegated representative, and the Department, for a site-specific variance from a treatment standard. The applicant for a site-specific variance shall demonstrate that because the physical or chemical properties of the waste differs significantly from the waste analyzed in developing the treatment standard, the

waste cannot be treated to specified levels or by the specified methods.

(9) Each petitioner for a site-specific variance shall demonstrate that the waste has received from the USEPA Administrator or a delegated representative a site-specific variance from a treatment standard pursuant to 40 CFR Section 268.44 or demonstrate that the waste is not subject to the USEPA land disposal restriction or treatment standard regulations under 40 CFR Part 268.

(h) Each petitioner for a site-specific variance shall demonstrate that all the following conditions apply to the waste:

(1) The hazardous waste cannot be recycled, reused, or treated to meet the standards adopted by the department pursuant to Section 25179.6 California Health and Safety Code at a commercial offsite hazardous waste facility in the state.

(2) Recycling or treatment alternatives cannot be provided at the site of generation.

(3) Measures have been, or will be, taken to reduce the generation of the hazardous waste.

(4) Land disposal of the hazardous waste is in compliance with all existing statutes and regulations.

(i) A generator, treatment facility, or disposal facility that is managing a waste covered by a site-specific variance from a treatment standard shall comply with the waste analysis requirements for restricted wastes found under Section 66268.7.

(j) During the application review process, the applicant for a site-specific variance shall comply with all restrictions on land disposal under this chapter once the effective date for the waste has been reached.

(k) After receiving a petition for variance from a treatment standard, the Department may request any additional information or samples which the Department may require to evaluate the petition. Additional copies of the petition may be requested as needed. Within 45 days of the receipt of the petition, the Department shall inform the petitioner, in writing, that the petition is complete and accepted for filing, or that the petition is deficient and what specific information is required.

(l) The Department shall make a decision on a petition for variance from a treatment standard within 120 days of the filing of a completed petition.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code, Section 15376, Government Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.8, Health and Safety Code, Section 15376, Government Code and 40 CFR Section 268.44.

Article 5. Prohibitions on Storage

66268.50. Prohibitions on Storage of Restricted Wastes.

(a) Except as provided in this section, the storage of hazardous wastes restricted from land disposal under Article 3 of this chapter or RCRA Section 3004 (42 U.S.C. Section 6924) is prohibited, unless the following conditions are met:

(1) A generator stores such wastes in tanks or containers on site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in Section 66262.34 of this division. (A generator who is in existence on the effective date of a regulation under this chapter and who must store hazardous wastes for longer than 90 days due to the regulations under this chapter becomes an owner/operator of a storage facility and shall obtain a Hazardous Waste Facility Permit. Such a facility may qualify for interim status upon compliance with the regulations governing interim status under Section 66270.70 of Chapter 20).

(2) An owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks or containers solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and:

(A) Each container is clearly marked to identify its contents and the date each period of accumulation begins;

(B) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank itself is marked, an owner/operator shall comply with the operating record requirements specified in Section 66264.73 or Section 66265.73.

(3) A transporter stores manifested shipments of such wastes at a transfer facility for 144 hours or less.

(b) An owner/operator of a treatment, storage or disposal facility may store such wastes for up to one year unless the Department can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(c) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(d) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension under Section 66268.5, or a nationwide capacity variance under Article 3), the prohibition in paragraph (a) of this section does not apply during the period of such exemption.

(e) The prohibition in subsection (a) of this section does not apply to hazardous wastes that meet the treatment standards specified under Sections 66268.41, 66268.42 and 66268.43 or the treatment standards specified under the variance in Section 66268.44, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in Section 66268.32 or RCRA Section 3004 (42 U.S.C. Section 6924) or where the waste is a non-RCRA hazardous waste.

(f) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm shall be stored at a facility that meets the requirements of 40 CFR Section 761.65 (b) and shall be removed from storage and treated or disposed as required by this part within one year of the date when such wastes are first placed into storage. The provisions of subsection (c) of this section do not apply to such PCB wastes prohibited under Section 66268.32 of this chapter.

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Chapter 18, A5, Page 3

Safety Code.

Reference: Sections 25150, 25159 and 25159.5, Health and Safety  
Code; 40 CFR Section 268.50.

Article 10. Land Disposal Prohibitions--Non-RCRA Wastes

66268.100. Waste Specific Prohibitions.

(a) The following non-RCRA hazardous wastes are subject of prohibition under this section:

(1) Non-RCRA metal-containing aqueous wastes identified in Section 66268.29(a) are prohibited from land disposal.

(2) PCB wastes identified in Section 66268.29(b) are prohibited from land disposal.

(3) Auto shredder waste identified in Section 66268.29(c) is prohibited from land disposal effective on May 8, 1991.

(4) Nonwastewater solvent waste identified in Section 66268.29(d) is prohibited from land disposal.

(5) Hazardous waste foundry sand identified in Section 66268.29(e) is prohibited from land disposal after January 1, 1991.

(6) [Reserved for oily petroleum wastes]

(7) Metal-containing solid waste identified in Section 66268.29(g) is prohibited from land disposal after May 8, 1992.

(8) Non-RCRA metal-containing fly ash, bottom ash, retort ash or baghouse waste from sources other than foundries identified in Section 66268.29(h) is prohibited from land disposal after January 1, 1991.

(9) Non-RCRA metal-containing baghouse waste from foundries identified in Section 66268.29(i) is prohibited from land disposal after January 1, 1991.

(10) Aqueous and liquid organic waste identified in Section 66268.29(j) is prohibited from land disposal after May 8, 1992.

(11) Solid hazardous waste containing organics identified in Section 66268.29(k) is prohibited from land disposal after May 8, 1992.

(12) [Reserved for liquid redox with metals]

(13) [Reserved for asbestos]

(b) The requirements of subsection (a) of this section do not apply if:

(1) The waste meets the treatment standards of Article 11 of this chapter; or

(2) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 66268.5, with respect to those wastes covered by the extension.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25159, 25159.5 and 25179.6, Health and Safety Code.

Article 11. Treatment Standards--Non-RCRA Waste Categories

66268.105. Applicability of Treatment Standards.

(a) A restricted waste identified in Section 66268.106 may be land disposed without further treatment only if an extract of the waste or of the treatment residue of the waste developed using the test method in Appendix II Chapter 11, CCR, does not exceed the value shown in Table I-CCWE of Section 66268.106 for any hazardous constituent listed in Table I-CCWE for that waste.

(b) A restricted waste identified in Section 66268.107 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Section 66268.107 for any hazardous constituent listed for that waste.

(c) PCB wastes are prohibited from land disposal unless the PCB wastes, the residuals from treatment of PCB wastes, and the residual ash from incineration of PCBs are in compliance with Section 66268.110.

Concentrations of polychlorinated biphenyls shall be determined by utilizing Method 8080 as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 3rd edition, U.S.

Environmental Protection Agency, September 1986 or other methods as determined to be equivalent by the Department of Health Services.

(d) A restricted waste identified in Section 66268.29(j) may be land disposed only if the waste meets the requirements of Section 66268.112.

(e) A restricted waste identified in Section 66268.29(k) may be land disposed only if the waste meets the requirements of Section 66268.113.

Note: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5, 25179.3 and 25179.6, Health and Safety Code.

66268.106. Treatment Standards Expressed as Concentrations in Waste Extract.

(a) Table I-CCWE (provided in this Section, commencing with Table 1-A CCWE) identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Appendix II, Chapter 11, CCR, for the allowable land disposal of such waste.

(1) Table I-A CCWE identifies the non-RCRA auto shredder wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of the waste or treatment residual for the allowable land disposal of such waste or residual.

TABLE I-A CCWE

Auto Shredder Wastes	Concentration (mg/l)
Cadmium	1.0
Chromium (VI) Compounds	5.0
Chromium (total)	560
Copper	25
Lead	50
Mercury	0.2
Nickel	20
Zinc	250

(2) Table I-B CCWE identifies the concentrations of hazardous constituents of hazardous waste foundry sand which may not be exceeded by the waste or treatment residual for the allowable land disposal of such waste or residual.

(A) Hazardous waste foundry sand containing hazardous constituents other than those listed in Table I-B CCWE or exhibiting other hazardous characteristics shall be subject to the appropriate generic treatment standard(s) for those hazardous constituents or hazardous characteristics.

TABLE I-B CCWE

<u>Hazardous Waste Foundry Sand</u>	<u>Concentration (mg/l)</u>
Cadmium	1.0
Copper	200.0
Lead	30.0
Nickel	20.0
Zinc	250.0

(3) Table I-C CCWE identifies the non-RCRA metal-containing solid wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of the waste or treatment residual for the allowable land disposal of such waste or residual. The specified concentrations shall not be exceeded by an average value of WET results for four representative samples, or a sampling method approved by the Department to be as stringent; this is in addition to the waste analysis requirements in Section 66268.7.

Table I-C CCWE

Metal-containing Solid Wastes	Concentration (mg/l)
Antimony	15.0
Arsenic	15.0
Barium	100.0
Beryllium	0.75
Cadmium	1.0
Chromium (VI)	5.2
Chromium (III)	560.0
Cobalt	80.0
Copper	230.0
Lead	67.0
Mercury	0.2
Molybdenum	350.0
Nickel	20.0
Selenium	1.0
Silver	5.0
Thallium	7.0
Vanadium	24.0
Zinc	250.0

(A) Spent catalyst generated from the fluid catalytic cracking unit in petroleum refineries may be recycled in accordance with Section 66261.6.

(4) Table I-D CCWE identifies the non-RCRA metal-containing fly ash, bottom ash, retort ash and baghouse waste from sources other than foundries, and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of the waste or treatment residual for the allowable land disposal of such waste or residual. The specified concentrations shall not be exceeded by an average value of WET results for four representative samples, or a single representative sample. Non-RCRA fly ash, bottom ash, retort ash and baghouse waste from sources other than foundries containing hazardous constituents other than those listed in Table I-D CCWE shall be subject to the appropriate generic treatment standard(s) for those hazardous constituents or hazardous characteristics.

Table I-D CCWE

Non-RCRA Waste Category  
Fly ash, Bottom Ash, Retort  
Ash, and Baghouse waste from  
Sources other than Foundries

<u>Concentration</u>	<u>(mg/l)</u>
Arsenic	15
Cadmium	1.0
Copper	40
Lead	20
Nickel	20

Selenium	1.0
Vanadium	24
Zinc	250

(5) Table I-E CCWE identifies the non-RCRA metal-containing baghouse waste from foundries, and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of the waste or treatment residual for the allowable land disposal of such waste or residual. The specified concentrations shall not be exceeded by an average value of WET results for four representative samples, or a representative sample. Non-RCRA baghousewaste from foundries containing hazardous constituents other than those listed in Table I-E CCWE shall be subject to the appropriate generic treatment standard(s) for those hazardous constituents or hazardous characteristics.

(6) [Reserved for liquid redox with metals]

(b) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue shall meet the lowest treatment standard for the constituent of concern.

Note: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25159, 25159.5 and 25179.6, Health and Safety Code.

66268.107. Treatment Standards Expressed as Waste Concentrations.

(a) Table II-CCW identifies the non-RCRA metal-containing aqueous wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the waste or treatment residual for the allowable land disposal of such waste or residual.

TABLE II--CONSTITUENT CONCENTRATIONS IN WASTES

Non-RCRA Waste Category	Concentration
	In liquid <u>Residual (mg/l)</u>
<u>Metal-containing aqueous waste</u>	
Antimony.....	15.0
Arsenic.....	5.0
Barium.....	100.0
Beryllium.....	0.75
Cadmium.....	1.0
Chromium (VI).....	5.0
Chromium (III).....	560.0
Cobalt.....	80.0
Copper.....	25.0
Lead .....	5.0
Mercury.....	0.2
Molybdenum.....	350.0
Nickel.....	20.0
Selenium.....	1.0
Silver.....	5.0
Thallium.....	7.0

Vanadium.....	24.0
Zinc .....	250.0

(A) The concentrations listed in subsection (a) shall be determined using the WET procedure specified in Appendix II, Chapter 11, CCR.

(b) Table III identifies the non-RCRA solvent waste and the concentration of their hazardous constituents which may not be exceeded by the waste or treatment residual (not an extract of such waste or residual) for the allowable land disposal of such waste or residual. Non-RCRA solvent waste burned in an authorized incineration facility in the State is deemed to be in compliance with Table III levels.

Table III - Constituent Concentrations in Waste

Non-RCRA Solvent Waste

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Nonwastewater* Subcategory	Total Concentration in Treatment Residual (mg/kg) (WET Weight)
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Total Organic Constituent	100.0
Methylene chloride	10.0
Carbon tetrachloride	2.0
1,1,1-Trichloroethane	2.0
Trichloroethylene	2.0
Tetrachloroethylene	3.0
Chlorobenzene	2.0
O-Dichlorobenzene	2.0
Trichloromono fluoromethane	2.0
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0
Chloromethane	2.5
Chloroform	2.0
1,2-Dichloroethane	2.0
1,1,2,2-Tetrachloroethane	2.0
Hexachloroethane	10.0
1,1-Dichloroethylene	10.0
Hexachlorobutadiene	10.0

1,2,4-Trichlorobenzene	5.0
Benzene	2.0
Ethyl Benzene	1.5
Toluene	3.0
Xylene (mixture)	2.0
Methanol	10.0
n-Butanol	10.0
Isobutanol	10.0
Acetone	10.0
Methyl ethyl ketone	10.0
Methyl Isobutyl ketone	10.0
Cyclohexanone	2.0
Pyridine	5.0
Ethyl acetate	2.0
Ethyl ether	2.0
Cresols (mixture)	0.5
Diethyl phthalate	5.0
Phenol	5.0
Napthalene	5.0
Isophorone	5.0

\* "Nonwastewater" is defined in subsection (b) (1) of this section.

(1) "Nonwastewater" for the purposes of Table III means a solvent-containing liquid waste containing greater than or equal to one percent by weight Total Organic Carbon (TOC).

(2) A waste is determined to be liquid or non-liquid at the point of generation with the use of Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846, 3rd Edition, 1986. The provisions of "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846, 3rd Edition, 1986, are hereby incorporated by reference.

(3) Concentrations of Table III constituents shall be determined with the use of Method 8240 and 8250 described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846 3rd Edition, 1986. The Concentration of Total Organic Constituent in Table III shall be the arithmetic summation of the concentration of individual organic compounds in the treatment residual including, but not limited to, Table III constituents as determined by Methods 8240 and 8250. The provisions of "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846, 3rd Edition, 1986, are hereby incorporated by reference.

(c) (1) When RCRA wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern. When non-RCRA wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

(c) (2) When RCRA and Non-RCRA wastes are combined for purposes of treatment, the treatment residue must meet both the lowest treatment standard established for the RCRA wastes and the lowest treatment standard established for the non-RCRA wastes.

Note: Authority Cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5, 25179.3 and 25179.6, Health and Safety Code.

**66268.108. Treatment Standards Expressed as Specified Technologies.**

**[Reserved]**

**NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.**

**Reference: Sections 25159, 25159.5 and 25179.6, Health and Safety Code.**

66268.110. Treatment Standard for PCB Wastes.

Table PCB Wastes identifies the restricted PCB containing wastes and the associated treatment standards expressed as a treatment technology and the associated performance level or the maximum concentration of PCBs for the allowable land disposal of the PCB waste or treatment residual.

TABLE PCB WASTE

PCB WASTE	TREATMENT STANDARD
Liquids with a PCB concentration > 5 ppm	1) Incineration in a DHS approved incinerator that meets 40 CFR 761 requirements. or 2) Treatment to a PCB concentration level of < 2 ppm.
Drained PCB or PCB-contaminated transformer carcasses	1) Incineration in a DHS approved incinerator that meets 40 CFR 761 requirements. or 2) After draining and/or flushing of PCBs in the transformer carcass in

accordance, with 40 CFR 761,  
the carcass shall be filled  
with a nonbiodegradable  
absorbent material and  
disposed in a hazardous  
waste landfill.

PCB containing electrical  
equipment that is not  
regulated under TSCA,  
such as small capacitors,  
light ballasts, and fixtures.

1) Incineration in a DHS  
approved incinerator with  
a PCB DRE of 99.9999%

or

2) Disposal in a hazardous  
waste landfill after  
placement in a lab pack.

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NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6,  
Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5, 25179.3 and 25179.6,  
Health and Safety Code.

66268.112. Treatment Standards for Aqueous and Liquid Organic Wastes.

An aqueous and liquid organic waste identified in Section 66268.29(j) shall be treated such that the concentration of each individual organic compound measured by an approved EPA test method shall not exceed 0.5 mg/l.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25159, 25159.5 and 25179.6, Health and Safety Code.

66268.113. Treatment Standards for Solid Hazardous Waste  
Containing Organics.

(a) Except as specified in subsection (c), a solid hazardous waste containing any of the organic substances identified in Section 66268.29(k) shall be treated to the following levels:

(1) 1 percent oil and grease (as measured using EPA Method 9071).

(2) 25 ppm volatile organics (as measured using EPA Method 8240),  
and

(3) 435 ppm semi-volatile organics (as measured using EPA Method 8270).

(b) Except as specified in subsection (c), a solid hazardous waste containing organics identified in Section 66268.29(k) that cannot be detected by EPA Methods 8240 and 8270 shall be treated by solvent extraction, critical fluid extraction, by a thermal separation unit or an alternative treatment method pursuant to Health and Safety Code Section 25179.6(b)(2).

(c) Incineration in an incinerator with a destruction and removal efficiency of 99.99 percent is an acceptable alternative method for those wastes subject to subsection (a) and (b) of this section.

(d) Solid hazardous waste containing organics that also contains metals or metal compounds identified in Section 66261.24(a)(2)

shall be subject to the non-RCRA treatment standards for solids with metals.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25159, 25159.5 and 25179.6, Health and Safety Code.

Article 12 Incineration Requirements of Certain Hazardous Waste

66268.120 Hazardous Waste with Heating Values Greater than 3,000 British Thermal Units per Pound of Waste.

Except as otherwise provided in Health and Safety Code Sections 25155.5, 25155.6 and 25155.7 and this article of the regulations, any person who, after January 1, 1990, disposes of hazardous waste which has a heating value of more than 3,000 British Thermal Units per pound of waste material shall dispose of those wastes by incineration, or any other treatment method that is effective and equally protective of the environment and has been authorized by the Department as part of a hazardous waste facilities permit issued pursuant to Health and Safety Code Section 25200.

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

Reference: Section 25155.5, Health and Safety Code.

66268.121 Hazardous Waste Contain More than One Percent of Volatile Organic Compounds.

Except as otherwise provided in Health and Safety Code Sections 25155.5, 25155.6 and 25155.7 and this article of the regulations, any person who, after January 1, 1990, disposes of hazardous waste containing more than one percent by weight of volatile organic compounds, shall dispose of these hazardous wastes by incineration, or any other treatment method that is effective and equally protective of the environment and has been authorized by the Department as part of a hazardous waste facilities permit issued pursuant to Health and Safety Code Section 25200. "Volatile organic compound" means a compound which is a volatile organic compound according to Method No. 8240 in the Environmental Protection Agency Document No. Solid Waste 846 (1982) or any equivalent, alternative method acceptable to the Department.

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

Reference: Section 25123.6 and 25155.5, Health and Safety Code.

66268.122 Treatment Capacity Exemption.

If the Department determines that adequate incineration or other authorized treatment capacity does not exist within the state, a person disposing of hazardous waste subject to Sections 66268.120 and 66268.121 of this chapter is exempt from the treatment requirements of these sections, until the Department determines that adequate incineration or other treatment is available. This section shall not exempt a hazardous waste specified in Sections 66268.120 and 66268.121 from any treatment, handling or disposal standard established by any other provision of law or regulation.

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

Reference: Section 25155.5, Health and Safety Code.

66268.124 Emergency Variance From Sections 66268.120 and  
66268.121.

(a) A hazardous waste producer may request in writing, an emergency variance from the Department pursuant to Health and Safety Code Section 25155.7. A producer of a hazardous waste subject to Land Disposal Restrictions established pursuant to Section 6924(m) of Title 42 of the United States Code is not eligible for an emergency variance, unless the waste has been granted a variance, extension, or exemption by the EPA Administrator.

(b) After receiving an application for an emergency variance, the Department may request any additional information which it deems necessary to evaluate the application. Within 45 days of receipt of the application, the Department shall inform the applicant, in writing, that the application is complete and accepted for filing, or that the application is deficient and what specific information is required.

(c) On the basis of the information referred to in Subsection (b) of this section, the Department may grant an emergency variance of up to 1 year upon the request of the applicant if the demonstration required pursuant to Health and Safety Code Section 25155.7, can still be made. In no event will an emergency variance extend beyond 24 months from the date the Department determines the application is complete and accepted for filing. The length of any emergency variance will be determined by the Department based on

the time required for the applicant to secure other treatment pursuant to Sections 66268.120 and 66268.121. The Department shall make a decision on an application for an emergency variance within 120 days of the filing of a completed application.

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

Reference: Section 25155.7, Health and Safety Code; and Section 15376, Government Code.

## Appendix I Toxicity Characteristic Leaching Procedure (TCLP)

### 1.0 SCOPE AND APPLICATION

1.1 The TCLP is designed to determine the mobility of both organic and inorganic analytes sent in liquid, solid, and multiphase wastes.

1.2 If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run.

1.3 If an analysis of any one of the liquid fractions of the TCLP extract indicates that a regulated compound is present at such high levels that even after accounting for dilution from the other fractions of the extract the concentration would be equal to or above the regulatory level for that compound, then the waste is hazardous and it is not necessary to analyze the remaining fractions of the extract.

1.4 If an analysis of extract obtained using a bottle extractor shows that the concentration of any regulated volatile analyte equals or exceeds the regulatory level for that compound, then the waste is hazardous and extraction using the ZHE is not necessary. However, extract from a bottle extractor cannot be used to

demonstrate that the concentration of volatile compounds is below the regulatory level.

## 2.0 SUMMARY OF METHOD (see Figure 1)

2.1 For liquid wastes (i.e., those containing less than 0.5 percent dry solid material), the waste, after filtration through a 0.6 to 0.8um glass fiber filter, is defined as the TCLP extract.

2.2 For wastes containing greater than or equal to 0.5 percent solids, the liquid, if any, is separated from the solid phase and stored for later analysis; the particle size of the solid phase is reduced, if necessary. The solid phase is extracted with an amount of extraction fluid equal to 20 times the weight of the solid phase. The extraction fluid employed is a function of the alkalinity of the solid phase of the waste. A special extractor vessel is used when testing for volatile analytes (See Table 1 for a list of volatile compounds). Following extraction, the liquid extract is separated from the solid phase by filtration through a 0.6 to 0.8um glass fiber filter.

2.3 If compatible (i.e., multiple phases will not form on combination), the initial liquid phase of the waste is added to the liquid extract, and these are analyzed together.

If incompatible, the liquids are analyzed separately and the results are mathematically combined to yield a volume-weighted

average concentration.

### 3.0 INTERFERENCES

3.1. Potential interferences that may be encountered during analysis are discussed in the individual analytical methods.

### 4.0 APPARATUS AND MATERIALS

4.1 Agitation apparatus: The agitation apparatus must be capable of rotating the extraction vessel in an end-over-end fashion (See Figure 1 ) at  $30 \pm 2$  rpm. Suitable devices known to USEPA and the Department are identified in Table 2.

#### 4.2 Extraction Vessels:

4.2.1 Zero-Headspace Extraction Vessel (ZHE). This device is for use only when the waste is being tested for the mobility of volatile analytes (i.e., those listed in Table 1). The ZHE (depicted in Figure 2) allows for liquid/solid separation within the device, and effectively precludes headspace. This type of vessel allows for initial liquid/solid separation, extraction and final extract filtration without opening the vessel (see section 4.3.1). These vessels shall have an internal volume of 500 - 600 mL, and be equipped to accommodate a 90-110mm filter. The devices contain VITON (registered) O-rings which should be replaced frequently. Suitable ZHE devices known to USEPA and the Department

are identified in Table 3.

For the ZHE to be acceptable for use, the piston within the ZHE should be able to be moved with approximately 15 pounds per square inch (psi) or less. If it takes more pressure to move the piston, the O-rings in the device should be replaced. If this does not solve the problem, the ZHE is unacceptable for TCLP analyses and the manufacturer should be contacted.

The ZHE should be checked for leaks after every extraction. If the device contains a built-in pressure gauge, pressurize the device to 50 psi, allow it to stand unattended for 1 hour, and recheck the pressure. If the device does not have a built-in pressure gauge, pressurize the device to 50 psi, submerge it in water, and check for the presence of air bubbles escaping from any of the fittings. If pressure is lost, check all fittings and inspect and replace O-rings, if necessary. Retest the device. If leakage problems cannot be solved, the manufacturer should be contacted.

Some ZHEs use gas pressure to actuate the ZHE piston, while other use mechanical pressure (see Table 3). Whereas the volatiles procedure (see section 7.3) refers to pounds per square inch (psi), for the mechanically actuated piston, the pressure applied is measured in torque-inch-pounds. Refer to the manufacturer's instructions as to the proper conversion.

4.2.2 Bottle Extraction Vessel. When the waste is being evaluated

using the nonvolatile extraction, a jar with sufficient capacity to hold the sample and the extraction fluid is needed. Headspace is allowed in this vessel.

The extraction bottles may be constructed from various materials, depending on the analytes to be analyzed and the nature of the waste (see section 4.3.3). It is recommended that borosilicate glass bottles be used instead of other types of glass, especially when inorganics are of concern. Plastic bottles, other than polytetrafluoroethylene, shall not be used if organics are to be investigated. Bottles are available from a number of laboratory suppliers. When this type of extraction vessel is used, the filtration device discussed in section 4.3.2 is used for initial liquid/solid separation and final extract filtration.

**4.3 Filtration Devices:** It is recommended that all filtrations be performed in a hood.

**4.3.1 Zero-Headspace Extractor Vessel (ZHE):** When the waste is evaluated for volatiles, the zero-headspace extraction vessel described in section 4.2.1 is used for filtration. The device shall be capable of supporting and keeping in place the glass fiber filter and be able to withstand the pressure needed to accomplish separation (50 psi).

**Note:** When it is suspected that the glass fiber filter has been ruptured, an in-line glass fiber filter may be used to filter the

material within the ZHE.

4.3.2 Filter Holder: When the waste is evaluated for other than volatile analytes, any filter holder capable of supporting a glass fiber filter and able to withstand the pressure needed to accomplish separation may be used. Suitable filter holders range from simple vacuum units to relatively complex systems capable of exerting pressures of up to 50 psi or more. The type of filter holder used depends on the properties of the material to be filtered (see section 4.3.3). These devices shall have a minimum internal volume of 300 mL and be equipped to accommodate a minimum filter size of 47 mm (filter holders having an internal capacity of 1.5 L or greater, and equipped to accommodate a 142 mm diameter filter are recommended). Vacuum filtration can only be used for wastes with low solids content (<10 percent) and for highly granular, liquid-containing wastes. All other types of wastes should be filtered using positive pressure filtration. Suitable filter holders known to USEPA and the Department are shown in Table 4.

4.3.3 Materials of Construction: Extraction vessels and filtration devices shall be made of inert materials which will not leach or absorb waste components. Glass, polytetrafluoroethylene (PTFE), or type 316 stainless steel equipment may be used when evaluating the mobility of both organic and inorganic components. Devices made of high density polyethylene (HDPE), polypropylene (PP), or polyvinyl chloride (PVC) may be used only when evaluating the mobility of

metals. Borosilicate glass bottles are recommended for use over other types of glass bottles, especially when inorganics are analytes of concern.

4.4 Filters: Filters shall be made of borosilicate glass fiber, shall contain no binder materials, and shall have an effective pore size of 0.6 to 0.8  $\mu\text{m}$ , or equivalent. Filters known to USEPA and the Department which meet these specifications are identified in Table 5. Prefilters must not be used. When evaluating the mobility of metals, filters shall be acid-washed prior to use by rinsing with N nitric acid followed by three consecutive rinses with deionized distilled water (a minimum of 1-L per rinse is recommended). Glass fiber filters are fragile and should be handled with care.

4.5 pH meters: The meter should be accurate to  $\pm 0.05$  units at  $25^{\circ}\text{C}$ .

4.6 ZHE Extract Collection Devices: TEDLAR (registered) bags or glass, stainless steel or PTFE gas-tight syringes are used to collect the initial liquid phase and the final extract of the waste when using the ZHE device. The devices listed are recommended for use under the following conditions:

4.6.1 If a waste contains an aqueous liquid phase or if a waste does not contain a significant amount of nonaqueous liquid (i.e.,  $< 1$  percent of total waste), the TEDLAR (registered) bag or a 600 mL syringe should be used to collect and combine the initial liquid

and solid extract.

4.6.2 If a waste contains a significant amount of nonaqueous liquid in the initial liquid phase (i.e., >1 percent of total waste), the syringe or the TEDLAR (registered) bag may be used for both the initial solid/liquid separation and the final extract filtration. However, analysts should use one or the other, not both.

4.6.3 If the waste contains no initial liquid phase (is 100 percent solid) or has no significant solid phase (is 100 percent liquid), either the TEDLAR (registered) bag or the syringe may be used. If the syringe is used, discard the first 5 mL of liquid expressed from the device. The remaining aliquots are used for analysis.

4.7 ZHE Extraction Fluid Transfer Devices: Any device capable of transferring the extraction fluid into the ZHE without changing the nature of the extraction fluid is acceptable (e.g., a positive displacement or peristaltic pump, a gas tight syringe, pressure filtration unit (See section 4.3.2) or other ZHE device).

4.8 Laboratory balance: Any laboratory balance accurate to within  $\pm 0.01$  grams may be used (all weight measurements are to be within  $\pm 0.1$  grams).

4.9 Beaker or Erlenmeyer flask, glass, 500 mL.

4.10 Watchglass, appropriate diameter to cover beaker or

Erlenmeyer flask.

4.11 Magnetic stirrer.

## 5.0 REAGENTS

5.1 Reagent grade chemicals shall be used in all tests. Unless otherwise indicated, it is intended that all reagents shall conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available. Other grades may be used, provided it is first ascertained that the reagent is of sufficiently high purity to permit its use without lessening the accuracy of the determination.

5.2 Reagent water. Reagent water is defined as water in which an interferent is not observed at or above the methods detection limit of the analyte(s) of interest. For nonvolatile extractions, ASTM Type II water, or equivalent meets the definition of reagent water. For volatile extractions, it is recommended that reagent water be generated by any of the following methods. Reagent water should be monitored periodically for impurities.

5.2.1 Reagent water for volatile extractions may be generated by passing tap water through a carbon filter bed containing about 500 grams of activated carbon (Calgon Corp., Filtrasorb-300 or equivalent).

5.2.2 A water purification system (Millipore Super-Q or equivalent) may also be used to generate reagent water for volatile extractions.

5.2.3 Reagent water for volatile extractions may also be prepared by boiling water for 15 minutes. Subsequently, while maintaining the water temperature at  $90 \pm 5^\circ\text{C}$ , bubble a contaminant-free inert gas (e.g., nitrogen) through the water for 1 hour. While still hot, transfer the water to a narrow mouth screw-cap bottle under zero-headspace and seal with a Teflon-lined septum and cap.

5.3 Hydrochloric acid (1N), HCl, made from ACS reagent grade.

5.4 Nitric acid (1N),  $\text{HNO}_3$ , made from ACS reagent grade.

5.5 Sodium hydroxide (1N), NaOH, made from ACS reagent grade.

5.6 Glacial acetic acid  $\text{CH}_3\text{COOH}$ , ACS reagent grade.

5.7 Extraction fluid.

5.7.1 Extraction fluid #1: Add 5.7 mL glacial acetic acid to 500 mL of reagent water (See section 5.2), add 64.3 mL of 1. N NaOH, and dilute to a volume of 1 liter. When correctly prepared, the pH of this fluid will be  $4.93 \pm 0.05$ .

5.7.2 Extraction fluid #2: Dilute 5.7 mL glacial acetic acid with

reagent water (See section 5.2) to a volume of 1 liter. When correctly prepared, the pH of this fluid will be  $2.88 \pm 0.05$ .

Note: These extraction fluids should be monitored frequently for impurities. The pH should be checked prior to use to ensure that these fluids are made up accurately. If impurities are found or the pH is not within the above specifications, the fluid shall be discarded and fresh extraction fluid prepared.

5.8 Analytical standards shall be prepared according to the appropriate analytical method.

## 6.0 SAMPLE COLLECTION, PRESERVATION, AND HANDLING

6.1 All samples shall be collected using an appropriate sampling plan.

6.2 The TCLP may place requirements on the minimal size of the field sample, depending upon the physical state or states of the waste and the analytes of concern. An aliquot is needed for preliminary evaluation of which extraction fluid is to be used for the nonvolatile analyte extraction procedure. Another aliquot may be needed to actually conduct the nonvolatile extraction (see section 1.4 concerning the use of this extract for volatile organics). If volatile organics are of concern, another aliquot may be needed. Quality control measures may require additional aliquots. Further, it is always wise to collect more sample just

in case something goes wrong with the initial attempt to conduct the test.

6.3 Preservatives shall not be added to samples before extraction.

6.4 Samples may be refrigerated unless refrigeration results in irreversible physical change to the waste. If precipitation occurs, the entire sample (including precipitate) should be extracted.

6.5 When the waste is to be evaluated for volatile analytes, care shall be taken to minimize the loss of volatiles. Samples shall be collected and stored in a manner intended to prevent the loss of volatile analytes (e.g., samples should be collected in Teflon-lined septum capped vials and stored at 4°C. Samples should be opened only immediately prior to extraction).

6.6 TCLP extracts should be prepared for analysis and analyzed as soon as possible following extraction. Extracts or portions of extracts for metallic analyte determinations must be acidified with nitric acid to a pH  $\pm$  2, unless precipitation occurs (see section 7.2.14 if precipitation occurs). Extracts should be preserved for other analytes according to the guidance given in the individual analysis methods. Extracts or portions of extracts for organic analyte determinations shall not be allowed to come into contact with the atmosphere (i.e., no headspace) to prevent losses. See section 8.0 (QA requirements) for acceptable sample and extract

holding times.

## 7.0 PROCEDURE

7.1 Preliminary Evaluations. Perform preliminary TCLP evaluations on a minimum 100 gram aliquot of waste. This aliquot may not actually undergo TCLP extraction. These preliminary evaluations include: (1) determination of the percent solids (section 7.1.1); (2) determination of whether the waste contains insignificant solids and is, therefore, its own extract after filtration (section 7.1.2); determination of whether the solid portion of the waste requires particle size reduction (Section 7.1.3); and (4) determination of which of the two extraction fluids are to be used for the nonvolatile TCLP extraction of the waste (section 7.1.4).

7.1.1 Preliminary determination of percent solids: Percent solids is defined as that fraction of a waste sample (as a percentage of the total sample) from which no liquid may be forced out by an applied pressure, as described below.

7.1.1.1 If the waste will obviously yield no liquid when subjected to pressure filtration (i.e., is 100 percent solids) proceed to section 7.1.3.

7.1.1.2 If the sample is liquid or multiphasic, liquid/solid separation to make a preliminary determination of percent solids is required. This involves the filtration device described in section

4.3.2 and is outlined in sections 7.1.1.3 through 7.1.1.9.

7.1.1.3 Pre-weigh the filter and the container that will receive the filtrate.

7.1.1.4 Assemble the filter holder and filter following the manufacturer's instructions. Place the filter on the support screen and secure.

7.1.1.5 Weigh out a subsample of the waste (100 gram minimum) and record the weight.

7.1.1.6 Allow slurries to stand to permit the solid phase to settle. Wastes that settle slowly may be centrifuged prior to filtration. Centrifugation is to be used only as an aid to filtration. If used, the liquid should be decanted and filtered followed by filtration of the solid portion of the waste through the same filtration system.

7.1.1.7 Quantitatively transfer the waste sample to the filter holder (liquid and solid phases). Spread the waste sample evenly over the surface of the filter. If filtration of the waste at 4°C reduces the amount of expressed liquid over what would be expressed at room temperature then allow the sample to warm up to room temperature in the device before filtering.

Note: If waste material (>1 percent of original sample weight) has

obviously adhered to the container used to transfer the sample to the filtration apparatus, determine the weight of this residue and subtract it from the sample weight determined in section 7.1.1.5 to determine the weight of the waste sample that will be filtered.

Gradually apply vacuum or gentle pressure of 1-10 psi, until air or pressurizing gas moves through the filter. If this point is not reached under 10 psi, and if no additional liquid has passed through the filter in any 2 minute interval, slowly increase the pressure in 10 psi increments to a maximum of 50 psi. After each incremental increase of 10 psi, if the pressurizing gas has not moved through the filter, and if no additional liquid has passed through the filter in any 2 minute interval, proceed to the next 10 psi increment. When the pressurizing gas begins to move through the filter, or when liquid flow has ceased at 50 psi (i.e., filtration does not result in any additional filtrate within any 2 minute period), stop the filtration .

Note: Instantaneous application of high pressure can degrade the glass fiber filter and may cause premature plugging.

7.1.1.8 The material in the filter holder is defined as the solid phase of the waste, and the filtrate is defined as the liquid phase.

Note: Some wastes, such as oily wastes and some paint wastes, will obviously contain some material that appears to be a liquid. Even

after applying vacuum or pressure filtration, as outlined in section 7.1.1.7, this material may not filter. If this is the case, the material within the filtration device is defined as a solid. Do not replace the original filter with a fresh filter under any circumstances. Use only one filter.

7.1.1.9 Determine the weight of the liquid phase by subtracting the weight of the filtrate container (See section 7.1.1.3) from the total weight of the filtrate-filled container. Determine the weight of the solid phase of the waste sample by subtracting the weight of the liquid phase from the weight of the total waste sample, as determined in section 7.1.1.5 or 7.1.1.7.

Record the weight of the liquid and solid phases. Calculate the percent solids as follows:

$$\text{Percent solids} = \frac{\text{Weight of solid (Section 7.1.1.9)}}{\text{Total weight of waste (Section 7.1.1.5 or 7.1.1.7)}} \times 100$$

7.1.2 If the percent solids determined in section 7.1.1.9 is equal to or greater than 0.5 percent, then proceed either to section 7.1.3 to determine whether the solid material requires particle size reduction or to section 7.1.2.1 if it is noticed that a small amount of the filtrate is entrained in wetting of the filter. If the percent solids determined in section 7.1.1.9 is less than the 0.5 percent, then proceed to section 7.2.9 if nonvolatile TCLP is to be performed and to section 7.3 with a fresh portion of the

waste if the volatile TCLP is to be performed.

7.1.2.1 Remove the solid phase and filter from the filtration apparatus.

7.1.2.2 Dry the filter and solid phase at  $100 \pm 20^{\circ}\text{C}$  until two successive weighings yield the same value within  $\pm 1$  percent. Record final weight.

Note: Caution should be taken to ensure that the subject solid will not flash upon heating. It is recommended that the drying oven be vented to a hood or other appropriate device.

7.1.2.3 Calculate the percent dry solids as follows:

$$\% \text{ dry solids} = \frac{[\text{Weight of dry waste + filter}] - \text{tared weight of filter}}{\text{Initial weight of waste (Section 7.1.1.5 or 7.1.1.7)}} \times 100$$

7.1.2.4 If the percent dry solids is less than 0.5 percent, then proceed to section 7.2.9 if the nonvolatile TCLP is to be performed and to section 7.3 if the volatile TCLP is to be performed. If the percent dry solids is greater than or equal to 0.5 percent, and if the nonvolatile TCLP is to be performed, return to the beginning of this section (7.1) and, with a fresh portion of waste determine whether particle size reduction is necessary (section 7.1.3), and determine the appropriate extraction fluid (section 7.1.4) If only the volatile TCLP is to be performed, see the note in section

#### 7.1.4.

7.1.3 Determination of whether the waste requires particle size reduction (particle size is reduced during this step): Using the solid portion of the waste, evaluate the solid for particle size. Particle size reduction is required, unless the solid has a surface area per gram of material equal to or greater than 3.1 cm<sup>2</sup> or is smaller than 1 cm in its narrowest dimension (i.e., is capable of passing through a 9.5 mm (0.375 inch) standard sieve). If the surface area is smaller or the particle-size larger than described above, prepare the solid portion of the waste for extraction by crushing, cutting or grinding the waste to a surface area or particle size as described above. If the solids are prepared for organic volatiles extraction, special precautions must be taken (see section 7.3.6).

Note: Surface area criteria are meant for filamentous (e.g., paper, cloth, and similar) waste materials. Actual measurement of surface area is not required; nor is it recommended. For materials that do not obviously meet the criteria, sample-specific methods would need to be developed and employed to measure the surface area. Such methodology is currently not available.

7.1.4 Determination of appropriate extraction fluid: If the solid content of the waste is greater than or equal to 0.5 percent and if the sample will be extracted for nonvolatile constituents (section 7.2), determine the appropriate fluid (section 5.67) for the

nonvolatiles extraction as follows:

Note: TCLP extraction for volatile constituents uses only extraction fluid #1 (section 5.7.1). Therefore, if TCLP extraction for nonvolatiles is not required, proceed to section 7.3.

7.1.4.1 Weigh out a small subsample of the solid phase of the waste, reduce the solid (if necessary) to a particle size of approximately 1 mm in diameter or less, and transfer 5.0 grams of the solid phase of the waste to a 500 mL beaker or Erlenmeyer flask.

7.1.4.2 Add 96.5 mL of reagent water to the beaker, cover with a watchglass, and stir vigorously for 5 minutes using a magnetic stirrer. Measure and record the pH. If the pH is  $\leq 5.0$ , use extraction fluid #1. Proceed to section 7.2.

7.1.4.3 If the pH from section 7.1.4.2 is  $> 5.0$ , add 3.5 mL 1 N HCl, slurry briefly, cover with a watchglass, heat to 50°C and hold at 50°C for 10 minutes.

7.1.4.4 Let the solution cool to room temperature and record the pH. If the pH is  $< 5.0$ , use extraction fluid #1. If the pH is  $> 5.0$ , use extraction fluid #2. Proceed to section 7.2.

7.1.5 If the aliquot of the waste used for the preliminary evaluation (sections 7.1.1-7.1.4) was determined to be 100 percent

solid at section 7.1.1.1, then it can be used for the section 7.2 extraction (assuming at least 100 grams remain), and the section 7.3 extraction (assuming at least 25 grams remain). If the aliquot was subjected to the procedure in section 7.1.1.7 then another aliquot shall be used for the volatile extraction procedure in section 7.3. The aliquot of the waste subjected to the procedure in section 7.1.1.7 might be appropriate for use for the section 7.2 extraction if an adequate amount of solid (as determined by section 7.1.1.9) was obtained. The amount of solid necessary is dependent upon whether a sufficient amount of extract will be produced to support the analyses. If an adequate amount of solid remains, proceed to section 7.2.10 of the nonvolatile TCLP extraction.

7.2 Procedure When Volatiles Are Not Involved. A minimum sample size of 100 grams (solid and liquid phases) is recommended. In some cases, a larger sample size may be more appropriate, depending on the solids content of the waste sample (percent solids, See section 7.1.1), whether the initial liquid phase of the waste will be miscible with the aqueous extract of the solid, and whether inorganics, semivolatile organics, pesticides, and herbicides are all analytes of concern. Enough solids should be generated for extraction such that the volume of TCLP extract will be sufficient to support all of the analyses required. If the amount of extract generated by a single TCLP extraction will not be sufficient to perform all of the analyses, more than one extraction may be performed and the extracts from each combined and aliquoted for analysis.

7.2.1 If the waste will obviously yield no liquid when subjected to pressure filtration (i.e., is 100 percent solid, see section 7.1.1), weigh out a subsample of the waste (100 gram minimum) and proceed to section 7.2.9.

7.2.2 If the sample is liquid or multiphasic, liquid/solid separation is required. This involves the filtration device described in section 4.3.2 and is outlined in sections 7.2.3 to 7.2.8.

7.2.3 Preweigh the container that will receive the filtrate.

7.2.4 Assemble the filter holder and filter following the manufacturer's instructions. Place the filter on the support screen and secure. Acid wash the filter if evaluating the mobility of metals (See section 4.4).

Note: Acid washed filters may be used for all nonvolatile extractions even when metals are not of concern.

7.2.5 Weigh out a subsample of the waste (100 gram minimum) and record the weight. If the waste contains <0.5 percent dry solids (section 7.1.2), the liquid portion of the waste, after filtration, is defined as the TCLP extract. Therefore, enough of the sample should be filtered so that the amount of filtered liquid will support all of the analyses required of the TCLP extract. For

wastes containing >0.5 percent dry solids (sections 7.1.1 or 7.1.2), use the percent solids information obtained in section 7.1.1 to determine the optimum sample size (100 gram minimum) for filtration. Enough solids should be generated by filtration to support the analyses to be performed on the TCLP extract.

7.2.6 Allow slurries to stand to permit the solid phase to settle. Wastes that settle slowly may be centrifuged prior to filtration. Use centrifugation only as an aid to filtration. If the waste is centrifuged, the liquid should be decanted and filtered followed by filtration of the solid portion of the waste through the same filtration system.

7.2.7. Quantitatively transfer the waste sample (liquid and solid phases) to the filter holder (see section 4.3.2). Spread the waste sample evenly over the surface of the filter. If filtration of the waste at 4°C reduces the amount of expressed liquid over what would be expressed at room temperature, then allow the sample to warm up to room temperature in the device before filtering.

Note: If waste material (>1 percent of the original sample weight) has obviously adhered to the container used to transfer the sample to the filtration apparatus, determine the weight of this residue and subtract it from the sample weight determined in section 7.2.5, to determine the weight of the waste sample that will be filtered.

Gradually apply vacuum or gentle pressure of 1-10 psi, until air or

pressurizing gas moves through the filter. If this point is not reached under 10 psi, and if no additional liquid has passed through the filter in any 2 minute interval, slowly increase the pressure in 10 psi increments to maximum of 50 psi. After each incremental increase of 10 psi, if the pressurizing gas has not moved through the filter, and if no additional liquid has passed through the filter in any 2 minute interval, proceed to the next 10 psi increment. When the pressurizing gas begins to move through the filter, or when the liquid flow has ceased at 50 psi (i.e., filtration does not result in any additional filtrate within a 2 minute period), stop the filtration.

Note: Instantaneous application of high pressure can degrade the glass fiber filter and may cause premature plugging.

7.2.8 The material in the filter holder is defined as the solid phase of the waste, and the filtrate is defined as the liquid phase. Weigh the filtrate. The liquid phase may now be either analyzed (see section 7.2.12) or stored at 4°C until time of analysis.

Note: Some wastes, such as oily wastes and some paint wastes, will obviously contain some material that appears to be a liquid. Even after applying vacuum or pressure filtration, as outlined in section 7.2.7, this material may not filter. If this is the case, the material within the filtration device is defined as a solid and is carried through the extraction as a solid. Do not replace the

original filter with a fresh filter under any circumstances. Use only one filter.

7.2.9 If the waste contains <0.5 percent dry solids (see section 7.1.2), proceed to section 7.2.13. If the waste contains >0.5 percent dry solids (see section 7.1.1 or 7.1.2), and if particle size reduction of the solid was needed in section 7.1.3, proceed to section 7.2.10. If the waste as received passes a 9.5 mm sieve, quantitatively transfer the solid material into the extractor bottle, along with the filter used to separate the initial liquid from the solid phase, and proceed to section 7.2.11.

7.2.10 Prepare the solid portion of the waste for extraction by crushing, cutting or grinding the waste to a surface area or particle size as described in section 7.1.3. When the surface area or particle size has been appropriately altered, quantitatively transfer the solid material into an extractor bottle. Include the filter used to separate the initial liquid from the solid phase.

Note: Sieving of the waste is not normally required. Surface area requirements are meant for filamentous (e.g., paper, cloth) and similar waste materials. Actual measurement of surface area is not recommended. If sieving is necessary, a Teflon-coated sieve should be used to avoid contamination of the sample.

7.2.11 Determine the amount of extraction fluid to add to the extractor vessel as follows:

$$\text{Weight of extraction fluid} = \frac{20 \times \text{percent solids (Section 7.1.1)} \times \text{weight of waste filtered (Section 7.2.5 or 7.2.7)}}{100}$$

Slowly add this amount of appropriate extraction fluid (see section 7.1.4) to the extractor vessel. Close the extractor bottle tightly (it is recommended that Teflon tape be used to ensure a tight seal), secure in rotary agitation device, and rotate at  $30 \pm 2$  rpm for  $18 \pm 2$  hours. Ambient temperature (i.e., temperature of room in which extraction takes place) shall be maintained at  $22 \pm 3^\circ\text{C}$  during the extraction period.

Note: As agitation continues, pressure may build up within the extractor bottle for some types of wastes (e.g., limed or calcium carbonate containing waste may evolve gases such as carbon dioxide). To relieve excess pressure, the extractor bottle may be periodically opened (e.g., after 15 minutes, 30 minutes and 1 hour) and vented into a hood.

7.2.12 Following the  $18 \pm 2$  hour extraction, separate the material in the extractor vessel into its component liquid and solid phases by filtering through a new glass fiber filter, as outlined in section 7.2.7 For final filtration of the TCLP extract, the glass fiber filter may be changed, if necessary, to facilitate filtration. Filter(s) shall be acid-washed (see section 4.4) if evaluating the mobility of metals.

7.2.13 Prepare the TCLP extract as follows:

7.2.13.1 If the waste contained no initial liquid phase, the filtered liquid material obtained from section 7.2.12 is defined as the TCLP extract. Proceed to section 7.2.14.

7.2.13.2 If compatible (e.g., multiple phases will not result on combination), combine the filtered liquid resulting from section 7.2.12 with the initial liquid phase of the waste obtained in section 7.2.7. This combined liquid is defined as the TCLP extract. Proceed to section 7.2.14.

7.2.13.3 If the initial liquid phase of the waste, as obtained from section 7.2.7, is not or may not be compatible with the filtered liquid resulting from section 7.2.12, do not combine these liquids. Analyze these liquids, collectively defined as the TCLP extract, and combine the results mathematically, as described in section 7.2.14.

7.2.14 Following collection of the TCLP extract, the pH of the extract should be recorded. Immediately aliquot and preserve the extract for analysis. Metals aliquots must be acidified with nitric acid to pH <2. If precipitation is observed upon addition of nitric acid to a small aliquot of the extract, then the remaining portion of the extract for metals analyses shall not be acidified and the extract shall be analyzed as soon as possible. All other

aliquots must be stored under refrigeration (4°C) until analyzed. The TCLP extract shall be prepared and analyzed according to appropriate analytical methods. TCLP extracts to be analyzed for metals shall be acid digested except in those instances where digestion causes loss of metallic analytes. If an analysis of the undigested extract shows that the concentration of any regulated metallic analyte exceeds the regulatory level, then the waste is hazardous and digestion of the extract is not necessary. However, data on undigested extracts alone cannot be used to demonstrate that the waste is not hazardous. If the individual phases are to be analyzed separately, determine the volume of the individual phases (to ±0.5 percent), conduct the appropriate analyses and combine the results mathematically by using a simple volume-weighted average:

$$\text{Final Analyte Concentration} = \frac{(V_1)(C_1) + (V_2)(C_2)}{V_1 + V_2}$$

where:

$V_1$  = The volume of the first phase (L).

$C_1$  = The concentration of the contaminant of concern in the first phase (mg/L).

$V_2$  = The volume of the second phase (L).

$C_2$ =The concentration of the contaminant of concern in the second phase (mg/L).

7.2.15 Compare the analyte concentrations in the TCLP extract with the levels identified in the appropriate regulations. Refer to section 8.0 for quality assurance requirements.

7.3 Procedure When Volatiles Are Involved. Use the ZHE device to obtain TCLP extract for analysis of volatile compounds only. Extract resulting from the use of the ZHE shall not be used to evaluate the mobility of nonvolatile analytes (e.g., metals, pesticides, etc.).

The ZHE device has approximately a 500 mL internal capacity. The ZHE can only accommodate a maximum of 25 grams of solid (defined as that fraction of a sample from which no additional liquid may be forced out by an applied pressure of 50 psi), due to the need to add an amount of extraction fluid equal to 20 times the weight of the solid phase.

Charge the ZHE with sample only once and do not open the device until the final extract (of the solid) has been collected. Repeated filling of the ZHE to obtain 25 grams of solid is not permitted. Do not allow the waste, the initial liquid phase or the extract to be exposed to the atmosphere for any more time than is absolutely necessary. Any manipulation of these materials should be done when cold (4°C) to minimize loss of volatiles.

7.3.1 Pre-weigh the (evacuated) filtrate collection container (See section 4.6) and set aside. If using a TEDLAR (registered) bag, express all liquid from the ZHE device into the bag, whether for the initial or final liquid/solid separation, and take an aliquot from the liquid in the bag for analysis. The containers listed in section 4.6 are recommended for use under the conditions stated in sections 4.6.1 - 4.6.3.

7.3.2 Place the ZHE piston within the body of the ZHE (it may be helpful first to moisten the piston O-rings slightly with extraction fluid). Adjust the piston within the ZHE body to a height that will minimize the distance the piston will have to move once the ZHE is charged with sample (based upon sample size requirements determined from section 7.3, section 7.1.1 and/or 7.1.2). Secure the gas inlet/outlet flange (bottom flange) onto the ZHE body in accordance with the manufacturer's instructions. Secure the glass fiber filter between the support screens and set aside. Set liquid inlet/outlet flange (top flange) aside.

7.3.3 If the waste is 100 percent solid (see section 7.1.1), weigh out a subsample (25 gram maximum) of the waste, record weight, and proceed to section 7.3.5.

7.3.4 If the waste contains <0.5 percent dry solids (section 7.1.2), the liquid portion of waste, after filtration, is defined as the TCLP extract. Filter enough of the sample so that the

amount of filtered liquid will support all of the volatile analyses required. For wastes containing >0.5 percent dry solids (sections 7.1.1 and/or 7.1.2), use the percent solids information obtained in section 7.1.1 to determine the optimum sample size to charge into the ZHE. The recommended sample size is as follows:

7.3.4.1 For wastes containing <5 percent solids (see section 7.1.1), weigh out a 500 gram subsample of waste and record the weight.

7.3.4.2 For wastes containing >5 percent solids (see section 7.1.1), determine the amount of waste to charge into the ZHE as follows:

$$\text{Weight of waste to charge ZHE} = \frac{25}{\text{Percent solids (Section 7.1.1)}} \times 100$$

Weigh out a subsample of the waste of the appropriate size and record the weight.

7.3.5 If particle size reduction of the solid portion of the waste was required in section 7.1.3, proceed to section 7.3.6. If particle size reduction was not required in section 7.1.3, proceed to section 7.3.7.

7.3.6 Prepare the waste for extraction by crushing, cutting or grinding the solid portion of the waste to a surface area or

particle size as described in section 7.1.3.1. Wastes and appropriate reduction equipment should be refrigerated, if possible, to 4°C prior to particle size reduction. The means used to effect particle size reduction must not generate heat in and of itself. If reduction of the solid phase of the waste is necessary, exposure of the waste to the atmosphere should be avoided to the extent possible.

Note: Sieving of the waste is not recommended due to the possibility that volatiles may be lost. The use of an appropriately graduated ruler is recommended as an acceptable alternative. Surface area requirements are meant for filamentous (e.g., paper, cloth) and similar waste materials. Actual measurement of surface area is not recommended.

When the surface area or particle size has been appropriately altered, proceed to section 7.3.7.

7.3.7 Waste slurries need not be allowed to stand to permit the solid phase to settle. Do not centrifuge wastes prior to filtration.

7.3.8 Quantitatively transfer the entire sample (liquid and solid phases) quickly to the ZHE. Secure the filter and support screens onto the top flange of the device and secure the top flange to the ZHE body in accordance with the manufacturer's instructions. Tighten all ZHE fittings and place the device in the vertical

position (gas inlet/outlet flange on the bottom). Do not attach the extract collection device to the top plate.

Note: If waste material (>1 percent of original sample weight) has obviously adhered to the container used to transfer the sample to the ZHE, determine the weight of this residue and subtract it from the sample weight determined in section 7.3.4, to determine the weight of the waste sample that will be filtered.

Attach a gas line to the gas inlet/outlet valve (bottom flange) and, with the liquid inlet/outlet valve (top flange) open, begin applying gentle pressure of 1-10 psi (or more if necessary) to force all headspace slowly out of the ZHE device into a hood. At the first appearance of liquid from the liquid inlet/outlet valve, quickly close the valve and discontinue pressure. If filtration of the waste at 4°C reduces the amount of expressed liquid over what would be expressed at room temperature, then allow the sample to warm up to room temperature in the device before filtering. If the waste is 100 percent solid (see section 7.1.1), slowly increase the pressure to a maximum of 50 psi to force most of the headspace out of the device and proceed to section 7.3.12.

7.3.9 Attach the evacuated pre-weighed filtrate collection container to the liquid inlet/outlet valve and open the valve. Begin applying gentle pressure of 1-10 psi to force the liquid phase of the sample into the filtrate collection container. If no additional liquid has passed through the filter in any 2 minute

interval, slowly increase the pressure in 10 psi increments to a maximum of 50 psi. After each incremental increase of 10 psi, if no additional liquid has passed through the filter in any 2 minute interval, proceed to the next 10 psi increment. When liquid flow has ceased such that continued pressure filtration at 50 psi does not result in any additional filtrate within any 2 minute period, stop the filtration. Close the liquid inlet/outlet valve, discontinue pressure to the piston and disconnect and weigh the filtrate collection container.

Note: Instantaneous application of high pressure can degrade the glass fiber filter and may cause premature plugging.

7.3.10 The material in the ZHE is defined as the solid phase of the waste and the filtrate is defined as the liquid phase.

Note: Some wastes, such as oily wastes and some paint wastes, will obviously contain some material that appears to be a liquid. Even after applying pressure filtration, this material will not filter. If this is the case, the material within the filtration device is defined as a solid and is carried through the TCLP extraction as a solid.

If the original waste contained <0.5 percent dry solids (see section 7.1.2), this filtrate is defined as the TCLP extract and is analyzed directly. Proceed to section 7.3.15.

7.3.11 The liquid phase may now be either analyzed immediately (see sections 7.3.13 through 7.3.15) or stored at 4°C under minimal headspace conditions until time of analysis.

Determine the weight of extraction fluid #1 to add to the ZHE as follows:

$$\text{Weight of extraction fluid} = \frac{20 \times \text{percent solids (Section 7.1.1)} \times \text{weight of waste filtered (Section 7.3.4 or 7.3.8)}}{100}$$

7.3.12 The following steps detail how to add the appropriate amount of extraction fluid to the solid material within the ZHE and agitation of the ZHE vessel. Extraction fluid #1 is used in all cases (see section 5.7).

7.3.12.1 With the ZHE in the vertical position, attach a line from the extraction fluid reservoir to the liquid inlet/outlet valve. The line used shall contain fresh extraction fluid and should be preflushed with fluid to eliminate any air pockets in the line. Release gas pressure on the ZHE piston (from the gas inlet/outlet valve), open the liquid inlet/outlet valve and begin transferring extraction fluid (by pumping or similar means) into the ZHE. Continue pumping extraction fluid into the ZHE until the appropriate amount of fluid has been introduced into the device.

7.3.12.2 After the extraction fluid has been added, immediately

close the liquid inlet/outlet valve and disconnect the extraction fluid line. Check the ZHE to ensure that all valves are in their closed positions. Manually rotate the device in an end-over-end fashion 2 or 3 times. Reposition the ZHE in the vertical position with the liquid inlet/outlet valve on top. Pressurize the ZHE to 5-10 psi (if necessary) and slowly open the liquid inlet/outlet valve to bleed out any headspace (into a hood) that may have been introduced due to the addition of extraction fluid. This bleeding shall be done quickly and shall be stopped at the first appearance of liquid from the valve. Re-pressurize the ZHE with 5-10 psi and check all ZHE fittings to ensure that they are closed.

7.3.12.3 Place the ZHE in the rotary agitation apparatus (if it is not already there) and rotate at  $30 \pm 2$  rpm for  $18 \pm 2$  hours. Ambient temperature (i.e., temperature of room in which extraction occurs) shall be maintained at  $22 \pm 3^\circ\text{C}$  during agitation.

7.3.13 Following the  $18 \pm 2$  hour agitation period, check the pressure behind the ZHE piston by quickly opening and closing the gas inlet/outlet valve and noting the escape of gas. If the pressure has not been maintained (i.e., no gas release observed), the device is leaking. Check the ZHE for leaking as specified in section 4.2.1, and perform the extraction again with a new sample of waste. If the pressure within the device has been maintained, the material in the extractor vessel is once again separated into its component liquid and solid phases. If the waste contained an initial liquid phase, the liquid may be filtered directly into the

same filtrate collection container (i.e., TEDLAR (registered) bag) holding the initial liquid phase of the waste. A separate filtrate collection container must be used if combining would create multiple phases, or there is not enough volume left within the filtrate collection container. Filter through the glass fiber filter, using the ZHE device as discussed in section 7.3.9. All extract shall be filtered and collected if the TEDLAR (registered) bag is used, if the extract is multiphasic or if the waste contained an initial liquid phase (see sections 4.6 and 7.3.1).

Note: An in-line glass fiber filter may be used to filter the material within the ZHE if it is suspected that the glass fiber filter has been ruptured.

7.3.14 If the original waste contained no initial liquid phase, the filtered liquid material obtained from section 7.3.13 is defined as the TCLP extract. If the waste contained an initial liquid phase, the filtered liquid material obtained from section 7.3.13 and the initial liquid phase (section 7.3.9) are collectively defined as the TCLP extract.

7.3.15 Following collection of the TCLP extract, immediately prepare the extract for analysis and stored with minimal headspace at 4°C until analyzed. Analyze the TCLP extract according to the appropriate analytical methods. If the individual phases are to be analyzed separately (i.e., are not miscible), determine the volume of the individual phases (to  $\pm 0.5$  percent), conduct the

appropriate analyses and combine the results mathematically by using a simple volume-weighted average:

$$\text{Final analyte concentration} = \frac{(V_1)(C_1) + (V_2)(C_2)}{V_1 + V_2}$$

where:

$V_1$ =The volume of the first phase (L).

$C_1$ =The concentration of the contaminant of concern in the first phase (mg/L).

$V_2$ =The volume of the second phase (L).

$C_2$ =The concentration of the contaminant of concern in the second phase (mg/L).

7.3.16 Compare the analyte concentrations in the TCLP extract with the levels identified in the appropriate regulations. Refer to section 8.0 for quality assurance requirements.

## 8.0 Quality Assurance

8.1 A minimum of one blank (using the same extraction fluid as used for the samples) must be analyzed for every 20 extractions that have been conducted in an extraction vessel.

8.2 A matrix spike shall be performed for each waste type (e.g. waste water treatment sludge, contaminated soil, etc.) unless the result exceeds the regulatory level and the data is being used solely to demonstrate that the waste property exceeds the regulatory level. A minimum of one matrix spike determination shall be used to correct the measured values. (See sections 8.2.4 and 8.2.5). As a minimum, follow the matrix spike addition guidance provided in each analytical method.

8.2.1 Matrix spikes are to be added after filtration of the TCLP extract and before preservation. Matrix spikes should not be added prior to TCLP extraction of the sample.

8.2.2 In most cases, matrix spikes should be added at a concentration equivalent to the corresponding regulatory level. If the analyte concentration is less than one half the regulatory level, the spike concentration may be as low as one half of the analyte concentration, but may not be less than five times the method detection limit. In order to avoid differences in matrix effects, the matrix spikes must be added to the same nominal volume of TCLP extract as that which was analyzed for the unspiked sample.

8.2.3 The purpose of the matrix spike is to monitor the performance of the analytical methods used and to determine whether matrix interferences exist. Use of other internal calibration methods, modification of analytical methods, or use of alternate analytical methods may be needed to accurately measure the analyte

concentration of the TCLP extract when the recovery of the matrix spike is below the expected analytical method performance.

8.2.4 Matrix spike recoveries are calculated by the following formula:

$$\%R (\% \text{ Recovery}) = \frac{100(X_s - X_u)}{K}$$

where:

$X_s$  = measured value for the spiked, sample,

$X_u$  = measured value for the unspiked sample, and

K = known value of the spike in the sample.

8.2.5 Measured values are corrected for analytical bias using the following formula

$$X_c = 100 \frac{X_u}{\%R}$$

where:

$X_c$  = corrected value, and

$X_u$  = measured value of the unspiked sample

8.3 All quality control measures described in the appropriate analytical methods shall be followed.

8.4 Samples must undergo TCLP extraction within the following time periods:

SAMPLE MAXIMUM HOLDING TIMES (DAYS)

	From: Field Collection	From: TCLP Extraction	From: Preparative Extraction	Total Elapsed Time
	To: TCLP Extraction	To: Preparative Extraction	To: Determinative Analysis	
Volatiles	14	NA	14	28
Semivolatiles	14	7	40	61
Mercury	28	NA	28	56
Metals, except mercury	180	NA	180	360

NA = Not Applicable

If sample holding times are exceeded, the values obtained will be considered minimal concentrations. Exceeding the holding time is not acceptable in establishing that a waste does not exceed the regulatory level. Exceeding the holding time will not invalidate characterization if the waste exceeds the regulatory level.

TABLE 1--VOLATILE ANALYTES 1/, 2/

Compound	CAS No.
Acetone	67-64-1
Benzene	71-43-2
n-Butyl alcohol	71-36-6
Carbon disulfide	75-15-0
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Chloroform	67-66-3
1,2-Dichloroethane	107-06-2
1,1-Dichloroethylene	75-35-4
Ethyl acetate	141-78-6
Ethyl benzene	100-41-4
Ethyl ether	60-29-7
Isobutanol	78-83-1
Methanol	67-56-1
Methylene chloride	75-09-2
Methyl ethyl ketone	78-93-3
Methyl isobutyl ketone	108-10-1
Tetrachloroethylene	127-18-4
Toluene	108-88-3
1,1,1-Trichloroethane	71-55-6
Trichloroethylene	79-01-6
Trichlorofluoromethane	75-69-4
1,1,2-Trichloro-1,2,2,-trifluoroethane	76-13-1
Xylene	1330-20-7

1/ When testing for any or all of these analytes, the zero-headspace extractor vessel shall be used instead of the bottle extractor.

2/ Benzene, carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichloroethane, 1,1-dichloroethylene, methyl ethyl ketone, tetrachloroethylene, trichloroethylene, and vinyl chloride are toxicity characteristic constituents.

TABLE 2--SUITABLE ROTARY AGITATION APPARATUS 1/

Company	Location	Model
Analytical Testing and Consulting Services, Inc.	Warrington, PA (215) 343-4490.	4-vessel (DC20S); 8-vessel (DC20); vessel (DC 20B).
Associated Design and Manufacturing Company.	Alexandria, VA (703) 549-5999.	2 vessel (3740-2); 4-vessel (3740-4); 6-vessel (3740-6); 8-vessel (3740-8); 12 vessel (3740-12); 24 vessel (3740-24).
Environmental Machine and Design, Inc.	Lynchburg, VA (804) 845-6424.	8-vessel (08-00-00); 4-vessel (04-00-00).
IRA Machine Shop and Laboratory.	Santurce, PR (809) 752-4004.	8-vessel (011001).
Lars Lande Manufacturing.	Whitmore Lake, MI (313) 449-4116.	10-vessel ;(01VRE); 5-vessel (5VRE).
Millipore Corp.	Bedford, MA (800) 225-3384.	4-ZHE or 4 1-liter bottle extractor (YT300RAHW).

1/ Any device that rotates the extraction vessel in an end-over-end fashion at 30+2 rpm is acceptable.

TABLE 3--SUITABLE ZERO-HEADSPACE EXTRACTOR VESSELS 1/

Company	Location	Model No.
Analytical Testing & Consulting  Services, Inc.	Warrington, PA, (215) 343-4490	C102, Mechanical Pressure Device._
Associated Design & Manufacturing Co.	Alexandria, VA, (703) 549-5999	3745-ZHE Gas Pressure Device._
Environmental Machine and Design, Inc.	Lynchburg, VA (804) 845-6424	VOLA-TOX1, Gas Pressure Device.
Lars Lande Manufacturing <u>2/</u>	Whitmore Lake, MI (313) 449-4116	ZHE-11, Gas Pressure Device.
Millipore Corp.	Bedford, MA, (800)225-3384	YT30090HW, Gas Pressure Device.

1/ Any device that meets the specifications listed in section 4.2.1. of the method is acceptable.

2/ This device uses a 110 mm filter.

TABLE 4--SUITABLE FILTER HOLDERS 1/

Company	Location	Model	Size
Nuclepore Corp.	Pleasanton, CA,	425910	142 mm.
	(800) 882-7711	410400	47 mm.
Micro Filtration Systems	Dublin, CA,	302400	142 mm.
	(800) 334-7132	311400	47 mm.
	(415) 828-6010		
Millipore Corp	Bedford, MA,	YT30142HW	142 mm.
		XX1004700	47 mm.

1/ Any device capable of separating the liquid from the solid phase of the waste is suitable, providing that it is chemically compatible with the waste and the constituents to be analyzed. Plastic devices (not listed above) may be used when only inorganic analytes are of concern. The 142 mm size filter holder is recommended.

TABLE 5--SUITABLE FILTER MEDIA 1/

Company	Location	Model	Pore size (um)
Micro Filtration Systems	Dublin, CA (800) 334-7132 (415) 828-6010	GF75	0.7
Millipore Corporation	Beford, MA (800) 225-3384	AP40	0.7
Nucleopore Corporation	Pleasanton, CA (415) 463-2530	211625	0.7
Whatman Laboratory Products, Inc.	Clifton, NJ, (201) 773-5800	GFF	0.7

1/ Nominal pore size Any filter that meets the specifications in section 4.4 of the Method is suitable.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Part 268 Appendix I.

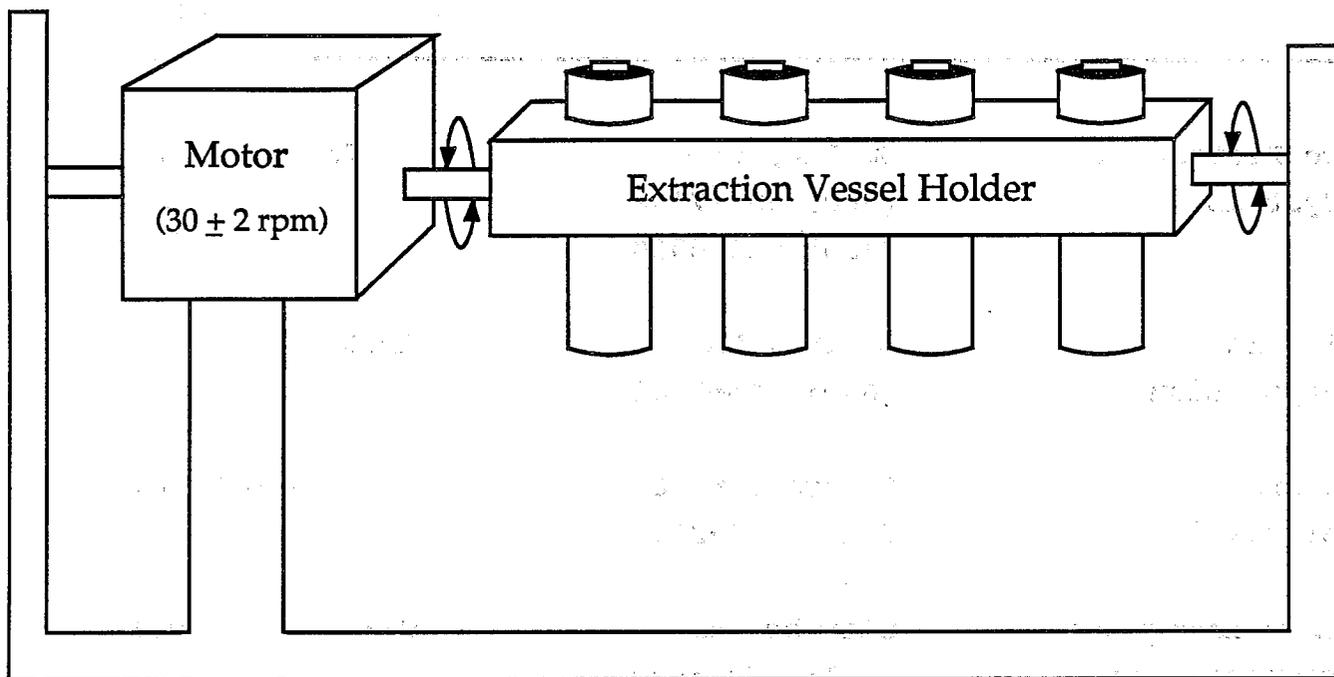


Figure 1. Rotary Agitation Apparatus

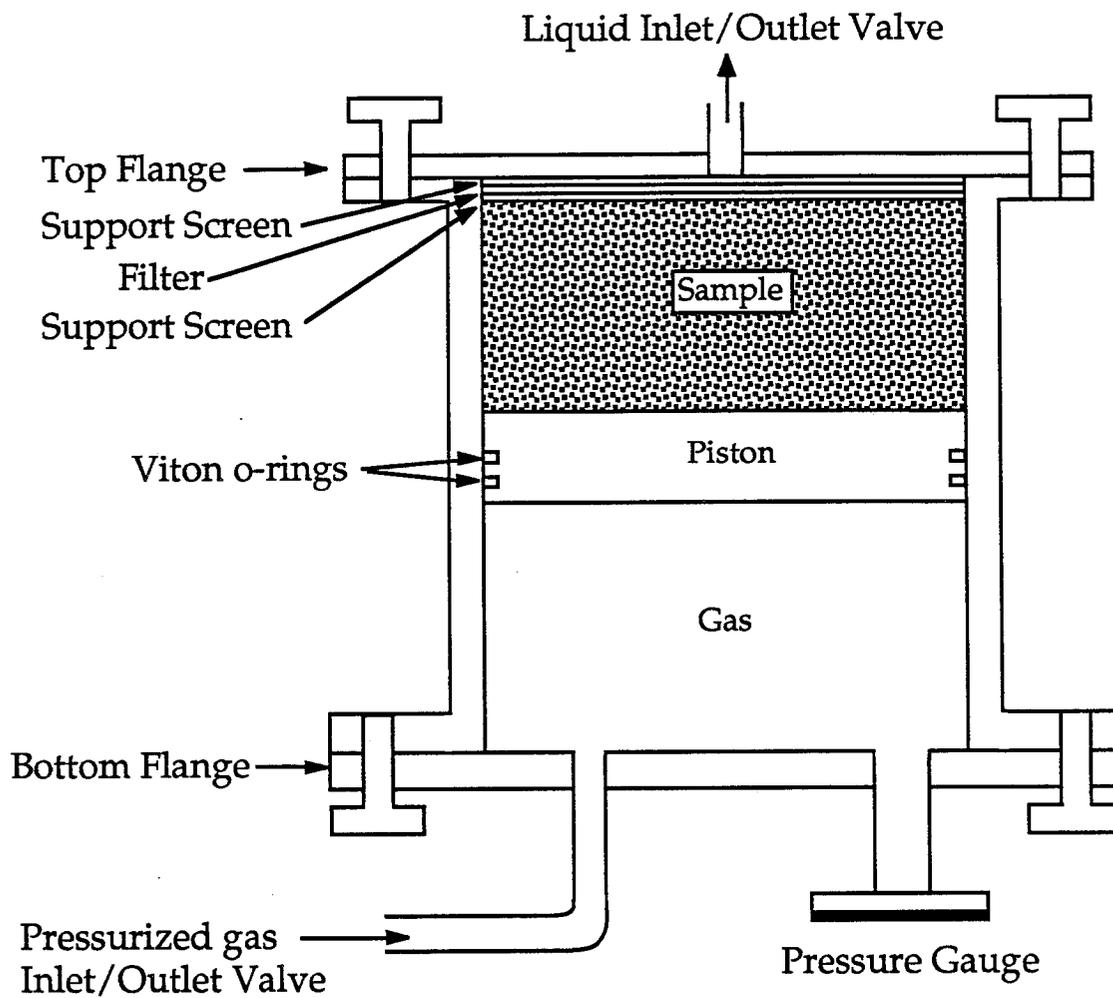
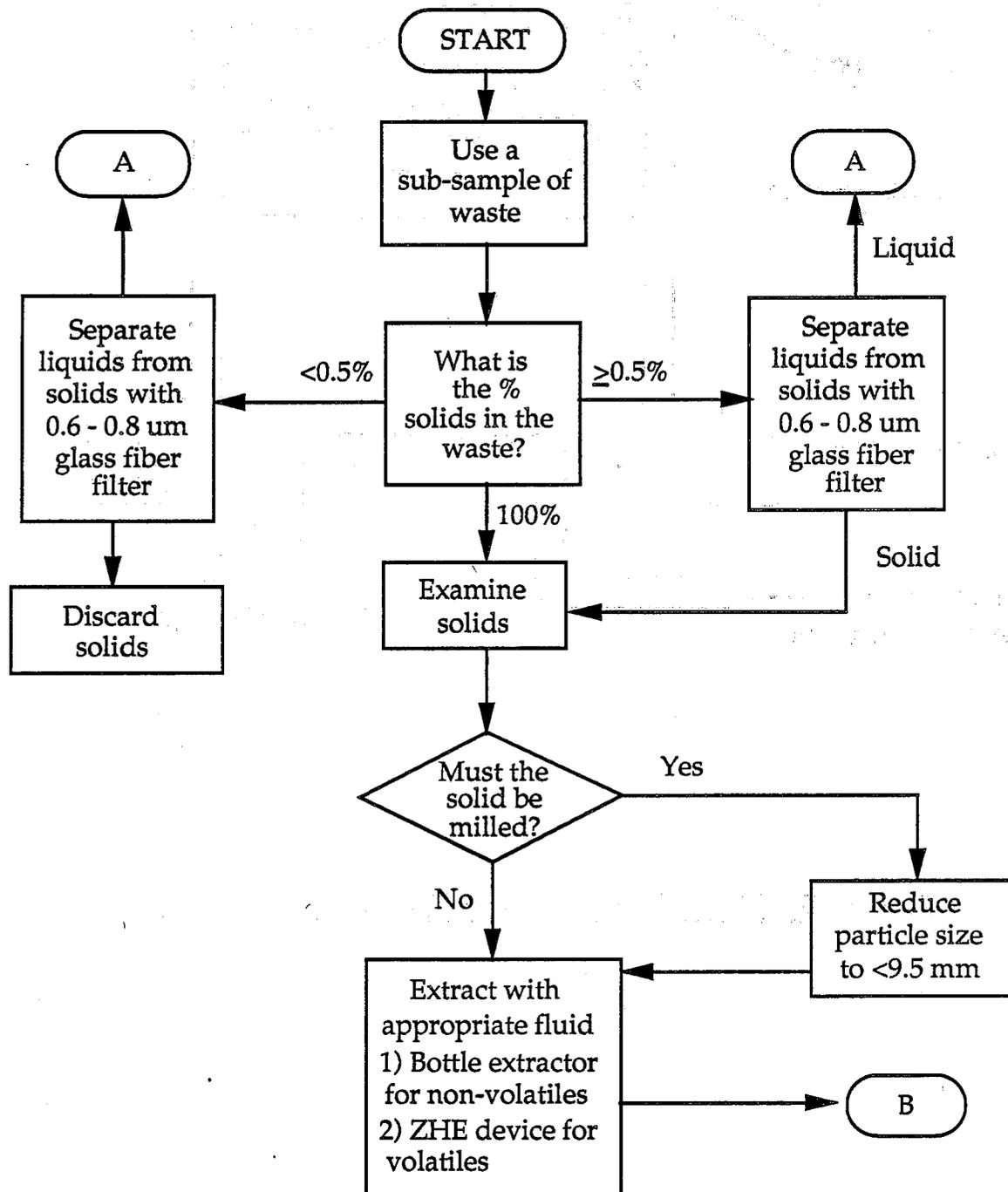


Figure 2. Zero-Headspace Extractor (ZHE)

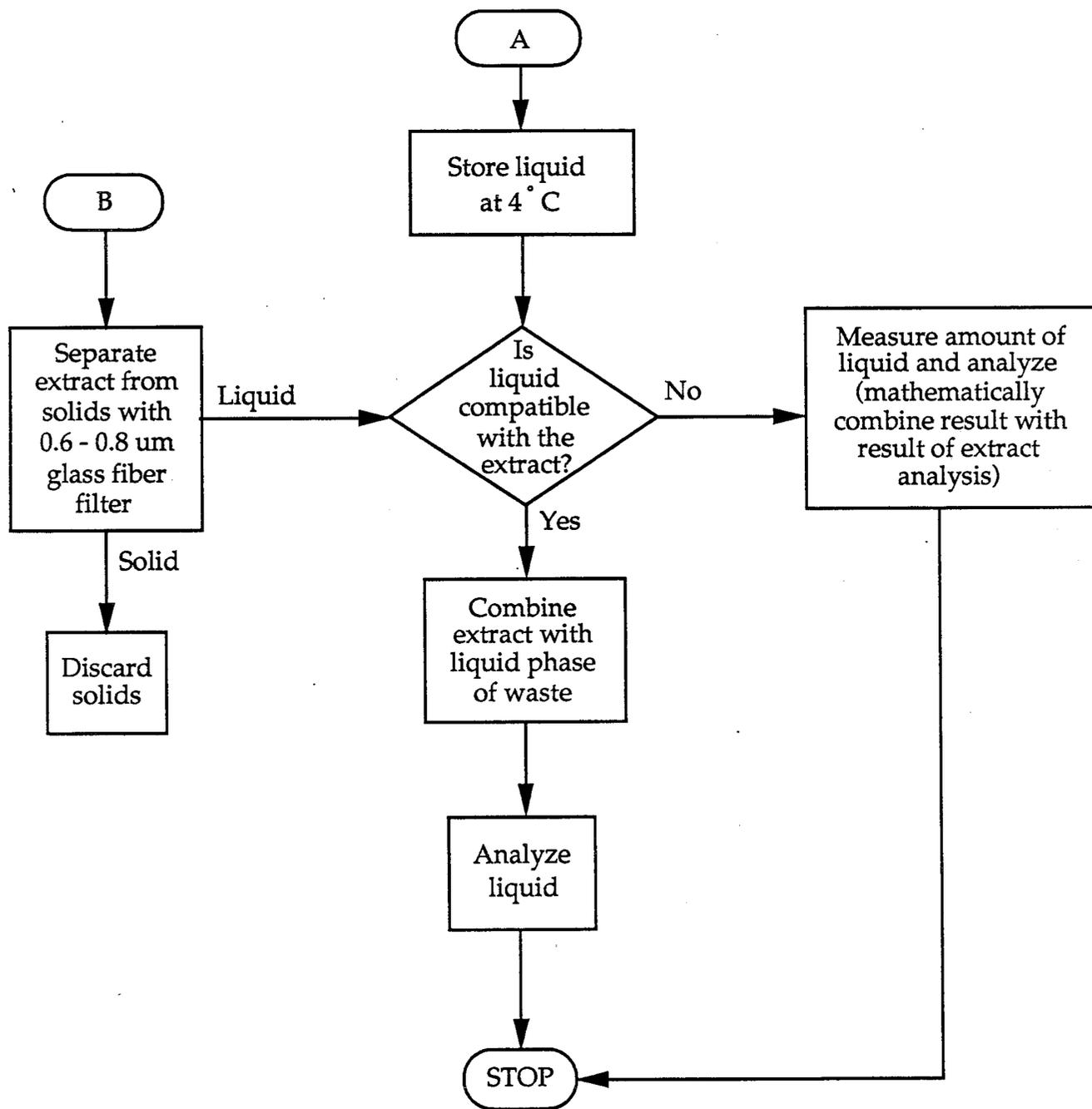
# Method 1311

## Toxicity Characteristic Leaching Procedure



Method 1311 (Continued)

Toxicity Characteristic Leaching Procedure



Appendix II Treatment Standards (as Concentrations  
in the Treatment Residual Extract).

[Note: The technologies shown are the basis of the treatment standards. They are not required to be used in meeting the treatment standards]

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Waste Treatability Groups For FO01-  
FO05 Spent Solvent Wastes (mg/l)

Constitutents of FO01- FO05 Spent Solvent Wastes	Waste- water	Technology Basis <sup>1</sup>	Wastewater Generated by Pharma- ceutical Plant <sup>2</sup>	All Other <sup>3</sup>
Acetone	0.05	SS		0.59
n-Butyl Alcohol	5.00	SS		5.00
Carbon disulfide	1.05	SS		4.81
Carbon tetrachloride	0.05	B		0.96
Chlorobenzene	0.15	B&AC		0.05
Cresols (cresylic acid)	2.82	AC		0.75
Cyclohexanone	0.125	SS		0.75
1,2-Dichlorobenzene	0.65	B&AC		0.125
Ethyl acetate	0.05	SS		0.75
Ethylbenzene	0.05	B		0.053
Ethyl ether	0.05	SS		0.75

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Isobutanol	5.00	SS		5.00
Methanol	0.25	SS		0.75
Methylene chloride	0.20	B	12.7	0.96
Methyl ethyl ketone	0.05	SS		0.75
Methyl isobutyl ketone	0.05	SS		0.33
Nitrobenzene	0.66	SS&AC		0.125
Pyridine	1.12	B&AC		0.33
Tetrachloroethylene	0.079	B		0.05
Toluene	1.12	B&AC		0.33
1,1,1-Trichloroethane	1.05	SS		0.41
1,1,2-Trichloro-				
1,2,2-trifluoroethane	1.05	SS		0.96
Trichloroethylene.	0.062	B&AC		0.091
Trichlorofluoromethane	0.05	B		0.96
Xylene	0.05	AC		0.15

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<sup>1</sup> In some instances other technologies achieved somewhat lower treatment values but waste characterization data were insufficient to identify separate treatability groups. Refer to the USEPA BDAT background document for a detailed explanation of the determination of the treatment standards.

SS=steam stripping

B=biological treatment

AC=activated carbon

<sup>2</sup> Wastewaters generated by pharmaceutical plants shall be treated to the standards given for all other wastewaters except in the case of methylene chloride.

<sup>3</sup> The treatment standards in this treatability group are based on incineration.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Part 268 Appendix II.

Appendix III List of Halogenated Organic Compounds Regulated Under  
66268.32 EPA Listed Compounds:

In determining the concentration of HOCs in a hazardous waste for purposes of the Section 66268.32 land disposal prohibition, HOCs that shall be included in the calculation as any compounds having a carbon-halogen bond which are listed in this Appendix (see Section 66268.10). Appendix III to Chapter 18 consists of the following compounds:

Volatiles

Bromodichloromethane

Bromomethane

Carbon Tetrachloride

Chlorobenzene

2-Chloro-1,3-butadiene

Chlorodibromomethane

Chloroethane

2-Chloroethyl vinyl ether

Chloroform

Chloromethane

3-Chloropropene

1,2-Dibromo-3-chloropropane

1,2-Dibromoethane

Dibromomethane

Trans-1,4-Dichloro-2-butene

Dichlorodifluoromethane

1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethylene  
Trans-1,2-Dichloroethene  
1,2-Dichloropropane  
Trans-1,3-Dichloropropene  
cis-1,3-Dichloropropene  
Iodomethane  
Methylene chloride  
1,1,1,2-Tetrachloroethane  
1,1,2,2-Tetrachloroethane  
Tetrachloroethene  
Tribromomethane  
1,1,1-Trichloroethane  
1,1,2-Trichloroethane  
Trichloroethene  
Trichloromonofluoromethane  
1,2,3-Trichloropropane  
Vinyl chloride

#### Semivolatiles

Bis(2-chloroethoxy) ethane  
Bis(2-chloroethyl) ether  
Bis(2-chloroisopropyl) ether  
p-Chloroaniline  
Chlorobenzilate

p-Chloro-m-cresol  
2-Chloronaphthalene  
2-Chlorophenol  
3-Chloropropionitrile  
m-Dichlorobenzene  
o-Dichlorobenzene  
p-Dichlorobenzene  
3,3'-Dichlorobenzidine  
2,4-Dichlorophenol  
2,6-Dichlorophenol  
Hexachlorobenzene  
Hexachlorobutadiene  
Hexachlorocyclopentadiene  
Hexachloroethane  
Hexachloroprophene  
Hexachloropropene  
4,4'-Methylenebis(2-chloroaniline)  
Pentachlorobenzene  
Pentachloroethane  
Pentachloronitrobenzene  
Pentachlorophenol  
Pronamide  
1,2,4,5-Tetrachlorobenzene  
2,3,4,6-Tetrachlorophenol  
1,2,4-Trichlorobenzene  
2,4,5-Trichlorophenol  
2,4,6-Trichlorophenol

Tris(2,3-dibromopropyl)phosphate

Organochlorine Pesticides

Aldrin

alpha-BHC

beta-BHC

delta-BHC

gamma-BHC

Chlordane

DDD

DDE

DDT

Dieldrin

Endosulfan I

Endosulfan II

Endrin

Endrin aldehyde

Heptachlor

Heptachlor epoxide

Isodrin

Kepone

Methoxychlor

Toxaphene

Phenoxyacetic Acid Herbicides

2,4-Dichlorophenoxyacetic acid

Silvex

2,4,5-T

PCBs

Aroclor 1016

Aroclor 1221

Aroclor 1232

Aroclor 1242

Aroclor 1248

Aroclor 1254

Aroclor 1260

PCBs not otherwise specified

Dioxins and Furans

Hexachlorodibenzo-p-dioxins

Hexachlorodibenzofuran

Pentachlorodibenzo-p-dioxins

Pentachlorodibenzofuran

Tetrachlorodibenzo-p-dioxins

Tetrachlorodibenzofuran

2,3,7,8-Tetrachlorodibenzo-p-dioxin

Phenoxyacetic Acid Herbicides

2,4-Dichlorophenoxyacetic acid

Silvex

2,4,5-T

PCBs

Aroclor 1016

Aroclor 1221

Aroclor 1232

Aroclor 1242

Aroclor 1248

Aroclor 1254

Aroclor 1260

~~PCBs not otherwise specified~~

~~Dioxins and Furans~~

~~Hexachlorodibenzo-p-dioxins~~

Hexachlorodibenzofuran

Pentachlorodibenzo-p-dioxins

Pentachlorodibenzofuran

Tetrachlorodibenzo-p-dioxins

Tetrachlorodibenzofuran

2,3,7,8-Tetrachlorodibenzo-p-dioxin

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code.

Appendix III-A List of Halogenated Organic Compounds Regulated  
Under 66268.32: California Listed Compounds

In determining the concentration of HOCs in a hazardous waate for the purposes of the Section 66268.32 land disposal restriction, HOCs that shall be included in the calculation as any compounds having a carbon-halogen bond which are listed in this Appendix (See Section 66260.10). Appendix III-A to Chapter 18 consists of the following compounds:

Chlorinated Solvents

1-Chlorobutane (N-Butyl Chloride)  
2-Chloro-2-methylpropane (t-Butyl Chloride)  
3-Chloro-2-methylpropene (Methallyl Chloride)  
Dichlorobutadiene  
Dichlorobutenes  
1,4-Dichlorobutyne  
Tetrachloroethylene (Perchloroethylene)  
1,2,3-Trichloropropene

Pesticides

Atrazine

Balan  
Barban  
Bladex  
Bromacil  
Bromoxynil Octanoate  
Captafol  
Captan  
Carbon Tetrachloride  
Carbophenthion  
CDEC  
Chipco 26019 (Iprodione)  
Chloramben (Imagan)  
Chlorbisan  
Chlordimeform  
Chloromeform Hydrochloride  
Chlorflurenol, methyl ester  
Chlorobenzilate  
2-Chloroethyl Trimethyl Ammonium Chloride  
Chloroneb  
Chlorophacione  
Chlorophenols  
1-(4-Chlorophenoxy)-3,3-Dimethyl-1-(1,2,4-Triazol-1-YL)-Butan-2-one S-((4-Chlorophenyl) methyl) Diethylcarbothioate  
Chloropicrin  
Chlorothalonil  
Chloroxuron

Chloropynifus  
Chloro-IPC  
Dalapon  
4(2,4-DB)  
D-D Mixture (Dichloropropane, Dichloropropene  
DDVP; Dichlorovo; Vapona  
Diallate  
Dicamba  
Dichlobenil  
Dichlone  
Para-dichlorobenzene  
2,4-Dichloro-6-(0-chloroanilino)-S-Triazine  
2,6-Dichloro-4-Nitroaniline Dichlorophene  
1-(2-(2,4 Dichlorophenyl)-2-(2-Propenyoxy-Ethyl)-IH-IM-IDAZ  
Dichloropropane  
Dichloropropene  
Dicofol  
Dimethyl Tetrachloroterephthalate  
Diuron  
2,4-DP  
Endothal  
Ethephon  
Ethylene Dibromide (EDB)  
Ethylene Dichloride (EDC)  
Fenac  
Fluometron

Fluchloralin

Folpet

Hexachlorophene

Lindane

Linuron

MCPA

MCPPA

Methfluoramid

Methyl Bromide

Methyl-2,3-Dichloro-9-hydroxy fluorene-9-carboxylate Methyl 2,7-

Dichloro-9-hydroxy fluorene-9-carboxylate Methyl 2-(4-(2,4

Dichlorophenoxy) phenoxy propanoate Methylene Chloride

Methyl-9-hydroxyfluorene-9-carboxylate Monuron

Naled

Neburon

N-Serve (Nitrpyrin)

Nitrofen

Norflurazon

PCNB

PCP

Pentac

Permethrin

Perthane

Phosalone

Picloram-R

Pipvon

Permethrin  
Proflurarin  
Propachlor  
Propanil  
Propazine  
Pyrazon  
Ronnell  
Simazine  
Sodium Dichloro-s-triazinetrione  
Terbucil  
Terrazole  
Tetrachloroethylene  
Tetrachlorovintos  
Tetrudifon  
N-Trichlormethyl Thio-4-cyclohexine 1,2-Dicarboximide  
Trichlorophon  
Trichloro-5-triazinetrione  
Trifluralin  
Triforine  
Vinclozolin

Compounds from Appendix X--Chapter 11

Acetyl Chloride

Allyl Bromide, 3-Bromopropene

Allylchloride, 3-chloropropene  
N-Amyl chloride, 1-chloropentane  
Benzotrifluoride, trifluoromethyl benzene  
Benzl Bromide, Alpha-Bromotoluene  
Benzylchloride, Apha-chlorotoluene  
bis (chloromethyl) ether, Dichloromethyl ether  
Carbophenothion, trithion  
Chloral Hydrate, trichloro Acetaldehyde  
Chlortenvinphos  
Chloroacetaldehyde  
Apha-chloroacetophenone, phenylchloromethyl ketone  
Chloroacetyl chloride  
para-Chlorobenzoyl peroxide  
orth-Chlorobenzylidene malonitrite, OCMB  
Chloropicrin, Trichloronitromethane  
Chloro-ortho-toluidine, 2 Amino-4-chloroteulene  
Coroxon  
Crimidine  
1,2-Dichloroethylene  
Dichloroethyl ether, diclorether  
1,2 Dichloropropene, propylene dichloride  
1,3 Dichloropropylene; 1,3 dichloropropene  
Dinitirochlorobenzene  
Epichlorohydrin  
Ethyl Chloride, chloroethane  
Fluoroacetanilide

Fluoroacetic acid

Isopropyl chloride

Methyl Chloromethyl ether, CMME

Monochloroacetic acid, Chloroacetic Acid, MCA

Monochloroacetone, Chloroacetone, 1-chloro-2-propanone

Nitrochlorobenzene, Chloronitrobenzene

Perchloroethylene

Perchloromethyl mercaptan, Trichloromethylsulfenyl chloride

Phosphamidon, Dimecron

Picryl Chloride, 2-Chloro-1,3,5 Trinitro Benzene Telodrin

Tetrasal, Animert

Tranid

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6,  
Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health  
and Safety Code.

**APPENDIX IV -- ORGANOMETALLIC LAB PACKS**

Hazardous waste with the following EPA waste codes may be placed in an "organometallic" or "Appendix IV lab pack:"

P001, P002, P003, P004, P005, P006, P007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P022, P023, P024, P025, P026, P027, P028, P031, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P108, P109, P110, P112, P113, P114, P115, P116, P118, P119, P120, P122, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U134, U135, U136, U137, U138, U139, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U152, U154, U153, U155, U156, U157, U158, U159, U160, U161, U162, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U328, U353, U359

F001, F002, F003, F004, F005, F006, F010, F020, F021, F023, F024, F026, F027, F028

K001, K002, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K054, K060, K061, K064, K065, K066, K069, K071, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, K111, K112, K113, K114, K115, K116, K117, K118, K123, K124, K125, K126, K136

D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D012, D013, D014, D015, D016, D017

U032, U136, U144, U145, U146, U163, U214, U215, U216, U217

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Part 268 Appendix IV.

**APPENDIX V -- ORGANIC LAB PACKS**

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Hazardous wastes with the following EPA Hazardous Waste Code No. may be placed in an "organic" or "Appendix V:"

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P001, P002, P003, P004, P005, P006, P007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P022, P023, P025, P024, P026, P027, P028, P031, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P108, P109, P110, P111, P112, P113, P114, P115, P116, P118, P119, P120, P122, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U135, U137, U138, U139, U140, U141, U142, U143, U147, U148, U149, U150, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U205, U206, U207, U208, U209, U210, U211, U213, U214, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U328, U353, U359

F001, F002, F003, F004, F005, F010, F020, F021, F023, F024, F026, F027, F028

K001, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K054, K060, K065, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, K111, K112, K113, K114, K115, K116, K117, K118, K123, K124, K125, K126, K136

D001, D012, D013, D014, D015, D016, D017

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Part 268 Appendix V.

**APPENDIX VI -- RECOMMENDED TECHNOLOGIES TO ACHIEVE DEACTIVATION OF CHARACTERISTICS IN SECTION 66268.42**

The treatment standard for many subcategories of D001, D002, and D003 wastes as well as for K044, K045, and K047 wastes is listed in 66268.42 simply as "Deactivation to remove the characteristics of ignitability, corrosivity, and reactivity". EPA has determined that many technologies, when used alone or in combination, can achieve this standard. The following appendix presents a partial list of these technologies, utilizing the five letter technology codes established in Section 66268.42 Table 1. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery, and/or the use of other pretreatment technologies provided deactivation is achieved and these alternative methods are not performed in units designated as land disposal.

Waste Code/Subcategory	Nonwastewaters	Wastewaters
D001 Ignitable Liquids based on 66261.21(a)(1) - Low TOC Nonwastewater Subcategory (containing 1% to <10% TOC)	RORGS INCIN WETOX CHOXD BIODG	n.a.
D001 Ignitable Liquids based on 66261.21(a)(1) - Ignitable Wastewater Subcategory (containing <1% TOC)	n.a.	RORGS INCIN WETOX CHOXD BIODG
D001 Compressed Gases based on 66261.21(a)(3)	RCGAS INCIN FSUBS ADGAS fb. INCIN ADGAS fb. (CHOXD; or CHRED)	n.a.
D001 Ignitable Reactives based on 66261.21 (a)(2)	WTRRX CHOXD CHRED STABL INCIN	n.a.
D001 Ignitable Oxidizers based on 66261.21(a)(4)	CHRED INCIN	CHRED INCIN
D002 Acid Subcategory based on 66261.22(a)(1) with pH less than or equal to 2	RCORR NEUTR INCIN	NEUTR INCIN
D002 Alkaline Subcategory based on 66261.22(a)(1) with pH greater than or equal to 12.5	NEUTR INCIN	NEUTR INCIN

Waste Code/Subcategory	Nonwastewaters	Wastewaters
D002 Other Corrosives based on 66261.22(a)(2)	CHOXD CHRED INCIN STABL	CHOXD CHRED INCIN
D003 Water Reactives based on 66261.23(a)(2), (3), and (4)	INCIN WTRRX CHOXD CHRED	n.a.
D003 Reactive Sulfides based on 66261.23(a)(5)	CHOXD CHRED INCIN STABL	CHOXD CHRED BIODG INCIN
D003 Explosives based on 66261.23(a)(6), (7), and (8)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIODG CARBN
D003 Other Reactives based on 66261.23(a)(1)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIODG CARBN
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN
K045 Spent carbon from the treatment of wastewaters containing explosives	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN
K047 Pink/red water from TNT operations	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN

NOTE: "n.a." stands for "not applicable"; "fb." stands for "followed by".

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.

Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Part 268 Appendix VI.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List]

Waste code	Waste category	Effective date
California list	Liquid hazardous wastes, including free liquids associated with solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l or certain metals or compounds of these metals greater than or equal to the prohibition levels	July 8, 1987.
California list	Liquid (aqueous) hazardous wastes having a pH less than or equal to 2	July 8, 1987.
California list	Dilute HOC wastewaters, defined as HOC-waste mixtures that are primarily water and that contain greater than or equal to 1,000 mg/l but less than 10,000 mg/l	July 8, 1987.
California list	Liquid hazardous waste containing PCBs greater than or equal to 50 ppm	July 8, 1987.
California list	Other liquid and non-liquid hazardous wastes containing HOCs in total concentration greater than or equal to 1,000 mg	Nov. 8, 1988.
California list	Soil and debris HOCs not from CERCLA/RCRA corrective actions	July 8, 1989.
California list	Soil and debris HOCs from CERCLA/RCRA corrective actions	Nov. 8, 1990.
D001	All	Aug. 8, 1990.
D002	All	Aug. 8, 1990.
D003	All	Aug. 8, 1990.
D004	Inorganic solid debris	May 8, 1992.
D004	Nonwastewater	May 8, 1992.
D004	Wastewater	Aug. 8, 1990.
D005	Inorganic solid debris	May 8, 1992.
D005	All others	Aug. 8, 1990.
D006	Inorganic solid debris	May 8, 1992.
D006	All others	Aug. 8, 1990.
D007	Inorganic solid debris	May 8, 1992.
D007	All others	Aug. 8, 1990.
D008	Inorganic solid debris	May 8, 1992.
D008	Lead acid batteries	May 8, 1992.
D008	All others	Aug. 8, 1990.
D009	Inorganic solid debris	May 8, 1992.
D009	High mercury nonwastewater	May 8, 1992.
D009	Low mercury nonwastewater	May 8, 1992.
D009	All others	Aug. 8, 1990.
D010	Inorganic solid debris	May 8, 1992.
D010	All others	Aug. 8, 1990.
D011	Inorganic solid debris	May 8, 1992.
D011	All others	Aug. 8, 1990.
D012	All	Aug. 8, 1990.
D013	All	Aug. 8, 1990.
D0014	All	Aug. 8, 1990.
D0015	All	Aug. 8, 1990.
D0016	All	Aug. 8, 1990.
D0017	All	Aug. 8, 1990.
F001-F005	All, except:	Nov. 8, 1986.
F001-F005	Small quantity generators, CERCLA/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids, and non CERCLA/RCRA corrective action soils with less than 1 percent total solvent constituents	Nov. 8, 1988.
F001-F005	Soil and debris	Nov. 8, 1990.
F002 b	All	Aug. 8, 1990.
F005 c	All	Aug. 8, 1990.
F006	Wastewater	Aug. 8, 1990.
F006	Nonwastewater	Aug. 8, 1988.
F006 (cyanides)	Nonwastewater	July 8, 1989.
F007	All	July 8, 1989.
F008	All	July 8, 1989.
F009	All	July 8, 1989.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
F010	Soil and debris	June 8, 1991.
F010	All others	June 8, 1989.
F011	All	July 8, 1989.
F012	All	July 8, 1989.
F019	All	Aug. 8, 1990.
F020	Soil and debris	Nov. 8, 1990.
F020	All others	Nov. 8, 1988.
F021	Soil and debris	Nov. 8, 1990.
F021	All others	Nov. 8, 1988.
F022	Soil and debris	Nov. 8, 1990.
F022	All others	Nov. 8, 1988.
F023	Soil and debris	Nov. 8, 1990.
F023	All others	Nov. 8, 1988.
F024	Soil and debris	June 8, 1991.
F024 (metals)	Nonwastewater	Aug. 8, 1990.
F024 (dioxins/furans)	All	Aug. 8, 1990.
F024	All others	June 8, 1989.
F025	All	Aug. 8, 1990.
F026	Soil and debris	Nov. 8, 1990.
F026	All others	Nov. 8, 1988.
F027	Soil and debris	Nov. 8, 1990.
F027	All others	Nov. 8, 1988.
F028	Soil and debris	Nov. 8, 1990.
F028	All others	Nov. 8, 1988.
F039	Wastewater	Aug. 8, 1990.
F039	Nonwastewater	May 8, 1992.
K001	Soil and debris	Aug. 8, 1990.
K001 (lead/organics)	All	Aug. 8, 1990.
K001	All others	Aug. 8, 1988.
K002	All	Aug. 8, 1990.
K003	All	Aug. 8, 1990.
K004	All	Aug. 8, 1990.
K005 <sup>d</sup>	All	Aug. 8, 1990.
K006 <sup>d</sup>	All	Aug. 8, 1990.
K007 <sup>d</sup>	All	Aug. 8, 1990.
K008	All	Aug. 8, 1990.
K009	Soil and debris	June 8, 1991.
K009	All others	June 8, 1989.
K010	Soil and debris	June 8, 1991.
K010	All others	June 8, 1989.
K011	Wastewater	Aug. 8, 1990.
K011	Nonwastewater	June 8, 1989.
K011	Soil and debris	June 8, 1991.
K013	Wastewater	Aug. 8, 1990.
K013	Nonwastewater	June 8, 1989.
K013	Soil and debris	June 8, 1991.
K014	Wastewater	Aug. 8, 1990.
K014	Nonwastewater	June 8, 1989.
K014	Soil and debris	June 8, 1991.
K015	Wastewater	Aug. 8, 1988.
K015	Nonwastewater	Aug. 8, 1990.
K016	Soil and debris	Aug. 8, 1990.
K016	All others	Aug. 8, 1988.
K017	All	Aug. 8, 1990.
K018	Soil and debris	Aug. 8, 1990.
K018	All others.	Aug. 8, 1988.
K019	Soil and debris	Aug. 8, 1990.
K019	All others	Aug. 8, 1988.
K020	Soil and debris	Aug. 8, 1990.
K020	All others	Aug. 8, 1988.
K021 <sup>e</sup>	All	Aug. 8, 1990.
K022	Wastewater	Aug. 8, 1990.
K022	Nonwastewater	Aug. 8, 1988.
K022	Soil and debris	Aug. 8, 1990.
K023	Soil and debris	June 8, 1991.
K023	All others	June 8, 1989.
K024	Soil and debris	Aug. 8, 1990.
K024	All others.	Aug. 8, 1988.
K025 <sup>e</sup>	All	Aug. 8, 1990.
K026	All	Aug. 8, 1990.
K027	Soil and debris	June 8, 1991.
K027	All others	June 8, 1989.
K028	Soil and debris	June 8, 1991.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
K028 (metals)	Nonwastewater	Aug. 8, 1990.
K028	All others	June 8, 1989.
K029	Wastewater	Aug. 8, 1990.
K029	Nonwastewater	June 8, 1989.
K029	Soil and debris	June 8, 1991.
K030	Soil and debris	Aug. 8, 1990.
K030	All others	Aug. 8, 1988.
K031	Wastewater	Aug. 8, 1990.
K031	Nonwastewater	May 8, 1992.
K032	All	Aug. 8, 1990.
K033	All	Aug. 8, 1990.
K034	All	Aug. 8, 1990.
K035	All	Aug. 8, 1990.
K036 <sup>e</sup>	All	Aug. 8, 1990.
K037	Soil and debris	Aug. 8, 1990.
K037	Wastewater	Aug. 8, 1990.
K037	All others	Aug. 8, 1988.
K038	Soil and debris	June 8, 1991.
K038	All others	June 8, 1989.
K039	Soil and debris	June 8, 1991.
K039	All others	June 8, 1989.
K040	Soil and debris	June 8, 1991.
K040	All others	June 8, 1989.
K041	All	Aug. 8, 1990.
K042	All	Aug. 8, 1990.
K043	Soil and debris	June 8, 1991.
K043	All others	June 8, 1989.
K044	All	Aug. 8, 1990.
K045	All	Aug. 8, 1990.
K046	Nonreactive nonwastewater	Aug. 8, 1988.
K046	All others	Aug. 8, 1990.
K047	All	Aug. 8, 1990.
K048	Wastewater	Aug. 8, 1990.
K048	Nonwastewater	Nov. 8, 1990.
K049	Wastewater	Aug. 8, 1990.
K049	Nonwastewater	Nov. 8, 1990.
K050	Wastewater	Aug. 8, 1990.
K050	Nonwastewater	Nov. 8, 1990.
K051	Wastewater	Aug. 8, 1990.
K051	Nonwastewater	Nov. 8, 1990.
K052	Wastewater	Aug. 8, 1990.
K052	Nonwastewater	Nov. 8, 1990.
K060 <sup>e</sup>	All	Aug. 8, 1990.
K061	Wastewater	Aug. 8, 1990.
K061	Nonwastewater	Aug. 8, 1988.
K062	All	Aug. 8, 1988.
K069	All	Aug. 8, 1990.
K073	All	Aug. 8, 1990.
K083	All	Aug. 8, 1990.
K084	Wastewater	Aug. 8, 1990.
K084	Nonwastewater	May 8, 1992.
K085	All	Aug. 8, 1990.
K086	All	Aug. 8, 1990.
K087	Soil and debris	Aug. 8, 1990.
K087	All others	Aug. 8, 1988.
K093	Soil and debris	June 8, 1991.
K093	All others	June 8, 1989.
K094	Soil and debris	June 8, 1991.
K094	All others	June 8, 1989.
K095	Wastewater	Aug. 8, 1990.
K095	Nonwastewater	June 8, 1989.
K095	Soil and debris	June 8, 1991.
K096	Wastewater	Aug. 8, 1990.
K096	Nonwastewater	June 8, 1989.
K096	Soil and debris	June 8, 1991.
K097	All	Aug. 8, 1990.
K098	All	Aug. 8, 1990.
K099	All	Aug. 8, 1988.
K100 <sup>e</sup>	All	Aug. 8, 1990.
K101	Wastewater	Aug. 8, 1988.
K101	Nonwastewater	May 8, 1992.
K102	Wastewater	Aug. 8, 1988.
K102	Nonwastewater	May 8, 1992.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
K103	Soil and debris	Aug. 8, 1990.
K103	All others	Aug. 8, 1988.
K104	Soil and debris	Aug. 8, 1990.
K104	All others.	Aug. 8, 1988.
K105	All	Aug. 8, 1990.
K106	High mercury nonwastewater	May 8, 1992.
K106	Low mercury nonwastewater	May 8, 1992.
K106	All others	Aug. 8, 1990.
K113	Soil and debris	June 8, 1991.
K113	All others	June 8, 1989.
K114	Soil and debris	June 8, 1991.
K114	All others	June 8, 1989.
K115	Soil and debris	June 8, 1991.
K115	All others	June 8, 1989.
K116	Soil and debris	June 8, 1991.
K116	All others	June 8, 1989.
P001	All	Aug. 8, 1990.
P002	All	Aug. 8, 1990.
P003	All	Aug. 8, 1990.
P004	All	Aug. 8, 1990.
P005	All	Aug. 8, 1990.
P006	All	Aug. 8, 1990.
P007	All	Aug. 8, 1990.
P008	All	Aug. 8, 1990.
P009	All	Aug. 8, 1990.
P010	Wastewater	Aug. 8, 1990.
P010	Nonwastewater	May 8, 1992.
P011	Wastewater	Aug. 8, 1990.
P011	Nonwastewater	May 8, 1992.
P012	Wastewater	Aug. 8, 1990.
P012	Nonwastewater	May 8, 1992.
P013	All	Aug. 8, 1990.
P014	All	Aug. 8, 1990.
P015	All	Aug. 8, 1990.
P016	All	Aug. 8, 1990.
P017	All	Aug. 8, 1990.
P018	All	Aug. 8, 1990.
P020	All	Aug. 8, 1990.
P021	All	June 8, 1989.
P022	All	Aug. 8, 1990.
P023	All	Aug. 8, 1990.
P024	All	Aug. 8, 1990.
P026	All	Aug. 8, 1990.
P027	All	Aug. 8, 1990.
P028	All	Aug. 8, 1990.
P029	All	June 8, 1989.
P030	All	June 8, 1989.
P031	All	Aug. 8, 1990.
P033	All	Aug. 8, 1990.
P034	All	Aug. 8, 1990.
P036	Wastewater	Aug. 8, 1990.
P036	Nonwastewater	May 8, 1992.
P037	All	Aug. 8, 1990.
P038	Wastewater	Aug. 8, 1990.
P038	Nonwastewater	May 8, 1992.
P039	Soil and debris	June 8, 1991.
P039	All others	June 8, 1989.
P040	Soil and debris	June 8, 1991.
P040	All others	June 8, 1989.
P041	Soil and debris	June 8, 1991.
P041	All others	June 8, 1989.
P042	All	Aug. 8, 1990.
P043	Soil and debris	June 8, 1991.
P043	All others	June 8, 1989.
P044	Soil and debris	June 8, 1991.
P044	All others	June 8, 1989.
P045	All	Aug. 8, 1990.
P046	All	Aug. 8, 1990.
P047	All	Aug. 8, 1990.
P048	All	Aug. 8, 1990.
P049	All	Aug. 8, 1990.
P050	All	Aug. 8, 1990.
P051	All	Aug. 8, 1990.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
P054	All	Aug. 8, 1990.
P056	All	Aug. 8, 1990.
P057	All	Aug. 8, 1990.
P058	All	Aug. 8, 1990.
P059	All	Aug. 8, 1990.
P060	All	Aug. 8, 1990.
P062	Soil and debris	June 8, 1991.
P062	All others	June 8, 1989.
P063	All	June 8, 1989.
P064	All	Aug. 8, 1990.
P065	High mercury nonwastewater	May 8, 1992.
P065	Low mercury nonwastewater	May 8, 1992.
P065	All others	Aug. 8, 1990.
P066	All	Aug. 8, 1990.
P067	All	Aug. 8, 1990.
P068	All	Aug. 8, 1990.
P069	All	Aug. 8, 1990.
P070	All	Aug. 8, 1990.
P071	Soil and debris	June 8, 1991.
P071	All others	June 8, 1989.
P072	All	Aug. 8, 1990.
P073	All	Aug. 8, 1990.
P074	All	June 8, 1989.
P075	All	Aug. 8, 1990.
P076	All	Aug. 8, 1990.
P077	All	Aug. 8, 1990.
P078	All	Aug. 8, 1990.
P081	All	Aug. 8, 1990.
P082	All	Aug. 8, 1990.
P084	All	Aug. 8, 1990.
P085	Soil and debris	June 8, 1991.
P085	All others	June 8, 1989.
P087	All	May 8, 1992.
P088	All	Aug. 8, 1990.
P089	Soil and debris	June 8, 1991.
P089	All others	June 8, 1989.
P092	High mercury nonwastewater	May 8, 1992.
P092	Low mercury nonwastewater	May 8, 1992.
P092	All others	Aug. 8, 1990.
P093	Soil and debris	May 8, 1992.
P093	All others	Aug. 8, 1990.
P094	Soil and debris	June 8, 1991.
P094	All others	June 8, 1989.
P095	Soil and debris	May 8, 1992.
P095	All others	Aug. 8, 1990.
P096	All	Aug. 8, 1990.
P097	Soil and debris	June 8, 1991.
P097	All others	June 8, 1989.
P098	All	June 8, 1989.
P099 (silver)	Wastewater	Aug. 8, 1990.
P099 (cyanides)	Wastewater	June 8, 1989.
P099 (cyanides/ silver)	Nonwastewater	June 8, 1989.
P101	All	Aug. 8, 1990.
P102	All	Aug. 8, 1990.
P103	All	Aug. 8, 1990.
P104 (silver)	Wastewater	Aug. 8, 1990.
P104 (cyanides)	Wastewater	June 8, 1989.
P104 (cyanides/ silver)	Nonwastewater	June 8, 1989.
P105	All	Aug. 8, 1990.
P106	All	June 8, 1989.
P108	Soil and debris	May 8, 1992.
P108	All others	Aug. 8, 1990.
P109	Soil and debris	June 8, 1991.
P109	All others	June 8, 1989.
P110	All	Aug. 8, 1990.
P111	Soil and debris	June 8, 1991.
P111	All others	June 8, 1989.
P112	All	Aug. 8, 1990.
P113	All	Aug. 8, 1990.
P114	All	Aug. 8, 1990.
P115	All	Aug. 8, 1990.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
P116	Soil and debris	May 8, 1992.
P116	All others	Aug. 8, 1990.
P118	Soil and debris	May 8, 1992.
P118	All others	Aug. 8, 1990.
P119	All	Aug. 8, 1990.
P120	All	Aug. 8, 1990.
P121	All	June 8, 1989.
P122	All	Aug. 8, 1990.
P123	All	Aug. 8, 1990.
U001	All	Aug. 8, 1990.
U002	All	Aug. 8, 1990.
U003	Soil and debris	May 8, 1992.
U003	All others	Aug. 8, 1990.
U004	All	Aug. 8, 1990.
U005	All	Aug. 8, 1990.
U006	Soil and debris	May 8, 1992.
U006	All others	Aug. 8, 1990.
U007	Soil and debris	May 8, 1992.
U007	All others	Aug. 8, 1990.
U008	All	Aug. 8, 1990.
U009	All	Aug. 8, 1990.
U010	Soil and debris	May 8, 1992.
U010	All others	Aug. 8, 1990.
U011	Soil and debris	May 8, 1992.
U011	All others	Aug. 8, 1990.
U012	All	Aug. 8, 1990.
U014	Soil and debris	May 8, 1992.
U014	All others	Aug. 8, 1990.
U015	Soil and debris	May 8, 1992.
U015	All others	Aug. 8, 1990.
U016	All	Aug. 8, 1990.
U017	Soil and debris	May 8, 1992.
U017	All others	Aug. 8, 1990.
U018	All	Aug. 8, 1990.
U019	All	Aug. 8, 1990.
U020	Soil and debris	May 8, 1992.
U020	All others	Aug. 8, 1990.
U021	Soil and debris	May 8, 1992.
U021	All others	Aug. 8, 1990.
U022	All	Aug. 8, 1990.
U023	All	Aug. 8, 1990.
U024	All	Aug. 8, 1990.
U025	All	Aug. 8, 1990.
U026	Soil and debris	May 8, 1992.
U026	All others	Aug. 8, 1990.
U027	All	Aug. 8, 1990.
U028	Soil and debris	June 8, 1991.
U028	All others	June 8, 1989.
U029	All	Aug. 8, 1990.
U030	All	Aug. 8, 1990.
U031	All	Aug. 8, 1990.
U032	All	Aug. 8, 1990.
U033	Soil and debris	May 8, 1992.
U033	All others	Aug. 8, 1990.
U034	Soil and debris	May 8, 1992.
U034	All others	Aug. 8, 1990.
U035	Soil and debris	May 8, 1992.
U035	All others	Aug. 8, 1990.
U036	All	Aug. 8, 1990.
U037	All	Aug. 8, 1990.
U038	Soil and debris	May 8, 1992.
U038	All others	Aug. 8, 1990.
U039	All	Aug. 8, 1990.
U041	Soil and debris	May 8, 1992.
U041	All others	Aug. 8, 1990.
U042	Soil and debris	May 8, 1992.
U042	All others	Aug. 8, 1990.
U043	All	Aug. 8, 1990.
U044	All	Aug. 8, 1990.
U045	All	Aug. 8, 1990.
U046	Soil and debris	May 8, 1992.
U046	All others	Aug. 8, 1990.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
U047	All	Aug. 8, 1990.
U048	All	Aug. 8, 1990.
U049	Soil and debris	May 8, 1992.
U049	All others	Aug. 8, 1990.
U050	All	Aug. 8, 1990.
U051	All	Aug. 8, 1990.
U052	All	Aug. 8, 1990.
U053	All	Aug. 8, 1990.
U055	All	Aug. 8, 1990.
U056	All	Aug. 8, 1990.
U057	All	Aug. 8, 1990.
U058	Soil and debris	June 8, 1992.
U058	All others	June 8, 1989.
U059	Soil and debris	May 8, 1992.
U059	All others	Aug. 8, 1990.
U060	Soil and debris	May 8, 1992.
U060	All others	Aug. 8, 1990.
U061	Soil and debris	May 8, 1992.
U061	All others	Aug. 8, 1990.
U062	Soil and debris	May 8, 1992.
U062	All others	Aug. 8, 1990.
U063	All	Aug. 8, 1990.
U064	All	Aug. 8, 1990.
U066	All	Aug. 8, 1990.
U067	All	Aug. 8, 1990.
U068	All	Aug. 8, 1990.
U069	Soil and debris	June 8, 1991.
U069	All others	June 8, 1989.
U070	All	Aug. 8, 1990.
U071	All	Aug. 8, 1990.
U072	All	Aug. 8, 1990.
U073	Soil and debris	May 8, 1992.
U073	All others	Aug. 8, 1990.
U074	Soil and debris	May 8, 1992.
U074	All others	Aug. 8, 1990.
U075	All	Aug. 8, 1990.
U076	All	Aug. 8, 1990.
U077	All	Aug. 8, 1990.
U078	All	Aug. 8, 1990.
U079	All	Aug. 8, 1990.
U080	All	Aug. 8, 1990.
U081	All	Aug. 8, 1990.
U082	All	Aug. 8, 1990.
U083	All	Aug. 8, 1990.
U084	All	Aug. 8, 1990.
U085	All	Aug. 8, 1990.
U086	All	Aug. 8, 1990.
U087	Soil and debris	June 8, 1991.
U087	All others	June 8, 1989.
U088	Soil and debris	June 8, 1991.
U088	All others	June 8, 1989.
U089	All	Aug. 8, 1990.
U090	All	Aug. 8, 1990.
U091	Soil and Debris	May 8, 1992.
U091	All others	Aug. 8, 1990.
U092	Soil and debris	May 8, 1992.
U092	All others	Aug. 8, 1990.
U093	Soil and debris	May 8, 1992.
U093	All others	Aug. 8, 1990.
U094	All	Aug. 8, 1990.
U095	Soil and debris	May 8, 1992.
U095	All others	Aug. 8, 1990.
U096	All	Aug. 8, 1990.
U097	Soil and debris	May 8, 1992.
U097	All others	Aug. 8, 1990.
U098	All	Aug. 8, 1990.
U099	All	Aug. 8, 1990.
U101	All	Aug. 8, 1990.
U102	Soil and debris	June 8, 1991.
U102	All others	June 8, 1989.
U103	All	Aug. 8, 1990.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
U105	All	Aug. 8, 1990.
U106	All	Aug. 8, 1990.
U107	Soil and debris	June 8, 1991.
U107	All others	June 8, 1989.
U108	All	Aug. 8, 1990.
U109	All	Aug. 8, 1990.
U110	Soil and debris	May 8, 1992.
U110	All others	Aug. 8, 1990.
U111	All	Aug. 8, 1990.
U112	All	Aug. 8, 1990.
U113	All	Aug. 8, 1990.
U114	Soil and debris	May 8, 1992.
U114	All others	Aug. 8, 1990.
U115	All	Aug. 8, 1990.
U116	Soil and debris	May 8, 1992.
U116	All others	Aug. 8, 1990.
U117	All	Aug. 8, 1990.
U118	All	Aug. 8, 1990.
U119	Soil and debris	May 8, 1992.
U119	All others	Aug. 8, 1990.
U120	All	Aug. 8, 1990.
U121	All	Aug. 8, 1990.
U122	All	Aug. 8, 1990.
U123	All	Aug. 8, 1990.
U124	All	Aug. 8, 1990.
U125	All	Aug. 8, 1990.
U126	All	Aug. 8, 1990.
U127	All	Aug. 8, 1990.
U128	All	Aug. 8, 1990.
U129	All	Aug. 8, 1990.
U130	Soil and debris	May 8, 1992.
U130	All others	Aug. 8, 1990.
U131	All	Aug. 8, 1990.
U132	Soil and debris	May 8, 1992.
U132	All others	Aug. 8, 1990.
U133	All	Aug. 8, 1990.
U134	All	Aug. 8, 1990.
U135	All	Aug. 8, 1990.
U136	Wastewater	Aug. 8, 1990.
U136	Nonwastewater	May 8, 1992.
U137	All	Aug. 8, 1990.
U138	All	Aug. 8, 1990.
U140	All	Aug. 8, 1990.
U141	All	Aug. 8, 1990.
U142	All	Aug. 8, 1990.
U143	Soil and debris	May 8, 1992.
U143	All others	Aug. 8, 1990.
U144	All	Aug. 8, 1990.
U145	All	Aug. 8, 1990.
U146	All	Aug. 8, 1990.
U147	All	Aug. 8, 1990.
U148	Soil and debris	May 8, 1992.
U148	All others	Aug. 8, 1990.
U149	Soil and debris	May 8, 1992.
U149	All others	Aug. 8, 1990.
U150	Soil and debris	May 8, 1992.
U150	All others	Aug. 8, 1990.
U151	High mercury nonwastewater	May 8, 1992.
U151	Low mercury nonwastewater	May 8, 1992.
U151	Soil and debris	May 8, 1992.
U151	All others	Aug. 8, 1990.
U152	All	Aug. 8, 1990.
U153	Soil and debris	May 8, 1992.
U153	All others	Aug. 8, 1990.
U154	All	Aug. 8, 1990.
U155	All	Aug. 8, 1990.
U156	Soil and debris	May 8, 1992.
U156	All others	Aug. 8, 1990.
U157	All	Aug. 8, 1990.
U158	All	Aug. 8, 1990.
U159	All	Aug. 8, 1990.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
U160	All	Aug. 8, 1990.
U161	All	Aug. 8, 1990.
U162	All	Aug. 8, 1990.
U163	Soil and debris	May 8, 1992.
U163	All others	Aug. 8, 1990.
U164	Soil and debris	May 8, 1992.
U164	All others	Aug. 8, 1990.
U165	All	Aug. 8, 1990.
U166	All	Aug. 8, 1990.
U167	Soil and debris	May 8, 1992.
U167	All others	Aug. 8, 1990.
U168	Soil and debris	May 8, 1992.
U168	All others	Aug. 8, 1990.
U169	All	Aug. 8, 1990.
U170	All	Aug. 8, 1990.
U171	Soil and debris	May 8, 1992.
U171	All others	Aug. 8, 1990.
U172	All	Aug. 8, 1990.
U173	Soil and debris	May 8, 1992.
U173	All others	Aug. 8, 1990.
U174	All	Aug. 8, 1990.
U176	Soil and debris	May 8, 1992.
U176	All others	Aug. 8, 1990.
U177	Soil and debris	May 8, 1992.
U177	All others	Aug. 8, 1990.
U178	Soil and debris	May 8, 1992.
U178	All others	Aug. 8, 1990.
U179	All	Aug. 8, 1990.
U180	All	Aug. 8, 1990.
U181	All	Aug. 8, 1990.
U182	All	Aug. 8, 1990.
U183	All	Aug. 8, 1990.
U184	Soil and debris	May 8, 1992.
U184	All others	Aug. 8, 1990.
U185	All	Aug. 8, 1990.
U186	All	Aug. 8, 1990.
U187	All	Aug. 8, 1990.
U188	All	Aug. 8, 1990.
U189	All	Aug. 8, 1990.
U190	Soil and debris	June 8, 1991.
U190	All others	June 8, 1989.
U191	Soil and debris	May 8, 1992.
U191	All others	Aug. 8, 1990.
U192	All	Aug. 8, 1990.
U193	Soil and debris	May 8, 1992.
U193	All others	Aug. 8, 1990.
U194	Soil and debris	May 8, 1992.
U194	All others	Aug. 8, 1990.
U196	All	Aug. 8, 1990.
U197	All	Aug. 8, 1990.
U200	Soil and debris	May 8, 1992.
U200	All others	Aug. 8, 1990.
U201	All	Aug. 8, 1990.
U202	Soil and debris	May 8, 1992.
U202	All others	Aug. 8, 1990.
U203	All	Aug. 8, 1990.
U204	All	Aug. 8, 1990.
U205	All	Aug. 8, 1990.
U206	Soil and debris	May 8, 1992.
U206	All others	Aug. 8, 1990.
U207	All	Aug. 8, 1990.
U208	All	Aug. 8, 1990.
U209	All	Aug. 8, 1990.
U210	All	Aug. 8, 1990.
U211	All	Aug. 8, 1990.
U213	All	Aug. 8, 1990.
U214	All	Aug. 8, 1990.
U215	All	Aug. 8, 1990.
U216	All	Aug. 8, 1990.
U217	All	Aug. 8, 1990.
U218	Soil and debris	May 8, 1992.

Appendix VII. -- Effective Dates of Surface Disposed Wastes Regulated in the LDRs<sup>a</sup>  
[Comprehensive List] (cont'd)

Waste code	Waste category	Effective date
U218	All others	Aug. 8, 1990.
U219	Soil and debris	May 8, 1992.
U219	All others	Aug. 8, 1990.
U220	All	Aug. 8, 1990.
U221	Soil and debris	June 8, 1991.
U221	All others	June 8, 1989.
U222	Soil and debris	May 8, 1992.
U222	All others	Aug. 8, 1990.
U223	Soil and debris	June 8, 1991.
U223	All others	June 8, 1989.
U225	All	Aug. 8, 1990.
U226	All	Aug. 8, 1990.
U227	All	Aug. 8, 1990.
U228	All	Aug. 8, 1990.
U234	Soil and debris	May 8, 1992.
U234	All others	Aug. 8, 1990.
U235	Soil and debris	June 8, 1991.
U235	All others	June 8, 1989.
U236	Soil and debris	May 8, 1992.
U236	All others	Aug. 8, 1990.
U237	Soil and debris	May 8, 1992.
U237	All others	Aug. 8, 1990.
U238	Soil and debris	May 8, 1992.
U238	All others	Aug. 8, 1990.
U239	All	Aug. 8, 1990.
U240	Soil and debris	May 8, 1992.
U240	All others	Aug. 8, 1990.
U243	All	Aug. 8, 1990.
U244	Soil and debris	May 8, 1992.
U244	All others	Aug. 8, 1990.
U246	All	Aug. 8, 1990.
U247	All	Aug. 8, 1990.
U248	All	Aug. 8, 1990.
U249	All	Aug. 8, 1990.

a This table does not include mixed radioactive wastes (from the First, Second, and Third Third rules) which are receiving a national capacity variance until May 8, 1992 for all applicable treatment technologies.

b Standards are being promulgated for 1,1,2-trichloroethane and 2-nitropropane for wastewaters and nonwastewaters.

c Standards are being promulgated for benzene and 2-ethoxyethanol for wastewaters and nonwastewaters.

d Treatment standards for nonwastewaters disposed of after June 8, 1989, were promulgated June 8, 1989.

e Treatment standards for nonwastewaters disposed of after August 17, 1988, were promulgated May 2, 1989.

NOTE: This table is provided for the convenience of the reader.

NOTE: Authority cited: Sections 208, 25150, 25159 and 25179.6, Health and Safety Code.  
Reference: Sections 25150, 25159, 25159.5 and 25179.6, Health and Safety Code; 40 CFR Part 268 Appendix VII

