



Fact Sheet

Onsite Tiered Permitting: Changes in Regulation of Silver Wastes [as established by Senate Bill (SB) 2111]

Revised - January 2000

This fact sheet summarizes upcoming **changes in regulatory requirements for wastes that are hazardous wastes solely due to the presence of silver ("silver-only" hazardous wastes)**. As a result of changes mandated by SB 2111 (Costa), Chapter 309, Statutes of 1998, many waste treatment activities for "silver-only" hazardous waste will not be regulated after January 1, 1999. The fact sheet primarily addresses onsite generation and treatment of "silver-only" hazardous wastes. For information related to offsite facilities, please contact the Department of Toxic Substances Control (DTSC) (see page 5 for where to contact DTSC). This fact sheet supersedes the previous fact sheet dated August 1999 and is effective from January 2000 to December 2003, unless extended or rescinded.

SUMMARY

SB 2111 mandates that, effective January 1, 1999, "silver-only" hazardous wastes are to be regulated only to the extent they are regulated under the federal Resource Conservation and Recovery Act (RCRA). This change applies to the generation, transportation, and treatment of "silver-only" hazardous wastes. Onsite treatment of photoimaging solutions and wastewaters will no longer be subject to Tiered Permitting authorization requirements. Generators of "silver-only" wastes continue to be considered hazardous waste generators, but they may be eligible for reduced management and transportation requirements. The major provisions of the bill are codified in section 25143.13 of the California Health and Safety Code (HSC) (attached). Applicable RCRA regulations [found in Title 40, Code of Federal Regulations (40 CFR), beginning with Part 260] will apply in California for "silver-only" hazardous wastes until existing regulations are amended. (Since applicable federal regulations will apply until DTSC can amend State regulations, only federal regulatory citations are given here.)

EFFECTIVE DATES

SB 2111 was signed into law on August 17, 1998 as Chapter 309 of the Statutes of 1998. The provisions of the bill went into effect on January 1, 1999.

BACKGROUND

Most of the currently regulated "silver-only" hazardous wastes are generated by the photoprocessing, printing, and dental/medical clinical industries. (Other industries, such as electroplating and electronics, also generate large quantities of silver-bearing wastes but these wastes are typically hazardous for other reasons, in addition to their silver content.) "Silver-only" wastestreams are usually generated in solution form and are treated onsite, or shipped offsite for treatment, to extract the silver. In cases where the solutions are treated onsite, the treated effluent is commonly discharged to a sewer operated by a Publicly Owned Treatment Works (POTW) and the silver-rich treatment residue or sludge is sent offsite for reclamation.

Businesses treating their own wastes onsite are currently regulated under DTSC's Tiered Permitting program, under the Permit by Rule (PBR), Conditional Authorization (CA), or Conditional Exemption (CE) authorization tiers. Certified Unified Program Agencies (CUPAs) are responsible for inspection and enforcement at generator sites and PBR, CA, and CE facilities. CUPAs also process CA, CE and PBR notifications and closures, whereas DTSC processes CA, CE, and PBR notifications and closures in non-CUPA jurisdictions. Most offsite silver recovery facilities are currently regulated by DTSC under the Standardized Permit tier.

WHO IS AFFECTED BY CHANGES?

P Businesses that generate “silver-only” hazardous wastes, such as:

Photoprocessors (includes photography, printing, and X-ray development wastes):

Dental offices/clinics
Hospitals
Medical professional offices/clinics
Chiropractic offices
Veterinary hospitals/clinics
Police
Schools with industrial labs
Government agencies
Microfilm labs
Motion picture labs
Minilabs/One-hour photo shops
Professional/photofinishers
Printer, graphic arts, commercial services labs

Jewelers and jewelry manufacturers

Electrical and electronics

P Businesses that transport “silver-only” hazardous wastes.

P Businesses that reclaim metals from “silver-only” hazardous waste.

P Environmental regulatory agencies.

WHAT ARE SOME OF THE IMPORTANT POINTS TO CONSIDER?

C Requirements established under laws other than California’s Hazardous Waste Control Law are not affected by the provisions of SB 2111.

Examples of requirements not affected include POTW pretreatment requirements for discharges to the sewer, as well as waste discharge requirements established under the federal Clean Water Act or California’s Porter-Cologne Water Quality Control Act.

C “Silver-only” hazardous wastes will be identified as hazardous due to their silver content according to the federal RCRA regulatory level of 5 milligrams/liter (mg/l), using the Toxicity Characteristic Leaching Procedure (TCLP) [40 CFR 261.24].

C If the waste is identified as hazardous for any other reason (i.e., corrosivity, reactivity, ignitability, or listed as hazardous) or constituent (i.e., toxicity characteristic other than silver), **using the California hazardous waste criteria**, then the waste remains subject to California hazardous waste requirements.

C Changes apply exclusively to wastes that are hazardous for silver only. Wastes that are hazardous for constituents other than silver are not included. Examples of wastes not included are:

- RCRA listed wastes, such as electroplating wastewater treatment sludges (F006 listed waste);
- dental amalgam (if it contains mercury or any other metal that would cause it to exhibit a characteristic of hazardous waste); and
- corrosive cleaning/etching solution wastes (generally hazardous due to corrosivity, as well as other metals).

C Treatment of photoimaging solutions and wastewaters to remove silver will be regulated only to the extent it is regulated under RCRA, and not require California Tiered Permitting authorization. Any other treatment of “silver-only” RCRA hazardous waste remains subject to regulation under California hazardous waste laws and may require treatment authorization.

C Businesses generating no more than 100 kilograms (approximately 27 gallons) per month exclusively of “silver-only” hazardous waste may be exempt from most generator requirements as Conditionally Exempt Small Quantity Generators (CESQGs) [40 CFR 261.5].

C Although subject to reduced waste management requirements, CESQGs must:

- determine whether their waste is “silver-only” hazardous or not using tests or knowledge of the waste [40 CFR 261.5(g)(1)];

- not accumulate onsite more than 1000 kilograms of waste at any time [40 CFR 261.5(g)(2)].
- ensure that their “silver-only” hazardous waste is either recycled (reclaimed) or disposed at a facility that is permitted or otherwise authorized to manage that hazardous waste [40 CFR 261.5(g)(3)].

C Businesses with a “zero waste count” for purposes of determining their generator category [40 CFR 261.5(c)(2)] are still considered hazardous waste generators (as CESQGs) because they remain subject to some RCRA regulatory requirements and meet the RCRA definition of “generator”.

C Sludges generated by the treatment of silver-rich solutions and wastewaters, which are hazardous only for their silver content, are not considered solid waste, and therefore not hazardous waste, when reclaimed [40 CFR 261.2(c)(3)].

C Businesses sending silver sludges for reclamation must be able to provide documentation that the sludges are being reclaimed [40 CFR 261.2(f)]. (Examples of acceptable documentation include contracts with refiners and/or receipts from the sludge transporter for shipments of sludge to a refiner.)

C Silver metal scraps that are recycled will not be subject to regulation as hazardous wastes [40 CFR 261.4(a)(13) and 40 CFR 261.6(a)(3)(ii)].

C Manifests are required for offsite shipments of “silver-only” hazardous wastes, unless the generator is a CESQG, in which case no manifest is required. Manifests are also not required for characteristically hazardous sludges that are reclaimed. These sludges are excluded from being considered a solid and a hazardous waste and are therefore not regulated under RCRA.

C Except for the CESQG requirements, most of the exclusions and exemptions from regulation require that “silver-only” hazardous waste be reclaimed. “Silver-only” hazardous wastes that are not reclaimed may be subject to full regulation under RCRA.

FREQUENTLY ASKED QUESTIONS

Does the passage of SB 2111 mean that silver is no longer regulated as a hazardous waste?

No. Most wastes containing silver above the regulatory threshold will continue to be regulated as hazardous wastes. But “silver-only” hazardous wastes will only be regulated to the extent that they are regulated under the federal RCRA.

Although many of the “silver-only” hazardous wastes will qualify for the reduced management requirements associated with the federal CESQG category or precious metals recovery, the wastes must still be handled in accordance with all applicable requirements. For example, silver-bearing photoprocessing solutions and wastewaters that are discharged to the sewer must comply with POTW discharge limits.

I am currently operating under the onsite tiers of the Tiered Permitting program and treat wastes that are “silver-only” hazardous wastes. What should I do?

If you are treating “silver-only” RCRA-exempt wastestreams or treating photoimaging solutions and wastewaters to remove silver, and are currently operating under the CA, CE, or PBR tiers, you should notify your CUPA in writing that, as of January 1, 1999, your treatment activity is exempt from Tiered Permitting requirements.

Note: For those facilities located in non-CUPA jurisdictions, notifications should be sent to DTSC.

DTSC and the CUPAs are requesting letters from facilities operating under the onsite tiers of the Tiered Permitting program in order to update facility files.

While the requested letter is not mandated by SB 2111, facilities are urged to provide the written notification to assure proper identification of regulatory status.

What if only a portion of the hazardous wastes I generate are hazardous solely due to their silver content?

You should notify your CUPA of the portion of the wastes you treat that are hazardous for silver only and are exempt from Tiered Permitting regulation as of January 1, 1999. If your authorized treatment unit treats both “silver-only” and non-silver hazardous wastestreams, you will continue to need authorization under the Tiered Permitting program for the non-silver treatment activity. However, you should still notify your CUPA of the portion of your wastes which are “silver-only” and exempt as of January 1, 1999, because you may be able to operate under a lower tier based on the change in volume of regulated wastestreams.

Do I need to complete any closure activities (such as unit decontamination or certification that a unit has been closed) for any “silver-only” onsite treatment units or wastestreams that are exempt from Tiered Permitting effective January 1, 1999?

No. Treatment activities regulated under the provisions of SB 2111 are exempt from Tiered Permitting requirements, including closure requirements, as of January 1, 1999. You will be able to continue operating without going through closure. However, as stated above, you should notify your CUPA that your treatment unit is exempt pursuant to SB 2111 provisions.

Do I need a letter from my CUPA or DTSC in order to operate under the SB 2111 provisions?

No. However, you should still notify your CUPA to assure proper identification of your regulatory status.

SELECTED DEFINITIONS

Generator: Any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR Part 261 or whose act first causes a hazardous waste to become subject to regulation [40 CFR 261.10].

By-product: A material that is not one of the primary products of a production process and is not solely or separately produced by the production process [40 CFR 261.1(c)(3)]. Examples of by-products are process residues, such as slags or distillation column bottoms.

Sludge: A solid, semi-solid, or liquid waste generated from a wastewater treatment system or pollution control process [40 CFR 260.10]. (The treated effluent generated in the process is not included in the definition of sludge.) Examples of sludge include sludge generated by silver recovery from photoprocessing solutions using metallic replacement cartridges or electrolysis.

Commercial chemical product: This term refers to both listed and characteristically hazardous chemical substances manufactured or formulated for commercial use [40 CFR 261.33]. The term generally includes commercial chemical products and their intermediates, off-specification species, spill residues, and container residues. The term does not include manufacturing process wastes. Examples of commercial chemical products include silver nitrate and silver chloride chemical products used in photographic processes.

Scrap metal: Bits and pieces of metal parts or metal pieces that may be combined together with bolts or soldering, which when worn or unnecessary can be recycled [40 CFR 261.1(c)(6)]. Examples of scrap metal are silver metal shavings from jewelry manufacturing and metal wire pieces. “Excluded scrap metal” is processed scrap metal and unprocessed turnings, cuttings, punchings, and borings generated by steel mills, foundries, refineries, and metal working/fabrication industries [40 CFR 261.1(c)(9)].

Speculative accumulation: A material is accumulated speculatively if it is accumulated before being recycled. A material is not accumulated speculatively if it can be shown that the material is potentially recyclable, that there is a feasible means for recycling the material, and that 75 percent of the material accumulated on the first of January of any given year is recycled during the same calendar year [40 CFR 261.1(c)(8)].

ADDITIONAL SOURCES OF INFORMATION

The United States Environmental Protection Agency (U.S. EPA), Office of Solid Waste provides a variety of mechanisms for accessing information about management of hazardous waste. To talk with a RCRA regulatory specialist about a specific issue or to order publications, call the U.S. EPA RCRA Hotline at (800) 424-9346, Monday through Friday, 9:00 a.m. to 6:00 p.m., Eastern time. Information is also available on the Internet at <http://www.epa.gov/osw>.

Copies of the CFR are generally available for review at libraries or environmental regulatory agencies. For information on purchasing copies, call the Government Printing Office, Customer Service, at (202) 512-1803.

Information on SB 2111, including the complete text of the bill, is also available on the Internet through DTSC's website at <http://www.dtsc.ca.gov>.

For more information call your local CUPA or the nearest DTSC Regional office.

Where to Contact DTSC

Headquarters Office

Department of Toxic Substances Control
400 P Street
P.O. Box 806
Sacramento, CA 95812-0806
(916) 323-6042

NORTHERN CALIFORNIA REGION

Sacramento Office

Department of Toxic Substances Control
10151 Croydon Way, Suite 3
Sacramento, CA 95827
(916) 255-3545

Clovis Office

Department of Toxic Substances Control
1515 Tollhouse Road
Clovis, CA 93611
(559) 297-3901

Berkeley Office

Department of Toxic Substances Control
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, CA 94710
(510) 540-2122

SOUTHERN CALIFORNIA REGION

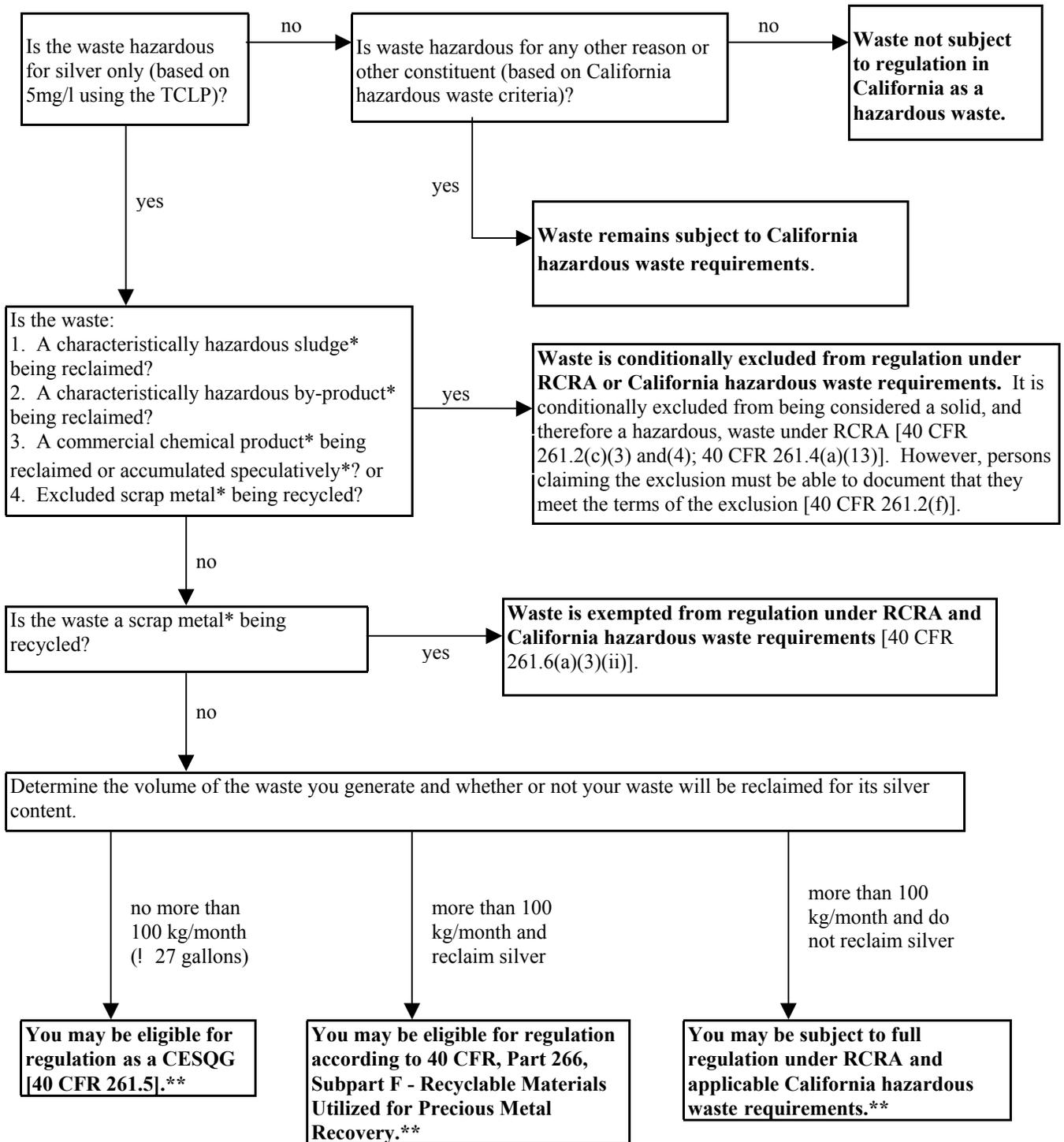
Glendale Office

Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201
(818) 551-2800

Cypress Office

Department of Toxic Substances Control
5796 Corporate Ave
Cypress, CA 90630
(714) 484-5300

HOW TO COMPLY WITH REQUIREMENTS EFFECTIVE 1/1/99



* See **Selected Definitions** on Page 4.

** See **Table 1**.

Table 1. RCRA Hazardous Waste Generator Categories and Requirements for “Silver-Only” Hazardous Wastes ¹.

	Conditionally exempt small quantity generator (CESQG) [40 CFR 261.5]	Small quantity generator (SQG) [40 CFR Part 262]	Large quantity generator (LQG) [40 CFR Part 262]	Subpart F Requirements- Recyclable Materials Utilized for Precious Metals Recovery [40 CFR 266.70]
Waste generated per month	No more than 100 kg (! 27 gallons)	More than 100 but less than 1,000 kg (! 27 - 270 gallons)	1,000 kg or more (! 270 gallons)	Not applicable
Hazardous Waste Determination	Required [40 CFR 261.5(g)(1)]	Required [40 CFR 262.11]	Required [40 CFR 262.11]	Not applicable
Maximum amount that can be accumulated onsite at any one time	1,000 kg (! 270 gallons)	6,000 kg (! 1,620 gallons)	No limit	No limit
Maximum onsite accumulation time	No limit	180 days (if shipped less than 200 miles) 270 days (if shipped 200 miles or more)	90 days	75% of material accumulated in a calendar year must be recycled.
EPA I.D. number	Not required	Required	Required	Required
Permit or Authorization	Not required	Not required	Not required	Not required
Disposal/Recycling of wastes	Ensure done at authorized facility [40 CFR 261.5(g)(3)]	Designate facility permitted for offsite treatment/storage/disposal [40 CFR 262.20].	Designate facility permitted for offsite treatment/storage/disposal [40 CFR 262.20].	Not applicable
Manifests	Not required	Required	Required	Required
Registered Transporter	Not required	Not required	Not required	Not required
Recordkeeping	Not required	Required	Required	Required (for storage to show that materials not accumulated speculatively.)
Contingency Plans and Training	Not required	Not required [40 CFR 262.34(d)(4)]	Required [40 CFR 262.34(a)(4)]	Not required
Financial Responsibility²	Not required	Not required	Not required	Not required

¹ “Silver-only” sludges are not subject to these regulations because they are excluded from being considered a solid and a hazardous waste when reclaimed [40 CFR 261.2(c)(3)].

² While instruments of financial responsibility are not required, the responsibility remains to clean up any spills or releases, as well as handle and dispose of wastes properly.

HEALTH AND SAFETY CODE SECTION 25143.13
(effective January 1, 1999):

25143.13. (a) Notwithstanding any other provision of law, except as provided in subdivision (c), wastes containing silver or silver compounds that are RCRA hazardous wastes solely due to the presence of silver in the waste are subject to regulation under this chapter solely to the extent that these wastes are subject to regulation under the federal act.

(b) Notwithstanding any other provision of law, wastes containing silver or silver compounds are exempt from regulation under this chapter if the wastes are not subject to regulation under the federal act as RCRA hazardous waste, and the wastes would otherwise be subject to regulation under this chapter solely due to the presence of silver in the waste.

(c) With respect to treatment of a hazardous waste, subdivision (a) applies only to the removal of silver from photoimaging solutions and photoimaging solution wastewaters. Any other treatment of wastes containing silver or silver compounds that are RCRA hazardous wastes is subject to all of the applicable requirements of this chapter.

(d) The department shall amend its regulations, as necessary, to conform to this section. Until the department amends these regulations, the applicable regulations adopted by the Environmental Protection Agency pursuant to the federal act pertaining to the regulation of wastes containing silver or silver compounds, which are regulated as RCRA hazardous wastes solely due to the presence of silver in the waste, shall be deemed to be the regulations of the department, except as otherwise provided in subdivision (c).

(e) This section shall not be construed to limit or abridge the powers or duties granted to any state or local agency pursuant to any law, other than this chapter, to regulate wastes containing silver or silver compounds.

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