

Fact Sheet
January 2002

Chlorinated Solvent Wastes Produced in Jewelry Manufacturing



JEWELRY MANUFACTURING WASTE STREAM

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. DTSC's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California



California
Environmental
Protection Agency



What is this waste?

Chlorinated solvents are used to degrease and clean metal surfaces before a decorative finish is applied. When the solvents become dirty and are no longer useful, they become waste and are referred to as spent solvents.

Why is this waste hazardous?

Spent solvents may be corrosive*, and tend to be capable of bursting into flame spontaneously, or by interaction with another substance (ignitable £). They also usually contain substances that are harmful to human health and the environment, such as toxic organic substances, metals and dissolved grease. Therefore, spent chlorinated solvents are considered hazardous waste [1].

Why must this waste be managed safely?

Because this waste is hazardous to human health and the environment, it is important to manage it safely, even if the waste contains precious metals. Current laws and regulations tell you how hazardous waste must be managed in order to protect public health and safety, and the environment [2]. These laws and regulations also specify how to recover precious metals from hazardous wastes that contain precious metals. Jewelry manufacturers can protect public health and safety, and avoid costly fines and penalties, by managing their hazardous wastes in compliance with these laws and regulations.

How should I manage this waste?

If your business generates a hazardous waste, it is your responsibility to ensure that waste is properly managed (please see the Department of Toxic Substances Control (DTSC) fact sheet on "[Hazardous Waste Generator Requirements For Jewelry Mart Operators](#)"). Recovering precious metals from spent solvents is considered hazardous waste treatment ‡ and requires a permit or grant of authorization. Using heat or chemicals to burn or evaporate

* "Corrosive" is described in Cal. Code Regs., tit. 22, § 66261.22.

£ "Ignitable" means capable of being set afire, or of bursting into flame spontaneously or by interaction with another substance or material. (Cal. Code Regs., tit. 22, § 66260.10.)

‡ "Treatment" is any method, technique, or process which is designed to change the physical, chemical, or biological character or composition of any hazardous waste or any material contained therein, or removes or reduces its harmful properties or characteristics for any purpose, including, but not limited to, energy recovery, material recovery, or reduction in volume. (Health & Saf. Code, § 25123.5 and Cal. Code Regs., tit. 22, § 66260.10.)

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our web site at www.dtsc.ca.gov.

spent solvents is also considered hazardous waste treatment, and also requires a permit or grant of authorization.

It is unlawful to dump any hazardous waste into the trash or onto the land, or to pour hazardous waste down the sink, into a storm drain, or down the toilet. If you want to treat any hazardous waste that you generate, or if you want to recover precious metals from your chlorinated solvent waste, you must get a grant of authorization or permit for hazardous waste treatment. You can contact your local [Certified Unified Program Agency \(CUPA\)](#) for assistance, or DTSC at (800) 728-6942 if there is no CUPA in your area.

You can also have your hazardous chlorinated solvent waste treated offsite† by a facility that is permitted to treat the waste. However, it is unlawful to use the United States Postal Service, any common parcel carrier, or anyone who is not a DTSC-registered transporter, to transport your hazardous waste offsite. For information about transport requirements, see the DTSC fact sheet on "[Hazardous Waste Generator Requirements for Jewelry Mart Operators](#)."

Can I send my spent chlorinated solvents to a company that recovers precious metals from the solvents?

Yes, as long as the company that recovers the precious metals is a permitted hazardous waste treatment facility that is authorized to treat hazardous solvent waste. You must also use a DTSC-registered transporter to transport your hazardous solvent wastes to the company that will treat the waste. For additional information regarding transport requirements, please see the DTSC fact sheet on "[Hazardous Waste Generator Requirements for Jewelry Mart Operators](#)."

Can I reduce the amount of chlorinated solvent waste that I generate?

Yes, there are water-based cleaning solutions

available that are much safer to handle than chlorinated solvents. The water-based cleaning solutions work just as well as chlorinated solvents, but they generate less hazardous waste. Therefore, they are less expensive to manage and may reduce your legal responsibility associated with the management and disposal of hazardous waste. The DTSC Office of Pollution Prevention and Technology Development (OPPTD) can help you identify ways to eliminate or reduce your use of chlorinated solvents. You can contact OPPTD at (800) 700-5854. For additional information, please see the DTSC fact sheet on "[Jewelry Manufacturing Industry Pollution Prevention Recommendations](#)."

Disclaimer

This fact sheet is intended to provide guidance for managing hazardous chlorinated solvent waste. The fact sheet only covers some of the basic management requirements under the Health and Safety Code and the California Code of Regulations. This document does not replace or supersede relevant statutes and regulations. This fact sheet was prepared in January, 2002 and is based on statutes and regulations in effect at that time. Interested parties should always review the most current statutes and regulations.

References

1. Cal. Code of Regs., tit. 22, div. 4.5, ch. 11.
2. Health & Safety Code, div. 20, ch. 6.5, and Cal. Code of Regs., tit. 22, div. 4.5.

† An "offsite facility" means a hazardous waste facility that is not an onsite facility. (Health & Saf. Code, § 25117.11 and Cal. Code Regs., tit. 22, § 66260.10.)

For questions, contact the DTSC Office nearest you, or call the regional Public and Business Liaisons at (800) 72TOXIC (1-800-728-6942) or visit www.dtsc.ca.gov

This fact sheet is also available in Armenian, Spanish, and Vietnamese.

Esta información se encuentra disponible también en armenio, español y vietnamita.

Այս իրողությունն էջերը տրամադրուած են Անգլերենով, Հայերենով, Սպաներենով եւ Վիեթնամերենով:

Tài liệu này được viết bằng tiếng Armenia, tiếng Tây Ban Nha và tiếng Việt