

Fact Sheet  
January 2002

# Cleaning Solution Waste 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?

When a cleaning solution becomes dirty and can no longer be used for cleaning, it becomes waste and is referred to as "spent cleaning solution." Jewelry manufacturing operations generate spent acid and alkaline cleaning solutions. Spent cleaning solutions usually contain dissolved heavy metals such as gold, silver, platinum, rhodium, copper, nickel, zinc, chrome, or other metals. They may also be corrosive\*.

### Why is this waste hazardous?

Waste that is corrosive or contains dissolved metals is generally harmful to human health and the environment, and is therefore considered hazardous [1].

### Why must this waste be managed safely?

Waste that is hazardous to human health and the environment must be managed safely, even if the waste contains precious metals. Current laws and regulations specify 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 waste that contains 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 the waste is properly managed (please see the Department of Toxic Substances Control (DTSC) fact sheet on "[Hazardous Waste Generator Requirements For Jewelry Mart Operators](#)"). The recovery of precious metals from hazardous waste is considered hazardous waste treatment‡ and requires a permit or grant of authorization.

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

‡ "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](http://www.dtsc.ca.gov).**

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 the hazardous cleaning solution waste that you generate, or if you want to recover precious metals from your hazardous cleaning solution waste, you must get a grant of authorization or permit for onsite 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 must also have a permit from your local wastewater treatment facility if you want to discharge your treated waste to the sewer. Your CUPA can also provide you with assistance in complying with the laws and regulations governing the discharge of treated waste.

You can also have your hazardous cleaning solution 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 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 spent cleaning solutions that I generate?

Yes. Bead sand blasters and ultrasonic cleaners may reduce the amount of hazardous cleaning solution waste that you generate. The DTSC Office of Pollution Prevention and Technology Development (OPPTD) can help you identify ways to reduce the amount of hazardous cleaning solution waste that your business generates. 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 cleaning solution waste. This fact sheet covers only 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 Regs., tit. 22, ch 11.
2. Health & Saf. Code, div. 20, ch. 6.5, and Cal. Code Regs., tit. 22, division 4.5.

¥ The term "onsite facility" is summarized for purposes of this fact sheet to mean a hazardous waste facility at which hazardous waste is generated, and which is owned by, leased to, or under the control of the generator of the waste. (Health and Saf. Code, § 25117.12 and Cal. Code Regs., tit.22, § 66260.10.)

† 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](http://www.dtsc.ca.gov)**

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

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

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