

Mercury Switch Removal Best Management Practices

These best management practices (BMPs) are only suggestions to help vehicle dismantlers and anyone who crushes, bales, shears or shreds vehicles how to comply with the mercury switch regulations. They do not supersede any federal, state or local regulations.

BMPs for Removing Mercury Switches:

It is a good idea to inspect ALL vehicles for mercury switches before crushing, baling, shearing or shredding them.

- Mercury switches are either inside the hood or trunk light assemblies, or inside a plastic casing attached to the hood or trunk hinge.
- If you find a hood or trunk light and there is no mechanical switch, then it probably has a mercury switch.
- If you are not sure whether a hood or trunk light has a mercury switch, assume that it does and remove it anyway.

Here are some examples of when to remove mercury switches from the vehicles before they are crushed, baled, sheared or shredded:

- The impound yard where the vehicles are placed to await Department of Motor Vehicles (DMV) clearance.
- The vehicle cleaning area where trash, debris, batteries and brake fluid are removed from the vehicles.
- The drain racks where gasoline, motor oil and antifreeze are removed from the vehicles.
- The customer retail yard before the vehicles are sent to the scrap area where they are crushed, baled, sheared or shredded.

BMPs for Storing Mercury Switches:

A good place to store mercury switches is in a properly labeled container that has a tight-fitting lid, such as a plastic 5-gallon bucket, or a plastic-lined 55-gallon drum.

You can label the container ***“Universal Waste – Mercury Switches.”***

You can store more mercury switches inside the container if you remove them from inside the light assembly or casing. After you remove the mercury switch you can handle the casing or light assembly as regular waste.

You can store the mercury switches for up to 1 year after they are placed inside the container.

BMPs for Disposing Mercury Switches:

When you are ready to dispose the mercury switches for offsite recycling, you can either ship the mercury switches to another handler or transporter, or to a facility that recovers mercury. (See attached list of facilities.)

You can choose to transport the mercury switches yourself inside California as long as you transport them by ground and the package has no more than 450 switches. You can also ship the switches using a commercial ground carrier that will accept them, or you can use a licensed hazardous waste hauler.

It is a good idea to use packing material, such as bubble-wrap or packaging peanuts, to pack the empty space inside the container and secure the mercury switches during transport.

One good way to reduce disposal costs is by partnering with other businesses and establishing a collection point where the mercury switches are consolidated and picked up by a licensed waste hauler. This way several businesses can share the cost for the disposal of mercury switches.

BMPs for Recording and Tracking Mercury Switches and Vehicles:

Keeping all records, including shipping and receiving records, in a central file will make it easier to maintain and organize the records.

Keeping and maintaining a log in either a notebook or computer is a good way to comply with the recordkeeping requirements of the regulations. Here is an example of a log sheet:

<i>Date</i>	<i># of Vehicles Dismantled</i>	<i># of Vehicles to be Dismantled that have Mercury Switches</i>	<i># of Mercury Switches Removed</i>	<i># of Vehicles that have Mercury Switches but too Damaged to Remove</i>
4-15-05	100 vehicles	25 vehicles	23 mercury switches	2 vehicles
4-22-05	90 vehicles	10 vehicles	10 mercury switches	0 vehicles

Marking the vehicles can help you keep track of which ones have been inspected and counted, and have mercury switches.

Facilities that send their vehicles offsite to be crushed, baled, sheared or shredded can also use a log for their records. Here is an example of a log sheet:

<i>Date of Shipment</i>	<i># of Vehicles Shipped that have Mercury Switches</i>	<i>Receiver's Contact Information</i>
4-15-05	20 vehicles	<i>Jack Doe Bob's Auto-wrecking 1234 Somewhere Street Anytown, CA 98765</i>
4-22-05	15 vehicles	<i>Bob's Auto-wrecking 1234 Somewhere Street Anytown, CA 98765</i>

BMPs for Recording and Tracking Mercury Switches that are Shipped and Received:

The log sheet shown below is an example of how records of mercury switches that are shipped and received can be kept:

Date Mercury Switches Sent/Received	Quantity of Mercury Switches Shipped/Received	Sender's Contact Information	Receiver's Contact Information
4-15-05	1 pound of mercury switches	John Doe John's Auto Salvage 5555 Something Rd Anytown, CA 98765	<i>Jack Doe Bob's Auto-wrecking 1234 Somewhere Street Anytown, CA 98765</i>
4-22-05	0.5 pound of mercury switches	John Doe John's Auto Salvage 5555 Something Rd Anytown, CA 98765	<i>Jack Doe Bob's Auto-wrecking 1234 Somewhere Street Anytown, CA 98765</i>

Safe Practices for Handling Mercury Switches

Make sure that employees removing mercury switches are familiar with proper waste mercury handling and emergency procedures, and that a mercury spill cleanup system is readily available.

Here are some ideas that can be part of a mercury spill cleanup system:

- Have an emergency plan in place that provides proper response procedures and emergency contact information for accidental mercury spills and releases.
- Keep a mercury spill kit in an easily accessible area.

Here are some suggestions for safely handling mercury switches:

- Use personal protective equipment like gloves and safety glasses when removing mercury switches.
- Remove and handle mercury switches in areas where accidental spills can easily be contained and properly cleaned.
- Store mercury switch containers in designated and securable areas away from heavy traffic.

ATTACHMENT
MERCURY SWITCH WASTE HANDLING AND TRANSPORTING FACILITIES
LOCATED IN CALIFORNIA*

<p>AERC-MTI (Advanced Environmental Recycling Co. – Mercury Technologies International) 30677 Huntwood Avenue Hayward, CA 94555 Ph: 800-628-3675 Fax: 510-429-1498 www.aercrecycling.com</p>	<p>Chemical Waste Management 35251 Old Skyline Road Kettlemen City, CA 93239 Ph: 550-386-9711</p>
<p>Clean Harbors Los Angeles, LLC Los Angeles Facility 5756 Alba Street Los Angeles, CA 90058 Ph: 323-277-2500 Fax: 323-277-2523 www.cleanharbors.com</p>	<p>Clean Harbors of San Jose, LLC San Jose Facility 1040 Commercial Street, Suite 109 San Jose, CA 95112 Ph: 408-451-5000 Fax: 408-453-6045 www.cleanharbors.com</p>
<p>Kinsbursky Brothers, Inc. 1314 North Anaheim Boulevard Anaheim, CA 92801 Ph: 714-738-8516 Fax: 714-441-0857 www.kinsbursky.com</p>	<p>Kinsbursky Environmental Management 101 North Glover Avenue, Suite B Chula Vista, CA 91909 Ph: 619-409-9292 www.kinsbursky.com</p>
<p>Lighting Resources, Inc. Ontario Branch 805 East Francis Street Ontario, CA 91741 Ph: 888-923-7252 Fax: 909-923-7510 www.lightingresourcesinc.com</p>	<p>North State Environmental – Southern California 2776 South Lilac Avenue Bloomington, CA 92316 Ph: 909-875-9288 Fax: 909-875-9813 www.north-state.com</p>
<p>North State Environmental 5519 Clairemont Mesa Boulevard San Diego, CA 92117 Ph: 858-273-8669 Fax: 858-273-8678 www.north-state.com</p>	<p>North State Environmental – Northern California 90 South Spruce Avenue, Suite C3 South San Francisco, CA 94080 Ph: 650-588-2838 Fax: 650-588-1950 www.north-state.com</p>

APPENDIX
MERCURY SWITCH WASTE HANDLING AND TRANSPORTING FACILITIES
LOCATED IN CALIFORNIA (CONTINUED)*

<p>Onyx Environmental Services, Inc. 4227 Technology Drive Fremont, CA Ph: 510-651-2964 Fax: 510-656-4926 www.onyxes.com</p>	<p>Onyx Environmental Services, Inc. 1704 West First Street Azusa, CA 91702 Ph: 626-334-5117 Fax: 626-334-4563 www.onyxes.com</p>
<p>Onyx Environmental Services, Inc. 5202 Oceanus Drive Huntington Beach, CA 92649 Ph: 714-379-6000 Fax: 714-379-6010 www.onyxes.com</p>	<p>Onyx Environmental Services, Inc. 1125 Hendey Street Richmond, CA 94801 Ph: 510-233-8001 Fax: 510-235-9427 www.onyxes.com</p>
<p>Recyclights, Inc. 2439 Industrial Parkway West Hayward, CA 94545 Ph: 800-884-8982 Fax: 510-782-8984</p>	<p>Safety-Kleen Systems, Inc. Cluster II, Building 3 5400 Legacy Drive Plano, TX 75024 Ph: 800-669-5740 Fax: 972-265-2000 www.safety-kleen.com</p>
<p>Thomas Gray & Associates, Inc. 1205 West Barkley Avenue Orange, CA 92868 Ph: 714-997-8090 Fax: 714-997-3561 www.tgainc.com</p>	

*Most hazardous waste transporters registered with DTSC will provide waste hauling services to generators and handlers of mercury-containing switches and devices.

Sources: The list was compiled from information obtained from phone interviews and an internet survey of companies included on nationwide lists maintained by the Association of Lighting and Mercury Recyclers (www.almr.org); the National Electric Manufacturers Association (www.nema.org/lamprecycle/); the U.S. EPA's Office of Solid Waste and Emergency Response (www.epa.gov/epaoswer/hazwaste/id/univwast/where.htm); and several state resource agencies. A list of permitted commercial facilities that accept hazardous waste for a fee is also available at the DTSC Web site: www.dtsc.ca.gov/HazardousWaste/index/html.

Disclaimer:

This list includes commercial firms found to offer mercury-containing switch handling services. The Department of Toxic Substances Control does not endorse or recommend any specific vendor. In addition, this list is for informational purposes only and is not meant to be a complete or up-to-date list of companies that provide mercury-handling and recycling services in California. Contact companies directly to obtain information regarding services provided, company-specific packaging and labeling requirements, and costs.