



February 17, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814
Via Email: commentletters@waterboards.ca.gov

Subject: SWRCB Proposed Inland Surface Waters, Enclosed Bays & Estuaries Plan for Tribal, Tribal Cultural & Subsistence Fishing Beneficial Uses and Statewide Mercury Water Quality Objectives

Dear Ms. Townsend:

On behalf of the State of California Auto Dismantlers Association (SCADA), I appreciate the opportunity to review and provide comments on the State Water Resources Control Board's (SWRCB) Proposed Mercury Water Quality Objectives and Tribal, Tribal Cultural and Subsistence Beneficial Uses for inclusion in the Inland Surface Waters, Enclosed Bays & Estuaries Plan.

The State of California Auto Dismantlers Association (SCADA) is the statewide trade association for the professional auto dismantling and recycling industry with approximately 200 members within 6 local chapters and Direct Membership Areas. SCADA was founded in 1959 to serve the members with education, regulatory, and business activities. Our members are recycling facilities that sell used vehicle parts under Standard Industrial Classification (SIC) Code 5015.

Licensed auto dismantlers provide an essential service that directly addresses society's ever increasing problem of what to do with end-of-life vehicles (ELVs). An estimated 1.3 million vehicles will reach the end of their useful lives this year in California, either by determination of their owners or by being declared a total loss by an insurance company. While those vehicles might otherwise end up on the roadside or abandoned in empty lots, licensed dismantlers acquire them and safely convert them into reusable/recycled commodities. This dismantling is done in partnership with other state agency programs that support the recycling of vehicles, thereby abating the severe environmental hazards associated with improperly disposed vehicles.

Under the development and program of implementation proposed for the Mercury Water Quality Objectives, we note the requirement for Municipal Separate Storm Sewer Systems (MS4s) to focus on mercury pollution prevention efforts with a specific mention of educating auto dismantlers in the proper disposal of mercury switches. More specifically, the Provisions require MS4s to educate auto dismantlers on the proper removal, storage,

and disposal of mercury containing switches in automobiles through onsite training and educational materials provided via mail or electronically. Further, as noted in the staff report, products containing mercury such as thermometers, light bulbs, batteries and switches in motor vehicles are classified as universal waste. Under such classification, they require special handling.

In 2001, Governor Gray Davis signed the Mercury Reduction Act of 2001 under SB 633 (Sher, 2001) that addresses several approaches to reducing mercury in California. Among other things, it encouraged the removal and recovery of switches containing mercury, i.e., convenience lights under the hood or in the trunk, from vehicles before disposal or recycling of the vehicle. Additionally, it banned the sale of vehicles in California manufactured on or after January 1, 2005, if they have light switches containing mercury. While such a ban is in place, auto dismantlers will be required to continue to properly manage mercury switches as older vehicles still containing them remain in circulation. Since 2006, 576 licensed auto dismantlers have participated in the program resulting in 2,714 pounds of mercury being collected and recycled.¹ This is mercury that would have otherwise gone into the environment.

Also as you may know, for years SCADA has worked collaboratively with the Department of Toxic Substances Control (DTSC) on the removal and proper management of mercury switches in end of life vehicles. DTSC worked closely with State of California Auto Dismantlers Association (SCADA) in developing the universal waste management standards for automotive mercury switches and partnered with SCADA to establish programs to facilitate the collection, proper management, and recycling of mercury switches removed from end-of-life vehicles. More specifically, in 2003 DTSC adopted the "Mercury Waste Classification and Management regulations." The regulations cleared up the rules for people who handle mercury switches removed from vehicles, and changed the rules for people who dismantle and recycle vehicles. As of January 1, 2005, a vehicle with a mercury switch is considered hazardous waste as soon as someone decides to crush, bale, shred, or shear it. Failure to remove the mercury switches before crushing or shredding a car is a violation of current law and enforceable by the state.

In an effort to provide guidance to auto dismantlers, DTSC has prepared resources that provide information on identifying, removal of, proper transport, record keeping, spill management, exposure and more. Please see the attachments for more information.

All in all, SCADA members support responsible recycling, worker safety, and environmental protection. We promote the proper handling and disposal of all automotive-related hazardous materials, including mercury switches.

All of this said, we have serious concerns about the proposed Mercury Water Quality Objectives and new beneficial uses. The proposal could have significant negative consequences on auto dismantlers who are already struggling to stay in business and be compliant with current laws, regulations and permit requirements.

¹ End of Life Vehicle Solutions, <http://elvsolutions.org/>

Under the Mercury Water Quality Objectives, the provisions would lower the numeric action level (NAL) for mercury contained in the NPDES Industrial General Permit from 1400 ng/L to 300 ng/L or lower. While the Industrial General Permit (IGP) requires that if the NAL is exceeded the permittee must take to address the source of the mercury, such Exceedance Response Actions (ERA) are costly for auto dismantlers who operate on very thin margins. Further, regional boards designating water bodies throughout the state with the new beneficial uses will result in lowering of other contaminant thresholds as well that will be similarly difficult for auto dismantlers to meet. Consistently meeting the current NALs is challenging enough and has resulted in the need to install extremely expensive stormwater filtration and treatment systems that are not economically achievable for most dismantlers. Lowering thresholds further for any constituents would be devastating for these businesses who would be required to conduct additional sampling, BMPs, installation of yet another level of costly equipment and more – all of which cost additional resources that they are not able to sustain.

We are concerned that the continued escalation of costs on SCADA members – the good actors in the industry – will further cripple the professional auto dismantling industry in California, drive smaller operations out of business, force more dismantlers underground as illegal operators, and ultimately threaten water resources since fewer vehicles will be properly processed.

SCADA appreciates your consideration of these comments and looks forward to further dialogue on the handling of mercury switches in the auto dismantling industry and to address the very real, significant challenges the industry continues to face in the state. If you have any questions, please contact Dawn Koepke with McHugh, Koepke & Associates at (916) 930-1993. Thank you.

Sincerely,



Greg Pirnik
President

Cc: SWRCB Board Members
Jonathan Bishop, SWRCB
Karen Larsen, SWRCB
Rik Rasmussen, SWRCB
Board Members, SCADA

Fact Sheet
May 2002

SB 633: **California's Mercury** **Reduction Act of 2001**



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



This fact sheet addresses California's Mercury Reduction Act of 2001 (SB 633), and is intended to provide information to the general public about mercury in K-12 schools, vehicles, thermometers, and novelty items. It introduces the risks associated with mercury exposure, suggests ways to avoid mercury, and identifies sources of additional information. It also provides guidance regarding the industries affected by this legislation, such as manufacturers, distributors and retailers of school laboratory equipment, thermometers, novelty items, and vehicles, as well as auto dismantlers and shredders.

WHAT IS MERCURY AND WHERE IS IT FOUND?

Mercury (also known as quicksilver because it is a silver-colored liquid metal at room temperature) is an element that does not break down in the environment. It occurs naturally and is found in oceans, rocks and soils. It becomes airborne as gas or dust when rocks erode, volcanoes erupt and soil decomposes, or when people burn coal, oil or natural gas as fuel or incinerate garbage containing mercury. Once in the air, mercury can fall to the ground with rain and snow, landing on soils or water bodies.

Lakes and rivers can also become contaminated when companies or individuals release mercury-laden industrial waste onto the ground or in waterways. Once present in these bodies of water, mercury accumulates in fish and may ultimately reach the dinner table.

Mercury is used in household and commercial products, as well as industrial processes, because it is liquid at room temperature, combines easily with other metals, and expands and contracts evenly with temperature changes. Incinerators, some manufacturing plants, hospitals, dental offices, schools, and homes all release mercury. In the home, mercury is present in fluorescent lights, thermostats, thermometers, old alkaline batteries, mercurochrome, chemistry sets, and even some children's toys. At school, mercury may be in science and chemistry classrooms, the nurse's office and electrical systems.

WHY REDUCE MERCURY USE?

Two different forms of mercury are of human health concern: elemental mercury and organic mercury.

Elemental mercury slowly vaporizes at room temperature and even more quickly when heated. Children playing with or near elemental mercury can be seriously poisoned by breathing the invisible vapor from mercury spilled in carpeting, furniture or other surfaces.

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.

Although people can take in organic mercury through the lungs, mouth or skin, the most likely source of organic mercury in humans is eating contaminated fish. Human exposure to organic mercury can result in long-lasting health effects, especially if it occurs during fetal development. In addition, scientists have linked mercury poisoning to nervous system, kidney and liver damage, and impaired childhood development. Nervous system disorders can include impaired vision, speech, hearing and coordination.

Although mercury has been a very useful element due to its unique properties, it poses a very real health risk from exposure. We can reduce this risk by reducing our use of products containing mercury and properly disposing of waste containing mercury.

Governor Gray Davis signed SB 633 into law on October 9, 2001. Introduced by Senator Byron Sher, the bill addresses several approaches to reducing mercury in California. See effective dates below.

What are the Alternatives?

School Uses: Teachers and students can use other chemicals in classroom experiments to illustrate chemistry or physics principles. Alcohol and electronic thermometers are readily available and sufficiently accurate.

Vehicles: Vehicle manufacturers can use alternatives to mercury switches for trunk and hood convenience lights. It is also possible to replace the mercury in an existing light switch with a ball bearing-type switch. Consumers are encouraged to request the replacement and recycling of mercury light switches during normal vehicle servicing.

Thermometers: Alternatives to mercury fever thermometers include digital thermometers and glass thermometers (with either alcohol or a mix of gallium, indium, and tin). The standards for accuracy are the same for mercury and non-mercury thermometers. In practice, numerous patient and user factors can affect the accuracy of all fever thermometers.

REQUIREMENTS OF CALIFORNIA'S MERCURY REDUCTION ACT OF 2001

Mercury Source	Requirement	Effective Date
Schools K-12	Prohibits any school from purchasing devices and materials containing mercury for use in classrooms and labs, except measuring devices when no adequate alternative exists.	January 1, 2002
Vehicles	Encourages removal and recovery of switches containing mercury, i.e., convenience lights under the hood or in the trunk, from vehicles before disposal or recycling of the vehicle.	January 1, 2002
Thermometers	Bans the sale or distribution of fever thermometers containing mercury without a prescription from a doctor, dentist, veterinarian or podiatrist.	July 1, 2002
Novelty Items	Prohibits the manufacture, sale, or distribution of mercury-added novelty items in California. Mercury-added novelties are products intended for personal or household enjoyment or adornment, such as jewelry, games, maze toys, or toys that light up or make noise. Manufacturers of novelties must notify retailers of this requirement and explain how to dispose of remaining inventory.	January 1, 2003
Vehicles	Bans the sale of vehicles manufactured on or after January 1, 2005, if they have light switches containing mercury.	January 1, 2005

Novelty Items: Some novelty items contain intentionally-added mercury. For instance, light-up tennis shoes once contained mercury, but according to footwear manufacturers, they changed the light-up mechanisms in 1997 to eliminate the mercury. Consumers should check to ensure that items that light-up or make noise are free of mercury. To help determine whether an item contains mercury, call the Consumer Products Safety Commission's hotline at (800) 638-2772.

How to Dispose of Products Containing Mercury

For mercury-containing products found in the home, local governments in California operate an extensive system of household hazardous waste collection programs. Many of these programs also accept hazardous waste from small businesses. For information about the household hazardous waste program in your community:

- Call your local environmental health or public works department
- Call 1-800-CLEANUP (1-800-253-2687)
- Visit 1-800-CLEANUP's web site at www.earth911.org
- Call DTSC's Public and Business Liaisons at 1-800-72TOXIC (1-800-728-6942)
- Visit DTSC's web site at www.dtsc.ca.gov

Businesses seeking information on management or disposal options for wastes containing mercury should contact the Department of Toxic Substances Control's Public and Business Liaisons at 1-800-72TOXIC (1-800-728-6942).

Disclaimer

This Fact Sheet was prepared in March 2002 and is based on the statutes and regulations in effect at that time. Interested parties should always review the most current statutes and regulations.

The clarifications provided in this Fact Sheet do not change existing statutes or regulations under CCR Titles 22 or 27.

For more information about regulatory requirements, please 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

**DTSC Headquarters - (916) 323-2678
1001 I Street, Sacramento, CA 94812**

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700 Heinz Avenue, 2nd Floor
Berkeley, CA 94710**

**Clovis Office - (559) 297-3901
1515 Tollhouse Road, Clovis, CA 93611-0522**

**Glendale Office - (818) 551-2830
1011 North Grandview Ave., Glendale, CA 94710**

**Cypress Office - (714) 484-5400
5796 Corporate Ave., Cypress, CA 90630**

**San Diego Office - (619) 278-3734
2878 Camino del Rio South, Suite 402
San Diego, CA 92108-3847**

For More Information:

SB 633 text: www.leginfo.ca.gov/bilinfo/html
(SB 633 chaptered pdf version)

Other ordinances and legislation:
www.noharm.org and
www.mercury-k12.org/legisbystate.htm

Vehicle switches:
www.ecocenter.org/ecmercury.html

Equipment containing mercury:
www.epa.gov/grtlakes/p2.mercpam.html

Mercury in schools:
www.mercury-k12.org

Mercury in consumer products: contact the Consumer Products Safety Commission at (800) 638-2772 or www.cpsc.gov/consumer.html



Department of
Toxic Substances
Control

*Preventing
environmental
damage from
hazardous waste,
and restoring
contaminated
sites for all
Californians.*



State of California



California
Environmental
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Fact Sheet, January 2007

How to Manage Mercury Switches in Vehicles

For: Scrap metal recyclers, auto dismantlers and auto repair shops.

This fact sheet explains how to remove, replace, and handle mercury switches in vehicles. It also tells you about changes in the laws that say how to dispose of mercury and what to do if you have a spill. This fact sheet does not replace or supersede statutes or regulations. Always review the most current statutes and regulations. Mention of vehicle makes and models, repair facilities, or mercury switch handling facilities or other companies in this fact sheet is not to be construed as an endorsement by DTSC.

What is mercury?

Mercury is a metal with special properties. It is liquid at room temperature and conducts electricity. This makes it ideal for use in light switches in vehicles.

What is a mercury light switch?

Mercury light switches look like small capsules. When you open the hood or trunk of your car, the mercury moves to the end of the capsule and touches an electrical contact and the light turns on. When you close the hood or trunk, the mercury moves away from the contact and the light turns off.

There are also mercury switches in other parts of vehicles, such as the ABS system G-force sensors.

How much mercury is in a light switch?

A mercury light switch contains about one drop of mercury.

Is mercury dangerous?

Mercury is poisonous. If mercury is not disposed of safely, it can be released into the environment and harm people and wildlife.

Contact with mercury can cause:

- birth defects,
- nerve disorders,
- brain damage, or
- death.

How do people come into contact with mercury?

Mercury can be inhaled, absorbed through the skin, or eaten (in contaminated food).

Are there laws about handling mercury?

Yes. In 2001, California passed a law called SB 633. This law:

- makes it illegal to sell certain items that contain mercury,



- encourages people who dismantle, recycle and repair vehicles to remove mercury switches, and
- makes the rules for handling switches simpler.

For more information about SB 633 go to: www.dtsc.ca.gov/Schools/EA_FS_SB633.pdf

In 2003, DTSC adopted the “Mercury Waste Classification and Management regulations.” The regulations cleared up the rules for people who handle mercury switches removed from vehicles, and changed the rules for people who dismantle and recycle vehicles.

Starting January 1, 2005, a vehicle with a mercury switch is considered hazardous waste as soon as someone decides to

- crush,
- bale,
- shred, or
- shear it.

Since January 1, 2005, if you crush or shred a car without taking out the mercury switches, you will be breaking the law.

These laws also say you can handle mercury switches like *universal waste*.

Note: You do not have to remove the switches if damage to the vehicle makes it impossible.

What is universal waste?

Universal waste is a type of hazardous waste that uses simpler rules for transportation and disposal than the ones for other hazardous wastes.

How do you know if a car has mercury switches?

Read page 5. It lists car makes and models that have mercury switches in the hood or trunk. Additionally, the End of Life Vehicle Solutions (ELVS) vehicle list also has a list of vehicles.

This list is obtainable by going to <http://www.elvsolutions.org/california.htm>. Neither list is all-inclusive. To be sure, check with the vehicle manufacturer.

Note: If a car has a hood or trunk light, and you don't see a mechanical switch, it probably has a mercury switch.

Who should remove mercury switches from vehicles?

Anyone who plans to crush, bale, shear, or shred a vehicle has to remove the mercury light switches from the hood and trunk. Usually, car dismantlers and scrap metal recyclers do this.

Auto repair shops do not have to remove mercury switches when they work on cars that are still in use. But, DTSC encourages repair shops to offer to replace and recycle mercury switches in the cars they repair. If a repair shop replaces or removes a mercury switch, they may handle it like universal waste.

Note: Before you remove mercury switches, make sure you and your employees know how to handle them safely, and know what to do if there's a mercury spill.

When should mercury switches be removed?

It is easiest for dismantlers to remove mercury switches when they remove the battery, coolant, and brake fluid.

How do I remove mercury switches?

DTSC has 2 training manuals that tell you how to safely remove mercury switches from vehicles:

- *Guide for Auto Repair Shops*, and
- *Guide for Auto Dismantlers*.

You can download them at:

<http://www.dtsc.ca.gov/HazardousWaste/Mercury/index.cfm>

How do I store mercury switches?

- Keep the mercury switches in a closed container in good condition.
- Do not use a metal container. Mercury can react with metal or leak through the seams.
- Wrap the switches in padding, like bubble wrap, so they won't break.
- Keep the containers where they won't be disturbed.
- Mark the container. Write on the label:
 - “*Universal Waste – Mercury*” or
 - “*Waste – Mercury Switches*” or
 - “*Used Mercury Switches*”

How long can I keep mercury switches?

If you handle them as universal waste, you can keep mercury switches for up to a year. Write the date on the container when you first store a mercury switch in it. That way you can show an inspector that you have not kept mercury switches for more than a year.

Do I need an EPA identification number to handle mercury switches as universal waste?

You do not need an EPA ID number unless you have more than 11,000 pounds of universal waste at one time. But, you still have to:

- Have a system for cleaning up mercury, and
- Train employees on how to handle switches and what to do in an emergency.

Do I need a special carrier to transport mercury switches?

No. If you handle them as universal waste you can transport the switches yourself. They have to be in sealed containers. If a switch is broken or damaged, put it in a sealed plastic bag inside the container. You do not have to use a hazardous waste manifest or a registered hazardous waste transporter.

If you handle other hazardous wastes, you can use your hazardous waste hauler to transport your mercury switches. You can also hire a commercial carrier that takes universal waste. Make sure the carrier knows and follows the rules for transporting universal waste.

If you ship packages of mercury switches by **air or by water**, you must follow the U.S. Department of Transportation (DOT) regulations for transporting hazardous materials. If you use **ground** shipment, your package must meet the DOT regulations only if it contains more than one pound of mercury. The website for the DOT is: <http://www.dot.gov>.

There is a new program that is available here in California for the collection and proper disposal of mercury switches obtained from vehicles. This program provides collection buckets and educational materials regarding the switches and the program. It also provides a method for free dis-

posal of the switches, and may even pay you to collect these switches. For more information, please contact the ELVS program, or DTSC.

Where can I ship mercury switches?

If you do not use the mercury switch collection program listed in the previous paragraph, you have to ship mercury switches to an authorized mercury recycling facility. You can take your mercury switches to a recycler or to a universal waste handler who collects switches before sending them to a recycler.

See page 6 for a list of mercury switch handlers, transporting facilities and waste destination facilities in California.

Do I have to keep records?

Yes. If you manage mercury switches as universal waste, then you must keep the following records for at least three years:

- How many vehicles you crushed, baled, shredded, or sheared,
- How many of the vehicles had mercury switches,
- How many mercury switches you removed from the vehicles, and
- How many vehicles had mercury switches that you could not remove because of accident damage.

Can I replace mercury switches?

Yes. You can replace them with switches without mercury. They will work in almost all vehicles.

Here are two companies that manufacture and supply mercury-free switches:

Comus International
454 Allwood Road
Clifton, NJ 07012
Tel: 973-777-6900
Fax: 973-777-8405
www.comus-intl.com/productinfo.asp

Signal Systems International
P.O. Box 470, 1700 Route 35 North
Lavallette, NJ 08735
Tel: 732-793-4668
Fax: 732-793-4679
<http://www.signalsystem.com/>

Note: DTSC does not endorse these companies. Contact the companies if you have questions about replacing mercury switches with mercury-free switches.

What if there is a mercury spill?

Be very careful! It is dangerous to inhale, swallow, or handle mercury. If you see a broken, leaking, or damaged mercury switch, put it in a sealed plastic bag and then into a container.

Do not try to vacuum a mercury spill! Vacuuming spreads mercury vapors into the air. It can do more harm than good.

Write a plan of what to do if there's a mercury spill. Keep personal protective equipment and a mercury spill kit nearby when you remove mercury switches. Make sure that the staff knows exactly how to use them. You can get affordable spill kits from laboratory and safety supply stores.

What if someone is exposed to mercury?

Mercury on the Skin

Wash the skin with soap and water. Remove all clothes that touched the mercury. Seal the clothes in a plastic bag. Put the plastic bag in a hazardous waste container. See a doctor right away!

Mercury in the Eye

Flush eyes with water for 15 minutes. See a doctor right away!

Swallowed Mercury

Get medical help right away! Call your poison control at 1-800-222-1222 or your doctor for more information.

Where can I get more information?

To learn more about mercury and the laws for handling mercury switches, call the regional Public and Business Liaisons at: (800) 72 TOXIC (1-800-728-6942).

There is a specific area on the DTSC website for information on Mercury:

<http://www.dtsc.ca.gov/HazardousWaste/Mercury/index.cfm>

The ELVS website for California is <http://www.elvsolutions.org/california.htm>

Or, contact the DTSC office nearest you.

DTSC Headquarters
1001 I Street
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Glendale Office
1011 North Grandview Avenue
Glendale, California 91201
(818) 551-2830

Cypress Office
5796 Corporate Avenue
Cypress, California 90630
(714) 484-5400

For general information about mercury and mercury switches:

U.S. EPA - RCRA

Superfund & EPCRA Call Center
800-424-9346, or
www.epacallcenter@bah.com

U.S. EPA

www.epa.gov/mercury/

U.S. EPA-Region 5

www.epa.gov/region5/air/mercury/mercury.html

Association of Municipal Recycling Coordinators

www.amrc.guelph.org

Appliance Recycling Information Center

www.aham.org/aric/aric.cfm

Vehicles that have Mercury Switches in the Hood or Trunk

Parent Company	Brand	Model/Line	Years*
BMW	BMW	7-Series	Before 1992; 1995-2002
	Rolls Royce	Rolls Royce	Before Mid-1960s
Daimler Chrysler	Chrysler	Ades	1975-1994
		Concorde	1993-1996
		Cordoba	1975-1994
		E Class	1983
		K Car	1987
		Laser	1975-1994
		LeBaron	1975-1994
		New Yorker	1975-1994
		Pacifica	1998; 2003
	Dodge	2500 4x4	1993
		2500 Pick up	1995
		3500 Van	1998
		Aries	1975-1994
		Aspen	1976
		Caravan	1987-1989, 2000
		Caravio	1992
		Dakota	1993-1994, 1998
Daytona		1987, 1988, 1990	
Durango		1998, 2000	
Duster		1990	
Dynasty		1982, 1989-1992	
Intrepid		1994, 1996	
Lancer		1986	
Landan		1989	
Laser		1975-1994	
Neon		1998, 2000	
Ram Pick up		1997-1998, 2001	
Ram Pick up 1500	1997		
Roadstar	1988		
Shadow	1974-1994		
Spirit	1990-1991, 1994, 1996		
Stratus	1996		
Voyager	1986-1987, 1991		
Eagle	Medallion	1989	
	Premier	1988-1989	
	Vision	1994	
Jeep	Cherokee	1998-1999	
	Cherokee Sport	1996	
	Grand Cherokee	1993, 1995-1999	
	Grand Cherokee Wagoneer	1989	
	Wranger	1992, 1994, 1999	
Plymouth	Acclaim	1986, 1990-1992, 1994	
	Reliant	1975-1994	
	Sundance	1975-1994	

Vehicles that have Mercury Switches in the Hood or Trunk (cont'd)

Parent Company	Brand	Model/Line	Years*
Ford		Aerostar	1989
		Bronco	1986
		Bronco II	1974-1994; 1993-1997
		Crown Victoria	1974-1994, 1997, 2000-2001
		E-350	1993; 2000
		Escort	1974-1995, 1998
		Escort GT	1991
		Escort LX	1991, 1992, 1995, 1997
		Escort Pony	1991
		Escort S/W	1995
		Escort SE	1999
		Escort Wagon	1997
		Excursion	2000-2001
		Expedition	2000-2001
		Explorer	1991-2002
		F-150	1988, 1990-1991 1993, 1996-1998, 2000-2001
		F-250	1988, 1990-1993, 1995-2001
		F-350	1988, 1996, 1999-2001
		F-150 Supercrew	2000
		LTD	1974-1994
		Mustang	1986, 1989, 1992, 1995, 1996
		Probe	1989, 1993, 1994
		Ranger	1974-1997, 1998; 1995-2001
		Ranger XLT	1995, 1997
		Scorpio	1988; 1985-1993
		Superduty	1992
		Taurus	1974-1999
		Tempo	1974-1994, 1996
		Tempo GL	1988, 1993
		Thunderbird	1974-1994
		Van	1988, 1993, 1995
		Windstar	1996; 2000
		Lincoln	Blackwood
		Continental	1988-1991, 1994-1995; 2000-2002
		Mark 7	1988
		Navigator	2000-2002
		Town Car	1994; 2002
	Mazda	Pick up	1996
		RX-7 Turbo	1990
	Mercury	Cougar	1974-1990, 1995
		Grand Marquis	1985-1986, 1993, 1997, 2001
		Mountaineer	1996-2001
		Sable	1987-1995, 1998-1999
		Sable LS	1994
		Topaz	1987, 1990, 1992
		Tracer	1988, 1993

Vehicles that have Mercury Switches in the Hood or Trunk (cont'd)

Parent Company	Brand	Model/Line	Years*
Ford <i>(continued)</i>	Mercury	Villager XR4TI	1993; 2000 1987
	Volvo	240/260 740/760 744/764	1975-1991 1982-1990 1982-1991
General Motors	Buick	Celebrity Century Electra Fifth Avenue Firenza LeSabre LeSabre Custom Park Avenue Regal Regal Limited Riveria Roadmaster Skyhawk Skylark Ultra	1977-1990 1977-1992, 1994, 1996, 1998, 2002 1981, 1985, 1990 1985 1977-1990 1974-1994, 1996-2000 1989 1974-1991, 1998-1999, 2002 1974-1994, 1996 1991 1986-1990, 1993 1992 1977-1990 1977-1990, 1993, 1994, 1996, 1998 1998
	Cadillac	Brougham Cimarron DeVille Eldorado Escalade Seville SLS/STS Standard	1987, 1989 1979, 1998-2003 1979-1991, 1996, 2000-2002; 1998-2003 1982, 1991, 1992, 2001 2000; 1998-2003 1998-2003 1986, 1996
	Chevrolet	98 250 1500 2500 1500 4x4 3/4 Ten Pick up 3500 4x4 Avalanche Beretta Blazer Blazer 1500 Blazer S-10 C3500 Pick up Camero Caprice Caprice Classic Cavalier	1983, 1985, 1988, 1994 1998 1989, 1994 1997 1996, 1998 1994 1997 2001 1981-1990 1987, 1989, 1993-1994, 1997, 1999-2002 1991 1989-1992, 1994, 1996-1998, 2000, 2002 1989, 1991 1984, 1989 1981-1991 1984, 1988 1988-1991, 1993, 1995-1996, 2000-2002

Vehicles that have Mercury Switches in the Hood or Trunk *(cont'd)*

Parent Company	Brand	Model/Line	Years*
General Motors <i>(continued)</i>	Chevrolet <i>(cont'd)</i>	Celebrity	1986-1987, 1996-1997
		Cheyenne	1996
		Corsica	1988-1993
		Express Van	2000-2002
		Impala	2001
		K1500	1996, 1998
		K2500 Pick up	1991, 1994
		K3500 Pick up	1993
		Lumina	1981-1995, 1998
		Lunima Euro	1990
		Lumina Z-34	1992
		Malibu	1997
		Monte Carlo	2000
		Passport	1989
		Pick up	1988, 1989, 1991-1996, 1998, 2000-2002
		S-10 Pickup	1998, 2000
		Silverado	1999
		Suburban	1990-1991, 1994-1995, 1997-2002
Tahoe	1995-1998		
GMC		4x4	1997-1998
		Denali	2000
		Envoy	1998-2001
		G-20 Van	1995
		Jimmy	1991, 1993, 1994, 1996, 1998-2001
		Luxury G-Van	2002
		Pick up 1500	1993
		Savanna Van	2000-2002
		Sonoma	1994
		Yukon	1998
Pontiac		6000	1988
		6000 LE	1990
		Bonneville	1984-1991, 1994, 1995, 2002
		Firebird	1989, 1994-1995, 2002
		Grand Am	1984-1999
		Grand Prix	1985-1986, 1988-1996
		Parisienne	1982
		Sunbird	1984-1990
		Sunfire	1997-2002
		Trans Sport	1993, 1996
		Vibe	2002
Oldsmobile		88	1990-1991, 1993, 1997
		98	1983, 1985, 1988, 1990, 1992, 1994
		98 Regency	1985

Vehicles that have Mercury Switches in the Hood or Trunk (cont'd)

Parent Company	Brand	Model/Line	Years*
General Motors (continued)	Oldsmobile (cont'd)	Achieva	1992-1993
		Aurora	2001
		Bravada	2000-2001
		Calais	1977-1991
		Ciera	1977-1991, 1993-1995
		Cutlass	1977, 1983, 1988, 1990-1992, 1996
		Cutlass Cruiser	1986, 1988, 1992
		Cutlass Supreme	1977-1996
		Delta 88	1977-1995
		Firenza	1984
		Intrigue	1999
		Omega	1980
		Royale	1982, 1986, 1989
		Regency	1977-1990
		Toronado	1977-1990
		Toronado Trofeo	1987-1988
		Wagon	1991
	Saab	9000/900	Pre-1992
Other	Nissan	SER	1993
	Porche	944	1985-1991
	Toyota	Celica GT	1990
		SR5	1986
Volkswagon	Weekender Van	Not specified	

**Note: There may be other models that contain mercury switches.*

Companies that Handle and Transport Mercury Switches in California

Company	Address	Contact
AERC-MTI (Advanced Environmental Recycling Co. – Mercury Technologies Int'l) Chemical Waste Management	30677 Huntwood Ave. Hayward, CA 94555	Tel: 800-628-3675 Fax: 510-429-1498 http://www.aercrecycling.com Tel: 550-386-9711
Clean Harbors Los Angeles, LLC Los Angeles Facility	35251 Old Skyline Road Kettleman City, CA 93239	Tel: 323-277-2500 Fax: 323-277-2523 http://www.cleanharbors.com
Clean Harbors of San Jose, LLC San Jose Facility	5756 Alba Street Los Angeles, CA 90058	Tel: 408-451-5000 Fax: 408-453-6045 http://www.cleanharbors.com
Kinsbursky Brothers, Inc.	1040 Commercial St., Suite 109 San Jose, CA 95112	Tel: 714-738-8516 Fax: 714-441-0857 http://72.166.37.253:83/index.html
Kinsbursky Environmental Management	1314 North Anaheim Blvd. Anaheim, CA 92801	Tel: 619-409-9292 http://72.166.37.253:83/partners.html#kem
Lighting Resources, Inc. Ontario Branch	101 North Glover Ave., Suite B Chula Vista, CA 91909	Tel: 888-923-7252 Fax: 909-923-7510 http://www.lightingresourcesinc.com
North State Environmental – Southern California	805 East Francis Street Ontario, CA 91741	Tel: 909-875-9288 Fax: 909-875-9813 http://www.north-state.com
North State Environmental	2776 South Lilac Ave. Bloomington, CA 92316	Tel: 858-273-8669 Fax: 858-273-8678 http://www.north-state.com
North State Environmental – Northern California	5519 Clairemont Mesa Blvd. San Diego, CA 92117	Tel: 650-588-2838 Fax: 650-588-1950 http://www.north-state.com
Onyx Environmental Services, Inc.	90 South Spruce Ave., Ste. C3 South San Francisco, CA 94080	Tel: 510-651-2964 Fax: 510-656-4926 http://www.onyxes.com
Onyx Environmental Services, Inc.	4227 Technology Drive Fremont, CA	Tel: 626-334-5117 Fax: 626-334-4563 http://www.onyxes.com
Onyx Environmental Services, Inc.	1704 West First Street Azusa, CA 91702	Tel: 714-379-6000 Fax: 714-379-6010 http://www.onyxes.com
Onyx Environmental Services, Inc.	5202 Oceanus Drive Huntington Beach, CA 92649	Tel: 510-233-8001 Fax: 510-235-9427 http://www.onyxes.com
Recyclights, Inc.	1125 Hendey Street Richmond, CA 94801	Tel: 800-884-8982 Fax: 510-782-8984
Safety-Kleen Systems, Inc. Cluster II, Building 3	2439 Industrial Parkway West Hayward, CA 94545	Tel: 800-669-5740 Fax: 972-265-2000 http://www.safety-kleen.com
Thomas Gray & Associates, Inc.	5400 Legacy Drive Plano, TX 75024	Tel: 714-997-8090 Fax: 714-997-3561 http://www.tgainc.com

Note: Most hazardous waste transporters registered with DTSC handle and transport mercury switches.

Disclaimer: This list includes commercial firms found to offer mercury-containing switch handling services. DTSC 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 11 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.

Waste Destination Facilities that Accept Mercury Switches from California ¹

<i>Company</i>	<i>Address</i>	<i>Contact</i>
AERC-MTI (Advanced Environmental Recycling Co. – Mercury Technologies Int'l)	2591 Mitchell Avenue Allentown, PA 18103	Tel: 800-554-2372 Fax: 610-791-7696 http://www.aercrecycling.com
Bethlehem Apparatus Company, Inc.	890 Front Street, PO Box Y Hellerton, PA 18055	Tel: 610-838-7034 Fax: 610-838-6333 http://www.bethlehemapparatus.com
Lighting Resources, Inc.	498 Park Drive Greenwood, IN 46143	Tel: 317-888-3889 Fax: 317-888-3890 http://www.lightingresourcesinc.com%20
Mercury Waste Solutions, Inc. National Processing Center	21211 Durand Avenue Union Grove, WI 53182-9711	Tel: 800-741-3343 Fax: 262-878-2699 http://www.mercurywastesolutions.com
NSSI Sources and Services, Inc.	P.O. Box 34042 Houston, TX 77234	Tel: 713-641-0391 Fax: 713-641-6153 http://www.nssihouston.com
Onyx Environmental Services, Inc. (dba: Onyx Special Services, Inc.)	5736 West Jefferson Street Phoenix, AZ 85043	Tel: 800-368-9095 http://www.superiorserv.com

Disclaimer: This list includes commercial firms that were found to offer mercury-containing switch recovery services. The Department of Toxic Substances Control does not endorse or recommend a 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 vendors that provide mercury recovery services in California. Contact companies directly to obtain information regarding services provided, company-specific packaging and labeling requirements, and costs.

¹ These facilities have a mercury retort to recover mercury from switches.

