

HAZARDOUS WASTE MANAGEMENT PLAN

Prepared for:

San Bernardino Valley College

701 South Mount Vernon Avenue San Bernardino, California 92410

> Revised January 2013



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CURRENT VERSION OF SBVC HAZARDOUS WASTE MANAGEMENT PLAN

The Waste Management Plan that follows has been checked and is the current version. Signify below that this plan is current, and plan revision and date.

Name of Reviewer	Revision	Date
Whitney Fields, EH&S Administrator	Original draft	October 2012

EMERGENCY CONTACT TELEPHONE NUMBERS

<u>Local Emergency Dispatch for Fire, Personal Injury or Local Police</u> 911

<u>District Police Department</u> 909-384-4491 (Campus Extension 4491)

Emergency Contacts

Guillermo (Memo) Parra, Interim Maintenance & Operations Coordinator: 909-387-1608 gparra@sbccd.cc.ca.us

Scott Stark, Interim Vice President of Administrative Services: 909-384-8958 sstark@valleycollege.edu

Karol Pasillas, Administrative Services/ Maintenance and Operations: 909-384-8965 kpasilla@sbccd.cc.ca.us

Whitney Fields, District Environmental Health & Safety Administrator: 909-382-4070 <u>wfields@sbccd.cc.ca.us</u>



1.0 INTRODUCTION/PROGRAM DESCRIPTION

The purpose of this Hazardous Waste Management Plan (HWMP) is to serve as a guidance document to facilitate the proper handling of the hazardous wastes generated from the Physical Science Building, Health & Life Science Building (HLS), Art Building, Technology Building, Transportation Building, Maintenance & Operations (M&O) Department, and any other department at San Bernardino Valley College (SBVC). SBVC is a small quantity generator (SQG, 40 CFR 262.34) and some of its hazardous and universal wastes include:

Waste Flammable Liquid
Waste Corrosive Liquid
Waste Corrosive Solid
Heavy Metals/Inorganic Waste
Waste Oxidizing Liquid
Waste Oxidizing Solid
Waste Inorganics, Toxic

Fluorescent Light Tubes High-pressure Sodium Bulbs Freon cylinders Non-PCB Light Ballasts Aerosol Paint Cans Waste Oil-based Paints

The HWMP assures compliance with all Federal, State, and Local regulations. All personnel who handle, generate, package, label or move waste must refer to this document when making waste management decisions. Waste inspection procedures are also contained in the HWMP.

Due to the ever-changing regulatory statues developed by the Federal, State and Local agencies, it is imperative that the contents of this HWMP be updated regularly to reflect any changes mandated by the regulatory agencies. This HWMP will require updates as inspection procedures, waste types, and waste profiles change, necessitating changes in waste management.

2.0 SCOPE

This HWMP identifies and establishes consensus for policies and procedures for managing hazardous wastes and assures compliance with all Federal, State, and Local regulations.

3.0 DEFINITIONS

- CUPA Certified Unified Program Agency
- DTSC Department of Toxic Substance Control
- EPA Environmental Protection Agency
- Non-RCRA A California hazardous waste that does not meet the definition of RCRA hazardous waste at the federal level
- RCRA Resource Conservation and Recovery Act



4.0 RESPONSIBILITIES

4.1. VICE PRESIDENT OF ADMINISTRATIVE SERVICES

- Responsible for ensuring that all affected groups at SBVC are meeting the intent under this HWMP.
- Provide program framework for labs and applicable departments.
- Provide training resources/consultative services.
- Obtain and maintain EPA identification numbers.
- Manage regulatory compliance and internal finances for waste disposition.
- Ensure departmental compliance with all the procedures outlined in this HWMP, the California Health & Safety Code, Title 22, California Code of Regulations (CCR), and Title 40, Code of Federal Regulations (CFR).
- Record keeping of the types and amounts of hazardous wastes generated.
- Record keeping of all Uniform Hazardous Waste Manifests.

4.2. DEANS

- Convey importance of this HWMP to lab technicians and employees.
- Responsible for facilitating day-to-day training, or oversee day-to-day training.
- Ensure that lab technicians/employees receive proper training through online safety training resources or contacting the Vice President of Administrative Services or Environmental Health & Safety Administrator for training assistance.
- Responsible for lab technicians/employees following policies and procedures outlined in this HWMP.

4.3. LAB TECHNICIANS/EMPLOYEES

- Have a general knowledge of hazardous waste characteristics.
- Responsible for management of hazardous waste in their respective assigned work areas.
- Provide identification of hazardous waste for subsequent handling.
- Participate in training programs in order to obtain the necessary skills and knowledge to identify and handle hazardous waste from a safety and health perspective.
- Follow SBVC policies and the procedures outlined in this HWMP.

4.4. MAINTENANCE & OPERATIONS DEPARTMENT

- Provide good service to meet employee needs.
- Handle material(s) safely upon possession from labs and departments, until final disposition.
- Recycle/reuse, where possible.



- Coordinate identification and waste characterization with SBVC designated hazardous waste contractor (if not done by the lab/department).
- Coordinate hazardous waste manifesting with SBVC designated hazardous waste contractor (EMT).
- Coordinate off-site hazardous waste transportation requirements with SBVC designated hazardous waste contractor (EMT).
- Coordinate land disposal restrictions for certain hazardous wastes with SBVC designated hazardous waste contractor (EMT).
- Review and sign all Uniform Hazardous Waste Manifests by trained and authorized designated personnel under the supervision of the Vice President of Administrative Services.

5.0 TRAINING REQUIREMENTS

5.1 General

Employees who handle hazardous waste in any capacity must be trained at a level equal with their duties. Training records must be kept for all employees. SBVC maintains a database for all employee training records. Records may be reviewed by contacting the District Human Resources department at (909) 382-4040.

5.2 Hazardous Waste Generator Training

Hazardous Waste Generator training is required annually per (22 CCR §66265.16) and applies to anyone who handles, generates, packages, labels hazardous waste. SBVC conducts Hazardous Waste Generator training annually and the training is coordinated by the Vice President of Administrative Services and the District Environmental Health & Safety Administrator.

5.3 Universal Waste Training

Employees are required to be trained in proper universal waste management including handling, packaging, storing and labeling the universal waste, as well as how to respond to releases (22 CCR §66273.36).

5.4 Spill Response Training

Spill Response training is specified in the SBVC Business Emergency/Contingency Plan (on file with the VP for Administrative Services and the San Bernardino County Fire Marshall – Hazardous Waste Division) and in the SBVC Chemical Hygiene Plan. SBVC provides spill response training annually for applicable personnel. Training can be requested for new



employees or annual refreshers by contacting the Vice President of Administrative Services at (909) 384-8958 or District Environmental Health & Safety at (909) 382-4070.

6.0 HAZARDOUS WASTES

The handling and storage of hazardous and non-hazardous waste requires that specific procedures be followed to maintain compliance with Federal, State, and Local regulations. The first step in the process is to properly identify and classify the waste. The following Section identifies the various waste types and what constitutes a waste of that type.

6.1 RECOGNIZING SOLID WASTES

Any material, chemical, or solution determined to be an unusable product, becomes a solid waste. A solid waste is any material that is discarded, i.e. abandoned, recycled, or considered inherently waste-like (22 CCR §66261.2).

Federal and State regulations define hazardous waste as a substance that poses a hazard to human health or the environment when improperly managed. Hazardous wastes may be solid, liquid, gaseous or a combination of solid and liquid (sludge). A liquid can be a solid waste. To assist in this task, the most common hazardous waste streams generated at SBVC are determined and classified in this HWMP in Appendix D.

6.2 RCRA HAZARDOUS WASTE

RCRA hazardous wastes are also known as EPA wastes or Federal wastes. A waste is a RCRA hazardous waste if:

- (1) It is not excluded from classification as a waste or a hazardous waste; and
- (2) It meets any of the following criteria:
 - (A) It exhibits any of the characteristics of hazardous waste identified in <u>22 CCR</u> <u>\$66261.20</u> (Characteristic Waste, Section 6.3);
 - (B) It is a listed waste as identified in <u>22 CCR §66261.30</u> (Listed Waste, Section 6.4); or
 - (C) It is a mixture of a waste and one or more hazardous wastes. However, mixtures of wastes and hazardous wastes are not hazardous wastes¹, if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act. This discharge requires an industrial wastewater permit
 - approved by the Bureau of Sanitation.

¹ Mixtures of a non-hazardous waste and hazardous waste that was listed for exhibiting a hazardous



characteristic are not considered hazardous if the mixture no longer exhibits any hazardous characteristics.



However, the waste is not a RCRA hazardous waste if:

- (1) It is determined that the waste does not meet the criteria of a hazardous waste by:
 - 1 Testing the waste according to approved methods (Sampling & Analysis); or
 - 2 Applying knowledge of the hazardous properties of the waste in light of the materials or the processes used and the characteristics (Process Knowledge).

6.3 CHARACTERISTIC WASTES (22 CCR §66261.20-24)

The EPA has set additional requirements for any solid waste determined to be hazardous if it meets any of the definitions of a "characteristic" waste. The following are EPA assigned Waste Code Numbers and definitions.

<u>Flammability/Ignitability</u> (D001) – A solid waste is ignitable if it has any of the following properties: (1) it is a liquid and has a flash point below 140 °F, (2) it is not a liquid and is capable of causing fire through friction, absorption of moisture or spontaneous chemical changes and when ignited it burns so vigorously that it creates a hazard, (3) it is an ignitable compressed gas, and (4) it is an oxidizer. Examples include acetone, propane, acetylene, oil-based paints, and many solvents.

<u>Corrosivity</u> (D002) – A solid waste is corrosive if it has any of the following properties: (1) it is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, (2) it is a liquid and corrodes steel at a rate greater than 0.25 inches a year. Examples include muriatic acid and corrosive cleaning solutions that contain sodium hydroxide.

Reactivity (D003) – A solid waste is reactive if it has any of the following properties: (1) it is normally unstable and readily undergoes violent change without detonating, (2) it reacts violently with water, (3) it forms explosive mixtures with water, (4) when mixed with water it generates toxic gases, vapors or fumes, (5) it is a cyanide or sulfide bearing waste, which when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes, (6) capable of detonation or explosive reaction if subjected to a strong initiating source or if heated under confinement, and (7) it is readily capable of detonation or explosive reaction at standard temperature.

<u>Toxicity</u> (D004) – A solid waste exhibits the characteristic of toxicity if it is equal to or exceeds the Toxicity Characteristic Leaching Procedure (TCLP) limit listed in 40 CFR 261.24 Table I – Maximum Concentration of Contaminants for the Toxicity Characteristic. It is then assigned the corresponding waste code listed in Table I. Table I is presented in Appendix A.

6.4 LISTED WASTES (22 CCR §66261.30-35)

The EPA has developed specific lists of materials for which they have determined are hazardous wastes. There are three categories of these wastes:



- (1) Chemical products which are regulated as hazardous wastes when they are discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (P² and U waste codes listed materials).
- (2) Specific wastes from specific types of industrial processes (K waste code).
- (3) Wastes from non-specific types of industrial processes (F waste code).

6.5 NON-RCRA HAZARDOUS WASTE

The California EPA and Department of Toxic Substances Control (DTSC) regulate materials in addition to those that are regulated by the EPA. These wastes are characterized as non-RCRA hazardous wastes (i.e. iodine, glucose, methyl orange, phenol red, etc.). All EPA and non-RCRA Hazardous Wastes are also assigned a specific <u>California Waste Code Number</u>.

The following are non-RCRA/California hazardous wastes:

- (1) It is listed in or contains a constituent listed in Appendix X of 22 CCR 66261 (Appendix B).
- (2) It contains a substance listed in <u>22 CCR 66261.24</u> Table II or Table III (Appendix C) at a concentration in milligrams per liter of waste extract above the Table value, as determined using the Waste Extraction Test (WET).
- (3) It has an acute oral LD₅₀ less than 2,500 milligrams per kilogram.
- (4) It has an acute dermal LD₅₀ less than 4,300 milligrams per kilogram.
- (5) It has an acute inhalation LC₅₀ less than 10,000 parts per million as a gas or vapor.
- (6) It has an acute aquatic 96-hour LC₅₀ less than 500 milligrams per liter (fish kill test).
- (7) It contains any of the substances listed in <u>22 CCR 66261.24(a) (7)</u> at a single or combined concentration equal to or exceeding 0.001 percent by weight.
- (8) It has been shown through experience or testing to pose a hazard to human health or environment because of its carcinogenicity, acute toxicity, chronic toxicity, bio accumulative properties or persistence in the environment.

² P-listed wastes are considered Acutely Hazardous Wastes.



6.6 EXTERMELY HAZARDOUS WASTE (22 CCR §66261.107)

A waste or a material is considered extremely hazardous if it:

- (1) Has an acute oral LD₅₀ less than or equal to 50 milligrams per kilogram;
- (2) Has an acute dermal LD₅₀ less than or equal to 43 milligrams per kilogram;
- (3) Has an acute inhalation LC₅₀ less than or equal to 100 parts per million as a gas or vapor;
- (4) Contains any of the substances listed in <u>22 CCR §66261.24(a) (7)</u> at a single or combined concentration equal to or exceeding 0.1 percent by weight;
- (5) Has been shown through experience or testing that human exposure to the waste or material may likely result in death, disabling personal injury, or serious illness because of the carcinogenicity, high acute or chronic toxicity, bio accumulative properties, or persistence in the environment of the waste or material;
- (6) Is water-reactive; or
- (7) Contains a substance listed in <u>22 CCR §66261.113</u> at a concentration in milligrams per kilograms of waste extract above the Table value, as determined using the WET method.

6.7 UNIVERSAL WASTE

New laws adopted since 2000 created California's "Universal Waste Rule" to simplify how we manage common hazardous wastes. This allows generators to manage certain wastes in a less stringent way.

Universal wastes are hazardous wastes that are common to the work place and pose a lower risk to people and the environment than other hazardous wastes. Federal and State regulations identify universal wastes and provide simple rules for handling, recycling, and disposing of them. The regulations, called the "Universal Waste Rule," are in the California Code of Regulations, Title 22, Division 4.5, Chapter 23.

All universal wastes are hazardous wastes and, without the new rules, they would have to be managed under the same stringent standards as other hazardous wastes. Also, universal wastes are generated by a wide variety of people rather than by the industrial businesses that primarily generate other hazardous wastes.

The following items are universal wastes when they are no longer useful or are discarded:



- Mercury thermostats. These thermostats contain small glass capsules of mercury, a shiny liquid metal, to make electrical contact. Modern electronic thermostats do not contain mercury.
- (2) Batteries. Universal waste batteries include all types, such as rechargeable nickel-cadmium batteries, silver button batteries, mercury batteries, small sealed lead acid batteries (burglar alarm and emergency light batteries), most alkaline batteries, carbon-zinc batteries, and any other batteries that exhibit a characteristic of a hazardous waste (§66261.20 through §66261.24).

NOTE: Spent automotive-type lead acid storage batteries are not universal waste. They are hazardous wastes that require specific management.

- (3) Lamps Universal waste lamps include fluorescent tubes, high intensity discharge lamps, sodium vapor lamps, and any other lamps that exhibit a characteristic of a hazardous waste.
- (4) Non-empty aerosol cans Aerosol cans sometimes need to be discarded before they are completely empty. This occurs for a variety of reasons, including when the spray mechanism no longer operates as designed, the propellant is spent, or the product is no longer used.
- (5) Mercury switches These switches include thermostats and tip switches in portable heaters, silent wall switches, motor vehicle light switches, and other mercury-containing switches and products containing them.
- (6) Mercury thermometers, including fever thermometers.
- (7) Pressure or vacuum gauges that contain mercury such as U tube manometers, barometers, and sphygmomanometers (blood pressure meters).
- (8) Consumer electronic devices Electronics that exhibit hazardous characteristics such as some cell phones, game consoles, and computers.
- (9) Gauges Vacuum and pressure gauges that contain mercury, including blood pressure gauges, barometers, and manometers.



6.8 CHARACTERIZING WASTES

It is the responsibility of the Laboratory Technicians to determine if a waste is hazardous through coordination with the Vice President of Administrative Services, which will consult with the District Environmental Health & Safety Administrator or the contracted hazardous waste management vendor. This is done through testing, knowing what the material is, or through process knowledge. These results known as waste profiles are listed for each known waste stream in the SBVC Waste Stream Designation/ Category/ Profile Table in Appendix D.

6.9 INHERENTLY WASTE-LIKE CHEMICALS/LEGACY CHEMICALS

"Inherently waste-like chemicals" include expired chemicals, chemicals in deteriorating containers, and chemicals that appear to be or are unusable. State inspectors may issue fines or infractions for inherently waste-like chemicals in the laboratory. Chemicals should not be kept past their expiration date, and cleanouts should be conducted during annual chemical inventory updates.

Legacy chemicals are those that are left behind by laboratory staff when they leave the university or move laboratories. They become the responsibility of the new space occupants. Directors/Department Heads or the principal laboratory personnel are required to completely clean out laboratories before they leave, including all hazardous chemicals and waste. Legacy chemicals are unwanted chemicals that are sometimes left behind after a move. If a new staff member moves into a laboratory that has legacy chemicals in it, he/she should tell their department head immediately. Unless there is a clear record of use and storage of the legacy chemical, and they think that they will use them, arrange to request their collection as hazardous waste and follow all waste accumulation rules, including hazard identification, labeling and segregation.

7.0 CONTAINERS AND MANAGEMENT

7.1 PLACING A CONTAINER INTO SERVICE

When placing a drum, portable tank, or tote into service for the collection of industrial or hazardous wastes, the following sequence of events must occur:

(1) Selecting a Container - The proper drum, portable tank, or tote must be selected for the accumulation of each unique waste stream. Accumulate waste in an appropriate container compatible with the waste. Containers that were designed for solid chemicals should not be used for liquids. Use only containers that show no sign of damage of deterioration.



Only use containers with screw top closures. The lids of waste containers should be removed only when waste is being added to the container. Use spring loaded funnels for adding waste frequently to waste containers.

If wastes will be accumulated in containers greater than 5-gallons in volume, ensure the drums used to accumulate regulated wastes are in good condition and are approved by the Department of Transportation (DOT) for highway mode transportation.

Do not fill the containers completely. Each container must have at least one inch of headspace above the waste when it is collected. Request collection of waste ahead of time to avoid overfilling containers.

- (2) **Labeling of Container** The container must be properly labeled immediately (See Section 8.0) just prior to placing waste into the container.
- (3) Satellite Accumulation Area A satellite accumulation area is any accumulation container that is kept in the individual's routine work area and is under his/her control. Satellite accumulation areas allow generators to accumulate 55-gallons of a single hazardous waste stream/type (or 1-quart of acutely hazardous waste or extremely hazardous waste) in multiple locations. Therefore, an individual can accumulate multiple containers of hazardous acutely hazardous waste or extremely hazardous waste as long as the material is not of the same waste stream.

Satellite accumulation containers must be moved from their location and placed into the 180-day waste accumulation area within one year. Once the container is full in the satellite accumulation area, it must be moved within three days to the 180-day accumulation area.

The hazardous waste is stored in satellite accumulation areas in the following buildings:

- (A) Physical Science Building [PS 314]
- (B) Maintenance & Operations [Construction Yard; it is located southwest of College Drive, north of the Snyder Gym]
- (C) Art Building [Exterior North, Gated Area]
- (D) Technical Building (Steam Clean Area, between the Aeronautics and Body Shops]
- (E) Transportation Building (Used Oil Drum & Filter Storage Area, South Storage Room]

(4) 180-Day Accumulation Area

(270-Day Accumulation Area if waste is transported a distance of 200 miles or more from SBVC)



The central storage area at SBVC is in the Construction Yard; it is located southwest of College Drive, north of the Snyder Gym. All of the waste from the satellite accumulation areas identified above is consolidated and profiled at the Central Storage area every 90 days for proper transportation and disposal.

A 180-day storage area is an area designed to store hazardous waste containers. If the container is used for accumulation in the 180-day storage area, the date of its first use must be put on the label in the appropriate location immediately upon use. It must be labeled and dated immediately upon use. The container must then be recycled or disposed to an off-site facility for disposal within 180 days.

The central hazardous waste storage area shall include a secondary containment capable of holding the volume of the largest storage container plus sufficient freeboard to offset the accumulation of any potential precipitation into the containment area. Secondary containment structures must be made of material compatible with the stored material and environmental conditions and be constructed in such a manner so as to contain a potential release from the storage container(s). Secondary containment systems must not be compromised by the storage of other material, debris, or water (including storm water). Containers shall be inspected periodically, and records kept of those inspections.

- (5) Maintaining Containers When a drum or container has been put into service it must be kept closed at all times, and containers must be kept in good condition. Leave headspace in the container for temperature and vapor pressure changes. A drum/container should be opened only when adding material. Open-top drums must have the lid securely fastened using the ring band. All bungs on open and closed-top drums must be kept closed to prevent evaporation or spilling of the waste material. These measures are not only regulatory requirements, but also can prevent a spill should a drum be overturned. If a device (i.e. funnel, pump, etc.) has been installed on a drum, it must seal the drum to prevent leakage, or be removed and have bungs put in place after its use.
- (6) **Grounding Containers** Drums and/or storage containers used to store and/or dispense flammable liquids must be grounded.

7.2 STORAGE REQUIREMENTS

There are different requirements for storage of hazardous wastes and are listed in Title 40 Parts 264. These requirements depend on the quantities stored and where it is stored. Hazardous waste may be accumulated in either a satellite accumulation area or in a 180-day accumulation area. Either of these areas must be managed to



prevent the spill or release of the wastes and to prevent the mixing of incompatible waste streams. All stored containers must have sufficient aisle space of at least 36 inches wide for container inspections. Spill kits should be located near the storage area where liquids are stored. http://www.epa.gov/osw/hazard/tsd/storage.htm

Store the waste away from emergency equipment such as safety showers and emergency access panels. Do not block exits. Do not store the waste near or in sinks. Do not accumulate large amounts of waste in the fume hood. If the waste is stored in an area that drains to a floor drain, the waste must be in secondary containment.

Segregate regulated chemical waste by chemical compatibility. Incompatible wastes or incompatible materials must not be placed in the same container or container storage area. All incompatible materials must be separated by means of a dike, berm, wall, or distance (§66265.177). Secondary containment should be used for segregation of incompatible wastes accumulated in the same area, and should be able to adequately contain all of the contents of the containers. Chemical wastes should be physically segregated by observing the general classes listed in Table 1 below and by checking the Safety Data Sheets for the chemical.

Table 1: Chemical Use Category Segregation Table

Acids	Segregate acids from reactive metals such as sodium, potassium, magnesium.		
	Segregate oxidizing acids from organic acids such as glacial acetic acid and from flammable and combustible materials, such as cardboard boxes.		
	Segregate acids from chemicals which could generate toxic or flammable gases upon contact.		
	Segregate acids from bases.		
Bases	Segregate bases from acids, metals, explosives, organic peroxides and easily ignitable materials.		
Flammables Store in approved safety cans or cabinets. Segregate from acids and oxidizers. Keep away from any source of ignition sparks, or open flames.			
Oxidizers	Store in a cool dry place. Keep away from combustible and flammable materials. Keep away from reducing agents such as zinc, alkali metals, and formic acid.		
Cyanides	Segregate from acids and oxidizers.		



Water Reactive Chemicals	Store in a cool dry place away from any water source. Have a Class D fire extinguisher available in case of fire.
Pyrophoric Substances	(Materials that will react with the air to ignite when exposed, e.g., Iron Sulfide, Alkali Metals.) Store in a cool dry place, making provisions for an airtight seal.

7.3 COLLECTION

A request for the collection of wastes can be made by emailing a list of the hazardous waste and its location to Karol Pasillas, Administrative Services/Maintenance and Operations, at kpasilla@sbccd.cc.ca.us or calling (909) 384-8965. If you do not receive a timely response on your collection request, please call the SBVC, Administrative Services main number at (909) 384-8985 and submit your request.

SBVC currently has a service agreement with the hazardous waste contractor, Emergency Management Technologies (EMT). EMT is responsible for profiling, transporting and disposing of the wastes generated at SBVC.

Jeremy Brown – EMT Account Manager 1436 S. Gage Street, San Bernardino, CA 92408 O-800-579-6834 C-951-323-4773

Service agreements which involve hazardous waste consultation, removal, transport, treatment or disposal by other vendors must be approved by Vice President of Administrative Services or the District Environmental Health & Safety Administrator first. Arrangements with outside vendors for collecting hazardous waste must not be made without contacting the Vice President of Administrative Services or the District Environmental Health & Safety Administrator.

7.4 UNIVERSAL WASTES

Universal Waste container management is similar to hazardous wastes. The specific requirements for the management of Universal Waste containers are the following:

- (1) Do not dispose of universal waste in the trash.
- (2) Send all universal waste to a facility authorized to collect, recycle or dispose of universal waste.
- (3) Do not accumulate more than 5,000 kilograms (5.5 tons) of universal waste at any one time for Small Quantity Handlers of Universal Wastes.



- (4) Do not store universal waste for longer than one year after generating or receiving the waste. If you think you need more time, contact District Environmental Health & Safety at (909) 382-4070 to attain authorization for special provisions from the Certified Unified Program Agency (CUPA) well before your oldest universal waste will be held for one year (§66273.15).
- (5) Generally, you may not treat universal waste except when cleaning up releases or managing specific wastes as provided in section 66273.13 (for example, removing mercury ampoules from thermostats or removing electrolyte from batteries) (§66273.11). Treatment includes any activity that changes the characteristics of the waste.
- (6) Clean up any releases such as leaking batteries or broken fluorescent tubes. Repackage the damaged universal waste and manage it as universal waste. Manage any other materials generated, such as cleanup supplies and contaminated soil, as hazardous wastes if they are identified as hazardous waste (§§66273.13 and 66273.17).

7.5 EMPTY CONTAINERS

A container is considered "empty" if:

- You have used "normal, no-nonsense means, such as inverting and draining, shaking, scraping, or scooping" to empty the container, while taking appropriate personal protective measures; and
- No more than 3% of the contents remain or no more than 1 inch of residue remains on the bottom of the container or inner liner.

Container reuse

If possible, reuse empty chemical containers for disposal of that same chemical or compatible chemicals. If container is reused, completely deface or remove the original label, and fill out and affix a new hazardous waste label to the container.

<u>Container recycling</u>

Containers for non-toxic chemicals can be recycled if they are emptied and dried completely and their labels are defaced. Containers for the chemicals listed below can be recycled:

- Acetone
- Alcohols
- Hexane, Toluene, Xylene



- Non-toxic Buffers, Salts
- Sugars, Nutrients
- Cleaning products

Do not put these containers in public area bins; instead, take them to the nearest bottles and cans container outside the building.

Container disposal

To dispose of the empty container, follow these directions:

- Dry the container in a well-ventilated area. Use a fume hood if available, or else find an area away from where people are working.
- With a pen, cross out or black out the labels on the container.
- Leave the container uncapped. Throw the cap away separately.
- Place the container in or next to the trash.

8.0 LABELING REQUIREMENTS

All wastes must be properly labeled. Labels must be complete, legible, and placed right-side up on the container (not the lid or bottom). The following information must be included on the label:

- (1) The words "Hazardous Waste", "Non-Hazardous Waste", or "Universal Waste".
- (2) The name of the contents.
- (3) SBVC and SBVC address.
- (4) The composition and physical state, and hazardous properties.
- (5) Accumulation Start Date.

Deface or remove any original labels remaining on the waste container to avoid confusion about the identity of the waste.

8.1 HAZARDOUS WASTE

Hazardous Waste labels must meet California requirements for labeling. All hazardous wastes have a California waste number. Some hazardous wastes may not have an EPA waste number. Hazardous waste labels must be placed on the hazardous waste container upon the start of accumulation. An example of the California blank waste label is in Figure 1.0 below.





FIGURE 1.0: HAZARDOUS WASTE LABEL

8.2 SATELLITE ACCUMULATION

Satellite Accumulation labels must meet California requirements for labeling. All hazardous wastes have a California waste number. Some hazardous wastes may not have an EPA waste number.

The Accumulation Start Date must be filled in as soon as the container is put into service. When it is moved from the satellite accumulation area, it must be dated in the "Date Place in Hazardous Waste Storage Area" line. An example of a blank Accumulation Container label is shown in Figure 2.0 below.



FIGURE 2.0: HAZARDOUS WASTE ACCUMULATION LABEL



8.3 UNIVERSAL WASTE

As with hazardous waste containers, Universal Waste containers must be labeled or marked to identify their types. Label the universal waste with an accumulation start date that is the date you discarded it yourself after it was "used up," or decided to discard it (§66273.15(c)). An example of a blank Universal Waste label is shown in Figure 3.0 below.



FIGURE 3.0: UNIVERSAL WASTE LABEL

Universal Wastes must be identified with one of the following markings:

- (1) Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, <u>Universal Waste--Battery(ies)</u>, or <u>Waste Battery(ies)</u>, or <u>Used Battery(ies)</u>.
- (2) Universal waste thermostats (i.e., each thermostat), or a container in which the thermostats are contained, <u>Universal Waste--Mercury Thermostat(s)</u>, or <u>Waste Mercury Thermostat(s)</u>, or <u>Used Mercury Thermostat(s)</u>.
- (3) Each lamp or a container or package in which such lamps are contained, <u>Universal Waste – Lamp(s), or Waste Lamp(s), or Used Lamp(s)</u>.
- (4) Each universal waste electronic device or container or pallet in or on which universal waste electronic devices are contained, Universal Waste Electronic Device(s) or UW Electronic Device(s).



- (A) In lieu of labeling individual universal waste electronic devices or containers or pallets, a small quantity handler may accumulate universal waste electronic devices within a designated area demarcated by boundaries that are clearly labeled with one of the following phrases Universal Waste Electronic Device(s) or UW Electronic Device(s).
- (5) Universal waste mercury switches and thermometers or a container in which the switches are contained, <u>Universal Waste Mercury Switch(es)</u>, or <u>Waste Mercury Switch(es)</u>.
- (6) Pressure or vacuum gauges
 - (A) A container in which universal waste gauges are contained, <u>Universal</u> Waste <u>Gauge(s)</u>, or Waste Mercury Gauge(s) or Used Mercury Gauge(s).
 - (B) A container in which mercury drained from one or more universal waste pressure or vacuum gauges is contained, <u>Universal Waste Drained Mercury</u>, or <u>Universal Waste Mercury</u> from Gauges.
- (7) Universal Waste Aerosols A container in which universal waste aerosol cans are contained, <u>Universal Waste Aerosol Cans</u>, <u>Waste Aerosol Cans</u>, or <u>Used Aerosol Cans</u>.

8.4 NON-HAZARDOUS WASTE

Other than general trash, all non-hazardous waste in containers must be identified so as to separate it from general trash, and prevent it from being disposed with general trash.

SBVC generates several types of non-hazardous waste that is disposed separately from general trash (refer to Appendix D). The waste container should be labeled with its contents and the date it was first put into service. A typical non-hazardous waste label is in Figure 4.0 below.





FIGURE 4.0: NON-HAZARDOUS WASTE LABEL

9.0 MANIFESTING AND RECORDKEEPING

A hazardous waste manifest must accompany all hazardous waste that is shipped off-site (EPA Form 8700-22). SBVC's designated EPA identification number is CAD981695281. Both the transporter and the SBVC-designated employee must sign and date the manifest by hand. Contact District Environmental Health & Safety at (909) 382-4070 for a current list of employees that have been trained and authorized to sign manifest's at San Bernardino Valley College. The generator (SBVC) must retain one copy of the manifest and give the transporter the remaining copies of the manifest. The disposal facility receiving the hazardous waste shipment should send a final copy of the manifest to the generator within 30 days of delivery and will retain a copy of each manifest for at least 3 years from the date of delivery.

SBVC must keep a copy of each hazardous waste manifest signed for 3 years or until SBVC receives a signed copy from the disposal facility. This signed copy must be retained by SBVC as a record for at least 3 years from the date the waste was accepted by the initial transporter. SBVC must also keep records of any test results, waste analyses, or other determinations made for at least 3 years from the date that the waste was last sent to onsite or off-site treatment, storage, or disposal.

All other wastes shipped off-site from SBVC must be accompanied by appropriate transportation and final disposal/disposition documentation, such as bills of ladings, non-hazardous waste manifests, etc. All transportation and final/disposition documentation



must be kept for a period of at least 3 years from the date the waste was accepted by the initial transporter.

All wastes at SBVC must be sent to an approved waste service contractor per District policy. Currently, the approved waste service contractor for SBVC is:

Emergency Management Technologies (EMT)
Jeremy Brown – Account Manager
1436 S. Gage Street, San Bernardino, CA 92408
O-800-579-6834
C-951-323-4773

10.0 INSPECTION REQUIREMENTS AND CHECKLISTS

10.1 WEEKLY INSPECTION

SBVC conducts a weekly inspection via designated employees of areas used for hazardous waste storage or transfer, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors (22 CCR 66265.174). Also inspected is the accumulation start date of containers and if there is any evidence of spills or leaks.

At a minimum, the inspections shall include:

- Open Containers If drums or containers are found with missing or open bungs, lids, or rings, the missing item(s) are to be replaced immediately.
- Mislabeled Containers Missing or incomplete labels must be corrected immediately.
- Ensure that wastes are stored in the appropriate containers that will not react
 with, or are otherwise incompatible with the hazardous waste that the
 container is storing.
- Container Damage and Contamination The containers in all hazardous waste storage areas are to be free of dents, bulges, or other defects, and must have a clean exterior.
- Signage Check for appropriate signage around all hazardous waste storage areas (i.e. Hazardous Waste Storage Area - Authorized Personnel Only, No Smoking).
- Spills and Leaks Check for signs of spills and leaks, and report any spills immediately. Ensure that containers are not overfilled.
- Good Housekeeping Spill containment for the hazardous waste storage areas must be in good condition and free of liquids. Check for proper aisle space, no breaches in containment, no excess waste, etc.
- Ensure that no incompatible wastes are stored within the same hazardous waste storage area.



• Ensure that all containers are dated, are less than 1 year from the accumulation start date on satellite accumulation hazardous waste containers, and are less than 180 days from the accumulation start date on the 180-day accumulation containers.

Weekly inspections will be performed at the following hazardous waste storage areas at SBVC:

- (A) Chemistry, Physical Science Building [PS 314]
- (B) Biology, Health & Life Science Building [HLS 244]
- (C) Microbiology, Health & Life Science Building [HLS 218]
- (D) Anatomy & Physiology/A&P, Health & Life Science Building [HLS 225]
- (E) Maintenance & Operations [Construction Yard; it is located southwest of College Drive, north of the Snyder Gym]
- (F) Art Building [Exterior North, Gated Area]
- (G) Technical Building (Steam Clean Area, between the Aeronautics and Body Shops]
- (H) Transportation Building (Used Oil Drum & Filter Storage Area, South Storage Room)

10.2 INSPECTION FORM

The Weekly Inspection Form can be found in Appendix E.

As required, the inspection records shall be retained in the respective hazardous waste storage areas summarized above on-site for a minimum of three (3) years.

11.0 REPORTING REQUIREMENTS/REPORTING

Reporting requirements are listed in SBVC's CUPA Emergency Response Plan and Procedures. Information contained within that Plan is repeated here for reference only.

11.1 INCIDENT REPORT

SBVC procedure states that <u>all</u> incidents (personal injury, property damage, environmental releases, and near misses) shall be investigated to fully analyze what happened, identify the root cause(s), and specify actions that will prevent similar incidents in the future. The Incident Investigation report should be printed and forwarded to incident location department manager/supervisor and the Vice President of Administrative Services to be kept available for reference.

The procedure requires applicable staff/faculty/employees to:

1. Investigate the incident and complete an Accident/Incident Report (Appendix F).



2. Submit the Accident/Incident Report to the incident location department manager/supervisor and the Vice President of Administrative Services for review and signature, within two (2) calendar days.

An Incident Review Meeting will then take place for all recordable injuries and near misses/first aids. The attendees can vary but will typically include a member(s) of the applicable incident location, the employee involved in the injury (if possible), and department manager/supervisor.

The meeting will take place to review the Accident/Incident Report. It will be called by the VP of Administrative Services.

11.2 EMERGENCY SPILL RESPONSE

In the event of a chemical or hazardous materials spill, follow the steps below:

- Provide any first aid (if necessary) to affected personnel. Liberally use eyewash station and/or safety shower to flush affected areas. Flush continuously for AT LEAST 15 minutes. Any exposure merits medical care and a large exposure to the body merits ambulatory service.
- 2) Notify the Dean, or the "administrator in charge," of the spill. If a spill is larger than 1 liter or extremely hazardous, the Campus Police should be immediately notified. Injured employees shall refer to the District's procedures for injured employees. Injured students shall be referred to the Student Health Services (909) 384-4495.
- 3) Evacuate students from the area.
- 4) If spilled materials exhibit flammability, eliminate ignition sources such as hot plates, Bunsen burners, etc.
- 5) Avoid all contact with spilled material. If necessary, use protective gloves, gown, goggles, and/or respirator.
- 6) Obtain supplies from Chemical Spill Clean-Up Kit (located in Chemistry Stockroom, PS-306, the M&O Building, the Vocational Tech. Building adjacent to the above ground oil storage tank between aeronautics/auto body shop or the Transportation Building, shop floor)
- 7) Neutralize acids and bases.
- 8) Contain collected materials and label container with name of contents and also as Hazardous Waste.
- 9) Always refer to Material Safety Data Sheet (MSDS) for special precautions or spill cleanup requirements.
- 10) To the best of your ability and without re-entering the building, assist District Police or SBVC staff in their attempt to determine that everyone has been evacuated safely.
- 11) DO NOT return to a building unless it has been declared safe to do so by District Police or SBVC Administration.



SBVC's Emergency Spill Response/Clean-up Contractor is:

Emergency Management Technologies (EMT)
Jeremy Brown – Account Manager
1436 S. Gage Street, San Bernardino, CA 92408
O-800-579-6834
C-951-323-4773

Note: The Vice President of Administrative Services, the Maintenance & Operations Coordinator or the District Environmental Health & Safety Administrator shall be the authorized designated staff to contact Emergency Management Technologies (EMT) for emergency response services following an emergency spill.

The following information should be collected and be made available to spill response agencies and regulators as required.

- (1) Your name, location, organization, and telephone number
- (2) Name and address of the party responsible for the incident
- (3) Date and time of the incident
- (4) Location of the incident
- (5) Source and cause of the release or spill
- (6) Types of material(s) released or spilled
- (7) Quantity of materials released or spilled
- (8) Medium (e.g. land, water) affected by release or spill
- (9) Danger or threat posed by the release or spill
- (10) Number and types of injuries or fatalities (if any)
- (11) Weather conditions at the incident location
- (12) Name of the carrier or vessel, the railcar/truck number, or other identifying information
- (13) Whether an evacuation has occurred
- (14) Other agencies notified or about to be notified
- (15) Any other information that may help emergency personnel respond to the incident

11.3 LOCAL FIRE DEPARTMENT

In the event that the SBVC's Emergency Spill Response/Clean-up contractor is unavailable, unresponsive or an authorized Administrator to contact EMT cannot be reached the local fire department must be contacted for spill response. The City of San Bernardino Fire Department can be contacted by calling 9-1-1.

11.4 OFFICE OF EMERGENCY SERVICES WARNING CENTER



Hazardous material spills must be reported to the State Office of Emergency Services, California State Warning Center at (800) 852-7550 or (916) 845-8911. A report must be made within 24 hours of a release or threatened release of toxic materials, which is an immediate threat to public health or safety and environment. The Vice President of Administrative Services and the District Environmental Health & Safety Administrator shall be responsible for reporting to the State Office of Emergency Services.



11.5 NATIONAL RESPONSE SYSTEM REPORTING

The National Response Center should be contacted for spills into the navigable waters or environment or for releases that exceed Federal Reportable Quantities (RQ) under CERCLA. The NRC can be reached at (800) 424-8802. See Section 11.9 for the reportable quantity of potential spills at SBVC. The Vice President of Administrative Services and the District Environmental Health & Safety Administrator shall be responsible for reporting to the National Response Center following this type of event.

The National Response System (NRS) is the government's mechanism for emergency response to discharges of oil and the release of chemicals into the navigable waters or environment of the United States and its territories. The <u>National Oil and Hazardous Substances Pollution Contingency Plan</u> set up the National Response Center for the reporting and coordination of response to pollution by oil and hazardous substances.

The National Response Center was charged with receiving reports of discharges of oil and hazardous substances. The NRC disseminates this information to the appropriate federally pre-designated On-Scene Coordinator. The criteria for reporting such incidents were set forth in 40 CFR 110 for oil discharges and 40 CFR 116 for hazardous substances discharges.

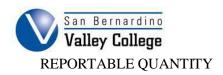
11.6 DTSC REPORTING

For hazardous waste tank releases or secondary containment releases, the local office of DTSC should be contacted.

11.7 CAL-OSHA

SBVC shall report immediately by telephone or facsimile to the nearest District Office of the Division of OSHA (San Bernardino) any serious injury or illness, or death of an employee occurring in a place of employment or in connection with any employment. The San Bernardino Cal-OSHA office can be reached at (909) 383-4321.

Serious Injury means hospitalization for 24 hours or more for more than observation, a loss of any part of the body (any bone loss), or permanent serious disfigurement irrespective of hospitalization. "Immediately" means as soon as practically possible, but no longer than eight (8) hours after the employer knows, or with diligent inquiry would have known of the death or serious injury or illness.



If a hazardous substance is released to the environment in an amount that equals or exceeds its reportable quantity (RQ), the release must be reported to federal authorities so that emergency response personnel can evaluate whether a response action is needed. The Superfund law specifically excludes any release that results in exposure to persons solely within a workplace from the definition of a release and, therefore, the reporting requirements do not apply.

Table 2 below is a list of materials and RQ that may be encountered at SBVC. Action must be taken when the RQ is exceeded. Specific actions and agencies to contact are listed in subsections in Section 11.10. A complete list of reportable quantities can be found in the Table 1 to Appendix A contained in 49 CFR §172.101.

TABLE 2.0 - REPORTABLE QUANTITIES (RQ)

Material	RQ (lb.)		
Formaldehyde	100		
Methanol	5000		
Sulfuric Acid	1000		
Nitric Acid	1000		
Nickel	100		
Hydrochloric Acid	5000		
Silver Nitrate	1		
Potassium	100		
Permanganate			
Dinitrophenol	10		
Paint Waste, Liquid	10		
Paint Waste, Solid			
Hexane	5000		
Toluene	1000		
Acetone	5000		
Cyclohexane	1000		
Potassium Hydroxide	1000		
Sodium Hydroxide	1000		
Lead	10		
Silver	1000		



11.8 OIL SPILL REPORTABLE QUANTITY (RQ)

The Oil Pollution Prevention Regulation in 40 CFR 112 regulates the reporting requirement for Petroleum products. An oil spill meets the Reportable Quantity (RQ) when any of the following occurs:

- Is on navigable waters;
- Violates applicable water quality standards;
- Causes a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines;
- Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

In addition, an oil spill or discharge of at least one barrel (44 gallons) of oil over a 24-hour period should be considered as a reportable quantity. Refer to SBVC's Spill Prevention, Control, and Countermeasure (SPCC) Plan for further details.

11.9 WRITTEN REPORTS

11.10.1 OFFICE OF EMERGENCY SERVICES

If required, within 30 days of an emergency in which the release exceeds the Reportable Quantity (RQ) in Section 11.8, SBVC's VP of Administrative Services shall with the assistance of District Environmental Health & Safety submit the Office of Emergency Services Form 304. The Form 304 should be prepared promptly and forwarded to the Chemical Emergency Planning and Response Commission (CEPRC) at 3650 Schriever Avenue, Mather, CA 95655. Form 304 is available at:

http://www.calema.ca.gov/HazardousMaterials/Documents/304%20-%20Written%20Report%20Form.doc

11.10.2 DTSC

Within 15 days after a spill incident in which the release exceeds the Reportable Quantity (RQ) in Section 11.8, SBVC's VP of Administrative Services shall with the assistance of District Environmental Health & Safety submit a written report on the incident to the Department of Toxic Substances Control and to the EPA Region IX Administrator.

The report shall include information from the list of items in "Emergency Spill Response" Section 11.2.



12.0 INFORMATION AND EXTERNAL REFERENCES

 $Laws\, and\, Regulations\, on\, Hazardous\, Waste\, Management$

State Laws

Hazardous Waste Control Law (HWCL) Hazardous Substance Account Act (HSAA) Hazardous Waste Treatment Permitting Reform H

Act (AB 1772)

Health and Safety Code § 25100-25249 Health and Safety Code § 25340-25392

Health and Safety Code § 25201

Federal Laws

Resource Conservation and Recovery Act

(RCRA)

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) 42 USC § 6901-6987

42 USC § 9601-9675

State Regulations

Identification and Listing of Hazardous Waste Requirements for Generators, Generally Requirements for Generators, Contingency

Plan

Requirements for Generators, Personnel

Training

Requirements for Transporters Land Disposal Prohibitions 22 CCR §\$66261-66261.126 22 CCR §\$66262.10-66262.70 22 CCR §\$66264.50-66265.56

22 CCR §66265.16

22 CCR §66263 22 CCR §66268



APPENDIX A

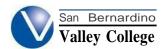
TABLE I – MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC

EPA HW No.	Contaminant	CAS No.	Pogulatory
[FN1]	Contaminant	[FN2]	Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	[Use D026 level]
D024	m-Cresol	108-39-4	[Use D026 level]
D025	p-Cresol	106-44-5	[Use D026 level]
D026	Cresol		200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	[FN3] 0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	[FN3] 0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentrachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	[FN3] 5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2
	,		

FN1 Hazardous waste number.

FN3 Quantitation limit is greater than calculated regulatory level and becomes the regulatory level.

FN2 Chemical abstracts service number.



APPENDIX B

22 CCR 66261 Appendix X- List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials

Appendix X List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials

(a) This subdivision sets forth a list of chemicals which create a presumption that a waste is a hazardous waste. If a waste consists of or contains a chemical listed in this subdivision, the waste is presumed to be a hazardous waste unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 66262.11. The hazardous characteristics which serve as a basis for listing the chemicals are indicated in the list as follows:(X) toxic, (C) corrosive, (I) ignitable and (R) reactive. A chemical denoted with an asterisk is presumed to be an extremely hazardous waste unless it does not exhibit any of the criteria set forth in section 66261.110 and section 66261.113. Trademark chemical names are indicated by all capital letters.

1.	Acetaldehyde (X,I)
1.	Acetic acid (X,C,I)
3.	Acetone, Propanone (I)
4.	Acetone cyanohydrin (X)
5.	Acetonitrile (X,I)
6.	* 2-Acetylaminofluorene, 2-AAF (X)
7.	Acetyl benzoyl peroxide (X,I,R)
8.	* Acetyl chloride (X,C,R)
9.	Acetyl peroxide (X,I,R)
10.	Acridine (X)
11.	* Acrolein, Aqualin (X,I)
12.	* Acrylonitrile (X,I)
13.	* Adiponitrile (X)
14.	* Aldrin; 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo- exodimethanonaphthalene (X)
15.	* Alkyl aluminum chloride (C,I,R)
16.	* Alkyl aluminum compounds (C,I,R)
17.	Allyl alcohol, 2-Propen-1-ol (X,I)
18.	Allyl bromide, 3-Bromopropene (X,I)
19.	Allyl chloride, 3-Chloropropene (X,I)
20.	Allyl chlorocarbonate, Allyl chloroformate (X,I)
21.	* Allyl trichlorosilane (X,C,I,R)
22.	Aluminum (powder) (I)
23A.	Aluminum chloride (X,C)
23B.	* Aluminum chloride (anhydrous) (X,C,R)
24.	Aluminum fluoride (X,C)
25.	Aluminum nitrate (X,I)
26.	* Aluminum phosphide, PHOSTOXIN (X,I,R)
27.	* 4-Aminodiphenyl, 4-ADP (X)

28.

* 2-Aminopyridine (X)

29. * Ammonium arsenate (X) 30. * Ammonium bifluoride (X,C) 31. Ammonium chromate (X,I) 32. Ammonium dichromate, Ammonium bichromate (X,C,I) 33. Ammonium fluoride (X,C) 34. Ammonium hydroxide (X,C) 35. Ammonium molybdate (X) 36. Ammonium nitrate (I,R) 37. Ammonium perchlorate (I,R) 38. Ammonium permanganate (X,I,R) 39. Ammonium persulfate (I,R) 40. Ammonium picrate (I,R) 41. Ammonium sulfide (X,C,I,R) 42. n-Amyl acetate, 1-Acetoxypentane (and isomers) (X,I) 43. n-Amylamine, 1-Aminopentane (and isomers) (X,I) 44. n-Amyl chloride, 1-Chloropentane (and isomers) (X,I) 45. n-Amylene, 1-Pentene (and isomers) (X,I) 46. n-Amyl mercaptan, 1-Pentanethiol (and isomers) (X,I) 47. n-Amyl nitrite, n-Pentyl nitrite (and isomers) (X,I) 48 * Amyl trichlorosilane (and isomers) (X,C,R) 49. Aniline, Aminobenzine (X) 50. Anisoyl chloride (X,C) 51. Anthracene (X) 52. Antimony (X) 53. Antimony compounds (X) 54. * Antimony pentachloride (X,C,R) 55. * Antimony pentafluoride (X,C,R) 56. Antimony pentasulfide (X,I) 57. Antimony potassium tartrate (X) 58 Antimony sulfate, Antimony trisulfate (X,I) 59. Antimony trichloride, Antimony chloride (X,C) 60. Antimony trifluoride, Antimony fluoride (X,C) 61. Antimony trioxide, Antimony oxide (X) 62. Antimony trisulfide, Antimony sulfide (X,I,R 63. * Arsenic (X)

* Arsenic acid and salts (X)

* Arsenic compounds (X)

64.

66. * Arsenic pentaselenide (X) 67. * Arsenic pentoxide, Arsenic oxide (X) 68. * Arsenic sulfide, Arsenic disulfide (X) 69. * Arsenic tribromide, Arsenic bromide (X) 70. * Arsenic trichloride, Arsenic chloride (X) 71. * Arsenic triiodide, Arsenic iodide (X) 72. * Arsenic trioxide, Arsenious oxide (X) 73. * Arsenious acid and salts (X) 74. * Arsines (X) 75. Asbestos (including chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite) (X) * AZODRIN, 3-Hydroxy-N-cis-crotonamide (X) 76. 77. Barium (X,I) 78. Barium azide (I,R) 79. Barium bromide (X) 80. Barium carbonate (X) 81. Barium chlorate (X,C,I,R) 82. Barium chloride (X) 83. Barium chromate (X) 84. Barium citrate (X) 85. Barium compounds (soluble) (X) 86. * Barium cyanide (X) 87. Barium fluoride (X) 88. Barium fluosilicate (X) 89. Barium hydroxide (X) 90. Barium iodide (X) 91. Barium manganate (X) 92. Barium nitrate (X,I) 93. Barium oxide, Barium monoxide (X) 94. Barium perchlorate (X,I,R) 95. Barium permanganate (X,I,R) 96. Barium peroxide (X,I,R) 97. Barium phosphate (X) 98. Barium stearate (X) 99. Barium sulfide (X)

Barium sulfite (X)

Benzene (X,I)

100.

102. * Benzene hexachloride, BHC; 1,2,3,4,5,6-Hexachlorocyclohexane (X) 103. * Benzenephosphorous dichloride (I,R) 104. Benzenesulfonic acid (X) 105. * Benzidine and salts (X) 106. * Benzotrifluoride, Trifluoromethylbenzene (X,I) 107. * Benzoyl chloride (X,C,R) 108. Benzoyl peroxide, Dibenzoyl peroxide (X,I,R) 109. Benzyl bromide, alpha-Bromotoluene (X,C) 110. Benzyl chloride, alpha-Chlorotoluene (X) 111. * Benzyl chlorocarbonate, Benzyl chloroformate (X,C,R) 112. * Beryllium (X,I) * Beryllium chloride (X) 113. 114. * Beryllium compounds (X) 115. * Beryllium copper (X) 116. * Beryllium fluoride (X) * Beryllium hydride (X,C,I,R) 117. 118. * Beryllium hydroxide (X) 119. * Beryllium oxide (X) 120. * BIDRIN, Dicrotophos, 3-(Dimethylamino)-1-methyl-3-oxo-1-propenyldimethyl phosphate (X) 121. * bis (Chloromethyl) ether, Dichloromethylether, BCME (X) 122. Bismuth (X,I) * bis (Methylmercuric) sulfate, CEREWET, Ceresan liquid (X) 123. 124. Bismuth chromate (X) 125. * BOMYL, Dimethyl 3-hydroxyglutaconate dimethyl phosphate (X) * Boranes (X,I,R) 126. 127. * Bordeaux arsenites (X) 128. * Boron trichloride, Trichloroborane (X,C,R) 129. * Boron trifluoride (X,C,R) 130. Bromic acid (X) 131. * Bromine (X,C,I) 132. * Bromine pentafluoride (X,C,I,R) 133. * Bromine trifluoride (X,C,I,R) 134. * Brucine, Dimethoxystrychnine (X) 135. 1,2,4-Butanetriol trinitrate (R) 136. n-Butyl acetate, 1-Acetoxybutane (and isomers) (X)

n-Butyl alcohol, 1-Butanol (and isomers) (X)

n-Butyl amine, 1-Aminobutane (and isomers) (X)

137.

- 139. n-Butyl formate (and isomers) (X)
- 140. tert-Butyl hydroperoxide (and isomers) (X,I)
- 141. * n-Butyllithium (and isomers) (X,C,I,R)
- 142. n-Butyl mercaptan, 1-Butanethiol (and isomers) (X,I)
- 143. tert-Butyl peroxyacetate, tert-Butyl peracetate (I,R)
- 144. tert-Butyl peroxybenzoate, tert-Butyl perbenzoate (I,R)
- 145. tert-Butyl peroxypivalate (I,R)
- 146. * n-Butyltrichlorosilane (C,I,R)
- 147. para-tert-Butyl toluene (X)
- 148. n-Butyraldehyde, n-Butanal (and isomers) (X,I)
- 149. * Cacodylic acid, Dimethylarsinic acid (X)
- 150. * Cadmium (powder) (X,I)
- 151. Cadmium chloride (X)
- 152. * Cadmium compounds (X)
- 153. * Cadmium cyanide (X)
- 154. Cadmium fluoride (X)
- 155. Cadmium nitrate (X,I,R)
- 156. Cadmium oxide (X)
- 157. Cadmium phosphate (X)
- 158. Cadmium sulfate (X)
- 159. * Calcium (I,R)
- 160. * Calcium arsenate, PENSAL (X)
- 161. * Calcium arsenite (X)
- 162. * Calcium carbide (C,I,R)
- 163. Calcium chlorate (I,R)
- 164. Calcium chlorite (I)
- 165. Calcium fluoride (X)
- 166. * Calcium hydride (C,I,R)
- 167. Calcium hydroxide, Hydrated lime (C)
- 168. * Calcium hypochlorite, Calcium oxychloride (dry) (X,C,I,R)
- 169. Calcium molybdate (X)
- 170. Calcium nitrate, Lime nitrate, Nitrocalcite (I,R)
- 171. Calcium oxide, Lime (C)
- 172. Calcium permanganate (X,I)
- 173. Calcium peroxide, Calcium dioxide (C,I)
- 174. * Calcium phosphide (X,I,R)

175. Calcium resinate (I) 176. Caprylyl peroxide, Octyl peroxide (I) 177. * Carbanolate, BANOL, 2-Chloro-4,5-dimethylphenyl methylcarbamate (X) 178. Carbon disulfide, Carbon bisulfide (X,I) 179. Carbon tetrachloride, Tetrachloromethane (X) 180. * Carbophenothion, TRITHION, S[[(4-Chlorophenyl)thio]methyl] 0,0-diethyl phosphorodithioate (X) 181. Chloral hydrate, Trichloroacetaldehyde (hydrated) (X) 182. * Chlordane; 1,2,4,5,6,7,8,8-Octachloro-4,7-methano-3a,4,7,7a-tetra- hydro- indane; (X) 183. * Chlorfenvinphos, Compound 4072, 2-Chloro-1-(2,4-dichlorophenyl) vinyl diethyl phosphate (X) 184. * Chlorine (X,C,I,R) 185. * Chlorine dioxide (X,C,I,R) * Chlorine pentafluoride (X,C,I,R) 186. 187. * Chlorine trifluoride (X,C,I,R) 188. * Chloroacetaldehyde (X,C) 189. * alpha-Chloroacetophenone, Phenyl chloromethyl ketone (X) 190. * Chloroacetyl chloride (X,C,R) 191. Chlorobenzene (X,I) 192. para-Chlorobenzoyl peroxide (I,R) 193. * ortho-Chlorobenzylidene malonitrile, OCMB (X) 194. Chloroform, Trichloromethane (X) 195. * Chloropicrin, Chlorpicrin, Trichloronitromethane (X) 196. * Chlorosulfonic acid (X,C,I,R) 197. Chloro-ortho-toluidine, 2-Amino-4-chlorotoluene (X) 198. Chromic acid, Chromium trioxide, Chromic anhydride (X,C,I) 199. Chromic chloride, Chromium trichloride (X) 200. Chromic fluoride, Chromium trifluoride (X) 201. Chromic hydroxide, Chromium hydroxide (X) 202. Chromic oxide, Chromium oxide (X) 203. Chromic sulfate, Chromium sulfate (X) 204. Chromium compounds (X,C,I) 205. * Chromyl chloride, Chlorochromic anhydride (X,C,I,R) 206. Cobalt (powder) (X,I) 207. Cobalt compounds (X) 208. Cobaltous bromide, Cobalt bromide (X) 209. Cobaltous chloride, Cobalt chloride (X)

Cobaltous nitrate, Cobalt nitrate (X,I)

Cobaltous resinate, Cobalt resinate (X,I)

210.

212.	Cobaltous sulfate, Cobalt sulfate (X)
213.	Cocculus, Fishberry, Picrotoxin (X)
215.	* Copper acetoarsenite, Paris green (X)
216.	Copper acetylide (I,R)
217.	* Copper arsenate, Cupric arsenate (X)
218.	* Copper arsenite, Cupric arsenite (X)
219.	Copper chloride, Cupric chloride (X)
220.	Copper chlorotetrazole (I,R)
221.	Copper compounds (X)
222.	* Copper cyanide, Cupric cyanide (X)
223.	Copper nitrate, Cupric nitrate (X,I,R)
224.	Copper sulfate, Cupric sulfate, Blue vitriol (X)
225.	* Coroxon; ortho,ortho-Diethyl-ortho-(3-chloro-4-methylcoumarin-7-yl) phosphate (X)
226.	* Coumafuryl, FUMARIN, 3-[1-(2-Furanyl)-3-oxobutyl] 1-4-hydroxy-2H-1-benzopyran-2-one (X)
227.	* Coumatetralyl, BAYER 25634, RACUMIN 57, 4-Hydroxy-3-(1,2,3,4-tetrahydro-1-naphthalenyl)-2H-1-benzopyran-2-one (X)
228.	* Crimidine, CASTRIX, 2-Chloro-4-dimethylamino-6-methylpyrimidine (X)
229.	* Crotonaldehyde, 2-Butenal (X)
230.	Cumene, Isopropyl benzene (X,I)
231.	Cumene hydroperoxide; alpha,alpha-Dimethylbenzyl hydroperoxide (X,I)
232.	Cupriethylene diamine (X)
233.	* Cyanide salts (X)
234.	Cyanoacetic acid, Malonic nitrile (X)
235.	* Cyanogen (X,I,R)
236.	Cyanogen bromide, Bromine cyanide (X)
237.	Cyanuric triazide (I,R)
238.	Cycloheptane (X,I)
239.	Cyclohexane (X,I)
240.	Cyclohexanone peroxide (I)
241.	* Cyclohexenyltrichlorosilane (X,C,R)
242.	* Cycloheximide, ACTIDIONE (X)
243.	* Cyclohexyltrichlorosilane (X,C,R)
244.	Cyclopentane (X,I)
245.	Cyclopentanol (I)
246.	Cyclopentene (X,I)
247.	DDT; 1,1,1-Trichloro-2,2-bis(chlorophenyl) ethane (X)
248.	* DDVP, Dichlorvos, VAPONA, Dimethyl dichlorovinyl phosphate (X)

249. * Decaborane (X,I,R) 250. DECALIN, Decahydronaphthalene (X) 251. * Demeton, SYSTOX (X) 252. * Demeton-S-methyl sulfone, METAISOSYSTOX-SULFON, S-[2-(ethyl-sulfonyl)ethyl] O,O-dimethyl phosphorothioate (X) 253. Diazodinitrophenol, DDNP, 2-Diazo-4,6-dinitrobenzene-1-oxide (I,R) 254. * Diborane, Diboron hexahydride (I,R) 255. * 1,2-Dibromo-3-chloropropane, DBCP, Fumazone, nemagon (X) 256. n-Dibutyl ether, Butyl ether (and isomers) (X,I) 257. Dichlorobenzene (ortho, meta, para) (X) 258. * 3,3-Dichlorobenzidine and salts, DCB (X) 259. 1,2-Dichloroethylene; 1,2-Dichloroethene (X,I) 260. Dichloroethyl ether, Dichloroether (X,I) 261. Dichloroisocyanuric acid, Dichloro-S-triazine-2,4,6-trione (X,I) 262. Dichloromethane, Methylene chloride (X) 263. * 2,4-Dichlorophenoxyacetic acid; 2,4-D (X) 264. 1,2-Dichloropropane, Propylene dichloride (X,I) 265. 1,3-Dichloropropylene; 1,3-Dichloropropene (X,I) 266. Dicumyl peroxide (I,X) 267. * Dieldrin; 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo,exo-5, 8-dimethanona-phthalene (X) 268. * Diethylaluminum chloride, Aluminum diethyl monochloride, DEAC (I,R) 269. Diethylamine (X,I) 270. * Diethyl chlorovinyl phosphate, Compound 1836 (X) 271. * Diethyldichlorosilane (X,C,I,R) 272. Diethylene glycol dinitrate (I,R) 273. Diethylene triamine (X) 274. * O,O-Diethyl-S-(isopropylthiomethyl) phosphorodithioate (X) 275. * Diethylzinc, Zinc ethyl (C,I,R) 276. * Difluorophosphoric acid (X,C,R) 277. * Diglycidyl ether, bis(2,3-Epoxypropyl) ether (X) 278. Diisopropylbenzene hydroperoxide (X,I) 279. Diisopropyl peroxydicarbonate, Isopropyl percarbonate (X,C,I,R) 280. * Dimefox, Hanane, Pextox 14, Tetramethylphosphorodiamidic fluoride (X) 281. Dimethylamine, DMA (X,I) 282. * Dimethylaminoazobenzene, Methyl yellow (X) 283. * Dimethyldichlorosilane, Dichlorodimethylsilane (X,C,I,R)

284. 2,5-Dimethylhexane-2,5-Dihydroperoxide (I) 285. * 1,1-Dimethylhydrazine, UDMH (X,I) 286. * Dimethyl sulfate, Methyl sulfate (X) 287. * Dimethyl sulfide, Methyl sulfide (X,I,R) 288. 2,4-Dinitroaniline (X) 289. * Dinitrobenzene (ortho, meta, para) (I,R) 290. Dinitrochlorobenzene, 1-Chloro-2,4-dinitrobenzene (I,R) 291. * 4,6-Dinitro-ortho-cresol, DNPC, SINOX, E 292. * Dinitrophenol(2,3-;2,4-;2,6-isomers) (I,R) 293. 2,4-Dinitrophenylhydrazine (X,I,R) 294. Dinitrotoluene (2,4-;3,4-;3,5-isomers) (X,I,R) 295. * DINOSEB; 2,4-Dinitro-6-sec-butylphenol (X) 296. 1,4-Dioxane; 1,4-Diethylene dioxide (X,I,R) 297. * Dioxathion, DELNAV; S,S-1,4-dioxane-2,3-diyl bis(O,O-diethyl phosphorodithioate) (X) 298. Dipentaerythritol hexanitrate (R) 299. * Diphenyl, Biphenyl, Phenylbenzene (X) 300. Diphenylamine, DPA, N-Phenylaniline (X) 301. * Diphenylamine chloroarsine, Phenarsazine chloride (X) 302. * Diphenyldichlorosilane (X,C,R) 303. Dipicrylamine, Hexanitrodiphenyl amine (I,R) 304. Dipropyl ether (X,I) 305. * Disulfoton, DI-SYSTON; O,O-Diethyl S-[2-(ethylthio) ethyl] phosphorodithioate (X) 306. * Dodecyltrichlorosilane (X,C,R) * DOW CO-139, ZECTRAM, Mexacarbate, 4-(Dimethylamino)-3,5-dimethylphenyl 307. methylcarbamate (X) 309. * DYFONATE, Fonofos, O-Ethyl-S-phenylethyl phosphonodithioate (X) 310. * Endosulfan, THIODAN; 6,7,8,9,10,10-Hexachlor-1,5,5a,6, 9,9a-hexa-hydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide (X) 311. * Endothal, 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid (X) * Endothion, EXOTHION, S-[(5-Mythoxy-4-oxo-4H-pyran-2-yl)-methyl]O,O-dimethyl 312. phosphorothioate (X) 313. * Endrin: 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4,4a,5,6,7,8,8a-octahydro-1, 4-endo-endo-5,8-dimethanonaphthalene (X) 314. Epichlorohydrin, Chloropropylene oxide (X,I) 315. * EPN; O-Ethyl O-para-nitrophenyl phenylphosphonothioate (X) 316. * Ethion, NIALATE; O,O,O',O' -Tetraethyl-S,S-methylenediphos-phorodithioate (X) 317. Ethyl acetate (X,I) 318. Ethyl alcohol, Ethanol (X,I)

319. Ethylamine, Aminoethane (X,I) 320. Ethylbenzene, Phenylethane (X,I) 321. Ethyl butyrate, Ethyl butanoate (I) 322. Ethyl chloride, Chloroethane (X,I) 323. * Ethyl chloroformate, Ethyl chlorocarbonate (X,C,I,R) 324. * Ethyldichloroarsine, Dichloroethylarsine (I,R) 325. * Ethyldichlorosilane (X,C,I,R) 326. * Ethylene cyanohydrin, beta-Hydroxypropionitrile (I,R) 327. Ethylene diamine (X) 328. Ethylene dibromide; 1,2-Dibromoethane (X) 329. Ethylene dichloride; 1,2-Dichloroethane (X,I) 330. * Ethyleneimine, Aziridine, EI (X,I,R) 331. Ethylene oxide, Epoxyethane (X,I,R) 332. Ethyl ether, Diethyl ether (I,R) 333. Ethyl formate (X,I) 334. * Ethyl mercaptan, Ethanethiol (X,I,R) 335. Ethyl nitrate (I,R) 336. Ethyl nitrite (I,R) 337. * Ethylphenyldichlorosilane (X,C,R) 338. Ethyl propionate (I) 339. * Ethyltrichlorosilane (I,R) * Fensulfothion, BAYER 25141, DASANIT, O,O-Diethyl-0-[4-(methyl--sulfinyl)phenyl] 340. phosphorothioate (X) 341. * Ferric arsenate (X) 342. Ferric chloride, Iron (III) chloride (X,C) 343. * Ferrous arsenate, Iron arsenate (X) 344. * Fluoboric acid, Fluoroboric acid (X,C) 345. Fluoride salts (X) 346. * Fluorine (X,C,R) 347. * Fluoroacetanilide, AFL 1082 (X) 348. * Fluoroacetic acid and salts, Compound 1080 (X) 349. * Fluorosulfonic acid, Fluosulfonic acid (X,C,R) 350. Formaldehyde, Methanal (X,I) 351. Formic acid, Methanoic acid (X,C) 352. Fulminate of mercury, Mercuric cyanate (I,R) 353. * FURADAN, NIA 10,242, Carbofuran; 2,3-Dihydro-2,2- dimethyl-7-benzofuranylmethylcarbamate (X)

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354.
             Furan, Furfuran (X,I,R)
355.
             Gasoline (I)
356.
             * GB, O-Isopropyl methyl phosphoryl fluoride (X)
357.
             Glutaraldehyde (X)
358.
             Glycerolmonolactate trinitrate (R)
359.
             Glycol dinitrate, Ethylene glycol dinitrate (R)
360.
             Gold fulminate, Gold cyanate (R)
361.
             Guanidine nitrate (I,R)
362.
             Guanyl nitrosaminoguanylidene hydrazine (R)
363.
             * Guthion; O,O-Dimethyl-S-4-oxo-1,2,3- benzotriazin-3(4H)-ylmethyl phosphorodithioate (X)
364.
             Hafnium (I,X,R)
365.
             * Heptachlor; 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene (X)
366.
             n-Heptane (and isomers) (X,I)
367.
             1-Heptene (and isomers) (X,I)
368.
             * Hexadecyltrichlorosilane (X,C,R)
369.
             Hexaethyl tetraphosphate, HETP (X)
370.
             Hexafluorophosphoric acid (X,C)
371.
             Hexamethylenediamine; 1,6-Diaminohexane (X)
372.
             n-Hexane (and isomers) (X,I)
373.
             1-Hexene (and isomers) (X,I)
374.
             n-Hexylamine, 1-Aminohexane (and isomers) (X,I)
375.
             * Hexyltrichlorosilane (X,C,R)
376.
             * Hydrazine, Diamine (X,I)
377.
             Hydrazine azide (I,R)
378.
             Hydrazoic acid, Hydrogen azide (I,R)
379.
             * Hydriodic acid, Hydrogen iodide (X,C,R)
380.
             * Hydrobromic acid, Hydrogen bromide (X,C,R)
381.
             * Hydrochloric acid, Hydrogen chloride, Muriatic Acid (X,C,R)
382.
             * Hydrocyanic acid, Hydrogen cyanide (X,I,R)
383.
             * Hydrofluoric acid, Hydrogen fluoride (X,C,R)
384.
             Hydrofluosilicic acid, Fluosilicic acid (X,C)
385.
             Hydrogen peroxide (X,C,I,R)
386.
             * Hydrogen selenide (X,I)
387.
             * Hydrogen sulfide (X,I)
388.
             * Hypochlorite compounds (X,C,I,R)
389.
             Indium (X)
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390.

Indium compounds (X)

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391.
             Iodine monochloride (X,C,R)
392.
             Isooctane; 2,2,4-Trimethylpentane (X,I)
393.
             Isooctene (mixture of isomers) (I)
394.
             Isopentane, 2-Methylbutane (I)
395.
             Isoprene, 2-Methyl-1,3-butadiene (X,I,R)
396.
             Isopropanol, Isopropyl alcohol, 2-Propanol (X,I)
397.
             Isopropyl acetate (X,I)
399.
             Isopropylamine, 2-Aminopropane (X,I)
400.
             Isopropyl chloride, 2-Chloropropane (I)
401.
             Isopropyl ether, Diisopropyl ether (I,R)
402.
             Isopropyl mercaptan, 2-Propanethiol (X,I)
404.
             * meta-Isopropylphenyl-N-methylcarbamate, Ac 5,727 (X)
405A.
             * Kepone; 1,1a,3,3a,4,5,5,5a,5b,6-Decachloro--octahydro-1,2,4-metheno-2H-cyclobuta (cd)
             pentalen-2-one, Chlorecone (X)
405B.
             Lauroyl peroxide, Di-n-dodecyl peroxide (X,C,I,R)
406.
             Lead compounds (X)
407.
             Lead acetate (X)
408.
             * Lead arsenate, Lead orthoarsenate (X)
409.
             * Lead arsenite (X)
410.
             Lead azide (I,R)
411.
             Lead carbonate (X)
412.
             Lead chlorite (I,R)
413.
             * Lead cyanide (X)
414.
             Lead 2,4-dinitroresorcinate (I,R)
415.
             Lead mononitroresorcinate (I,R)
416.
             Lead nitrate (X,I)
417.
             Lead oxide (X)
418.
             Lead styphnate, Lead trinitroresorcinate (I,R)
419.
             * Lewisite, beta-Chlorovinyldichloroarsine (X)
420.
             * Lithium (C,I,R)
421.
             * Lithium aluminum hydride, LAH (C,I,R)
422.
             * Lithium amide (C,I,R)
423.
             * Lithium ferrosilicon (I,R)
424.
             * Lithium hydride (C,I,R)
425.
             * Lithium hypochlorite (X,C,I,R)
426.
             Lithium peroxide (C,I,R)
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427.

Lithium silicon (I,R)

428. * London purple, Mixture of arsenic trioxide, aniline, lime, and ferrous oxide (X) 429. * Magnesium (I,R) 430. * Magnesium arsenate (X) 431. * Magnesium arsenite (X) 432. Magnesium chlorate (I,R) 433. Magnesium nitrate (I,R) 434. Magnesium perchlorate (X,I,R) 435. Magnesium peroxide, Magnesium dioxide (I) 436. * Maleic anhydride (X) 437. Manganese (powder) (I) Manganese acetate (X) 438. 439. * Manganese arsenate, Manganous arsenate (X) 440. Manganese bromide, Manganous bromide (X) 441. Manganese chloride, Manganous chloride (X) 442. Manganese methylcyclopentadienyl tricarbonyl (X) 443. Manganese nitrate, Manganous nitrate (X,I) 444. Mannitol hexanitrate, Nitromannite (R) 445. *MECARBAM; O,O-Diethyl S-(N-ethoxycarbonyl N-methylcarba-moyl-methyl) phosphorodithioate (X) 446. * Medinoterb acetate, 2-tert-Butyl- 5- methyl-4,6-dinitro-phenyl acetate (X) 447. para-Menthane hydroperoxide, Paramenthane hydroperoxide (I) 448. Mercuric acetate, Mercury acetate (X) 449. Mercuric ammonium chloride, Mercury ammonium chloride (X) 450. Mercuric benzoate, Mercury benzoate (X) 451. Mercuric bromide, Mercury bromide (X) 452. * Mercuric chloride, Mercury chloride (X) 453. * Mercuric cyanide, Mercury cyanide (X) 454. Mercuric iodide, Mercury iodide (X) 455. Mercuric nitrate, Mercury nitrate (X,I) 456. Mercuric oleate, Mercury oleate (X) 457. Mercuric oxide (red and yellow) (X,I) 458. Mercuric oxycyanide (I,R) 459. Mercuric-potassium iodide, Mayer's reagent (X) 460. Mercuric salicylate, Salicylated mercury (X) 461. Mercuric subsulfate, Mercuric dioxysulfate (X) 462. Mercuric sulfate, Mercury sulfate (X) 463. Mercuric thiocyanide, Mercury thiocyanate (X)

464. Mercury, Mercury nucleate (X) 465. Mercurous bromide (X) 466. Mercurous gluconate (X) 467. Mercurous iodide (X) 468. Mercurous nitrate (I,R) 469. Mercurous oxide (X) 470. Mercurous sulfate, Mercury bisulfate (X) 472. * Mercury (X) 473. * Mercury compounds (X) 474. Metal carbonyls (X) 475. * Metal hydrides (I,R) 476. Metal powders (X,I) 477A. * Methomyl, LANNATE, S-Methyl-N-((methyl-carbamoyl)oxy) thioacetimidate (X) 477B. * Methoxychlor; 1,1,1-Trichloro-2,-bis(p-methoxyphenyl) ethane, CHEMFLORM, MARLATE (X) 478. * Methoxyethylmercuric chloride, AGALLOL, ARETAN (X) 479. Methyl acetate (X,I) 480. Methyl acetone (Mixture of acetone, methyl acetate, and methyl alcohol) (X,I) 481. Methyl alcohol, Methanol (X,I) 482. * Methylaluminum sesquibromide (I,R) 483. * Methylaluminum sesquichloride (I,R) 484. Methylamine, Aminomethane (X,I) 485. n-Methylaniline (X) 486. * Methyl bromide, Bromomethane (X) 487. 2-Methyl-1-butene (I) 488. 3-Methyl-1-butene (I) 489. Methyl butyl ether (and isomers) (X,I) 490. Methyl butyrate (and isomers) (X,I) 491. Methyl chloride, Chloromethane (X,I) 492. * Methyl chloroformate, Methyl chlorocarbonate (X,I,R) 493. * Methyl chloromethyl ether, CMME (X,I) 494. Methylcyclohexane (X,I) 495. * Methyldichloroarsine (X) 496. * Methyldichlorosilane (X,I,R) 497. * 4,4-Methylene bis(2-chloroaniline), MOCA (X) 498. Methyl ethyl ether (X,I)

Methyl ethyl ketone, 2-Butanone (X,I)

500. Methyl ethyl ketone peroxide (X,I) 501. Methyl formate (X,I) 502. * Methyl hydrazine, Monomethyl hydrazine, MMH (X,I) 503. * Methyl isocyanate (X,I) 504. Methyl isopropenyl ketone, 3-Methyl-3-butene-2-one (X,I) 505. * Methylmagnesium bromide (C,I,R) 506. * Methylmagnesium chloride (C,I,R) 507. * Methylmagnesium iodide (C,I,R) 508. Methyl mercaptan, Methanethiol (X,I) 509. Methyl methacrylate (monomer) (X,I) 510. * Methyl parathion; O,O-Dimethyl-O-para-nitrophenyl-phosphorothioate (X) 511. Methyl propionate (I) 512. * Methyltrichlorosilane (X,C,I,R) 513. Methyl valerate, Methyl pentanoate (and isomers) (I) 514. Methyl vinyl ketone, 3-Butene-2-one (X,I) 515A. * Mevinphos, PHOSDRIN, 2-Carbomethoxy-1-methylvinyl dimethylphosphate (X) 515B. * Mirex; 1,1a,2,2,3,3a,4,5,5,5a,5b,6-Dodecachlorooctahydro- 1,3,4-metheno-1H-cyclobuta (cd) pentalene, Dechlorane (X) 516. * MOCAP, O-Ethyl-S,S-dipropyl phosphorodithioate (X) 517. Molybdenum (powder) (I) 518. Molybdenum trioxide, Molybdenum anhydride (X) 519. Molybdic acid and salts (X) 520. Monochloroacetic acid, Chloracetic acid, MCA (X,C) 521. Monochloroacetone, Chloroacetone, 1-Chloro-2-propanone (X) 522. Monofluorophosphoric acid (X,C) 523. Naphtha (of petroleum or coal tar origin), Petroleum ether, Petroleum naphtha (X,I) 524. Naphthalene (X) 525. * alpha-Naphthylamine, 1-NA (X) * beta-Naphthylamine, 2-NA (X) 526. 527. Neohexane; 2,2-Dimethylbutane (X,I) 528. Nickel (powder) (X,I) 529. Nickel acetate (X) 530. Nickel antimonide (X) 531. * Nickel arsenate, Nickelous arsenate (X) 532. * Nickel carbonyl, Nickel tetracarbonyl (X) 533. Nickel chloride, Nickelous chloride (X) 534. * Nickel cyanide (X)

535. Nickel nitrate, Nickelous nitrate (X,I,R) 536. Nickel selenide (X) 537. Nickel sulfate (X) 538. Nicotine, beta-pyridyl-alpha-N-methyl pyrrolidine (X) 539. Nicotine salts (X) 540. Nitric acid (X,C,I) 541. Nitroaniline, Nitraniline (ortho, meta, para) (I,R) * Nitrobenzol, Nitrobenzene (X) 542. 543. * 4-Nitrobiphenyl, 4-NBP (X) 544. Nitro carbo nitrate (I,R) 545. Nitrocellulose, Cellulose nitrate, Guncotton, Pyroxylin, Collodion, Pyroxylin (nitrocellulose) in ether and alcohol (I,R) 546. Nitrochlorobenzene, Chloronitrobenzene (ortho, meta, para) (X) 547. Nitrogen mustard (X,C) 548. Nitrogen tetroxide, Nitrogen dioxide (X,I) 549. Nitroglycerin, Trinitroglycerin (X,I,R) 550. Nitrohydrochloric acid, Aqua regia (X,C,I) 551. * Nitrophenol (ortho, meta, para) (X) 552. * N-Nitrosodimethylamine, Dimethyl nitrosoamine (X) 553. Nitrosoguanidine (R) 554. Nitrostarch, Starch nitrate (I,R) 555. Nitroxylol, Nitroxylene, Dimethylnitrobenzene (2,4-;3,4-; 2,5-isomers) (X) 556. 1-Nonene, 1-Nonylene (and isomers) (X,I) 557. * Nonyltrichlorosilane (I,R) 558. * Octadecyltrichlorosilane (I,R) 559. n-Octane (and isomers) (X,I) 560. 1-Octene, 1-Caprylene (X,I) 561. * Octyltrichlorosilane (I,R) 563. * Oleum, Fuming sulfuric acid (X,C,R) 565. Osmium compounds (X) 566. Oxalic acid (X) 567. * Oxygen difluoride (X,C,R) 568. * Para-oxon, MINTACOL; O,O-Diethyl-O-para-nitrophenyl phosphate (X) 569. * Parathion; O,O-Diethyl-O-para-nitrophenyl phosphorothioate (X) 570A. * Pentaborane (X,I,R) 570B. Pentachlorophenol, PCP, DOWICIDE 7 (X)

Pentaerythrite tetranitrate, Pentaerythritol tetranitrate (R)

572. n-Pentane (and isomers) (X,I) 573. 2-Pentanone, Methyl propyl ketone (and isomers) (X,I) 574. Peracetic acid, Peroxyacetic acid (X,C,I,R) 575. Perchloric acid (X,C,I,R) 576. Perchloroethylene, Tetrachloroethylene (X) 577. * Perchloromethyl mercaptan, Trichloromethylsulfenyl chloride (X) 578. Perchloryl fluoride (X,C,I) 580. Phenol, Carbolic acid (X,C) 581. * Phenyldichloroarsine (X) 582. Phenylenediamine, Diaminobenzene (ortho, meta, para) (X) 583. Phenylhydrazine hydrochloride (X) * Phenylphenol, Orthozenol, DOWICIDE I (X) 584. 585. * Phenyltrichorosilane (I,R) 586. * Phorate, THIMET; O,O-Diethyl-S-[(Ethylthio)methyl]phosphorodithioate (X) 587. * Phosfolan, CYOLAN, 2-(Diethoxyphosphinylimino)-1,3-dithiolane (X) 588. * Phosgene, Carbonyl chloride (I,R) 589. * Phosphamidon, DIMECRON, 2-Chloro-2-diethyl--carbamoyl-1-methylvinyl dimethyl phosphate (X) 590. * Phosphine, Hydrogen phosphide (X,I) 591. Phosphoric acid (C) 592. Phosphoric anhydride, Phosphorus pentoxide (C,I) 593. Phosphorus (amorphous, red) (X,I,R) 594. * Phosphorus (white or yellow) (X,I,R) 595. * Phosphorus oxybromide, Phosphoryl bromide (X,C,R) 596. * Phosphorus oxychloride, Phosphoryl chloride (X,C,R) 597. * Phosphorus pentachloride, Phosphoric chloride (X,C,I,R) 598. * Phosphorus pentasulfide, Phosphoric sulfide (X,C,I,R) 599. * Phosphorus sesquisulfide, tetraphosphorus trisulfide (X,C,I,R) 600. * Phosphorus tribromide (X,C,R) 601. * Phosphorus trichloride (X,C,R) 602. Picramide, Trinitroaniline (I,R) 603. Picric acid, Trinitrophenol (I,R) 604. Picryl chloride, 2-Chloro-1,3,5-trinitrobenzene (I,R) 605. * Platinum compounds (X) 606. * Polychlorinated biphenyls, PCB, Askarel, aroclor, chlorextol, inerteen, pyranol (X) 607. Polyvinyl nitrate (I,R)

Potasan; O,O-Diethyl-0-(4-methylumbelliferone) phosphoro-thioate (X)

609. * Potassium (C,I,R) 610. * Potassium arsenate (X) 611. * Potassium arsenite (X) 612. * Potassium bifluoride, Potassium acid fluoride (X,C) 613. Potassium binoxalate, Potassium acid oxalate (X) 614. Potassium bromate (X,I) 615. * Potassium cyanide (X) 616. Potassium dichloroisocyanurate (X,I) 617. Potassium dichromate, Potassium bichromate (X,C,I) 619. Potassium fluoride (X) 620. * Potassium hydride (C,I,R) 621. Potassium hydroxide, Caustic potash (X,C) 622. Potassium nitrate, Saltpeter (I,R) 623. Potassium nitrite (I,R) 624. Potassium oxalate (X) 625. Potassium perchlorate (X,I,R) 626. Potassium permanganate (X,C,I) 627. Potassium peroxide (C,I,R) 628. Potassium sulfide (X,I) 629. * Propargyl bromide, 3-Bromo-1-propyne (X,I) 630. * beta-Propiolactone, BPL (X) 631. Propionaldehyde, Propanal (X,I) 632. Propionic acid, Propanoic acid (X,C,I) 633. n-Propyl acetate (X,I) 634. n-Propyl alcohol, 1-Propanol (X,I) 635. n-Propylamine (and isomers) (X,I) 636. * Propyleneimine, 2-Methylaziridine (X,I) 637. Propylene oxide (X,I) 638. n-Propyl formate (X,I) 639. n-Propyl mercaptan, 1-Propanethiol (X,I) 640. * n-Propyltrichlorosilane (X,C,I,R) * Prothoate, FOSTION, FAC; O,O-Diethyl-S-carboethoxy--ethyl phosphorodithioate (X) 641. 642. Pyridine (X,I) 643. * Pyrosulfuryl chloride, Disulfuryl chloride (X,C,R) 644. * Quinone; 1,4-Benzoquinone (X)

* Schradan, Octamethyl pyrophosphoramide, OMPA (X)

645.

646.

Raney nickel (I)

- 647A. * Selenium (X)
- 647B. * Selenium compounds (X)
- 648. * Selenium fluoride (X)
- * Selenous acid, Selenious acid and salts (X)
- * Silicon tetrachloride, Silicon chloride (X,C,R)
- 651. * Silver acetylide (I,R)
- 652. Silver azide (I,R)
- 653. Silver compounds (X)
- 654. Silver nitrate (X)
- 655. Silver styphnate, Silver trinitroresorcinate (I,R)
- 656. Silver tetrazene (I,R)
- 657. * Sodium (C,I,R)
- 658. Sodium aluminate (C)
- 659. * Sodium aluminum hydride (C,I,R)
- * Sodium amide, Sodamide (C,I,R)
- 661. * Sodium arsenate (X)
- 662. * Sodium arsenite (X)
- 663. Sodium azide (I,R)
- * Sodium bifluoride, Sodium acid fluoride (X,C)
- 665. Sodium bromate (X,I)
- * Sodium cacodylate, Sodium dimethylarsenate (X)
- 667. Sodium carbonate peroxide (I)
- 668. Sodium chlorate (X,I)
- 669. Sodium chlorite (X,I)
- 670. Sodium chromate (X,C)
- 671. * Sodium cyanide (X)
- 672. Sodium dichloroisocyanurate (I)
- 673. Sodium dichromate, Sodium bichromate (X,C,I)
- 674. Sodium fluoride (X)
- 675. * Sodium hydride (X,C,I,R)
- 676. Sodium hydrosulfite, Sodium hyposulfite (I)
- 677. Sodium hydroxide, Caustic soda, Lye (X,C)
- 678. * Sodium hypochlorite (X,I,R)
- * Sodium methylate, Sodium methoxide (C,I,R)
- 680. Sodium molybdate (X)
- 681. Sodium nitrate, Soda niter (X,I,R)

682. Sodium nitrite (X,I,R) 683. Sodium oxide, Sodium monoxide (X,C) Sodium perchlorate (X,I,R) 684. 685. Sodium permanganate (X,I) 686. * Sodium peroxide (X,I,R) 687. Sodium picramate (X,I,R) 688. * Sodium potassium alloy, NaK, Nack (C,I,R) 689. * Sodium selenate (X) 690. Sodium sulfide, Sodium hydrosulfide (X,I) 691. Sodium thiocyanate, Sodium sulfocyanate (X) 692. Stannic chloride, Tin tetrachloride (X,C) 693. * Strontium arsenate (X) 694. Strontium nitrate (X,I,R) 695. Strontium peroxide, Strontium dioxide (I,R) 696. * Strychnine and salts (X) 697. Styrene, Vinylbenzene (X,I) 698. Succinic acid peroxide (X,I) 699. Sulfide salts (soluble) (X) 700. * Sulfotepp, DITHIONE, BLACAFUM, Tetraethyldithio--pyrophosphate, TEDP (X) 701. * Sulfur chloride, Sulfur monochloride (X,C,R) 702. * Sulfur mustard (X,C,R) 703. * Sulfur pentafluoride (X,C) 704. Sulfur trioxide, Sulfuric anhydride (X,C,I) 705. Sulfuric acid, Oil of vitriol, Battery acid (X,C) 706. Sulfurous acid (X,C) 707. * Sulfuryl chloride, Sulfonyl chloride (X,C,R) 708. * Sulfuryl fluoride, Sulfonyl fluoride (X,C,R) 709. * SUPRACIDE, ULTRACIDE, S-[(5-Methoxy-2-oxo-1,3,4-thiadiazo13(2H)-yl)methyl] -O,O-dimethyl phosphorodithioate (X) 710. * SURECIDE, Cyanophenphos, O-para-Cyanophenyl-O-ethyl phenyl phosphonothioate (X) * Tellurium hexafluoride (X,C) 711. 712. * TELODRIN, Isobenzan; 1,3,4,5,6,7,8,8- Octachloro-1, 3,3a,4,7, 7a-hexahydro-4, 7-methanoisobenzofuran (X) 713. * TEMIK, Aldicarb, 2-Methyl-2(methylthio) propionaldehyde-O-(methylcarbamoyl) oxime (X) 714. * 2,3,7,8-Tetrachlorodibenzo-para-dioxin, TCDD, Dioxin (X) 715. sym-Tetrachloroethane (X)

* Tetraethyl lead, TEL (and other organic lead) (X,I)

718. * Tetraethyl pyrophosphate, TEPP (X) 719A. Tetrahydrofuran, THF (X,I) 719B. Tetrahydrophthalic anhydride, Memtetrahydrophthalic anhydride (X) 720. TETRALIN, Tetrahydronaphthalene (X) 721. Tetramethyl lead, TML (X,I) 722. * Tetramethyl succinonitrile (X) 723. * Tetranitromethane (X,I,R) 724. * Tetrasul, ANIMERT V-101, S-para-Chlorophenyl-2,4,5-trichlorophenyl sulfide (X) 725. Tetrazene, 4-Amidino-1-(nitrosamino-amidino)-1-tetrazene (I,R) 726. * Thallium (X) 727. * Thallium compounds (X) 728. * Thallous sulfate, Thallium sulfate, RATOX (X) 729. * Thiocarbonylchloride, Thiophosgene (X,C,R) 730. * Thionazin, ZINOPHOS; O,O-Tetramethylthiuram monosulfide (X) 731. * Thionyl chloride, Sulfur oxychloride (X,C,R) * Thiophosphoryl chloride (X,C,R) 732. 733. Thorium (powder) (I) 734. Tin compounds (organic) (X) 735. Titanium (powder) (I) 736. Titanium sulfate (X) 737. * Titanium tetrachloride, Titanic chloride (X,C,R) 738. Toluene, Methylbenzene (X,I) 739. * Toluene-2,4-diisocyanate, TDI (I,R) 740A. Toluidine, Aminotoluene (ortho, meta, para) (X) 740B. * Toxaphene, Polychlorocamphene (X) 741. * TRANID, exo-3-Chloro-endo-6-cyano-2-norbornanone-O-(methylcarbamoyl) oxime (X) 743. 1,1,2-Trichloroethane (X) 744. Trichloroethylene; Trichlorethene (X) 745. Trichloroisocyanuric acid (X,I) 746. * 2,4,5-Trichlorophenoxyacetic acid; 2,4,5-T (X) * Trichlorosilane, Silicochloroform (X,C,I,R) 747. 748. Trimethylamine, TMA (X,I) 749. Trinitroanisole; 2,4,6-Trinitrophenyl methyl ether, (I,R) 750. 1,3,5-Trinitrobenzene, TNB (I,R) 751. Trinitronaphthalene, Naphtite (I,R)

2,4,6-Trinitrobenzoic acid (I,R)

2,4,6-Trinitroresorcinol, Styphnic acid (I,R)

752.

754. 2,4,6-Trinitrotoluene, TNT (X,I,R) 755. * tris(1-Aziridinyl) phosphine oxide, Triethylenephospho-ramide, TEPA (X) 756. Tungstic acid and salts (X) 757. Turpentine (X,I) 758. Uranyl nitrate, Uranium nitrate (X,I,R) 759. Urea nitrate (X,I,R) 760. n-Valeraldehyde, n-Pentanal (and isomers) (X,I) 761. Vanadic acid salts (X) 762. Vanadium oxytrichloride (X,C) 763. * Vanadium pentoxide, Vanadic acid anhydride (X) 764. Vanadium tetrachloride (X,C) 765. Vanadium tetraoxide (X) 766. Vanadium trioxide, Vanadium sesquioxide (X) 767. Vanadyl sulfate, Vanadium sulfate (X) 768. Vinyl acetate (I,X) 769. * Vinyl chloride (X,I) 770. Vinyl ethyl ether (I) 771. Vinylidene chloride, VC (X,I) 772. Vinyl isopropyl ether (I) 773. * Vinyltrichlorosilane (X,C,I,R) 774. VX, O-Ethyl methyl phosphoryl N,N-diisopropyl thiocholine (X) 775. * W EPSYN 155, W P 155, Triamiphos, para-(5-Amino-3-phenyl-1H-1,2,4-triazol-1-yl)-N, N, N', N'-tetramethylphosphonic diamide (X) 776. Xylene, Dimethylbenzene (ortho,meta,para) (X,I) 777. Zinc (powder) (I) Zinc ammonium nitrate (X,I) 778. 779. * Zinc arsenate (X) 780. * Zinc arsenite (X) 781. Zinc chloride (X,C) 782. Zinc compounds (X) 783. * Zinc cyanide (X) 784. Zinc nitrate (X,I,R) 785. Zinc permanganate (X,I) 786. Zinc peroxide, Zinc dioxide (X,I,R)

787.

788.

789.

* Zinc phosphide (X,I,R)

Zirconium (powder) (I)

Zinc sulfate (X)

- 790. * Zirconium chloride, Zirconium tetrachloride (X,C,R)
- 791. Zirconium picramate (I)
- (b) This subdivision sets forth a list of common names of wastes which are presumed to be hazardous wastes unless it is determined that the waste is not a hazardous waste pursuant to the procedures set forth in section 66262.11. The hazardous characteristics which serve as a basis for listing the common names of wastes are indicated in the list as follows:

(X) toxic, (C) corrosive, (I) ignitable and (R) reactive.

Acetylene sludge (C)

Acid and water (C)

Acid sludge (C)

AFU Floc (X)

Alkaline caustic liquids (C)

Alkaline cleaner (C)

Alkaline corrosive battery fluid (C)

Alkaline corrosive liquids (C)

Asbestos waste (X)

Ashes (X,C)

Bag house wastes (X)

Battery acid (C)

Beryllium waste (X)

Bilge water (X)

Boiler cleaning waste (X,C)

Bunker Oil (X,I)

Catalyst (X,I,C) Caustic

sludge (C) Caustic

wastewater (C)

Cleaning solvents (I)

Corrosion inhibitor (X,C)

Data processing fluid (I)

Drilling fluids (X,C)

Drilling mud (X)

Dyes (X)

Etching acid liquid or solvent (C,I)

Fly ash (X,C)

Fuel waste (X,I)

Insecticides (X)

Laboratory waste (X,C,R,I)

Lime and sulfur sludge (C)

Lime and water (C)

Lime sludge (C)

Lime wastewater (C)

Liquid cement (I)

Mine tailings (X,R)

Obsolete explosives (R)

Oil and water (X)

Oil Ash (X,C)

Paint (or varnish) remover or stripper (I)

Paint thinner (X,I)

Paint waste (or slops) (X,I)

Pickling liquor (C)

Pigments (X)

Plating waste (X,C)

Printing Ink (X)

Retrograde explosives (R)

Sludge acid (C)

Soda ash (C)

Solvents (I)

Spent acid (C)

Spent caustic (C)

Spent (or waste) cyanide solutions (X,C)

Spent mixed acid (C)
Spent plating solution (X,C)
Spent sulfuric acid (C)
Stripping solution (X,I)
Sulfonation oil (I)
Tank bottom sediment (X)
Tanning sludges (X)

Toxic chemical toilet wastes (X) Unrinsed pesticide containers (X)

Unwanted or waste pesticides --an unusable portion of active ingredient or undiluted formulation (X)

Waste epoxides (X,I) Waste (or slop) oil (X)

Weed Killer (X)

(c) This subsection sets forth a list of electronic wastes that are presumed to be hazardous wastes and that are "covered electronic device[s]" pursuant to chapter 8.5 of part 3 of division 30 of the Public Resources Code section 42460 et seq., if they have a viewable screen size [as defined in sec. 66260.201, subsec. (b)(3)(C)] greater than four inches, unless it is determined that the electronic waste is not a hazardous waste pursuant to the procedures set forth in section 66262.11. The hazardous characteristic that serves as a basis for listing the common names of electronic wastes is toxicity.

- (1) Cathode ray tube (CRT)-containing devices (CRT devices);
- (2) CRTs:
- (3) CRT-containing computer monitors;
- (4) Liquid crystal display (LCD)-containing laptop computers;
- (5) LCD-containing desktop monitors;
- (6) CRT-containing televisions;
- (7) LCD-containing televisions (excluding LCD projection televisions);
- (8) Plasma televisions (excluding plasma projection televisions);
- (9) Portable DVD players with LCDs.

NOTE: Authority cited: Sections 25140, 25141, 25214.9, and 25214.10.1, Health and Safety Code; and Section 42475, Public Resources Code. Reference: Sections 25117, 25140, 25141, 25214.9, 25214.10 and 25214.10.1, Health and Safety Code; Section 42463, Public Resources Code.

HISTORY

- 1. New section filed 5-24-91; effective 7-1-91 (Register 91, No. 22).
- 2. New subsection (c) and amendment of Note filed 6-7-2004 as an emergency; operative 6-7-2004 (Register 2004, No. 24). Pursuant to Public ResourcesCode section 42475.2, a Certificate of Compliance must be trans

Public ResourcesCode section 42475.2, a Certificate of Compliance must be transmitted to OAL by 6-7-2006 or emergency language will be repealed by operation of law on the following day.

- 3. Amendment of subsection (c) and amendment of Note filed 12-27-2004 as an emergency; operative 12-27-2004 (Register 2004, No. 53). Pursuant to Public Resources Code section 42475.2, a Certificate of Compliance must be transmitted to OAL by 1-1-2007 or emergency language will be repealed by operation of law on the following day.
- 4. New subsection (c) and Note, including subsequent emergency amendments, refiled 6-5-2006 as an emergency; operative 6-5-2006 (Register 2006, No. 23). Pursuant to Health and Safety Code section 25214.10.2, this emergency
- regulation shall remain in effect for a period of two years or until revised by the department, whichever occurs sooner.
- 5. Amendment of subsection (c) and Note filed 12-29-2006 as an emergency; operative 12-29-2006 (Register 2006, No. 52). Pursuant to

Health and Safety Code section 25214.10.2, this emergency regulation shall remain in effect for a period of two years or until revised by the department, whichever occurs sooner.

6. New subsection (c) and Note refiled 5-8-2008 as an emergency; operative 5-8-2008 (Register 2008, No. 19). Pursuant to

Health and Safety Code section25214.10.2, this emergency regulation shall remain in effect for a period of two years or until revised by the department, whichever occurs sooner.

7. Certificate of Compliance as to 5-8-2008 order, including further amendment of subsection (c), new subsections (c)(1)-(9) and amendment of Note, transmitted to OAL 12-19-2009 and filed 2-4-2009 (Register 2009, No. 6).



APPENDIX C

22CCR 66261.24 **TABLE II** - List of Inorganic Persistent and Bioaccumulative Toxic Substances and Their Soluble Threshold Limit Concentration (STLC):

	STLC	TTLC Wet-Weight
Substance	mg/l	mg/kg
Antimony and/or antimony compounds	15	500
Arsenic and/or arsenic compounds	5.0	500
Asbestos		1.0
		(as percent)
Barium and/or barium compounds	100	10,000
Beryllium and/or beryllium compounds	0.75	75
Cadmium and/or cadmium compounds	1.0	100
Chromium (VI) compounds	5{d}	500
Chromium and/or chromium (III) compounds	5	2,500
Cobalt and/or cobalt compounds	80	8,000
Copper and/or copper compounds	25	2,500
Fluoride salts	180	18,000
Lead and/or lead compounds	5.0	1,000
Mercury and/or mercury compounds	0.2	20
Molybdenum and/or molybdenum compounds	350	3,500
Nickel and/or nickel compounds	20	2,000
Selenium and/or selenium compounds	1.0	100
Silver and/or silver compounds	5	500
Thallium and/or thallium compounds	7.0	700
Vanadium and/or vanadium compounds	24	2,400
Zinc and/or zinc compounds	250	5,000

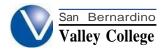
{d} If the soluble chromium, as determined by the TCLP set forth in Appendix I of chapter 18 of this division, is less than 5 mg/l, and the soluble chromium, as determined by the procedures set forth in Appendix II of chapter 11, equals or exceeds 560 mg/l and the waste is not otherwise identified as a RCRA hazardous waste pursuant to section 66261.100, then the waste is a non-RCRA hazardous waste.



22CCR 66261.24 **TABLE III** -- List of Organic Persistent and Bioaccumulative Toxic Substances and Their Soluble Threshold Limit Concentration (STLC) and Total Threshold Limit Concentration (TTLC) Values:

	STLC	TTLC Wet-Weight
Substance	mg/l	mg/kg
Aldrin	0.14	1.4
Chlordane	0.25	2.5
DDT, DDE, DDD	0.1	1.0
2,4-Dichlorophenoxyacetic acid	10	100
Dieldrin	0.8	8.0
Dioxin (2,3,7,8-TCDD)	0.001	0.01
Endrin	0.02	0.2
Heptachlor	0.47	4.7
Kepone	2.1	21
Lead compounds, organic		13
Lindane	0.4	4.0
Methoxychlor	10	100
Mirex	2.1	21
Pentachlorophenol	1.7	17
Polychlorinated biphenyls (PCBs)	5.0	50
Toxaphene	0.5	5
Trichloroethylene	204	2,040
2,4,5-Trichlorophenoxypropionic acid	1.0	10

C-2



APPENDIX D

SBVC Waste Stream Designation/Category/Profile Table

CHEMICAL	NON	NON DODA	NON PODA				WASTE				MACTE	MACTE	MACTE	LIE AND	INIODOANIO	111011111
CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS WASTE LIQUID	NON-RCRA HAZARDOUS WASTE SOLID	ENV. HAZARDOUS WASTE SOLID, N.O.S.	WASTE CORROSIVE LIQUID, ACIDIC, N.O.S.	WASTE CORROSIVE SOLID	SOLID, ACIDIC, INORGANIC,	WASTE CORROSIVE LIQUID, BASIC, INORGANIC,	WASTE CORROSIVE SOLID, BASIC, INORGANIC,	WASTE FLAMMABLE LIQUID, N.O.S.	WASTE FLAMMABLE SOLID, N.O.S.	WASTE OXIDIZING LIQUID, N.O.S.	WASTE OXIDIZING SOLID, N.O.S.	HEAVY METALS /INORGANIC WASTE	INORGANIC, TOXIC	HIGHLY REACTIVE SOLID
							N.O.S.	N.O.S.	N.O.S.							
Acetic Acid					X, organic											
Acetic Acid Solution					X, organic											
Acetic Anhydride					X, organic											
Acetone										X						
Acid Alcohol										Х						
Acid Potassium, Phthalate			X													
Agar			X													
Agarose			X													
Albumin			X													
Albumin Egg			X													
Alizarin			X													
Alpha-Naphthol		X	Λ													
Aluminum, Activated		, A	Х													
Aluminum Ammonium			X													
Sulfate																
Aluminum Chloride							Х									
Aluminum Oxide			X													
Aluminum Oxide G Aluminum Potassium	1		X													
Sulfate			^													
Amberlite			Χ													
Ammonium Carbonate			X													
Ammonium Cerium (IV)													Х			
Nitrate																
Ammonium Chloride			Χ													
Ammonium Hydroxide								Х								
Solution																
Ammonium Molybdate					X, inorganic											
Ammonium Oxalate							Χ									
Ammonium Phosphate			X													
Monobasic																
Ammonium Sulfate,			Х													
Granular, Purified Ammonium Tartrate			X													
Ammonium Thiocyanate			X													
Ammonium Thiosulfate			X Y	+						1	+					
Pentahydrate			^													
Barium Carbonate			Х													
Barium Chloride				1						1	1			Х		
Barium Hydroxide									Х	1						
Barium Nitrate									X							
Barium Sulfate							Х									
Benedict's Reagent			Χ													
Powder																
Benedict's Qualitative		Χ														
Solution																
Benedict's Solution -		X														
Quantitative	1	<u> </u>	1							ļ						
Bergamot Oil		X														
BHI Agar		X	X	-						-						
Bile Salts			Х													
Bis (2-Methoxyethyl Ether)			V	1						X	-					
Bismuth Subcarbonate	1		Х	<u> </u>	1				1	<u> </u>			<u> </u>			

				,,			<u>M DESIGNA</u>									
CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS WASTE LIQUID	NON-RCRA HAZARDOUS WASTE SOLID	ENV. HAZARDOUS WASTE SOLID, N.O.S.	WASTE CORROSIVE LIQUID, ACIDIC, N.O.S.	WASTE CORROSIVE SOLID	WASTE CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	WASTE CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	WASTE FLAMMABLE LIQUID, N.O.S.	WASTE FLAMMABLE SOLID, N.O.S.	WASTE OXIDIZING LIQUID, N.O.S.	WASTE OXIDIZING SOLID, N.O.S.	HEAVY METALS /INORGANIC WASTE	INORGANIC, TOXIC	HIGHLY REACTIVE SOLID
Biurets Reagent with								Χ								
Sodium Hydroxide																
Blood Agar		Χ														
Mrs. Stewart's Bluing	X															
Boric Acid			Х													
Bromophenol Blue		Х														
Bromothymol Blue Indicator		X														
Bromothymol Blue Sodium Salt			X													
Chemvelope Buffers pH 2-11			Х													
Buffer Solution pH 4.0		X														
Buffer Solution pH 7.0		Х														
Buffer Solution pH 10.0 Buffer Solution		X ¹								X						
Preservative										X						
Butvar (polyvinyl butyral) -Butvar B-74			X													
Calcium Acetate			Х													
Calcium Carbonate, Marble Chips			X													
Calcium Carbonate Powder			Х													
Calcium Chloride			X													
Calcium Hydroxide			Α						Χ							
Calcium Nitrate									Λ			X	Х			
Calcium Oxide					X, inorganic											
Calcium Phosphate Monobasic			Х		,											
Calcium Phosphate Dibasic			Х													
Calcium Turnings											X					X, when
Calmagite	1		X													wet
Camphor											X, organic					
Carbolfuchsin		Х									<u> </u>					
Carbowax 20M			Х													
Carmine			Χ													
Carolina Buffer Solutions Hydrion Buffer with																
Potassium Phospate Carolina Perfect Solution		V														
Carolina Perrect Solution Catalase Powder	+	X	X													
Charcoal			^								X, organic					
Chlorosufonic Acid	+	+	 		X, organic				 	 	A, organic	 				
Chromium					7, organic									X (toxic)		
Chromium (IC) Chloride			Х											Χ		
Chromium Nitrate													Χ			
Chromium Potassium Sulfate			X													
Chromium Trioxide							Х						Х			

¹ HW designation provided by the contractor was flammable liquid; HW designated as Non-RCRA following review of MSDS. *Hazardous waste designations based upon the information provided by the contractor

OUT NO AL								MION/CAIL								
CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS WASTE LIQUID	NON-RCRA HAZARDOUS WASTE SOLID	ENV. HAZARDOUS WASTE SOLID, N.O.S.	WASTE CORROSIVE LIQUID, ACIDIC, N.O.S.	WASTE CORROSIVE SOLID	WASTE CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	WASTE CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	WASTE FLAMMABLE LIQUID, N.O.S.	WASTE FLAMMABLE SOLID, N.O.S.	WASTE OXIDIZING LIQUID, N.O.S.	WASTE OXIDIZING SOLID, N.O.S.	HEAVY METALS /INORGANIC WASTE	INORGANIC, TOXIC	HIGHLY REACTIVE SOLID
Chromosorb G Resin			Х													
Chromosorb P			Х													
Chromosorb W			Х													
Cobalt Chloride					X, inorganic											
Cobalt (II) Nitrate					, , , , , , , g e e								Х			
Hexahyrate																
Congo Red		Х														
Copper (II) Acetate			Х													
Copper (II) Sulfate				Х												
Copper Wire			Х													
Corn Starch	Χ															
Crystal Violet		Х														
Cupric Acetate						X, inorganic									Х	
Cupric Carbonate									Х							
Cupric Nitrate													Χ			
Cupric Oxide			Χ													
Cupric Sulfate Anhydrous						X, inorganic									Х	
Cuprous Chloride					X, inorganic										Χ	
2,6 Dichloroindophenol			Χ													
Decarboxylase Broth		Х														
Dextrose			Χ													
Diatase of Malt			Х													
Dimethyl Apha-										Х						
Naphthylamine																
Disodium			Х													
Ethylenediamante																
Tetracetate																
Dissection preserved Specimens FORM FREE										X						
Glutaraldehyde,																
Propylene glycol, Phenol,																
acetone																
DNase Agar		Χ														
Dodecyl Sulfate, Sodium Salt			X													
Elastosil M4444			Χ													
Polydimethylsiloxane with																
hydroxyl groups +																
polydimethyylane + fillers																
Elastosil M4514			X													
Polydimethylsiloxane +																
auxiliaries																
Ethanol, 95% (Ethyl										X						
Alcohol)																
Ethyl Acetate		Х								1,,						
Ethyl Acohol										Х						
Ethylenediamine		X														
Tetraaactic Acid	1	V	V					1	-	1	1					
Fermentation Broth + Sugar		X	X													
Ferric Chloride (10%)					X, inorganic											
Ferrous Ammonium Sulfate			X													
Ferrous Sulfate 7-Hydrate			Х													
Formalin										Х						
<u> </u>	•		•	•	•			•			•		•			•

OUT HOT								HON/CATE								
CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS WASTE LIQUID	NON-RCRA HAZARDOUS WASTE SOLID	ENV. HAZARDOUS WASTE SOLID, N.O.S.	WASTE CORROSIVE LIQUID, ACIDIC, N.O.S.	WASTE CORROSIVE SOLID	WASTE CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	WASTE CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	WASTE FLAMMABLE LIQUID, N.O.S.	WASTE FLAMMABLE SOLID, N.O.S.	WASTE OXIDIZING LIQUID, N.O.S.		HEAVY METALS /INORGANIC WASTE	INORGANIC, TOXIC	HIGHLY REACTIVE SOLID
Fuchsin, Acid					X, inorganic											
Fuchsin, Basic					71, 11101 garii e			Х								
Gelatin		Х	Х													
Glucose		X	X													
Glycerol		X	, A													
3-Heptanone		Λ								Χ						
Hexanes										X						
Humectant Solution,	X									, A						
Wards																
Hydrogen Peroxide (3%)												Х				
Hydrochloric Acid					X, inorganic							7.				
Hydrochloric Acid					X, inorganic											
Solution					l .,ga											
Hydroxylamine								Х								
Hydrochloride																
Hydroxy Naphthol Blue			Х													
Hypophosphoric Acid					X, inorganic											
Iodine (Gram's)		Х			, in the gains											
Iodine					X, inorganic											
IKI lodine-potassium					X, inorganic											
Iodide Solution					, morganio											
Indicating Drierite			Χ													
Iron (II) Nitrate													Х			
Iron (II) Chloride					X, inorganic								7.			
Iron Oxide			Χ		x, merganie											
Isopropyl Acohol										Χ						
Kovacs Reagent		Х														
Lacquer Thinner										Χ						
Lactic Acid		Х	Х													
Lactose Broth		X	, , , , , , , , , , , , , , , , , , ,													
Lead														X (toxic)		
Lead (II) Nitrate													Х	77 (10/110)		
Lead Acetate													, , , , , , , , , , , , , , , , , , ,		Χ	
Lead Chloride														Χ	X	
Leader Lens Cleaner										Χ				Α		
Solution										1						
Lead Nitrate Crystals													Х			
Charcoal Lighter Fluid				1						Х	1					
Lime Water Tablets	X ²															
Lithium Sulfate			Х													
Luminous Powder - Blue			X													
WMG Magikast 90 A		Х														
Magnesium				1							X, inorganic					
Magnesium Acetate			Χ								.,o.gaine					
Magnesium Carbonate			X	1							1					
Magnesium Chloride			X								1					
Magnesium Nitrate			,										Х			
Hexahydrate													()			
Magnesium Oxide			Х	1							1					
Magnesium Sulfate			X								1					
Malachite Green		Х									1					
Maneval's Stain		X														
ariovai 3 otairi	_1	I	1	1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	1	1	1	<u> </u>	1		<u>I</u>

² HW designation provided by the contractor was corrosive liquid/caustic; HW designated as Non-Hazardous following review of MSDS. *Hazardous waste designations based upon the information provided by the contractor

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CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS	NON-RCRA HAZARDOUS	ENV. HAZARDOUS	WASTE CORROSIVE	WASTE CORROSIVE	WASTE CORROSIVE	WASTE CORROSIVE	WASTE CORROSIVE	WASTE FLAMMABLE	WASTE FLAMMABLE	WASTE OXIDIZING	WASTE OXIDIZING	HEAVY METALS	INORGANIC, TOXIC	HIGHLY REACTIVE
	TIALARDOOS	WASTE LIQUID	WASTE SOLID	WASTE SOLID,	LIQUID,	SOLID	SOLID,	LIQUID,	SOLID,	LIQUID,	SOLID,	LIQUID,	SOLID,	/INORGANIC	IOAIO	SOLID
		WASILLIQUID	WASIL SOLID	N.O.S.	ACIDIC,	JOLID	ACIDIC,	BASIC,	BASIC,	N.O.S.	N.O.S.	N.O.S.	N.O.S.	WASTE		JOLID
				14.0.5.	N.O.S.		INORGANIC,	INORGANIC,	INORGANIC,	14.0.5.	14.0.3.	14.0.5.	14.0.5.	WASIL		
					14.0.0.		N.O.S.	N.O.S.	N.O.S.							
Manganese			Х													
Manganese Carbonate			Х													
Manganese Chloride			Х													
Manganese Dioxide													Х			
Manganese Oxide																
Manganese Sulfate			X													
Mercuric Chloride									X (toxic)							
Mercurous Nitrate									,				Х			
Mercury								X (toxic)								
Mercury (II) Nitrate													Х			
Methyl Orange		Х														
Methyl Red		Χ														
Methyl Violet		Х														
Methylene Blue		Χ														
(Loeffler's)																
Methylene Blue 1% Aq.		Χ														
MR-VP		Χ	Х													
Muriatic Acid					X, organic											
Mystery Fluid								Χ								
.1% NaOH, dextrose,																
Methylene blue																
Neutral Red			Х													
Nickel Ammonium				Χ												
Sulfate																
Nickel (II) Chloride														X		
Hexahydrate [Nickelous																
Nitrate]																
Nigrosin		X														
Nile Blue A			Х													
Nitrate Broth												Х				
Nitric Acid					X, inorganic											
OF Glucose		Х	X													
1,10-Phenanthroline			X													
1,10-Phenanthroline			X													
Monohydrate										V						
Permount			X		+					X						
Phenolphtalein Phenol Red Solution		V	Λ													
Phenylalanine Agar		X														
Phenylaianine Agai Phosphoric Acid		X	1		Vinorgania											
Phosphorous Acid					X, inorganic X, inorganic											
Potassium					A, ITIOI GATIIC						Viporgania					X, when
Potassium											X, inorganic					
Potassium Bisulfate			X		1											wet
Potassium Bitartrate	 		X		+					 			 			
Potassium Bromide			X		1				1	 			 			
Potassium Carbonate		†	X		†				†	1	<u> </u>		1		†	
Potassium Chlorate			1		1				1	1			X			
Potassium Chloride			X										1			
Potassium Chloride												Х				
Solution																
Potassium Chromate												Χ				
Potassium Dichromate													Х			
Potassium Fluoride															Χ	
•																

CHEMICAL	NON-	NON-RCRA	NON-RCRA	ENV.	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE	WASTE	HEAVY	INORGANIC,	HIGHLY
CHEIVIICAL							WASIE									
	HAZARDOUS	HAZARDOUS	HAZARDOUS	HAZARDOUS	CORROSIVE	CORROSIVE	CORROSIVE	CORROSIVE	CORROSIVE	FLAMMABLE	FLAMMABLE	OXIDIZING		METALS	TOXIC	REACTIVE
		WASTE LIQUID	WASTE SOLID	WASTE SOLID,	LIQUID,	SOLID	SOLID,	LIQUID,	SOLID,	LIQUID,	SOLID,	LIQUID,	SOLID,	/INORGANIC		SOLID
				N.O.S.	ACIDIC,		ACIDIC,	BASIC,	BASIC,	N.O.S.	N.O.S.	N.O.S.	N.O.S.	WASTE		
					N.O.S.		INORGANIC,	INORGANIC,	INORGANIC,							
							N.O.S.	N.O.S.	N.O.S.							
Potassium									Х							
Hexacyannoferrate																
Potassium Hydrogen			X													
Phthalate			^													
Primalate																
Potassium Hydroxide									Х							
Potassium Hydroxide								X								
(16%)																
Potassium Iodate													Χ			
Potassium Iodide		Χ														
Potassium Iodide Solution												Χ				
Potassium Nitrate Crystal													Х			
Potassium Oxalate													, <u>, , , , , , , , , , , , , , , , , , </u>		Y	
Potassium												V			٨	
												Χ				
Permanganate																
Potassium												X				
Permanganate Solution																
Potassium Phosphate			X													
Potassium Phosphate,		Х	Х													
Dibasic																
Potassium Phosphate,			X													
Monobasic			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \													
			Y													
Potassium Phosphate,			\ \ \													
Tribasic																
Potassium Phthalate			Х													
Potassium Sulfate			Χ													
Preserved Specimen										Χ						
Holding Fluid																
Concentrate																
Propionic Acid					X, inorganic					Х						
Propylene Glycol		Χ			74,					7.						
Pro-Texx		Λ								X		Х				
PIO-TEXX		X								^		^				
PV92 Homozygous		X														
Control ++																
PV92 Homozygous		X														
Control																
									<u> </u>							<u> </u>
PV92 Heterozygous		Х														
Control -+																
PV92 /XC Loading Dye		Х														
InstaGene Matrix		X							1							
Bio Safe DNA Stain	Χ	^														
50X Tris/Acetate Buffer	X								1							1
	^		V		+				+				-			+
Precision Molecular Mass			X													
Ruler									1							1
PV92 Primer Mix for PCR		Χ														
PV92 Master Mix		Χ										<u> </u>				<u> </u>
PV92 Fast Blast DNA		Χ														
Quinine Sulfate			X													
Rose Bengal			X		†	1			†							†
Safranin		X	^		+	1			1		1					+
		^	Y		+				1							1
Silica Gel			^			-										
Silicar TLC-7 GF			Χ		1				1							1
Silicic Acid			X													
(Silica Gel)				<u> </u>	<u> </u>			<u> </u>	<u></u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>		<u> </u>
				-												

								HON/CATE								
CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS WASTE LIQUID	NON-RCRA HAZARDOUS WASTE SOLID	ENV. HAZARDOUS WASTE SOLID, N.O.S.	WASTE CORROSIVE LIQUID, ACIDIC, N.O.S.	WASTE CORROSIVE SOLID	WASTE CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	WASTE CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	WASTE FLAMMABLE LIQUID, N.O.S.	WASTE FLAMMABLE SOLID, N.O.S.	WASTE OXIDIZING LIQUID, N.O.S.	WASTE OXIDIZING SOLID, N.O.S.	HEAVY METALS /INORGANIC WASTE	INORGANIC, TOXIC	HIGHLY REACTIVE SOLID
Vi-Sil V-1067 Part A		Χ														
Polydimethylsiloxane																
Hydroxyl terminated																
Silicon Dioxide																
Sodium Sulfate																
Titanium Dioxide																
Vi-Sil V-1065 Silicon Paste			Χ													
Polydimethylsiloxane,																
hydroxyl terminated																
Precipitated Silica																
Poly(dimethyl)siloxane																
Titanium Dioxide																
Silicon Casting Catalyst			Χ													
Hi-ProBlue																
Silver Nitrate												X	X			
SIM Media		Χ														
Simmons Citrate Agar		Χ														
Skim Milk Agar		Χ	Χ													
Sodium Acetate			Χ													
Sodium Benzoate			Χ													
Sodium Bicarbonate		Χ	Χ													
Sodium Bismulfate			Χ													
Sodium Bismuthate			Χ													
Sodium Bisulfate							X3									
Sodium Bisulfite					Χ,											
					inorganic⁴											
Sodium Borate			Χ													
Sodium Bromide			Χ													
Sodium Carbonate			Х													
Sodium Chloride			Χ													
Sodium Citrate			Χ													
Sodium Hydroxide								Х	Χ							
Sodium Hydroxide								Х								
Solution																
Sodium Hypochloride								Χ								
Sodium Hypochlorite								Х								
Solution																
Sodiumlodide			Χ													
Sodium Meta Bisulfite							Χ									
Sodium Metaphosphate			Χ													
Sodium Nitrate													Χ			
Sodium Oxalate			Χ													
Sodium Peroxide													Х			
Sodium Phosphate			X													
Sodium Phosphate			Χ													
Monobasic	<u> </u>															
Sodium Phosphate			Χ													
Tribasic	<u> </u>	<u></u>									<u> </u>					
Sodium Polyacrylate			Χ													
Sodium Sulfate			X													
Sodium Sulfide Solution		Χ														
	1	1	1	1	II.	1	1	1	1	1	1		1	1	1	

³ HW designation provided by the contractor was Non-RCRA waste; HW designated as Corrosive Solid following review of MSDS.

⁴ HW designation provided by the contractor was Non-RCRA waste; HW designated as Corrosive Liquid following review of MSDS.

^{*}Hazardous waste designations based upon the information provided by the contractor

									EGORY/PR							
CHEMICAL	NON- HAZARDOUS	NON-RCRA HAZARDOUS WASTE LIQUID	NON-RCRA HAZARDOUS WASTE SOLID	ENV. HAZARDOUS WASTE SOLID, N.O.S.	WASTE CORROSIVE LIQUID, ACIDIC, N.O.S.	WASTE CORROSIVE SOLID	WASTE CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	WASTE CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	WASTE FLAMMABLE LIQUID, N.O.S.	WASTE FLAMMABLE SOLID, N.O.S.	WASTE OXIDIZING LIQUID, N.O.S.	SOLID,	HEAVY METALS /INORGANIC WASTE	INORGANIC, TOXIC	HIGHLY REACTIVE SOLID
Sodium Sulfite			X													X
Sodium Thiocyanate			Χ													
Sodium Thiosulfate			X													
Pentahydrate																
Spirit Blue Agar + Lipase		Χ														
Starch Agar		Χ	X													
Strontium Chloride			Χ													
Succinic Acid			X													
Sucrose	Х															
Sulfanilic Acid			Х													
Sulfuric Acid					X, inorganic											
Sulfuric Acid Solution					X, inorganic											
Talc			Х													
Thioglycollate		Χ	Χ													
Thymol Blue		Χ														
Tin			Х													1
TSA		Χ	Х													
TSB		Χ	Х													1
Motility Media + ∏C		Χ	Χ													1
Universal Indicator										X ⁵						
Urea Broth		Χ	Χ													
Value Craft Antifreeze		Χ														1
Vanadium Pentoxide													Х			
Yeast	Х															
Zinc (Powder)			Χ													
Zinc Chloride					X, inorganic											
Zinc Nitrate													Х			1
Zinc Oxide			Χ													
Zinc Strips			Χ													
Zinc Sulfate				Х												

⁵ HW designation provided by the contractor was non-RCRA liquid; HW designated as Flammable Liquid following review of MSDS.

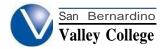


APPENDIX E

Weekly Hazardous Waste Container Storage Area Inspection Checklist

Location of Inspection:	Total Nun	nber of Containers:	
I was all the)/50	NO	0
Inspection Item	YES	NO	Comments on Inspection Items
Containers Marked/Labeled Properly			
Labels Legible			
Appropriate Containers for Type of Wastes			
Containers stored upright			
Wastes Separated/Segregated Correctly			
Containers Dated Properly (i.e.			
accumulation dates)			
Containers Stored 180 Days or Less			
Containers Observed to be free of Leaks /			
Staining (i.e. not overfilled)			
Containers Observed with Closed Tops or			
Bungs			
Containers Observed without Dents or			
Corrosion			
Appropriate Aisle Space Maintained			
Containment System free of Cracks, Water			
or Other Liquids			
Area Free of Debris and Other Materials			
Area Free of Spills or Leaks			
Proper Signage, Waste Procedures Posted			
Emergency Response Equipment in Proper Working Order			
Describe any observations for items checked '	NO'		
Corrective actions required.			
Reviewed By:		Date:	
	E-1		

Note: State and Federal Regulations require that this inspection be performed weekly. Maintain checklist as documentation in SBVC Hazardous Waste Management Plan.



APPENDIX F

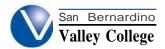
SBVC Accident/Incident Report



Accident/Incident Report

'					
Person Reporting Incident					
Last Name:		First Name:			
Phone:		Email:			
Occupation/Position:		Department:			
Date Reported (yyyy-mm-dd):		Time of Reporting:			
Person Involved or Affected					
Last Name:		First Name:			
Phone:		Email:			
Public					
Incident Details					
Date of Incident (yyyy/mm/dd):		Time of Incident:			
Campus:		Incident Location/Parking Lot:			
Room:		Other:			
Gh Level 1 I Near misses I Incidents with no body injuries I injuries requiring first aid Gh Level 1 I Injuries I Injuries I Loss	es requiring restricted work transfer of consciousness erty damage	vel and check an ite Gh Level 2 I Workplace Violence I Fire and Explosion I For EH&S/Risk Manag WC cases	I	Gh Level 3 Death In-patient hospitalization of the Injured Party	
	Type of I	ncident			
Nature of Injury	Body Parts		Wha	What caused the harm	
I Open Wound: Laceration, Puncture, Scratch I Mental/Emotional Distress I Allergy/Sensitivity Reaction I Sprains/Strains/Twist I Fracture/Dislocation I Pain/Inflammation/ Edema I Electric Shock I Hearing Loss I Heart/Circulatory Diseases I Needlestick/Sharps I Exposure to Potential Infectious Material I Respiratory Conditions I Mental/Emotional Distress I Allergy/Sensitivity Reaction I Chronic Irreversible Disease I Consciousness I Skin Disorders I Punctured Ear Drum I Tuberculosis Infection Damage I Non-personal Damage I None I Other	I Head I Eyes I Ears I Nose I Mouth I Neck I Chest/Shoulders I Torso/Side I Back I Abdomen I Buttocks I Elbows	I Arms I Fingers I Hands/Wrists I Hip/Pelvis I Legs I Knees I Feet/Ankles/Toes I Groin I Body Systems I None I Other	I Bites/Scratch I Struck by Obj. I Contact with O I Overexertion I Fall from Elev. I Slip or Trip I Repetitive Mo Injury I Bio-hazardou: Materials/Infe Diseases I Needles/Shar I Noise I Fire	Ject I Chemicals Objects I Machinery I I Structures/Surfaces Violence: Patient, Staff, Visitors I Radiation I Motor Vehicles I Drugs	

Possible Causes					
Equipment	Environment	Policies/Procedures	Human Factors		
 Defective Tools/Equipment Defective Material No Guards/Barriers Inadequate Guards/Barriers Using Equipment Improperly Inadequate Maintenance Improper Equipment Other 	I Inadequate Ventilation I Inclement Weather I Inadequate or Excessive Illumination I Ergonomics Issues I Air Contaminants I Chemicals I Noise I Fire/Exposion I Animal Action I Poor Housekeeping Inclement Weather I Slippery/Uneven surface I Ergonomics Issues I Frost Bite I Heat Stress I Heat Stress I Other	I Failure to Follow Procedures Appropriate Procedures Non-existent I Inadequate Instructions/ Procedures I Inadequate Planning/ Preparation I Inadequate Support/ Assistance I Other	I Inadequate Training I Verbal Assault I Inadequate/ Improper PPE I Inattention I PPE Not Used I Loss of Balance I Improper Lifting I Failure to Follow Established Protocols/ Procedures I Verbal Assault Inattention I Rushing I Horseplay Phobia/Anxiety I Horseplay Other		
	Suggested Corrective Ac	tions By the Affected Part	ty		
■ Provide safety training		■ Change/review work procedure	es		
■ Undertake hazard assessment	■ Undertake hazard assessment ■ Provide PPE				
■ Submit request for maintenance/repair ■ Other					
■ Change work area layout/design	n				
Management Review Possible Causes:					
	ay have contributed to the accident. Such factors ma	ry include equipment, policies, procedu	res, and personnel.)		
Recommendations/Preventive Meas	ures.				
Supervisor or University Representative					
Corrective Actions Target Date (mm.	/dd/yyyy):	Corrective Actions Complete Date (m	m/dd/yyyy):		
Name:		Phone Number:	Email:		
Approve Investigation and Corrective	e Actions: I Yes I No	Corrective Actions Complete: 1 Yes	s I No		
Comments:					



APPENDIX G

Biohazardous Waste Standard Operating Procedures



APPENDIX G

Biohazardous Waste Standard Operating Procedures

All personnel are responsible for following established protocols for identifying, segregating, decontaminating, and properly packaging and disposing of biohazardous waste. Biohazardous wastes generated at SBVC include:

- Wildlife dissection specimens
- Urine specimens
- Fungal and bacterial cultures
- Laboratory glass and plastic ware waste when contaminated with biohazardous materials. Examples include culture dishes, plates and flasks, pipettes, pipette tips, devices used to transfer, inoculate and mix cultures.
- Laboratory waste that has come in contact with the above listed biohazardous agents or
 other biohazardous agents (i.e. pathogenic agents, body tissues and/or fluids), and
 disposable laboratory personal protective equipment (gloves, gowns, shoe covers,
 masks)
- Sharps waste are instruments used to puncture, cut, or scrape body parts and that, in a
 waste container, can cause punctures or cuts to solid waste handlers or the public, and
 include needles, syringes, scalpel blades, glass tubes, glass slides, cover slips, razor
 blades.

1.0 BIOHAZARDOUS WASTE STORAGE

All biohazardous waste shall be contained separately from other waste at the point of generation.

- All wastes shall be decontaminated.
- All solid biohazardous waste shall be placed in approved-biohazard red disposable, leak
 proof bags having enough strength to prevent ripping, tearing, breaking, or bursting
 under normal use. The biohazardous waste bags must be securely tied and placed in
 secondary containment during storage and transport.
- Secondary containments must be rigid, leak resistant, have tight fitting covers, be clean, and in good repair.
- All biohazardous sharps waste shall be placed in an approved, rigid, puncture-resistant, leak resistant, biohazardous sharps container and which, when sealed cannot be opened without great difficulty. These containers are red in color and equipped with a tight-fitting lid for use during handling and transport. The primary container must be placed within a secondary leak proof, rigid container during any transport. Treated sharps shall not be mixed with the general solid waste stream at any time.
- Free flowing liquid waste must be contained in leak proof, rigid durable containers. The
 containers shall contain chlorine bleach (or other suitable chemical disinfectant) and
 shall be property labeled. These containers shall be closed and placed within leak proof



containers during handling and transport and placed within leak proof containers for handling or transport.

- All solid biohazardous waste, except for biohazardous sharps waste, must be properly stored in the SBVC designated storage locations and disposed of during the quarterly waste disposal pick-ups. A request for the collection of biohazardous wastes can be made by emailing a list of the biohazardous waste and its location to Karol Pasillas, Administrative Services/Maintenance and Operations, at kpasilla@sbccd.cc.ca.us or calling (909) 384-8965. If you do not receive a timely response on your collection request, please call the SBVC, Administrative Services main number at (909) 384-8985 and submit your request.
- Biohazardous sharps waste, must be stored in the SBVC storage locations and disposed of during the quarterly waste disposal pick-ups or when approximately 2/3 full, which ever event occurs first. A request for the collection of biohazardous wastes can be made by emailing a list of the biohazardous waste and its location to Karol Pasillas, Administrative Services/Maintenance and Operations, at kpasilla@sbccd.cc.ca.us or calling (909) 384-8965. If you do not receive a timely response on your collection request, please call the SBVC, Administrative Services main number at (909) 384-8985 and submit your request.

2.0 BIOHAZARDOUS WASTE LABELING

All biohazardous waste and pathology waste containers including red bags, bottles, sharps containers and secondary containers must be labeled with the words "BIOHAZARDOUS WASTE" or with the international symbol (Figure 1) and the word "BIOHAZARD." All secondary containers of pathology waste must be labeled with the words "PATHOLOGY WASTE – FOR INCINERATION ONLY."



Figure 1: International Biohazard Symbol

3.0 DECONTAMINATING BIOHAZARDOUS WASTE

Bagged Waste: Certain types of solid waste such as bacterial cultures¹ can be decontaminated using steam sterilization (Autoclaving). Place autoclave label or tape on the biohazard bags to

¹ Refer to SBVC's Autoclave Permit for wastewater discharge limits of Waste Electrophoresis Gel generated by Molecular Biology department.



indicate that he waste has been treated. Note: Biohazardous waste with chemical waste should not be autoclaved.

Laboratory Glass and Plastic Ware Waste: Decontaminate waste using steam sterilization (Autoclave). Bagged waste with glassware or hard plastic pipettes should be packaged in a cardboard box and labeled "LABORATORY GLASSWARE". Bagged waste and boxes of laboratory glassware can be placed in the regular waste container for the laboratory.

Carcasses: Carcasses that have been fixed in phenol or other fixatives must have the solutions drained and disposed of as a hazardous chemical waste. The tissues or carcasses can then be disposed of as pathology waste.

SBVC's Autoclave Permit, as issued by the Department of Public Health, Environmental Health Services agency, requires recordkeeping, training, and quality control checks to be performed to assure adequate sterilization conditions. Contact the SBVC, Dean of Science at (909) 384-8650 for further information and requirements regarding autoclave use, maintenance, training, and recordkeeping.

4.0 SOLID, LIQUID, AND SHARPS BIOHAZARDOUS WASTE DISPOSAL

A request for the collection of wastes can be made by emailing a list of the biohazardous waste and its location to Karol Pasillas, Administrative Services/Maintenance and Operations, at kpasilla@sbccd.cc.ca.us.

Liquid biohazardous waste should be decontaminated by mixing 1 part chlorine bleach to 9 parts of liquid biohazardous waste, prior to placement in appropriate leak proof, rigid durable containers for eventual disposal.

SBVC currently has a service agreement with biohazardous waste contractor, TSM Recovery & Recycling Co., Inc. (TSM). TSM is responsible for profiling, transporting and disposing of the biohazardous wastes generated at SBVC.

Steve Mitsunaga – President 317 Eubank Avenue, #2, Wilmington, California 90744 310-835-9443

Service agreements which involve hazardous waste consultation, removal, transport, treatment or disposal by other vendors must be approved by Vice President of Administrative Services or the District Environmental Health & Safety Administrator first. Arrangements with outside vendors for collecting hazardous waste must not be made without contacting the Vice President of Administrative Services or the District Environmental Health & Safety Administrator.

5.0 STAFF TRAINING FOR BIOHAZARDOUS WASTE HANDLING



Employees who handle biohazardous waste in any capacity must be trained at a level equal with their duties. Training records must be kept for all employees. SBVC maintains a database for all employee training records.

Biohazardous Waste training shall be a module of training within Chemical Hygiene training and be provided annually and when working with new chemicals or work practices, and applies to anyone who handles, packages, stores, transports, and/or decontaminates biohazardous waste.

San Bernardino Community College District

Safety Program Approval

Safety Program: Hazardous Waste Management Program – San Bernardino Valley College – 01/22/13 Revision

Reviewed by: Environmental Health & Safety Administrator	DateC1/22/13
Approved by: SBVC/Vice President Administrative Services/Business	Date2 · 5 · 13
Approved by:	Date 2/7/13

SBVC President

Office of the President
FEB - 5 2013