

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

**STANDARDIZED PERMIT APPLICATION  
OPERATION PLAN INSTRUCTIONS**

## OPERATION PLAN

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**NOTE: All of the section citations that begin with 66XXX are from Title 22, Division 4.5, of the California Code of Regulations (CCR). These regulations are available online at <http://ccr.oal.ca.gov/>.**

## **SECTION I – FACILITY IDENTIFICATION / LOCATION**

### **A. FACILITY IDENTIFICATION**

List the following information for this facility:

1. Facility name
2. EPA ID number
3. Address (street, city, state, county, zip code)
4. Telephone number
5. Describe the facility land use designation and surrounding land use, including any schools, residences, hospitals, parks, etc.
6. Provide environmental data of the facility, e.g. the depth to groundwater, distance to nearest surface water.

Is this operation plan for a proposed facility or for the renewal of an existing standardized permit?

- If this is an operation plan for a proposed (new) facility, please briefly describe the hazardous waste management activities that would be authorized under the standardized permit (e.g., “consolidating used oil”, “removing gold from wastewater”, etc).
- If this is an operation plan for a renewal, describe what is being proposed as changes from the existing permit, with regard to the facility and/or its operations.

### **B. PREPARER OF STANDARDIZED PERMIT APPLICATION**

Provide the following information regarding the person(s) preparing the facility's standardized permit application:

1. Name of the firm, if applicable
2. Name(s) and title(s) of the person(s) responsible for preparation of the operation plan
3. Work telephone number(s) of the person(s) responsible
4. Date and original signatures of the person(s) responsible

**C. OWNER / OPERATOR SIGNATURES AND CERTIFICATION**

Provide **original signatures and date** of the facility owner and facility operator:

1. The following facility operator certification is required under California Code of Regulations (CCR), title 22, section 66270.11(d):

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I further certify that the property owner has been informed that a hazardous waste facility will be operated on the premises. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

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Owner, Print Name and Signature Date

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Operator, Print Name and Signature Date

**D. FACILITY LOCATION MAP AND SITE LAYOUT DIAGRAM**

Provide a map showing where the facility is located and a scaled diagram, showing the general layout of the facility. This diagram must show the following, if applicable:

1. Legal property boundaries of the facility
2. All buildings and areas such as secondary containment, occupied by all storage and treatment units
3. Include the name of each operation (e.g., Tank Farm A, Drum Storage Area #1, etc.)
4. The approximate dimensions of the property boundaries and of each

storage and treatment area

5. Security provisions (e.g., fences, gates, etc.)
6. Permanent access and internal roads

#### **E. LEGAL DESCRIPTION OF PROPERTY**

Furnish a written legal description of the property occupied by the facility. A legal description may be obtained from the local county recorder or from a title company.

#### **F. CONFIDENTIALITY REQUESTS AND JUSTIFICATIONS**

In accordance with CCR, title 22, section 66260.2, any information submitted to DTSC may be claimed as confidential by the submitter. Any such claim shall be asserted at the time of submission. If no claim is made at the time of submission, DTSC may make the information available to the public without further notice.

**If any of the information provided in the Operation Plan is to be construed to be a "trade secret" within the meaning of Section 25173, California Health and Safety Code, the trade secret item(s) must be clearly identified "Confidential: Trade Secret" in the Plan. All unmarked items will be available for public review without notice to the facility owner and/or operator. If only parts of the Plan or of a given supporting document are confidential, the following should be provided: two complete copies of the document with the confidential items marked and one copy with the confidential items deleted.**

For each specific trade secret item, the following questions must be answered in a written attachment to the plan:

1. How long is the item to be considered a trade secret?
2. What measures have been employed by the company to maintain that item as a trade secret?
3. Who else has received a copy of the item and what measures were taken with respect to distribution of that copy to maintain the item as a trade secret?
4. What decision (if any) has been made by any other government agency regarding the confidentiality of the item?
5. What will be the substantial harm to the company's competitive

position from disclosure of the trade secret item? Include specific information about what the harm would be and why it should be considered substantial, as well as information about the relationship between disclosure and harm.

**DTSC'S MANAGEMENT OF TRADE SECRET INFORMATION:** The two copies of the Plan and supporting documents submitted to DTSC, that contain a trade secret item for which the above questions have been answered, will be maintained in controlled files. The copy with the trade secrets deleted will be placed in a file that is open for public inspection.

## **SECTION II – FACILITY OPERATION AND HAZARDOUS WASTE MANAGEMENT PRACTICE**

- A.** Describe the facility business type, including:
1. What manufacturing processes are employed and products manufactured
  2. Where and what hazardous wastes are generated or received
  3. How hazardous wastes are typically managed, e.g. storage in less than 90-days, stored in drums or tanks, or treated in containers or tanks
- B.** Provide manufacturing process flow diagrams showing how and where hazardous wastes are generated
- C.** Provide simplified process flow diagrams showing how and where the hazardous wastes are treated and stored

Provide a process flow diagram showing the path of each waste stream from the point of entrance into the facility to its exit from the facility. The process flow diagram should include each point where the waste stream physically and/or chemically changes and show points where samples are collected (sampling points will be indicated in the waste analysis plan). Also show any equipment used to move the waste stream such as pumps, blowers, belts, etc.

### SECTION III – WASTE ANALYSIS PLAN

The general purpose of a Waste Analysis Plan (WAP) is to characterize each waste stream to ensure that the facility is authorized to manage the waste generated or received. Minimally the facility shall have sampling criteria for pre-acceptance, inspection and finger printing procedures for each incoming shipment, and periodic / non-periodic verification program.

DTSC encourages facility owners and operators to read and ensure compliance with CCR, title 22, section 66264.13, which requires a written waste analysis plan. The following instructions and tasks are a recommended format to facilitate communications among the permittee, permit writer, and inspector. Much of the information can be obtained from generators' existing Materials Safety Data Sheets (MSDSs).

#### A. Description of Waste Streams Types

The hazardous waste management facility (Facility) shall list all waste streams to be accepted and managed. For each waste stream, list its waste codes, the hazards characteristics, constituents, and the industrial processes which generate the streams. If the Facility handles multiple waste streams, a tabulated form can be used as following example:

	Names of Waste Streams	USEPA Waste Codes	California Waste Codes	Hazards	Hazardous Constituents	Process or industry that generates the waste
A	Used Oil	n/a	221, 612	Toxic	Lead, benzene	Automotive service stations
B	Waste Water	D002, D007		Corrosive, Toxic	pH 1.5, chromium	Plating
C	Spent Fluorescent lamp	D008		Toxic	Mercury	

#### B. Pre-acceptance Criteria

The Facility shall require generators to provide waste profiles before the Facility can receive and manage the waste. The Facility shall provide the criteria and require the data from generators. The generator can use his/her knowledge, published or documented data, or laboratory results to obtain a detailed chemical and physical analysis of a representative sample of the waste.

The following is a sample listing of possible pre-acceptance criteria for

used oil.

Pre-acceptance criteria	Test Method	Acceptable Results
Color	observation	Dark brown
Total Organic Halides	EPA Method 9076, 9077, or 8010	Less than 1,000 ppm, unless rebuttable
pH	pH meter or paper, EPA Method 9040, 9041	2. – 12.5
Bottom Sediment and Water	ASTM D-96, D-1796, or D-4007	To be determined by the Facility
API Gravity	ASTM D-287	To be determined by the Facility
Flash Point Testing	ASTM D-93	Greater than 100 F
Others (to be completed by Applicant)		

By using this example, list all acceptance criteria for waste streams to be managed.

**C. Inspection and Finger-printing:**

For each incoming shipment, the Facility shall have tracking system to track the movement of wastes and finger-printing results.

1. Inspection: The Facility must have procedures to inspect each shipment when wastes arrive. The inspection is to determine whether waste matches the identity of the waste specified on the accompanying manifests or shipping paper.
2. Finger- Printing: After verifying the manifest, the Facility shall take finger printing samples to analyze the incoming shipment.
  - a. The number of samples: The facility shall take random samples from the drums/containers as follow for each waste type listed in the manifest:
 

1 drum	- 1 sample
2 - 10 drums/containers	- 2 samples
more than 10 drums	- 3 or 10% samples whichever is greater

- b. The finger printing tests: The facility shall specify what tests will be analyzed. Well established field test methods are acceptable. For example:

Waste Stream A: Used Oil

<b>Analysis</b>	<b>Test Method</b>
Color	Visual
Total Organic Halides	Chloro T-test
pH	pH paper
Flash Point Testing	Na- Flame test
Others (to be completed by Applicant)	

- c. The sampling methods: The facility shall describe the sampling methods for liquid and solid waste. For example, for the homogenous liquid samples, the facility can use a thief to sample liquid and use sampling scoop for solids.
- D.** **Outgoing Waste Shipment:** to ensure the outgoing shipment can be accepted by designated treatment, storage or disposal (TSD facilities) and to ensure the completion of the treatment at the Facility, the Facility shall test the outgoing shipment or end-point material.
- E.** **Periodic/non Periodic Generator Profile Verification:** The Facility shall verify the generator's profile and pre-acceptance data periodically, e.g. annually or semi-annually. The Facility shall also require the generator submit new waste profile data when the Facility is notified or has reason to believe that the generator's process or operation has changed.

Reference: U.S. EPA "Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes: A Guidance Manual" 04/15/1994, [EPA 530-R-94-024], Order Number:PB94-963-603, Order Form:NTIS

<http://www.epa.gov/epaoswer/hazwaste/ldr/wap330.pdf>

## **SECTION IV – FACILITY DESIGN (STORAGE)**

In this section, please describe each of your storage areas where you store hazardous wastes in drums, containers, tanks or other devices (“storage devices”) The description must include the following information.

- A. Storage Areas for Drums / Containers / Tanks / Other Devices
- B. Hazardous Wastes Stored
- C. Storage Device Equipment Description
- D. Secondary Containment Design
- E. Storage of Ignitable, Corrosive, or Reactive Hazardous Waste
- F. Specified Air Emission Controls
- G. Engineer Certification
- H. Engineer Qualification

### **A. STORAGE AREAS FOR DRUMS / CONTAINERS / TANKS / OTHER DEVICES**

1. How many storage areas do you have or plan to have? In the facility plot plan, indicate where your storage areas are, how you will arrange the storage devices (including length of each row, aisle space). See Notes, below;
2. What are the dimensions of each storage area? Include the berm height
3. How many storage devices do you plan to store in each area?
4. What are the sizes of the storage devices?
5. Do you stack storage devices? You may not stack more than two containers high
6. All waste must be stored in DOT (Department of Transportation) approved storage devices. Of what materials are your storage devices made?
7. Are or will any storage devices be kept outside? If so, describe the measures taken to protect hazardous waste /devices that are subject to corrosion or deterioration from the weather (e.g. roofs, tarps, awnings, and elevation of containers above ground surface)
8. Will liners be used in any of the storage devices holding hazardous waste? If so, explain how the empty storage devices or liners are or will be managed or disposed

9. How do you track your storage devices management and movement (e.g., receiving to offsite shipment)?
10. How do you make sure that any incompatible wastes are separated?  
See Notes, below
11. How often do you inspect your storage devices? You are required to inspect the container storage areas at least weekly, daily for tank storage area and look for leaking containers and for deterioration of storage devices and the containment system caused by corrosion or other factors. A storage device holding hazardous waste must always be closed during transfer and storage, except when it is necessary to add or remove waste.

**Notes:**

- A minimum amount of aisle space (30") between rows of storage devices must be maintained at all times.
- Storage devices holding ignitable or reactive waste must be located at least 50 feet from the facility's property line.
- Incompatible wastes, or incompatible wastes and materials, must not be placed in the same storage device.
- A storage device holding a hazardous waste that is incompatible with any waste or other materials transferred or stored nearby in containers or tanks shall be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

**B. HAZARDOUS WASTES STORED**

Provide the name and describe the physical properties of each hazardous waste that is or will be stored in each area. Be sure that the information includes all of the following:

1. Common waste chemical name(s)
2. EPA and/or California hazardous waste number(s)
3. Specific gravity
4. Vapor pressure, if applicable
5. Flame point/auto-ignition temperature, if applicable

6. pH
7. Color
8. Others (to be completed by Applicant)

**C. STORAGE DEVICE / EQUIPMENT DESCRIPTION**

List all devices/equipment to be used in each storage area, including containers, totes, bags, tanks, reactors, vats, etc. Describe the following if they apply to the equipment (excluding DOT-drums);

1. Internal and/or external dimensions in feet and inches
2. Internal design capacity in gallons
3. Age of each tank (new or from the operating records of the facility)
4. If the equipment will be coated or lined, describe the lining and/or coating material and thickness used inside or outside

**D. SECONDARY CONTAINMENT SYSTEM FOR STORAGE AREAS**

Each storage area where liquid wastes are stored must have a secondary containment into which the storage devices are placed. The Applicant shall include an Engineer Certification which describes the containment designs. See Subsection G for details on certification.

**E. STORAGE OF IGNITABLE, CORROSIVE, OR REACTIVE HAZARDOUS WASTE**

1. If the Facility will transfer, or store ignitable, corrosive or reactive wastes, in the facility plot plan, show the locations where equipment holding ignitable or reactive hazardous wastes are or will be stored at the facility and their protective distances or buffer zone of at least 50 feet from the facility's property line. Show on the plan the minimum protective buffer distance required around each tank(s) in accordance with Table 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code". Data is available from the National Fire Protection Association, 1 Batterypark, Quincy, MA. 02267, Phone: (800) 344-3555.
2. Describe the precautions taken by the facility, e.g. distances of separation between incompatible wastes and the locations of dikes, berms, or walls used to maintain the separation, to prevent reactions

involving ignitable or reactive wastes which would result in any of the following:

- a. Generate extreme heat or pressure, fire or explosions, or violent reactions
- b. Produce uncontrolled flammable fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
- c. Produce uncontrolled flammable fumes or gases in sufficient quantity to pose a risk of fire or explosions
- d. Damage the structural integrity of the container or the facility
- e. Through other means threaten human health or the environment

**F. SPECIFIED AIR EMISSIONS CONTROLS**

Review CCR, Title 22, section 66264.1082 (Air Emission Standards for Tanks, Surface Impoundments, and Containers) to determine whether the regulations apply at your facility. Provide all of the applicable information specified in CCR, title 22, section 66270.27 "Specific Part B Information Requirements for Air Emission Controls for Tanks, Surface Impoundments, and Containers" that applies to containers or tanks.

**G. ENGINEER'S CERTIFICATION**

1. Engineering Certification of Tank Integrity

The purpose of this engineering certification is to verify that the tanks used to store or treat hazardous wastes have been adequately designed for this service. A tank integrity certification shall be prepared by an independent, qualified professional engineer registered in the State of California. The tank integrity certification shall include and address the following requirements:

- a. Tanks shall have sufficient shell strength to assure that they do not collapse or rupture. This shall be verified by sonic testing to determine the actual shell thickness of each tank. Actual thicknesses shall be compared to the calculated minimum shell thickness based on operating temperature, pressure, and specific gravities of fluids stored.
- b. A statement that the tank material of construction is compatible with the hazardous waste contents.

- c. Description of tank system piping (materials of construction, pipe diameter)
  - d. Description of any internal or external pumps
  - e. Description of design standard(s), if available, according to which tank and ancillary equipment were constructed.
  - f. Description of any spill prevention or overfill equipment
  - g. Description of any corrosion protection measures
  - h. Description of any structural damage or inadequate construction such as cracks punctures or damaged fittings. All shall be documented in the assessment and remedied before the tank system is certified for use.
  - i. Description of any leak detection equipment
  - j. Information on the documented age of the tank system. Estimated remaining service life based on findings.
  - k. Leak test report that verifies current tank and attachments integrity.
  - l. The certification by the independent engineer shall be written in accordance with the format specified in California Code of Regulations (CCR), title 22, section 66270.11(d).
2. Engineering Certification of Tank Secondary Containment

The purpose of the certification of the tanks secondary containment system is to confirm that there will not be any releases of hazardous waste contents to subsoil or surrounding areas in the event of a tank failure or spillage.

The secondary containment for above-ground tank systems shall include and address the following requirements:

- a. Secondary containment volume shall be greater than either 10% of the total volume of all tanks or 100% of the largest tank volume, whichever greater, plus the volume of rainfall from a 24-hour, 25-year rainstorm.

- b. The secondary containment pad and berms shall be coated with a material, to make an impervious barrier and prevent migration of spilled liquids.
- c. The coating material, used for the coating, shall be compatible with the wastes handled in the tank system.
- d. The secondary containment shall have sufficient structural strength and thickness to prevent failure due to pressure gradients, physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation.
- e. The secondary containment foundation should be capable of providing support, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression or uplift. The base shall be free from cracks or gaps.
- f. Verification that the secondary containment system has a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any released or hazardous waste or accumulated liquid in the secondary containment system within 24 hours.
- g. Verification of slope design and designed to remove liquids resulting from leaks, spills or precipitation.
- h. Designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system from other areas within the facility.
- i. The certification by the independent engineer shall be written in accordance with the format specified in CCR, title 22, section 66270.11(d).

The secondary containment system for below-ground tank systems shall include the following:

- a. Designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greatest of 10% of the aggregate volume of all tanks or 100% of the capacity of the largest tank within its boundary.
- b. Designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the

collection system has sufficient excess capacity, in addition to that required above

- c. Constructed with chemical-resistant water stops in place at all joints. (if any)
- d. Interior impermeable coating or lining compatible with the waste being stored in order to prevent migration of waste into the concrete
- e. It should be protected against the formation of and ignition of vapors within the vault
- f. The certification by the independent engineer shall be written in accordance to the format specified in CCR, title 22, section 66270.11(d).

Secondary Containment can also be provided by utilizing double-walled tanks. The secondary containment certification for double-walled tank systems shall include the following:

- a. Designed as an integral structure so that any release from the inner tank is contained by the outer shell.
  - b. Protect, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell.
  - c. Provide with a built-in continuous leak detection system capable of detecting a release within 24 hours.
  - d. Verification that all auxiliary equipment shall be provided with secondary containment.
  - e. The certification by the independent engineer shall be written in accordance with the format specified in CCR, title 22, section 22670-11(d).
3. Engineering Certification of Secondary Containment of Container Storage Areas.

The engineering certification for the secondary containment of container storage areas is the same as that for tank storage areas. The only different requirements would be the following:

- a. The containment system shall have sufficient capacity to contain precipitation from at least 24-hour, 25-year storm plus 20% of the

aggregate volume of all containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination.

4. Engineering Certification of Compliance with Seismic Standards

The tank integrity assessment shall also include calculations in order to show that supporting structures are of sufficient strength to withstand a seismic event. This calculation will include a ground acceleration factor based on current earthquake fault data in the vicinity of the facility. DTSC is required to issue hazardous waste facility permits which meet the building standards published in the state building standards code per health and safety code section 25200(a).

**H. ENGINEER'S QUALIFICATION**

1. Name of the registered engineer
2. Registration number
3. Engineering discipline
4. Date of expiration of the engineer's registration

## SECTION V – FACILITY DESIGN (TREATMENT)

In this section, please describe each of your treatment processes in containers, tanks, reactors or other equipment. The description must include answers to the following questions:

- A. Treatment Process Description and Flow Diagram
- B. Hazardous Wastes Treated
- C. Treatment Device/Equipment Description
- D. Secondary Containment Design
- E. Treatment of Ignitable, Corrosive, or Reactive Hazardous Waste
- F. Specified Air Emission Control
- G. Engineer Certifications
- H. Engineer Qualification

### A. TREATMENT PROCESS DESCRIPTION AND FLOW DIAGRAM

1. Treatment process: Describe in detail all of the chemical treatment processes that are or will be done in equipment (e.g., oxidation/reduction, pH modification, precipitation, etc.); or physical treatment process that are or will be done in equipment (e.g., separation, distillation, evaporation, etc.). Also include:
  - a. Equipment used
  - b. Chemicals added
  - c. Process type (e.g., batch, continuous, etc.)
  - d. Feed rate (e.g., gal/min., lb/hr., etc.)
  - e. Chemical reactions, if any
  - f. Products and by-products for each chemical treatment process
2. Flow Process Diagram: Include a diagram of existing or planned treatment process unit and associated treatment equipment, including all piping throughout the facility connecting treatment containers, tanks, reactors, vats, etc., showing any valves, plumbing, pumps, process flow direction, etc

In addition, provide the following detailed information, diagrams and drawings for each tank:

- a. Indicate whether the equipment (e.g. tank) is or will be entirely or

- partially above and/or below ground, if applicable.
- b. Indicate whether the equipment (e.g. tank) can or will be able to be entered for inspection and routine maintenance, if applicable.
  - c. Show the aisle space between containers, tanks or other equipment.
  - d. If there is or will be an automatic or manual feed waste safety cutoff system, describe the hazardous waste feed safety cutoff system, if applicable.
  - e. If there are or will be tanks that are uncovered and outdoors, minimum freeboard is required. Provide calculations to show that each open uncovered tank has or will have sufficient containment volume to hold the rainfall from a 24-hour, 25-year storm. Rainfall data may be obtained from the Department of Water Resources, Office of the State Meteorologist, Phone: (916) 653-5791.
  - f. If there is or will be a bypass system to a standby tank or a backup plan to prevent overfills, describe this system or the backup plan.
  - g. If there are or will be tanks that are airtight, pressurized or under vacuum, describe the pressure control and/or pressure release controls for closed tanks such as vents and relief valves.
  - h. If there are or will be temperature controls used in any tanks, describe the temperature controls and temperature cutoff safety controls.
  - i. If there are or will be liquid level indicators used in tanks, describe the liquid level measurement devices or indicators.
  - j. If there are or will be tanks that contain volatile hazardous wastes, describe the pressure relief or tank venting and vapor control systems for these tanks.
  - k. If there are or will be tanks that are outdoors and made of metal, describe how each tank is protected from lightning.
3. For any treatment unit, furnish sampling data that shows the effectiveness of the treatment. This data should be based on sampling of untreated incoming hazardous waste and waste after treatment. The samples must be tested at a California state certified analytical laboratory.

4. Provide the following information concerning prevention of releases to the environment:
  - a. Describe how the facility does or will prevent any releases of hazardous waste from reaching surface soils, surface water or wetlands.
  - b. Describe how the facility does or will prevent any releases of hazardous waste from reaching the air.

**B. HAZARDOUS WASTES TREATED**

1. Provide the name and describe the physical properties of each hazardous waste that is or will be treated in each process. Be sure that the information includes all of the following:
  - a. Common waste chemical name(s)
  - b. EPA and/or California hazardous waste number(s)
  - c. Specific gravity
  - d. Vapor pressure, if applicable
  - e. Flame point/auto-ignition temperature, if applicable
  - f. pH
  - g. Color

**C. TREATMENT DEVICE/EQUIPMENT DESCRIPTION**

List all equipment to be used in each treatment process, including containers, tanks, reactors, vats, furnaces, etc. Describe the following if they apply to the equipment (excluding DOT-drums);

1. Internal and/or external dimensions in feet and inches
2. Internal design capacity in gallons
3. Shell thickness such as wall, top, and bottom in inches
4. Age of each tank (new or from the operating records of the facility)
5. Operating temperature of each tank in degrees Fahrenheit (from design or from operating records) and operating pressure in psi.

6. If the equipment will be coated or lined, describe the lining and/or coating material and thickness used inside or outside

#### **D. SECONDARY CONTAINMENT DESIGN**

Tank system or treatment equipment containing no free liquids and situated inside a building with an impermeable floor are exempt from secondary containment requirements. The Applicant shall include an Engineer Certification which describes the containment designs. See **Subsection IV.G** for details on certification.

#### **E. TREATMENT OF IGNITABLE, CORROSIVE, OR REACTIVE HAZARDOUS WASTE**

1. If the facility will transfer, treat or store ignitable, corrosive or reactive wastes, in the facility plot plan, show the locations where equipment holding ignitable or reactive hazardous wastes are or will be stored at the facility and their protective distances or buffer zone of at least 50 feet from the facility's property line. Show on the plan the minimum protective buffer distance required around each tank(s) in accordance with Table 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code". Data is available from the National Fire Protection Association, 1 Batterypark, Quincy, MA., 02267, Phone: (800) 344-3555.
2. Describe the precautions taken by the facility, e.g. distances of separation between incompatible wastes and the locations of dikes, berms, or walls used to maintain the separation, to prevent reactions involving ignitable or reactive wastes which would result in any of the following:
  - a. Generate extreme heat or pressure, fire or explosions, or violent reactions
  - b. Produce uncontrolled flammable fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
  - c. Produce uncontrolled flammable fumes or gases in sufficient quantity to pose a risk of fire or explosions
  - d. Damage the structural integrity of the container or the facility
  - e. Through other means threaten human health or the environment

**F. SPECIFIED AIR EMISSIONS CONTROLS**

See Section **IV.F** for applicability.

**G. ENGINEER'S CERTIFICATION OF TANK INTEGRITY AND  
SECONDARY CONTAINMENT**

If treatment is conducted in tanks or containers please refer to **Section IV.G** for details on tank integrity engineering certification and secondary containment engineering certification.

**H. ENGINEER'S QUALIFICATION**

1. Refer to **Section IV.H** for details of Engineer's qualifications for certifications.

## **SECTION VI – TRAINING PLAN**

### **A. TRAINING**

The personnel training requirements for hazardous waste management facilities are cited in CCR, title 22, Section 66264.16. The purpose of these requirements is to ensure that all facility personnel have adequate training to perform their duties safely and in compliance with regulatory standards.

1. The owner/operator must develop a training program for all facility personnel involved in the management of hazardous waste or the supervision of these activities. The program must be relevant to the job responsibilities and activities conducted at the facility.
2. All personnel associated with the management of hazardous wastes are required to successfully complete a program of instruction that trains them to perform their duties safely and in compliance with regulatory requirements.
3. A written training plan must be developed and maintained at the facility.
4. Training records must be maintained at the facility for all current and former personnel. Records must be retained for at least 3 years after the last date of employment. In addition to the requirements in Section 66264.16, Title 22, CCR, the training program must also address Cal-OSHA worker training requirements identified in CCR, title 8, section 5192.

### **B. TRAINING PROGRAM**

1. The training program must consist of an introductory training program and a continuing training program, or annual review. The training program should be specific to positions at the facility. The program should ensure that employees have or will have acquired the necessary training and management skills needed to perform their jobs in a competent manner that will protect human health and the environment.
2. The introductory training program should be completed by each facility employee within the first six months of employment or six months after a change of position. Until the employee has completed this training, he/she may not work in an unsupervised position. The introductory training must address the following topics:

- a. Hazardous Waste Management Procedures-- This should be relevant to the position in which the individual is employed.
- b. Contingency Plan Implementation-- This must be designed to ensure that facility personnel are able to respond effectively to emergencies and become familiar with emergency equipment and emergency systems. This should include, where applicable:
  - (1) Use, inspection, repair, and replacement of facility emergency and monitoring equipment
  - (2) use of automatic waste feed cut-off systems
  - (3) communications or alarm systems
  - (4) response to fires or explosions
  - (5) shutdown of operations
  - (6) response to ground water contamination incidents
3. Each employee must participate annually in an update, or refresher, of the initial training. The refresher should keep personnel up to date with changes at the facility, such as the characteristics of new wastes managed at your facility or updates to the contingency plan, as well as changes in the rapidly evolving field of hazardous waste management.
4. The training program may consist of classroom or on-the-job training, or combination, depending upon the position. Training may be acquired in any of three ways: a formal training program offered outside of the facility in-house training programs, or on-the-job training programs. A combination of these three is also feasible. The owner or operator of the facility should determine which option is the most appropriate to the facility.
5. The training program must be directed by a person trained in hazardous waste management procedures. A supervisor who is skilled in the current methods of facility operation and knowledgeable about principles of hazardous waste management may serve as an on-the job trainer.
6. Cal-OSHA also requires that all employees of hazardous waste facilities regulated under Chapter 6.5, Health and Safety Code obtain an initial health and safety training of 24 hours and refresher training for eight (8) hours annually. The initial training requirement may be

satisfied by experience for current employees. The training must include safety and health hazards at the facility, personal protective equipment, other safety practices, and names of on-site safety coordinators and alternates. These requirements are found in Title 8, Section 5192, CCR. For further information on Cal-OSHA requirements, you may contact that agency at (510) 286-7000.

### **C. TRAINING PLAN**

A written training plan that documents the facility training program must be maintained at the facility. The training plan should include a description of the type and amount of continuing and introductory training that is required for each staff or supervisory position involved in the management of hazardous waste. The training plan should identify specific training classes or modules for each job title at the facility. This should include course title, length of each course, and where the training is offered. In-house training should identify the trainer and describe the course content. The plan should document that the training program meets the requirements in CCR, title 22, Section 66264.16 as described in the "Training Program" section above. In order to meet the requirement for training pertaining to hazardous waste management procedures, courses pertaining to the following topics are examples of appropriate training: hazardous waste identification; sampling and analysis; shipment of hazardous wastes; manifesting; record keeping. In addition, training pertaining to the facility's contingency plan and emergency procedures is required in order to meet the requirements of the Department and Cal-OSHA.

### **D. TRAINING RECORDS**

Personnel training records must be kept at the facility for examination by a DTSC representative upon request. The training records for current personnel must be kept on file at the facility until the facility closes. The training records of former employees must be kept for at least 3 years from their last date of employment at the facility. If a person is transferred within the same company, their training records remain the same. Training records must include: a job title for each position at the facility that is related to hazardous waste management, a job description for each of those positions, and the names of the employees filling those positions. The job description, for each position, must include the skill, education, or other qualifications needed by employees to fill each position at your facility and the duties of employees assigned to each position. The records must demonstrate that the proper training has been completed by facility personnel. The facility must retain a record of the dates on which employees received their initial training and annual reviews.

Develop, submit with other application components, implement and maintain a staff training plan that meets the requirements detailed above.

## SECTION VII – INSPECTION PLAN

### A. INSPECTION PLAN

The Inspection Plan specifies a schedule and method of inspection of various equipments, structural and operational features of the facility. Regular scheduled inspections can help the facility operator to identify and correct situations that could lead to sudden or non-sudden occurrences that may threaten human health, or the environment, or identify and act to minimize sudden occurrences that may threaten human health or the environment. The Inspection Plan can be utilized as part of an overall strategy to help the facility to plan, organize and maintain a consistent standard of operation.

#### 1. REGULATORY SECTIONS RELATED TO INSPECTION SCHEDULES AND LOGS

- General Inspection Requirement CCR 66264.15
- Inspection of Containers CCR 66264.174
- Inspection of Tanks CCR 66264.195

#### 2. REQUIREMENTS

The owner or operator must inspect the facility for malfunctions and deteriorations, operator errors, and releases to secondary containment or the environment which may cause or may lead to the release of hazardous waste constituents to the environment or threaten human health. All findings shall be recorded in an inspection log. When such problems arise, steps shall be taken immediately to correct the situation. In the event of a release, the Contingency Plan shall be implemented. The owner or operator must inspect all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (e.g. sumps, dikes and pumps) that are important in preventing, detecting or responding to the environmental or human health hazards in accordance with the following inspection schedule. The owner or operator shall remove from service and put on standby any structures or equipment that the inspection identifies as in a state of malfunction, deterioration or disrepair until such time as the structure or equipment is in good repair and working order, to ensure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately as described in the Contingency Plan

### 3. FACILITY INSPECTION REQUIREMENTS

#### Frequency of Inspection

#### a. Container Storage Area – Weekly Required

- (1) Aisle space
- (2) Containers correctly stacked
- (3) Storage capacity not exceeded
- (4) Containers stored within secondary containment area
- (5) Containers are in good condition
- (6) Labeled
- (7) Containment free of liquids and cracks
- (8) Signs posted

#### b. Tank – Daily (Required)

#### c. Facility Equipment (Schedules to be designed by the Facility, the following is suggested frequency)

- (1) Emergency Equipment
  - (a.) Eyewash & Showers – Daily
  - (b.) Respirators & Cartridges – Weekly
  - (c.) Self-Contained Breathing Apparatus- Weekly
  - (d.) Protective Clothing – Weekly
  - (e.) First Aid Kits – Monthly
- (2) Spill Control Materials – Monthly
- (3) Fire Extinguisher – Monthly
- (4) Monitoring Equipment

- (a.) Process and operations monitoring - At least once each 8-hour shift
- (5) Heavy Moving Equipment
  - (a.) Fork Lifts – Weekly
  - (b.) Vacuum Trucks – Weekly
  - (c.) Others

Inspection logs shall be maintained in the operating records for at least three years from the date on inspection. Records shall include date, time, inspector's name, observations, repairs required and repairs performed. Recommended facility inspection log forms are attached immediately following this page.

4. EQUIPMENT, STRUCTURE, AREAS TO BE CONSIDERED FOR INCLUSION IN AN INSPECTION SCHEDULE

- Safety Equipment
- Emergency Equipment
- Emergency Shower/Eyewash
- Fire Blankets
- Face Shields
- Fire Extinguisher
- Protective Glasses
- Fire Alarm System
- Disposable Respirators
- Emergency Lights
- First aid/Equipment Supplies
- Portable Pumps / Hoses
- Protective Clothing
- Fire Fighting Hoses
- Gas Masks
- Self-Contained Breathing
- Chemical Respirators
- Apparatus
- Warning Signs
- Absorbent
- Monitoring Equipment
- Security Equipment
- Liquid Level Monitors
- Fences-Facility/Area
- Leak Detection System
- Signs
- Fire Detection System
- Gates
- Liquid Meters
- Locks
- Areas
- Communication Equipment
- Loading Area
- Telephones
- Unloading Area
- Radios
- Storage Area
- Intercoms
- Main Roadways
- Public Address System
- Gate Areas
- Periphery Structures
- Berms
- Tank Supports

Develop, submit with other application components, implement, and maintain an inspection plan that meets the requirements detailed above.

**SAMPLE  
 Inspection Schedule**

<b>Permitted Unit Description</b>	<b>Inspection Items</b>	<b>Inspection Frequency</b>
General Facility	Signs, security, fence	Daily
Containers	Container conditions, labels, incompatibles, ..	weekly
Tanks	Overfill controls, corrosion, releases, monitoring and leak detection equipment, secondary containment, free board	daily
Tanks	Cathodic protection system	Six month after first installation and then annually
Health and Safety Equipment	Eye wash	Every two weeks
Loading and unloading area	Spill, cracks of foundation	daily
Emergency Response Equipment	Inventory, condition of equipment	(to be completed by Applicant)
Others (to be completed by Applicant)		

**SAMPLE  
 Weekly Inspection Form**

Inspector: \_\_\_\_\_ AM/PM  
 Name Date and Time

**Storage Area**

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	1. All containers free of leaks, corrosion, deterioration, or bulging,
<input type="checkbox"/>	<input type="checkbox"/>	2. All incompatibles separated properly.
<input type="checkbox"/>	<input type="checkbox"/>	3. Containers stacked no more than two high (55-gallon drum equivalents) in stable format.
<input type="checkbox"/>	<input type="checkbox"/>	4. Minimum 36-inch aisle spaces are maintained.
<input type="checkbox"/>	<input type="checkbox"/>	a. Containers are positioned within the lines without leaning at an angle from the vertical axis.
<input type="checkbox"/>	<input type="checkbox"/>	b. Container labels are facing aisle.
<input type="checkbox"/>	<input type="checkbox"/>	5. All containers are closed
<input type="checkbox"/>	<input type="checkbox"/>	6. No liquid or waste residue in containment area
		7. Not exceed the permitted capacity
		8. Others (to be completed by Applicant)

Note: All "No" answers must be accompanied by a notation of the corrective action taken or a work order number.

Comments:

Reviewed by Supervisor: \_\_\_\_\_ Name and Date: \_\_\_\_\_

Work Order # \_\_\_\_\_ submitted on \_\_\_\_\_ (date)

**SAMPLE**  
**Work Order Form**

ORDER No. \_\_\_\_\_

NATURE OF WORK NEEDED AND PRIORITY \_\_\_\_\_:

REQUEST DATE \_\_\_\_\_ BY \_\_\_\_\_

REPAIR COMPLETED DATE \_\_\_\_\_ BY \_\_\_\_\_

Note:

Priority 1: Completed within 24 hours

Priority 2: Completed within 5 days

Priority 3: Completed within 10 working days

Priority 4: Completed within 30 days or longer; with an explanation

## **SECTION VIII – CONTINGENCY PLAN**

### **A. CONTINGENCY PLAN / EMERGENCY PREPAREDNESS**

#### **1. EMERGENCY PREPAREDNESS AND PREVENTION**

Article 3 of Chapter 14, Title 22, CCR (Sections 66264.30 et seq) identifies facility requirements that are intended to minimize the possibility of a fire, explosion, or any unplanned release of hazardous waste to the environment.

#### **2. REQUIRED EQUIPMENT**

The following equipment is required in order to adequately respond to an emergency situation (unless the facility can demonstrate to the Department that the hazards posed by the facility would not require a particular kind of equipment specified below):

- a. Internal communications or alarm system (should be immediately accessible to all personnel involved in the handling of hazardous waste)
- b. Telephone, two-way radio, or other device capable of summoning emergency assistance from local police, fire departments, or emergency response team (also should be immediately available to any employee alone while the facility is in operation)
- c. Portable fire extinguishers and other fire control equipment (including special extinguishing equipment appropriate to the facility; such equipment, for example, may use foam, inert gas or dry chemicals, depending upon the hazardous wastes and other chemicals handled)
- d. Spill control equipment
- e. Decontamination equipment
- f. Water supply systems (such as spray systems, automatic sprinklers, or hoses) or foam producing equipment. Testing and maintenance of this equipment must be conducted to assure proper operation in the event of an emergency. Records of this testing must be included the facility's operating record

**3. ARRANGEMENTS WITH LOCAL EMERGENCY SERVICES AND AUTHORITIES**

The owner or operator is required to make arrangements with local police, fire departments, emergency response teams, local hospitals and the local Office of Emergency Services to provide emergency services. This would be described in the facility's Contingency Plan, with copies provided to these entities.

**4. WHAT IS THE CONTINGENCY PLAN AND WHY IS IT NEEDED?**

The contingency plan describes the actions a facility will take in the event of an emergency or accident involving hazardous wastes. This plan provides a structured list of procedures that allow the facility to respond immediately and appropriately to incidents such as fires, explosions and unplanned releases, or spills, of hazardous wastes or hazardous waste constituents to the air, soil or surface water. This process minimizes the hazards to human health and the environment that may occur as a result of emergencies involving hazardous wastes. The regulations that specify the contingency plan requirements and the plan contents are found in the California Code of Regulations (CCR), Title 22, Chapter 14, Article 4, beginning with 66264.50. The facility keeps one copy of the plan, and any revisions made to the plan, and submits a copy of the plan and its revisions to each of the agencies that may provide emergency response, including local police departments, fire departments, hospitals, and local and State emergency response teams. The plan must be revised whenever the plan fails during an emergency, the facility changes, the contents of the plan change, or the regulations change.

**5. WHAT IS INCLUDED IN A CONTINGENCY PLAN?**

The plan's provisions include:

- a. Emergency Coordinator: The plan must list, and keep up-to-date, the names, addresses, and phone numbers of all persons qualified to act as an emergency coordinator. This list must identify the person who the primary emergency coordinator, and list the alternate emergency coordinators in the order in which they will assume responsibility as alternates. As the title implies, the emergency coordinator, an employee who is either on the premises of the facility or on-call, is responsible for coordinating the facility's emergency response procedures. The emergency coordinator must be familiar with all aspects of the facility's operation, its activities, its layout, its contingency plan, the location and characteristics of hazardous wastes managed at the

facility, and the location of records at the facility. The emergency coordinator must also have the authority to implement the contingency plan, including the authority to commit the necessary resources to accomplish the provisions of the plan. In designating the emergency coordinators, thought should be given to the availability and response time of those individuals when they are not present at the facility.

- b. Emergency Procedures: The contingency plan must describe the specific procedures that the facility will follow if an emergency occurs. If there is an imminent or actual emergency, the emergency coordinator shall notify facility personnel, if applicable, by activating internal alarms or communication systems, and notify the appropriate local and State agencies with emergency response roles.
- c. If there is a fire, explosion or release of hazardous waste or hazardous waste constituents, the emergency coordinator shall immediately determine the character, source, amount and real extent of the release, using observation, facility records and manifests. Chemical analysis may also be used to characterize the release. In this situation, the emergency coordinator must also evaluate the possible hazardous impact of the release, fire or explosion on human health and the environment, considering both direct effects (such as the effect of any toxic or irritating gases that may be generated) and indirect effects (such as the effect of any surface water run-off generated by water or chemical agents to control fires). If the emergency coordinator determines that the fire, explosion or release could threaten human health or the environment outside of the facility, the coordinator must immediately notify the appropriate local authorities, if surrounding areas require evacuation. In all cases, the emergency coordinator must also notify the State Office of Emergency Services (OES). The report to OES must include the name and phone number of the person making the report, the facility name and address, the time and type of incident, the names and quantities of materials involved the extent of any injuries and the possible hazards to human health and the environment outside of the facility.
- d. During an emergency, the emergency coordinator must take reasonable measures to ensure that fires, explosions or releases do not occur, recur or spread to other hazardous waste at the facility. For example, if appropriate, the emergency coordinator shall stop processes and operations, and, if it is safe to do so, collect and contain release waste and remove or isolate

containers. If the facility operations are stopped, the emergency coordinator shall, wherever appropriate and when conditions are safe, monitor the facility equipment for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment.

- e. Immediately after any emergency, the emergency coordinator shall make arrangements for treating, storing and/or disposing of recovered waste, contaminated soil or surface water, or any other material resulting from the incident. Unless the owner/operator of the facility demonstrates that the recovered material is not a hazardous waste, the owner/operator is considered a hazardous waste generator and must comply with all applicable generator requirements. The emergency coordinator must ensure that until the released material is completely cleaned up, no waste that may be incompatible with the released material may be transferred, treated, stored or disposed of in the affected areas. In addition the emergency coordinator must ensure that all emergency equipment listed in the contingency plan is clean and fit for its intended use before facility operations resume. In order to resume operations in the affected areas, the owner/operator of the facility must notify DTSC and other appropriate state and local authorities that no incompatible wastes are in contact with the affected areas and all emergency equipment listed in the contingency plan is ready for use.
- f. Any time the contingency plan is used, the owner/operator must note in its operating record the time, date and details of the incident. The owner/operator must also submit a report to DTSC within 15 days after the incident including the name, address and telephone number of the owner/operator, the name address and telephone number of the facility; the date, time, and type of incident; the name and quantity of materials involved; the extent of any injuries; an assessment of any actual or potential hazards to human health or the environment; and the estimated quantity and disposition of recovered material that resulted from the incident.
- g. Emergency Services: The plan shall describe arrangements made with local police departments, fire departments, hospitals, contractors and local and state emergency response teams to provide emergency services. This element is intended to familiarize local fire, police and emergency response teams with the facility layout, the properties of the hazardous waste handled at the facility, locations where facility employees typically work, entrances to and roads within the facility and possible evacuation routes. This provision also familiarizes local hospitals with the

properties of the hazardous wastes managed at the facility and the types of injuries or illnesses that could result from emergencies. Finally, this element describes the agreements made with State emergency response teams, emergency response contractors and equipment suppliers. This element also describes the local agency with primary emergency authority and the local agencies providing supporting emergency response in those instances where more than one fire or police department may respond.

- h. Any arrangement made for emergency services must be appropriate for the type of hazardous waste managed at the facility and the potential need for the emergency services provided by these agencies.
- i. Emergency Equipment: The plan should include a current listing, kept up-to-date, of all emergency equipment at the facility, including a physical description of each item, its location and an outline of its capabilities. Typical emergency response equipment includes fire extinguishers and extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment.
- j. Evacuation Plan: If there is a possibility that an emergency could result in the need for evacuation of facility personnel, the plan shall include a description of evacuation procedures. These procedures should describe the alarm that signals evacuation is to begin, the evacuation route, and the alternate evacuation routes.
- k. OES Contact: The plan shall list the current telephone number for the State Office of Emergency Services so that the emergency coordinator may report to OES, as described in the emergency procedures.

Develop, submit with other application components, implement and maintain a contingency and emergency preparedness plan that meets the requirements detailed above.

## **SECTION IX – CLOSURE PLAN**

This guidance document was developed by DTSC to assist owners and operators of facilities applying for a standardized permit to produce a workable closure plan. Closure is a process where all of the facility's hazardous waste is removed and the facility is decontaminated. This guidance document takes the owners and operators through a step-by-step closure plan preparation process. By completing this section, the owners and operators will meet the closure plan requirement for a standardized permit.

For further closure plan guidance, the following documents may be referenced:

- Permit Writer Instructions for Closure of Storage & Treatment Facilities
- RCRA Guidance Manual for Subpart G closure and Post-Closure Care Standards and Subpart H Cost Estimating Requirements, OSWER Policy Directive #9476.00-5, 1987
- Clean Closure of Hazardous Waste Tank Systems and Container Units, EPA/530-SW-88-0005, OSWER Policy Directive 9476.00-11, 1987
- Guidance Manual: Cost Estimates for Closure and Post-Closure Plans (Subparts G and H), EPA #530-SW-86-036, OSWER Policy Directive Number 9476.00-6

The first document may be obtained from DTSC's Website, in the Publications and Forms section, at:

[http://www.dtsc.ca.gov/HazardousWaste/Permits/Permit\\_Writers\\_Closure\\_TOC.cfm](http://www.dtsc.ca.gov/HazardousWaste/Permits/Permit_Writers_Closure_TOC.cfm)

The last three documents may be obtained from National Technical information Services at (703) 605-6050 or U.S. EPA, Public Information Center at (415) 947-8000.

### **INSTRUCTIONS FOR PREPARING CLOSURE PLAN**

- Carefully read each instruction and question, and provide answers to all requested information; and
- Check to see that all sections of the closure plan have been addressed.

#### **A. INTRODUCTION**

Please provide a brief description of the facility and its operations and the procedures to be used to close the facility.

## **B. CLOSURE PERFORMANCE STANDARD**

Please provide the numerical closure performance standards you will be using to achieve closure of the facility. Closure performance standards are the measure you will be comparing your data with to show that closure has been achieved (i.e., the soil is not contaminated, the equipment has been properly decontaminated, etc.). Closure performance standards can either be non-detect, background concentrations, or health-risk based for unrestricted use of the property (See below) and are applicable to soil, groundwater, and equipment and structures.

You will need to performing sampling and analysis to show that closure performance standards have been met. The results of the analysis must be at or below the following levels for the unit to be considered “clean” closed:

- **Non-Detect** - Non-Detect is the detection limit for a specific analytical method. (e.g., the detection limit for Aldrin using method 8080 is 0.004 ug/L). This would be most applicable to structures, equipment, and buildings but can also be used for soils and groundwater.
- **Background** - Background level is mostly applicable to soil samples; however, background samples can be used for structures if you have samples of the original composition of the structure. For example, if you were constructing a new storage area with concrete and retain a sample of the original concrete, that original sample can be considered background. Background levels are also most applicable for determination by inorganic hazardous waste constituents such as metals. Background levels are the level of inorganic constituent that may exist in natural soil without any outside influence. In certain instances, background levels may also exist for organic constituents and should be discussed with the project manager on a case-by-case basis.
- **Risk-based** - If closure performance standards based on non-detect and background levels cannot be met, the facility may submit a health risk assessment that will provide levels that does not pose a substantial present or potential threat to human health and the environment.

## **C. MAXIMUM INVENTORY ESTIMATES**

This section of the closure plan describes the maximum hazardous waste inventory that will be at the site at any one time over the active life of the facility. The maximum inventory should be a sum of all hazardous waste storage capacity and estimated waste generated from closure activities.

1. Give an estimate of the maximum hazardous waste inventory.
  - a. Maximum amount of hazardous waste that would have been stored (A sum of all volumes given in section **IV**)
  - b. Maximum amount of hazardous waste that would have been treated (A sum of all volumes given in section **V**)
2. Provide an estimate of the amount of waste that will be generated from closure activities (i.e. washwater generated, sand from sand blasting, etc.)
  - a. Calculate the amount of waste generated from the decontamination of storage areas
  - b. Calculate the amount of waste generated from the decontamination of treatment processes
  - c. Calculate the waste generated from the decontamination of other areas
  - d. Equipment and supplies which will be used to close the facility and requires disposal. (i.e., rags, personal protective equipment, sampling equipment, etc.).

**Note:** *The following figures may be used to estimate the quantity of waste that will be generated from closure activities.*

High-Pressure Washing

*10 gallons of washwater generated per 1 drum cleaned;  
50 gallons of washwater generated for 1 pump & lines cleaned; and/or  
4 gallons of washwater generated per square foot of surface cleaned.*

Steam Cleaning

*4 gallons of washwater generated per square foot of surface cleaned.*

Sand Blasting

*0.62 gallons of sand per square foot of surface cleaned.*

**D. WASTE REMOVAL / TREATMENT**

When the facility will be closing and will no longer be used to manage hazardous wastes, describe how the final batch of waste will be removed from the facility or treated at the facility. The wastes may be removed/treated by any or a combination of the following methods:

processing the waste through the facility's process; taking the waste off-site to a treatment facility; taking the waste off-site to a disposal facility; and/or other methods.

Please describe as much detail as possible the waste removal method(s) that will be used when this facility closes.

#### **E. DECONTAMINATION PROCEDURE**

This section of the closure plan identifies all structures, buildings, and equipment that the facility plans to decontaminate.

1. List all equipment, structures, and buildings the facility plans to decontaminate. Identify each of these items on a plot plan. If an item cannot be identified on the plot plan, identify it on the plot plan by a unique number, and provide a brief description including the size and material of construction. Be sure that you address any of the following that are applicable: tanks, containers, treatment process units, secondary containment systems, floors & walls of buildings, pipes, pumps, valves, hoses, loading and unloading pads, and equipment (e.g., forklifts, dollies, pallets, shovels); and
2. Describe the procedures used to decontaminate each of the items identified in the previous item. The decontamination methods should be selected based on criteria such as waste contaminants, level of contamination and the surface materials being cleaned.

#### **F. CONFIRMATION SAMPLING PLAN FOR STRUCTURES, EQUIPMENT, AND BUILDINGS**

This closure plan must include a sampling plan that will demonstrate that the closure performance standards have been met (See Section B above). The sampling plan is used to verify that decontamination have been effective or to demonstrate that no contamination has ever taken place. Sampling should be conducted only after a thorough visual inspection and proper decontamination has been performed.

The sampling plan must describe the sampling procedures to be used for sampling buildings, equipment and structures for contamination. The description should discuss the number of samples to be taken, sampling methods, location of sampling points and rationale used for selecting sampling point locations. All structures, equipment and buildings identified in this application must be included in the sampling description.

There are generally two sampling methods used to determine the locations and number of sampling points: biased (judgmental) and

statistical (random). They are as follows:

- **Biased Sampling** - Used in situations where the locations of point sources of the contamination are known or suspected. For example, a biased sample plan would be take samples from areas that are either visibly contaminated or suspected to be contaminated.
- **Statistical Sampling** - Used in situations where there is no information or knowledge available about the sampling area. The statistical sampling method is especially useful for covering large unknown sampling area.

There are four surface sampling methods that are used for the closure of treatment and storage facilities. They are as follows:

- **Wipe Sampling** - This method is used for sampling smooth, impervious and solid surfaces such as metal tanks, epoxy coated concrete, vinyl liner, etc. Four wipe sample, at a minimum, should be taken from each tank, depending on the size of the tank. A typical wipe sample area is 1 square foot. The samples should be taken using filter paper or gauze pad moistened with a solvent that will remove the contaminant from the surface.
- **Chip Sampling** - This method is used for sampling porous surfaces such as asphalt, concrete and wood. In this method, the surface of the material is chipped out using tools such as a chisel or an electric hammer. The chip sample should have a size approximately 10 cm x 10 cm in area and 3 millimeters in depth.
- **Cleaning Solution Sampling** - This method is used for sampling items such as pumps, pipes, filters and equipment. This method is used for sampling parts that are physically difficult to get to or too small to sample individually.
- **Polychlorinated Biphenyls (PCB) Wipe Sampling** - A specific procedure for sampling PCB is available in the U. S. EPA document, Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup, Interim Report #3, Work Assignment 37.

There is no specific guidance on the number of samples required for sampling structures, equipment, and buildings. However, the sampling number should be large enough to prove that all structures, equipment, and buildings have been properly decontaminated. For each sample and each sample set that is taken at the site, a quality control measure is required to establish the data's quality for each analytical result. Therefore, additional quality control samples are required.

Additional information about sampling methods described above can be obtained from the following U. S. EPA guidance document, Compendium of Waste Sampling Procedures, EPA/540/P-91/008.

All sampling should follow the procedure specified in the document, EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846.

NOTE: The EPA guidance documents may be obtained from the National Technical Information Services at (703) 605-6050 or U.S. EPA, Public Information Center at (415) 947-8000.

## **G. CONFIRMATION SOIL SAMPLING PLAN**

A soil sampling plan is also required as part of the facility's closure plan. The soil sampling plan must describe the soil sampling procedure to be used for each storage and treatment area. The soil sampling plan must also discuss the number of samples to be taken, sampling methods, location of sampling points and rationale used for selecting sampling point locations.

As discussed in the previous section, either biased or statistical sampling methods can be utilized for the soil sampling plan. Alternatively, a combination of both biased sampling and statistical sampling may also be used. This is useful for large area with small portion that are suspected to be contaminated. Regardless of the chosen sampling method, soil samples must be taken at or near the surface and at a certain depth, typically at 3 feet below ground surface and at 6 feet below ground surface. Deeper samples may be required especially when liquid wastes have been managed at the facility, or evidence of cracks or stains are on the surface of the containment areas.

The number of sample locations required depends on conditions such as the size of the area to be sampled, hazardous waste managed at the facility, and the degree of contamination. For this guidance purpose, a minimum of 4 soil sample locations is recommended for a containment area, either for storage or treatment, less than 1,600 square feet. For containment areas larger than 1,600 square feet, there should be one sampling location for each 400 square feet of surface area.

Additionally, if closure performance standards will be based on background levels, the soil sampling plan is required to have background samples. Background soil samples are used to establish the closure performance standards to determine that no soil contamination has occurred. The background sample locations must be from areas that are known not to be impacted by the facility's operations. The soil sampling

plan must describe the background soil sampling procedure, number of background samples to be taken, sampling methods, location of sampling points, and the rationale used for selecting sampling point locations.

All sampling shall follow the procedures specified in the document, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd edition.

The Pacific Northwest National Laboratory developed a software program called Visual Sample Plan (VSP) to assist facility in preparing a soil sampling plan. VSP helps in selecting the right number and location of environmental samples so that the results of statistical tests performed on the data collected via the sampling plan have the required confidence for decision making. The software is free and can be download from the Data Quality Objectives website: <http://dco.pnl.gov>.

## **H. ANALYTICAL TEST METHODS**

All laboratory analyses must be performed by a California Certified Analytical Laboratory. This section must describe the analyses that will be performed on samples. The analysis description must include: waste constituents being analyzed, preparation method, analysis method and detection limit.

All analytical methods used for closure must conform with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition and Title 22, California Code of Regulation, Section 66261.126, Appendix III.

For many waste constituents, there are generally at least two analytical methods available (general and specific). To meet closure performance standards, the method with the lowest detection limit should be used.

## **I. CLOSURE COST ESTIMATE**

The closure plan must provide an estimate of the cost to properly close the facility. The closure cost estimate must consistent with the work proposed in the closure plan with one exception. In the closure plan, the facility may treat its own waste as part of inventory removal. However, for closure cost estimate purposes, all cost for waste removal must be based on shipping and disposing of the waste inventory offsite by a third party contract. The closure cost estimate must consider the following points:

1. The closure cost estimate must be high enough to ensure that, when at any time, the facility begins closure, the cost would not exceed the cost estimate.

2. The closure cost estimate must be based on the cost of hiring a third party to close the facility. A third party is an independent party who cannot be employed by a parent company or by a subsidiary of the facility's company.
3. The closure cost estimate may not incorporate any salvage value that may be recouped with sale of wastes, structures, equipment, and other assets
4. Although the final batch of waste may be removed/treated using the facility's normal operating process, for closure cost estimate purposes, the cost shall reflect the cost of sending waste off- site for treatment or disposal
5. A 20% contingency cost must be added to the final estimate to account for any unknowns or errors
6. The remediation cost for treating/removing contaminated soil may be required as a necessary part of the closure cost estimate.
7. The closure cost estimate must provide sufficient detail for DTSC to fully evaluate its validity.

**The closure cost estimate must be updated when any of the following occur:**

1. Annually for inflation. (To account for annual inflation, the facility may either recalculate estimates every year using that year's current prices or update the cost estimate annually by multiplying the current estimates by an inflation factor);
2. Changes in the facility's operation;
3. An increase in the amount of hazardous waste managed; or
4. Any remediation that may be required at the time of closure.

This table should be used to show the closure cost estimate. **Attach separate pages showing calculations that support the cost estimates.**

Table: Closure Cost Estimate			
Description	Quantity (# of gallons, pounds, etc.)	Cost/Quantity	Total Cost
A. Costs for Removal/Disposal/Treatment of:			
Waste in Containers			
Waste in Tanks			
Washwater/Residue Generated from Closure Activities			
Other Wastes			
SUBTOTAL:			
B. Costs for Removal/Disposal/Treatment of:			
Containers			
Tanks			
Ancillary Equipment			
Structures/Buildings			
SUBTOTAL:			
C. Decontamination Costs:			
Tanks			
Containers			
Ancillary Equipment			
Structures/Buildings			
Additional Equipment			
Removal/Disposal of Decontamination Wastewater			
SUBTOTAL:			

Table: Closure Cost Estimate (continued)			
Description	Quantity (# of gallons, pounds, etc.)	Cost/Quantity	Total Cost
D. Transportation Costs:			
Wastes from Containers			
Wastes from Tanks			
Tanks and Containers			
Structure/Buildings/Equipment			
E. Sampling Costs (includes quality control samples):			
Containers			
Tanks			
Ancillary Equipment			
Structures/Buildings			
Soil			
Washwater/Residue Generated from Closure Activities			
			SUBTOTAL:
F. Closure Certification Costs:			
Preparation of Certification (clerical)			
Preparation of Certification by P.E.			
Inspection by Certified P.E.			
Review by Certified P.E.			
			SUBTOTAL:
			CLOSURE SUBTOTAL of Parts A, B, C, D, E, and F:
			Contingency Factor of 20% of CLOSURE SUBTOTAL:
			TOTAL (CLOSURE SUBTOTAL and Contingency Factor):

## J. CLOSURE SCHEDULE

When the owner or operator decides to close the facility, the owner or operator shall notify DTSC their intent of closure at least 90 days prior to the beginning of the closure plan implementation. DTSC may require the owner or operator to amend the closure plan that time.

The closure plan implementation must comply with the following closure schedule:

1. Wastes must be removed and structures/equipment decontaminated within 90 days of the date that the facility stopped receiving hazardous waste or the closure plan was approved, whichever is later.
2. All closure activities must be completed within 180 days of the date that the facility stopped receiving hazardous waste or the closure plan was approved whichever is later.

## K. CLOSURE HEALTH AND SAFETY PLAN

This section must be submitted when the facility is ready for close. **Therefore, no submittal is necessary for this section at this time, but the Applicant must acknowledge this element in the closure plan.**

At the time of closure, the facility must have a health and safety plan (H&S Plan) that will provide protection to personnel during the closure activities. The H&S Plan must be reviewed and approved by a certified industrial hygienist.

**The health and safety plan must address the following:**

1. Hazard Identification - Identifies the hazards that will be present during closure (e.g., confined spaces, heat stress, chemical hazards, heavy equipment use, etc.).
2. Hazard Evaluation - Evaluates the impact of closure on personnel or public health. The evaluation is usually accomplished by referring to the standard reference for data and guidelines on permissible levels of exposure.
3. Personal Protective Equipment (PPE) - Lists the PPEs that will be used during the closure activities.
4. Environmental Monitoring - Monitoring of atmosphere and personnel to ensure a safe site environment.

5. Site Work Zones - Delineates zones or area at the facility where different types of closure activity will take place. The zones are defined to prevent the spread of hazardous waste
6. Decontamination of Workers - Establishes the procedures for decontaminating closure personnel.

#### **L. CLOSURE CERTIFICATION REPORT**

After all closure activities have been completed, a closure certification must be submitted. The certification must be submitted to DTSC by registered mail within 60 days of completion of closure activity.

##### **The Closure Certification Report must include the following:**

1. A certification signed by an independent professional engineer registered in California in accordance with Title 22, California Code of Regulations, Section 66270.11(d).
2. Supervisory Personnel Description - Identify the person(s) or companies who were responsible for supervision of closure activities at the site, including transportation of waste and sample collection
3. Summary of Closure Activities - Briefly describe the main activities performed for each closure activity.
4. Field Engineer Observation Report
5. Sampling Data and Analysis - All sampling information such as sampling locations, soil boring log, chain of custody, analytical results must be included
6. Discussion of Analytical Results
7. Manifests - Copies of manifests showing the disposition of the waste inventory
8. Modifications and Amendments to Closure Plan
9. Photographs

**The facility also must keep and maintain the following documents at the facility until the closure certification approval:**

1. Approved Closure Plan
2. Copies of the independent Professional Engineer's field observation reports
3. Laboratory results of samples analyzed
4. Quality assurance/quality control demonstrations
5. Manifests
6. Miscellaneous documents
7. Closure certification report

## SECTION X – CERTIFICATIONS

Owner / Operator certifications are available for the following portions of the Standardized Permit application:

1. Security
2. Location, Seismic and Precipitation Information
3. Manifest System, Record Keeping, and Reporting
4. Preparedness and Prevention

The facility owner/operator must carefully read and understand the requirements identified in the certification guidance materials, then maintain the records that demonstrate compliance with the certified portions of the application. Only the signed certifications are to be submitted with the application package.

## SECURITY

I hereby certify the following:

1. I have read and understood Sections 66264.14, and 66270.14(b)(4), Title 22 of the California Code of Regulations (Security).
2. The security procedures and equipment for my facility will be in compliance with these regulations.
3. I understand that this certification is an integral part of the formal application for a Standardized Permit for my facility and that any falsification is equivalent to a false statement under Health and Safety Code Section 25191 and may be grounds for a permit denial.

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Facility Address

## **A. SECURITY (INFORMATION ONLY)**

The Applicant shall prevent unauthorized entry onto the facility. This is to ensure adequate protection against potential hazards to human health, domestic livestock or wildlife. Signs are used to alert employees and visitors of possible dangers within a designated area. Fences or other barriers are used to control access of wildlife, livestock, and unauthorized persons.

## **B. SECURITY MEASURES**

The following security measures must be taken:

1. The facility must be surrounded by a fence kept in good repair. Describe the fence around your facility. Include height, materials used, and other features (e.g. barbed wire).
2. If the perimeter of the facility is not fenced, the security measures must consist of (choose one):
  - a. A 24 hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility
  - b. Controlled entry, at all times, by the use of locked gates and entrances to the active portion of the facility

## **C. SIGNS**

"Hazardous Waste Area" signs must be posted in a conspicuous manner at each entrance to the facility. Additionally, "Hazardous Waste Area" signs shall be placed around the perimeter of the facility such that at least one sign shall be visible from any point of approach to the facility. The signs shall be written in English, Spanish and in any other language predominant in the area of the facility. The exact wording is as follows: "Danger Hazardous Waste Area-Unauthorized Personnel Keep Out". These signs must be legible from a distance of 25 feet.

Signs must be posted within the facility, in the areas where hazardous waste is managed. Additional signs shall be posted at the area where wastes generated from any recycling operation are stored. The signs required within the facility are as follows:

1. "No Smoking Area"
2. "Hard Hat Area"

3. Safety equipment (e.g., fire extinguisher, eye wash and showers)

**D. LIGHTING**

During hours of darkness, sufficient artificial lighting must be provided at the facility to ensure safe and effective operation. Describe the type of lighting, location of the lighting, and wattage, for indoor and outdoor, as applicable.

- E.** Please include whether the artificial lighting at the facility will be used for the following purposes:

1. To handle hazardous waste during indoor and/or night operations.
2. For emergency response after daylight hours.
3. For security measures

## FACILITY LOCATION, SEISMIC AND PRECIPITATION INFORMATION

I hereby certify the following:

1. I have read and understood Sections 66264.25 and 66270.14(b)(11), Title 22, of the California Code of Regulations on Facility location, Seismic and Precipitation Information.
2. I certify that the nearest fault to my facility is \_\_\_\_\_ Fault and is \_\_\_\_\_ feet (miles) away my facility.
3. I certify that my facility is not in the 100-year flood plain; otherwise I will provide the information required under section 66270.14 (b)(11)(D).
4. I understand that this certification is an integral part of the formal application for a Standardized Permit for my facility and that any falsification is equivalent to a false statement under Health and Safety Code Section 25191 and may be grounds for a permit denial.

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Facility Address

## F. FACILITY LOCATION / SITING INFORMATION

### 1. FLOOD PLAINS

Section 66264.18 states that a facility located in a 100-year floodplain shall be designed, constructed, operated and maintained to prevent washout of any hazardous waste, unless the owner or operator can demonstrate to DTSC's satisfaction that the facility would be able to safely remove the waste before the flood waters can reach the facility.

Include as part of your facility operation plan a Federal Flood Insurance Administration Flood Map (available at the federal Office of Housing and Urban Development). Determine if your facility is in a 100-year floodplain, and, if it is, the time lag projected between flood stage and the arrival of water at the facility. If the facility is within a 100-year floodplain, you must do one of the following:

- a. If the facility will be expected to withstand flooding: demonstrate that the facility has been or will be designed, constructed operated and maintained to prevent washout of any hazardous waste. This demonstration must take into account the potential maximum depth of the water, the velocity of the current, potentials impacts from floating debris, how the facility would withstand these stresses, potential undercutting of hazardous waste units and how the facility would be inspected and repaired following a flooding incident. If this option is chosen, the following additional information must be provided:
  - (1) An engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected at the facility during a 100-year flood.
  - (2) Structural or other engineering studies showing the design of operational units (e.g., tanks) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout
- b. Prepare a plan that would allow all hazardous wastes at the facility to be moved out of the flood area. The plan must address issues such as equipment availability, the time needed to completely remove all the waste from the facility, the route over which the waste would be moved, spill prevention, the temporary storage location for the waste, security measures during storage and how the facility would be prepared for the return of the waste.

## 2. DISTANCE FROM HOLOCENE FAULTS

Documentation must be submitted to show whether the facility is located within 3,000 feet of a Holocene fault. This information is available from local city or county planning departments or at the California Department of Mines and Geology library (916) 327-1850. If the facility is located within 3,000 feet of a Holocene fault, you must also submit a geologic analysis that demonstrates that no Holocene faults pass within 200 feet of the portions of the facility used for hazardous waste management.

## 3. PRECIPITATION DESIGN

All cover and drainage control systems must be designed to function without failure when subjected to a 24-hour probable maximum precipitation storm.

## MANIFEST SYSTEM, RECORD KEEPING AND REPORTING

I hereby certify the following:

1. I have read and understood sections 66264.70 through 66264.78, Title 22, of the California Code of Regulations on Manifest System, Record Keeping and Reporting requirements. I will have or prepare, for my facility, the required records and reports to be in compliance with all applicable regulations.
2. I certify that a copy of the required records or reports will be maintained at my facility and will be available to local, state or federal agencies upon request. I understand that this certification is an integral part of the formal application for a standardized permit for my facility. And that any falsification is equivalent to a false statement under Health and Safety Code section 25191 and may be grounds for a permit denial.
3. My facility is (or is not) an offsite facility. I have sent a notice to generators that may use my facility's services and I have the appropriate permit(s) (section 66264.12(b)). A copy of my notice is kept in my facility.

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Facility Name and Address

## **MANIFESTING (INFORMATION ONLY)**

Chapter 12, Article 2 requires hazardous waste generators to use a hazardous waste manifest. Chapter 14, section 66264.71 requires facilities that receive manifested wastes to process the manifest in specified ways.

A standardized permit facility may be involved in manifesting from two different aspects:

- All hazardous wastes being transported from the original generator to the facility for storage and/or treatment must be accompanied by a manifest or other form of shipping paper.
- If the facility sends any hazardous wastes to another facility for treatment or disposal, the facility is the generator of that waste. The waste must be accompanied by a manifest or other form of shipping paper.

### **MANIFESTING - GENERATOR'S RESPONSIBILITIES:**

At a minimum, a generator (i.e. either an original producer or a facility shipping waste to another facility) must complete Items 1 through 16 of the manifest. These items cover the generator's identification number, mailing address, phone number; the transporter's name and identification number; and the name, address and identification number of the facility designated to receive the waste. The generator may indicate an alternate facility in Item 15. In addition, the generator must provide the Department of Transportation (DOT) description of the waste (including proper shipping name, hazard class, identification number and technical description), number and type of containers, total quantity and volumetric measurements. The DOT information required on the manifest can also satisfy federal DOT hazardous materials shipping document requirements.

The generator must sign the manifest for it to be certified. The generator must also ensure that the transporter signs and dates the manifest upon acceptance of the waste. The generator must retain one copy of the manifest for three years or until a signed copy is received from the destination facility, in which case this copy is retained for three years. The remaining copies of the manifest are given to the transporter

### **UNCONFIRMED MANIFESTS - GENERATOR'S RESPONSIBILITIES:**

If a generator does not receive a copy of the manifest from the destination facility within 35 days of the date the waste was accepted

by the initial transporter, the generator must contact the transporter and/or the facility to determine the status of the waste. If the generator still has not received a copy of the manifest within 45 days, the generator must send an Exception Report to DTSC describing the actions being taken to resolve the situation, along with a copy of the relevant manifest.

#### REQUIREMENTS FOR RAIL AND WATER SHIPMENTS - GENERATOR'S RESPONSIBILITIES:

If waste is being transported from the site of generation solely by rail, the generator must send at least three copies of the properly completed, dated and signed manifest to the designated facility. If the waste will initially be transported by rail, then transferred to a non-rail carrier, the generator must send at least 3 copies of the signed and completed manifest to the first non-rail transporter. If the waste is being transported from the United States by mail, the generator must send at least three copies of the signed and completed manifest to the last rail transporter that handles the waste in the United States.

If the hazardous waste is being shipped within the United States solely by water, the generator must send three copies of the properly completed, dated and signed manifest to the designated facility. If the waste is being exported from the United States, the generator must send 3 copies of the completed and signed manifest to the last water transporter that handles the waste in the United States.

#### FACILITY ACCEPTANCE OF MANIFESTED WASTES:

A facility must be permitted by DTSC to accept the type of waste designated on the manifest. The facility owner or operator (or his agent) is required to verify that the information on the manifest is correct by signing and dating the manifest at Item 20. The facility must give at least one signed copy of the manifest to the transporter and send a signed copy of the manifest to the generator and to DTSC within 30 days of the receipt of the hazardous waste. A copy of the manifest must be retained at the facility for three years from the date the hazardous waste is received.

#### MANIFEST DISCREPANCIES - FACILITY RESPONSIBILITIES

If there is a significant discrepancy between the waste received and the waste designated on the manifest, the differences must be recorded at item 19 on the manifest. A significant discrepancy is any variation (greater than 10% for bulk or any variation for piece count for batch waste) in the type or quantity of waste reported on the manifest and the type or quantity actually received. The facility must

make a note on the manifest and attempt to resolve the discrepancy by contacting the generator and/or the transporter. If the discrepancy is not resolved within 15 days after receipt of the waste, the facility must send a letter describing the discrepancy and actions taken to resolve it, along with a copy of the relevant manifest, to DTSC.

In addition, any facility that accepts waste not accompanied by a manifest is required to submit an Un-manifested Waste Report. The identification numbers, names and addresses of all known handlers of the un-manifested waste should be included in the report, as well as reasons for the lack of a manifest (if known) and the methods used to treat or store the waste.

#### EXPORTING HAZARDOUS WASTE:

Before hazardous waste can be exported out of the United States, a Notification of Intent to Export must be submitted to DTSC, and, if the waste is a RCRA waste, to the U.S. EPA. See Title 22, CCR, Chapter 12, Article 5, for details

#### VERY SMALL QUANTITY LOAD TRANSPORTATION:

Up to 5 gallons or 50 pounds of a hazardous waste may be transported without a manifest by the generator of that waste to an authorized hazardous waste management facility. The generator must comply with the following:

Wastes are transported in closed containers that prevent spills.

Wastes are not mixed within a container during transportation.

If the waste is from a business, it may not be extremely hazardous waste.

The generator must not generate more than a cumulative total of 100 kilograms (220 pounds) of hazardous waste in any month.

The generator does not accumulate more than 1,000 kilograms (2,200 pounds) of hazardous waste at any time.

#### MILK RUN TRANSPORTATION:

Certain specified hazardous waste may be transported using a modified manifesting procedure wherein one manifest covers all the waste a driver transports in one day. The waste must be transported by a registered transporter. The transporter must apply for a Transporter Regulatory Exemption (DTSC 8463). See sections

66263.41(d) and 66263.42 for details.

### SMALL LOAD OPERATIONS

Subject to certain restrictions, up to 100 kilograms (220 pounds) per load and 1,000 kilograms (2,220 pounds) per month may be transported without using a manifest and without being transported by a registered transporter. Instead, a shipping paper (bill of lading) must accompany the waste. The transporter must apply for a Transporter Regulatory Exemption (DTSC 8463). See sections 66263.41(d) and 66263.46 for details.

### USED OIL

Used oil may be transported to a transfer facility or from a transfer facility to a permitted treatment facility using a modified manifest procedure similar to a milk run, except that the transporter need not apply for a Transporter Regulatory Exemption and the individual used oil generators do not have to have Identification Numbers. See Health and Safety Code section 25250.8 for details.

### **RECORD KEEPING:**

Unless otherwise specified, the following records, reports, documents, amendments, revisions and any modifications to the facility must be maintained at the facility until closure is completed. The documents listed below must be maintained at the facility and must be accessible at all times to operating personnel and available for inspection by any representative of DTSC or any other agency with appropriate statutory authority. The retention period for these records is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by DTSC.

Standardized Permit Document, and/or documentation of any form(s) of authorization to operate the facility.

Operating records (section 66264.73).

Training records for current employees (section 66264.16).

Waste analysis plan (section 66264.13).

Contingency plan (section 66264.53).

Closure plan (section 66264.112).

Closure cost estimates (section 66264.142) and financial responsibility documents.

Inspection schedules (section 66264.15).

Copies of the confirmation to the generator that the facility has the authorization for and will accept the waste the generator is shipping (section 66264.12).

The following records must be retained for three years:

Inspection records (section 66264.15).

Training records for employees, including former employees (section 66264.16).

Copy of each manifest received (section 66264.71).

For generators with milk run or small load operations agreements (per section 66263.42 or 66263.46), copies of all notifications, certifications and waste analysis data for compliance with all land disposal restriction requirements (section 66268.7).

The following records must be retained for five years:

- For generators who use the regular manifest procedures, copies of all notifications, certifications and waste analysis data for compliance with land disposal restriction requirements (section 66268.7).

1. OPERATING RECORD (section 66264.73):

The operating record must include the information discussed below. The operating record must be kept up-to-date at all times.

- a. Record of each hazardous waste received, and the method(s) and date(s) of its transfer, treatment or storage at the facility. Use the handling codes specified in Appendix I of Chapter 14, title 22.
- b. The location and quantity of each hazardous waste within the facility cross-referenced to the number of the specific manifest under which that waste was accepted.
- c. Records of all required waste analyses (sections 66264.13, 66264.193, 66268.7).
- d. The reports from all incidents that required implementation of the contingency plan (section 66264.56).
- e. Inspection records (section 66264.15).

- f. All closure cost estimates (section 66264.142). Note that these must be updated annually based on facility operations and on the inflation factor information provided by the Implicit Price Deflator for Gross National Product published by the U. S. Department of Commerce in its Survey of Current Business.
- g. All land disposal restriction documents (66268.7).

## REPORTING

### 24-HOUR REPORTING

The owner or operator will report to DTSC any noncompliance that may endanger health or the environment. Information will be provided verbally within 24 hours from the time the owner/operator becomes aware of the noncompliance.

The following must be reported verbally within 24 hours to the appropriate regional DTSC office:

Information concerning any release of hazardous waste that may endanger public drinking water supplies.

Any information of any release or discharge of hazardous waste, or of fire or explosion from the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause will include:

Name, address, and telephone number of the owner or operator.

Name, address, and telephone number of facility.

Date, time, and type of incident.

Name and quantity of material(s) involved.

The extent of injuries, if any.

An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable.

Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission will also be provided within fifteen (15) days of the time the owner/operator becomes aware of the circumstances. The written submission

will contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance

## ANNUAL REPORT

Operator will prepare and present to DTSC, upon request, one copy of an Annual Report. The report will be on the form designated by DTSC and must be completed and submitted to DTSC by March 1 of each year. As a courtesy, DTSC will notify facilities and make the report forms available, prior to that date. The report will include the following information:

The total volume of the hazardous waste managed at the beginning and end of the preceding calendar year.

The total volume of hazardous waste received during the preceding calendar year.

The total volume of hazardous waste recycled during the preceding calendar year, itemized as follows:

- (1) Prepared for reuse as original product.
- (2) Consumed in the process of preparing for reuse, including waste generated.
- (3) Prepared for reuse other than as original product, specifying each type of other use.
- (4) Not recycled but transported off-site.
- (5) Any other information DTSC may require.

## PREPAREDNESS AND PREVENTION

I hereby certify the following:

1. I have read and understood Sections 66264.30 through 66264.35, 66264.37, and 66270.14(b)(8) and (b)(9), Title 22 of the California Code of Regulations (Preparedness and Prevention).
2. The procedures and equipment for my facility will be in compliance with these regulations. My facility will be designed, constructed, maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
3. I understand that this certification is an integral part of the formal application for a Standardized Permit for my facility and that any falsification is equivalent to a false statement under Health and Safety Code Section 25191 and may be grounds for a permit denial.

---

Print Name and Title

---

Signature

---

Date

---

Facility Name and Address

## **Article 3. Preparedness and Prevention**

### **§66264.30. Applicability.**

The regulations in this article apply to owners and operators of all hazardous waste facilities, except as section 66264.1 provides otherwise.

### **§66264.31. Design and Operation of Facility.**

Facilities shall be located, designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

### **§66264.32. Required Equipment.**

All facilities shall be equipped with the following, unless it can be demonstrated to the Department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

- (a) an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- (b) a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;
- (c) portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- (d) water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

### **§66264.33. Testing and Maintenance of Equipment.**

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

### **§66264.34. Access to Communications or Alarm System.**

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the Department has ruled that such a device is not required under section 66264.32.

(b) If there is ever just one employee on the premises while the facility is operating, the employee shall have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless the Department has ruled that such a device is not required under section 66264.32.

### **§66264.35. Required Aisle Space.**

The owner or operator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it is demonstrated pursuant to section 66270.14(b)(6) to the Department that aisle space is not needed for any of these purposes.

## SECTION XI – FINANCIAL RESPONSIBILITY FOR STANDARDIZED PERMIT FACILITIES

Please indicate in the Operation Plan what financial mechanisms (closure assurance and sudden and accidental liability) you will have for your facility. Mail a copy of the documents to DTSC at the address below.

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Note: Every facility must establish two types of financial responsibility before it begins operating, and maintain them until the facility has been certified closed:

- A. CLOSURE ASSURANCE:** Closure assurance is required to make sure there is enough money available to clean close the facility. The amount necessary will vary depending on the size of the facility and the activities conducted; the calculations for a standardized permit facility are made in the same way as for a facility with a full permit. The amount of closure assurance needed is to be estimated as part of the closure plan calculations in Form 1179 in the application packet.

There are several financial mechanisms that an owner or operator may use to demonstrate this assurance. Please see title 22, article 8, particularly section 66264.143.

- B. SUDDEN AND ACCIDENTAL LIABILITY:** Liability coverage is required to make sure there is enough money available to deal with any accidents or upsets at the facility. There are set amounts of liability unique to standardize permit facilities; the Series B, C and Small-Quantity C levels are significantly less than those required for a facility with a full permit. The amounts are specified in existing section title 22, section 67800.5 (which will become new section 66270.69.4 in the proposed regulations):

1. Series A \$1 million per occurrence/\$2 million annual aggregate
2. Series B \$500,000 per occurrence/\$1 million annual aggregate
3. Series C \$300,000 per occurrence/\$600,000 annual aggregate
4. Series Small-Quantity C \$100,000 per occurrence/\$200,000 annual aggregate

There are several financial mechanisms that an owner or operator may use to demonstrate this coverage. Please see title 22, article 8 particularly section 66264.147.

If you have questions about establishing and maintaining financial responsibility for your facility, you may contact:

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Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, California 95826-3200  
(916) 255-3628,