A Guide to Standards for the handling and disposal of Asbestos Containing Waste at solid waste disposal sites

California Integrated Board Permitting and Enforcement Branch

Waste Management Enforcement Division
## Table of Contents

**TABLE OF CONTENTS**

- ABOUT THIS GUIDE TO THE ACW REGULATIONS........................................ii
- ABOUT THE ADDITIONAL INFORMATION FOR IMPLEMENTING THE ACW REGULATIONS...iv

**ARTICLE 1.   GENERAL ............................................................1**
- §17897 Purpose, Scope and Applicability.............................................1
- §17897.10 Definitions..............................................................................1
- §17897.15 Schedules of Compliance........................................................3

**ARTICLE 2.  STANDARDS ...........................................................5**
- §17897.16 General Standards.................................................................5
- §17897.18 Design and Operating Requirements.........................................5
- §17897.19 Additional Requirements.......................................................6
- §17897.20 Inspection Requirements.......................................................10

**ARTICLE 3.  EXCAVATION REQUIREMENTS..........................................11**
- §17897.21 Excavation Requirements......................................................11

**ARTICLE 4.  CLOSURE AND POST CLOSURE.......................................13**
- §17897.24 General.................................................................................13

**ARTICLE 5.  LEA STANDARDS AND CERTIFICATION..............................13**
- §17897.25 Designated ACW Program....................................................13

**HOW DO LAND DISPOSAL RESTRICTIONS APPLY TO ACW DISPOSAL SITES?......15**

**WHAT’S IN AN OPERATING RECORD?.....................................................16**

**WHAT’S IN A CONTINGENCY PLAN?.......................................................16**

**IF THEY ALREADY HAVE A BUSINESS PLAN, DO THEY NEED TO PREPARE A CONTINGENCY PLAN? .......16**

**WHEN ARE INSPECTIONS REQUIRED?..................................................17**

**WHAT SHOULD BE IN A TRAINING PROGRAM?..................................17**
About this guide to the ACW regulations

This guide is formatted so that the text of the regulations is accompanied by notes that add clarification. These notations are in the shaded cells to the left of the text of the regulation. The note is a reference or plain English clarification. Some of the subsections are explained in greater detail in the accompanying text.

### Standards for the Handling and Disposal of Asbestos Containing Waste

<table>
<thead>
<tr>
<th>Section number and description</th>
<th>Actual text of the regulation</th>
<th>A reference to the source of the requirement</th>
<th>This is an example of a reference and a clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>§17897.19. Additional Requirements</td>
<td>(a) The owner or operator shall not accept asbestos containing waste without having received an Identification Number as described in section 68260.10, title 22, California Code of Regulations (CCR), following the procedure specified by the Department of Toxic Substances Control.</td>
<td>The disposal site needs an EPA Identification Number prior to accepting ACW.</td>
<td>The disposal site needs an EPA Identification Number prior to accepting ACW.</td>
</tr>
<tr>
<td></td>
<td>(b) The owner or operator shall comply with the applicable title 14 requirements as they apply to landfills and the additional title 8 and title 22 requirements as specified:</td>
<td>The disposal site must meet the applicable disposal site standards in Title 14 and the additional Title 8 and Title 22 requirement as follows:</td>
<td>The disposal site must meet the applicable disposal site standards in Title 14 and the additional Title 8 and Title 22 requirement as follows:</td>
</tr>
<tr>
<td></td>
<td>(1) Provide site security as specified in article 7.4 of chapter 3 of this division to prevent unauthorized entry and minimize the unauthorized entry of persons into the designated asbestos containing waste disposal area. These requirements include:</td>
<td>The active disposal area must meet the security requirements for solid waste disposal sites including:</td>
<td>The active disposal area must meet the security requirements for solid waste disposal sites including:</td>
</tr>
<tr>
<td></td>
<td>(A) A surveillance system which continuously monitors and controls entry by the public into the designated asbestos containing waste disposal area or means to control entry into the designated asbestos containing waste disposal area at all times, unless the entire facility meets the above requirements or the facility does not allow public access.</td>
<td>Provide a method for continuous monitoring and control of the ACW disposal area. If the entire disposal site is secure or does not allow public access, then this standard is met.</td>
<td>Provide a method for continuous monitoring and control of the ACW disposal area. If the entire disposal site is secure or does not allow public access, then this standard is met.</td>
</tr>
<tr>
<td></td>
<td>(B) Post warning signs as specified in this section around the designated asbestos containing waste disposal area. These signs must be posted in a manner so that a person can read them. These signs shall be at least ( 51 \text{ cm} \times 36 \text{ cm} ) (20 inch x 14 inch) and state the following information:</td>
<td>Warning signs must be posted around the active disposal area so that they can be read. The sign must be at least 20&quot; x 14&quot;.</td>
<td>Warning signs must be posted around the active disposal area so that they can be read. The sign must be at least 20&quot; x 14&quot;.</td>
</tr>
<tr>
<td></td>
<td>The sign must state the following:</td>
<td>The sign must state the following:</td>
<td>The sign must state the following:</td>
</tr>
<tr>
<td></td>
<td>Each line has a specific minimum letter height. The size of each line was selected to make the sign legible from 25 feet. Sans serif, Gothic and Block fonts are used because they are easier to read at a distance. The legend also needs to be in Spanish and any other common language of the area (e.g., Hmong, Vietnamese, etc.)</td>
<td>The top line shall be in at least one and three fourths inch (4.4 cm) type. The second line shall be in at least one inch (2.5 cm) type. The third line shall be in at least three fourths inch (1.9 cm) type. The last line shall be in at least 48 point type. All four lines shall be in Sans Serif, Gothic or Block type. The line spacing shall be equal or greater to the height of the upper line. The legend shall be written in English, Spanish and in any other language predominant in the area surrounding the solid waste facility.</td>
<td>The top line shall be in at least one and three fourths inch (4.4 cm) type. The second line shall be in at least one inch (2.5 cm) type. The third line shall be in at least three fourths inch (1.9 cm) type. The last line shall be in at least 48 point type. All four lines shall be in Sans Serif, Gothic or Block type. The line spacing shall be equal or greater to the height of the upper line. The legend shall be written in English, Spanish and in any other language predominant in the area surrounding the solid waste facility.</td>
</tr>
<tr>
<td></td>
<td>A disposal site record must be kept with this additional information.</td>
<td>Operating records are kept by Title 22 and RCRA Subtitle C disposal sites. The information must be maintained until closure of the disposal site. The operating record (or a complete copy) should be kept on site during the active life of the disposal site.</td>
<td>Operating records are kept by Title 22 and RCRA Subtitle C disposal sites. The information must be maintained until closure of the disposal site. The operating record (or a complete copy) should be kept on site during the active life of the disposal site.</td>
</tr>
<tr>
<td></td>
<td>An adequacy that Title 22 treatment standards are being met.</td>
<td>Operating records are kept by Title 22 and RCRA Subtitle C disposal sites. The information must be maintained until closure of the disposal site. The operating record (or a complete copy) should be kept on site during the active life of the disposal site.</td>
<td>Operating records are kept by Title 22 and RCRA Subtitle C disposal sites. The information must be maintained until closure of the disposal site. The operating record (or a complete copy) should be kept on site during the active life of the disposal site.</td>
</tr>
<tr>
<td></td>
<td>(2) Maintain disposal site records as specified in article 7.3 of chapter 3 of this division.</td>
<td>(B) The facility shall maintain an operating record as part of the disposal site record. This operating record shall include the following information: the quantity and date of each shipment of asbestos containing waste received, the disposal location(s) of each shipment of asbestos containing waste, a summary report of all incidents which require implementation of the contingency plan, results of inspection required by section 17897.20, and training records as specified in subsection (c)(2)(B) of this section. The operating record shall be maintained until closure of the facility.</td>
<td>(B) The facility shall maintain an operating record as part of the disposal site record. This operating record shall include the following information: the quantity and date of each shipment of asbestos containing waste received, the disposal location(s) of each shipment of asbestos containing waste, a summary report of all incidents which require implementation of the contingency plan, results of inspection required by section 17897.20, and training records as specified in subsection (c)(2)(B) of this section. The operating record shall be maintained until closure of the facility.</td>
</tr>
</tbody>
</table>
About the additional information for implementing the ACW regulations

The pages at the end of this guide to the ACW regulations have additional information about interpreting the Title 22 inspired requirements. This additional information is included to provide clarification on topics addressed in the text of the regulations. The additional information pages follow this format.

**HOW DO LAND DISPOSAL RESTRICTIONS APPLY TO ACW DISPOSAL SITES?**


*All* hazardous wastes in California are subject to either state or federal land disposal restrictions. Asbestos Containing Waste (ACW) is subject only to the California requirements in Title 22 CCR, Division 4.5, Chapter 18.

**Restricted vs. Prohibited wastes:**

*Restricted wastes* are hazardous wastes which are restricted from disposal to land. *Prohibited wastes* are restricted wastes which have a treatment standard in effect. California regulations make *ALL* hazardous wastes restricted wastes. All shipments of restricted wastes *must* be accompanied or preceded by notification. All shipments of ACW sent for disposal must have an accompanying notification. Typically the notification is sent in advance of the shipment and is kept on file at the disposal site.

**Notification vs. Certification:**

A *Notification statement* provides information about restricted waste and its treatment standard(s). A *Certification statement* provides assurance that the waste meets the appropriate treatment standard(s) and may be disposed to land.

Unless a variance or extension is granted, restricted waste becomes a prohibited waste on the effective date of the appropriate treatment standard(s) for that waste. ACW has a treatment standard (22 CCR 66268.114). Shipments of ACW to disposal sites require notifications and certifications. An exception to this requirement is for generators with CA ID numbers issued for residential asbestos abatement or 90 day provisional numbers (see the Text box above). These generators are not required to send a notification and certification.

### Identification number begins with:

<table>
<thead>
<tr>
<th>CA</th>
<th>US EPA</th>
<th>EPA ID number for federally owned facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP</td>
<td>US EPA</td>
<td>Provisional EPA ID number (temporary number)</td>
</tr>
<tr>
<td>CAL</td>
<td>DTSC</td>
<td>Permanent CA ID number (non-RCRA regulated)</td>
</tr>
<tr>
<td>CAC</td>
<td>DTSC</td>
<td>CA ID number (temporary)</td>
</tr>
<tr>
<td>CAS</td>
<td>DTSC</td>
<td>CA ID number for emergency response (“haz mat incidents”)</td>
</tr>
<tr>
<td>CAH</td>
<td>DTSC</td>
<td>CA ID number for household hazardous waste events</td>
</tr>
<tr>
<td>CAX</td>
<td>DTSC</td>
<td>CA ID number for natural disasters no longer valid</td>
</tr>
</tbody>
</table>

**Is there anything I can tell from the EPA ID number?**

EPA ID numbers (identification numbers) are assigned to generators, transporters, treaters, storers and disposers of hazardous waste. Identification numbers are necessary to track hazardous wastes from the “cradle to the grave.” The identification number is assigned by either U.S. EPA (EPA ID Number) or by the Department of Toxic Substances Control (California ID number). EPA ID numbers are reserved for facilities that generate, transport, store, treat or dispose of RCRA hazardous wastes. ACW is not a RCRA hazardous waste; California does regulate ACW as a hazardous waste. In order to track the generation, transportation, storage, treatment and disposal of California hazardous wastes (non-RCRA waste), DTSC assigns California ID numbers to generators that are not otherwise regulated by RCRA. All identification numbers are twelve digits. Begin with the US Postal Service state abbreviation as the first two digits and are followed by either a letter and nine numbers or ten numbers. For example:

- 3 letters, 9 numbers: CA123456789
- 2 letters, 10 numbers: CA1234567890

The following table illustrates the issuing agency and type of identification numbers that can be seen on a hazardous waste manifest.
TITLE 14, DIVISION 7, CHAPTER 3.5.
STANDARDS FOR HANDLING AND DISPOSAL OF ASBESTOS CONTAINING WASTE

Article 1. General

§17897 Purpose, Scope and Applicability
(a) The purpose of this chapter is to establish minimum standards that define the acceptable management of asbestos containing waste. The standards of this chapter apply only to the owner or operator of a solid waste facility who disposes of asbestos containing waste, pursuant to Health and Safety Code section 25143.7.

(b) Nothing in these Articles shall be construed as relieving any owner, operator, or designee from the obligation of obtaining all required permits, licenses, or other clearances and complying with all orders, laws, regulations, or reports, or other requirements of other regulatory or enforcement agencies, including but not limited to, local health agencies, regional water quality control boards, air quality management districts or air pollution control districts, local land use authorities, and fire authorities.

Note: Authority cited: Section 44820, Public Resources Code.

§17897.10 Definitions
The following definitions are to be used only for the purposes of this Chapter.

"Adequately wet" means waste that is sufficiently mixed or penetrated with liquid to prevent the release of finely divided particles. Spraying water over the surface of asbestos containing waste does not satisfy "adequately wet" requirement.

"Asbestos Containing Waste" or "ACW" means asbestos containing waste managed at a landfill as authorized by section 25143.7, chapter 6.5 of the California Health and Safety Code which contains greater than one percent (1%) friable asbestos by weight. Asbestos containing waste does not include waste contaminated with another hazardous waste as identified in chapter 11, division 4.5, title 22, California Code of Regulations.
- **Designated area** is defined as to specify the actual active disposal area. The definition requires the area to be defined and located on a survey plat for future identification purposes.

- **Disposal** is defined as the final deposition of waste.

- **Disposal Area** means an area specifically designated for the disposal of asbestos containing waste at a solid waste facility. A specifically designated area is a dedicated disposal area. The area shall be identified on a survey plat containing the location and dimensions of the area with respect to permanently surveyed vertical and horizontal control monuments. This survey plat shall be prepared and certified by a professional land surveyor licensed in California or a civil engineer authorized to practice land surveying in California. The designated area shall be delineated with physical barriers, such as a fence, and signs.

- **Enforcement Agency** means the California Integrated Waste Management Board or its designee.

- **Excavation** means any activity that exposes buried asbestos containing waste to the atmosphere.

- **Handling** means the collection, processing, treatment, or packaging of asbestos containing waste for disposal.

- **Leak tight** means that solids or liquids cannot escape or spill out. It also means dust tight.

- **Natural barrier** means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes, or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

- **Solid waste facility** means any class II or class III landfill as defined in sections 2532 and 2533, chapter 15, title 23, California Code of Regulations (CCR); and any unclassified waste management unit which accepts inert waste as defined in section 2524, chapter 15, title 23, CCR.
"Visible emissions" means any emissions that are visually detectable without the aid of instrument, coming from asbestos containing waste or from handling and disposal of asbestos containing waste. This does not include condensed uncombined water vapor.


§17897.15 Schedules of Compliance

(a) The owner or operator of a solid waste facility that disposes of asbestos containing waste (ACW) in accordance with section 25143.7 of the Health and Safety Code on or after August 1, 1996 does not posses a solid waste facilities permit shall:

(1) Comply with the security, inspection, manifest system, recordkeeping and reporting requirements specified in this chapter on or before October 30, 1996.

(2) The owner or operator shall implement the approved change(s) according to a schedule of compliance established by the Enforcement Agency.

(3) Obtain a solid waste facilities permit on or before November 29, 1997.

(b) The owner or operator of a solid waste facility that disposes of ACW in accordance with section 25143.7 of the Health and Safety Code on or after August 1, 1996 and has a solid waste facilities permit which regulates the disposal of asbestos containing waste shall:

(1) Comply with the security, inspection, manifest system, recordkeeping and reporting requirements specified in this chapter on or before October 30, 1996.

(2) The owner or operator shall implement the approved change(s) according to a schedule of compliance established by the Enforcement Agency.
### Standards for the Handling and Disposal of Asbestos Containing Waste

<table>
<thead>
<tr>
<th>RDSI amendments, if necessary, need to be approved by the EA within one year of the effective date of the regulations.</th>
<th>(3) Obtain approval for RDSI amendments on or before November 29, 1997.</th>
</tr>
</thead>
<tbody>
<tr>
<td>This subsection applies to landfills which have a SWF permit that does not address conditions for handling ACW and were not accepting ACW prior to the adoption of the regulations.</td>
<td>(c) The owner or operator of a solid waste facility that disposes of ACW in accordance with section 25143.7 of the Health and Safety Code on or after August 1, 1996 and has a solid waste facilities permit which does not regulate the disposal of asbestos containing waste shall:</td>
</tr>
<tr>
<td>These disposal sites need to:</td>
<td></td>
</tr>
<tr>
<td>Meet the minimum standards.</td>
<td>(1) Comply with the security, inspection, manifest system, recordkeeping and reporting requirements specified in this chapter on or before October 30, 1996.</td>
</tr>
<tr>
<td>A general requirement to meet conditions set by an EA compliance schedule.</td>
<td>(2) The owner or operator shall implement the approved change(s) according to a schedule of compliance established by the Enforcement Agency.</td>
</tr>
<tr>
<td>The disposal site must have a revised SWF permit within one year after the effective date.</td>
<td>(3) Obtain a revised solid waste facilities permit on or before November 29, 1997.</td>
</tr>
<tr>
<td>This subsection applies to landfills which already have a SWF permit but were accepting ACW prior to the adoption of the regulations.</td>
<td>(d) The owner or operator of a solid waste facility that has not disposed of ACW in accordance with section 25143.7 of the Health and Safety Code on or before August 1, 1996 and intends to dispose of ACW shall file an application for a permit revision request pursuant to article 3.1, chapter 5 of this division to the Enforcement Agency and comply with the provisions specified in this chapter.</td>
</tr>
<tr>
<td>This subsection applies to new solid waste landfills or new unclassified waste management units.</td>
<td>(e) The owner or operator of a new solid waste facility who intends to dispose of ACW in accordance with section 25143.7 of the Health and Safety Code after August 1, 1996 shall file an application for a new permit pursuant to article 3.1, chapter 5 of this division to the Enforcement Agency and comply with the provisions specified in this chapter.</td>
</tr>
</tbody>
</table>

Article 2. Standards

§17897.16  General Standards

The owner or operator of any solid waste facility that disposes of asbestos containing waste shall ensure that the designated asbestos containing waste disposal area complies with requirements specified in this division. The designated asbestos containing waste disposal area shall be located, designed, constructed, operated and maintained so that it will protect public health, worker safety, and the environment.


§17897.18  Design and Operating Requirements

The owner or operator of a solid waste facility that disposes of asbestos containing waste shall:

**Designate a specific ACW disposal area.**

(a) establish a designated asbestos containing disposal area for the disposal of asbestos containing waste as defined in section 17897;

**Control access to the ACW disposal area.**

(b) establish a site control program with work zones and control points at the designated asbestos containing waste disposal area. At a minimum, work zones should be established for the active face, designated disposal area, handling and support areas;

**This subsection prohibits mixing of refuse with ACW.**

(c) segregate asbestos containing waste from refuse. At no time shall asbestos containing waste be disposed with refuse;

**Prevent airborne emissions outside the active disposal area.**

(d) establish a means to prevent any visible emissions outside the designated asbestos containing waste disposal area during handling and disposal operations;

**Don’t open/rupture/damage packaging or containers of ACW.**

(e) maintain the integrity of leak-tight containers and/or packaging at all times during the handling and disposal operations;
No compacting of ACW prior to application of cover.

- (f) minimize the release and exposure of asbestos containing waste after placement in the disposal area by not compacting the waste prior to application of cover, at no time shall compaction equipment come into contact with asbestos containing waste containers or packaging;

Apply cover material.

- (g) after deposit, the owner or operator shall cover the asbestos containing waste with sufficient cover material to ensure complete coverage of the disposed asbestos containing waste and prevent re-exposure during continuing disposal operations.

Application of cover should be after deposit of ACW. However, once every “operational hour” should be sufficient. An “operational hour” would occur during active placement of ACW. This subsection also allows for disposal sites with no public access to have an alternate cover frequency as deemed appropriate by the EA.

- (h) cover shall be applied to the asbestos containing waste at a frequency that minimizes releases to the environment and threats to human health, but at a minimum of once every operational hour. An alternative frequency may be prescribed if the Enforcement Agency deems it appropriate and the facility has no public access.


§17897.19 Additional Requirements

- (a) The owner or operator shall not accept asbestos containing waste without having received an Identification Number as described in section 66260.10, title 22, California Code of Regulations (CCR), following the procedure specified by the Department of Toxic Substances Control.

The disposal site needs an EPA Identification Number prior to accepting ACW.

- (b) In addition to any requirements already imposed on landfills by Title 14, Division 7, Chapter 3 (commencing with section 17200) and Chapter 5 (commencing with section 18010), and in lieu of any requirements imposed by Title 8 and Title 22, the owner or operator shall comply with the following requirements:
The active disposal area must meet the security requirements for solid waste disposal sites including:

1. Provide additional site security to that required in article 7.4 of chapter 3 of this division (commencing with section 17656) to prevent unauthorized entry of persons into the designated asbestos containing waste disposal area. These requirements include:

   A method for continuous monitoring and control of the ACW disposal area. If the entire disposal site is secure or does not allow public access, then this standard is met.

   A surveillance system which continuously monitors and controls entry by the public into the designated asbestos containing waste disposal area or means to control entry into the designated asbestos containing waste disposal area at all times, unless the entire facility meets the above requirements or the facility does not allow public access.

   Warning signs must be posted around the active disposal area so that they can be read. The sign must be at least 20”x14”.

   Post warning signs as specified in this section around the designated asbestos containing waste disposal area. These signs must be posted in a manner so that a person can read them. These signs shall be at least 51 cm X 36 cm (20 inch x 14 inch) and state the following information:

   DANGER
   Asbestos Waste Disposal Site
   Do Not Create Dust
   Breathing Asbestos Is Hazardous To Your Health

   Each line has a specific minimum letter height. The size of each line was selected to make the sign legible from 25 feet. Sans serif, Gothic and Block fonts are used because they are easier to read at a distance. The legend also needs to be in Spanish and any other common language of the area (e.g., Hmong, Vietnamese, etc.).

   The top line shall be in at least one and three fourths inch (4.4 cm) type. The second line shall be in at least one inch (2.5 cm) type. The third line shall be in at least three fourths inch (1.9 cm) type. The last line shall be in at least 48 point type. All four lines shall be in Sans Serif, Gothic or Block type. The line spacing shall be equal or greater to the height of the upper line. The legend shall be written in English, Spanish and in any other language predominant in the area surrounding the solid waste facility.

   Disposal site records must be kept with additional information as required in Title 22.

   In addition to disposal site records specified in article 7.3 of chapter 3 of this division (commencing with section 17636), maintain the additional information required by article 5, chapter 15, division 4.5, title 22, CCR as it relates to hazardous waste manifests and recordkeeping.
An adequacy that Title 22 treatment standards are being met. The treatment standards are required for hazardous wastes disposed of in landfills. A generator of waste will include a statement that a waste meets, does not meet the applicable treatment standard.

(A) The solid waste facility shall comply with the requirements of chapter 18, division 4.5, title 22, CCR as they apply to the notification/certification/treatment of asbestos containing waste prior to land disposal. At a minimum, the solid waste facility should ensure that the asbestos containing waste is adequately wet or treated so that it meets this standard prior to disposal.

Operating records are required for Title 22 and RCRA Subtitle C disposal sites. The information must be maintained until closure of the disposal site. The operating record (or a complete copy) should be kept on site during the active life of the disposal site.

(B) The facility shall maintain an operating record as part of the disposal site record. This operating record shall include the following information: the quantity and date of each shipment of asbestos containing waste received, the disposal location(s) of each shipment of asbestos containing waste, a summary report of all incidents which require implementation of the contingency plan, results of inspection required by section 17897.20, and training records as specified in subsection (c)(2)(B) of this section. The operating record shall be maintained until closure of the facility.

Disposal sites need to provide financial mechanisms for closure and post closure care.

(3) meet the requirements for financial responsibility for liability claims and closure and post closure as specified in articles 3.3 and 3.5 of chapter 5 of this division.

These are Title 22 emergency and personnel training requirements:

(c) The owner or operator shall at a minimum comply with the following additional requirements:

A contingency plan is an emergency plan. A contingency plan incorporates elements that address releases or other catastrophic events that would require evacuation from an area of the disposal site or the entire disposal site.

(1) The solid waste facility shall prepare a contingency plan. The contingency plan shall be designed to minimize the hazard to human health or the environment from unplanned sudden or non-sudden release of asbestos containing waste to the air, soil or water. The provisions of this plan shall be carried out immediately when a release could threaten human health or the environment.
The contingency plan must be in writing. It must include a description of actions to be taken in response to an emergency. It needs to: state the arrangements that were made with emergency authorities; have a list of emergency coordinators; list the equipment available to respond to the emergency; and describe the evacuation plan.

(A) The contingency plan shall describe the actions facility personnel shall take in response to a release of asbestos containing waste. The plan shall describe arrangements agreed to by local emergency response agencies. The plan shall list names, addresses and telephone numbers of all persons qualified to act as emergency coordinators. This list shall be kept up to date. The plan shall list all emergency equipment located at the facility. This list shall be kept up to date. The plan shall include a description of each item on the list and a brief description of its capabilities. The plan shall describe a signal to begin evacuation, identify routes for evacuation, and identify alternate routes.

The contingency plan must be kept up to date.

(B) The contingency plan shall be amended whenever: the regulations change, the plan fails, the facility changes in operation, the list of emergency coordinators changes, or the list of emergency equipment changes.

Personnel training is required.

(2) Solid waste facility personnel shall complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way which ensures the facility's compliance with these requirements.

The training program needs to be taught by a qualified person. The training should, at a minimum, familiarize the employees with the contingency plan. Employees need to complete training prior to working alone in the ACW disposal and handling areas. The training must be completed within six months of their hire. Annual reviews are mandatory.

(A) The training program shall be directed by a person trained in asbestos waste management procedures. At a minimum, the training program shall be designed to ensure that facility personnel are capable of responding effectively to an emergency by familiarizing them with the contingency plan. Personnel shall successfully complete the training described within six months of their assignment to duties which manage asbestos containing waste. Personnel shall also take part in an annual review. No personnel shall work unsupervised until they have completed the training described in this section.
A Training Plan describing the type and amount of training required and individual training records must be maintained to verify compliance with the above subsection.

(B) The owner or operator shall maintain the following documents and records at the facility: a job title for each job related to asbestos containing waste management and the name of each person filling that job; a written description of that job title; a written description of the type and amount of training required for that job title; and records documenting that the training had been given.

Note: Authority cited: Section 44820, Public Resources Code.

§17897.20 Inspection Requirements

The operator of the disposal site needs to conduct daily inspections of items at the disposal area which are essential for control and operation of the disposal site. Examples of items to be inspected include: adequacy of cover, fences, signs, dust suppression equipment, safety equipment, etc.). A written description of the items to be inspected needs to be kept. A log documenting each inspection must become part of the operating record. Entries in the inspection log should indicate the time, date, condition of item, and the individual making the inspection. If a problem is discovered, the operator must take steps to correct the problem in a timely fashion. If the problem would result in an imminent hazard, the operator must take steps immediately.

The owner or operator of a solid waste facility that disposes of asbestos containing waste shall inspect the facility. This inspection shall include but not be limited to the designated asbestos waste containing area for deterioration, operator errors, problems with cover, leakage and discharges that may be causing or may lead to: (1) releases to the environment; or (2) a threat to human health. The owner or operator shall maintain an inspection schedule that identifies the items to be inspected, the frequency of the inspection and identify the types of problems that are to be looked for during the inspection. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment but at a minimum of once each operating day. The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Remedial action must be taken immediately where a hazard is imminent or has already occurred. The owner or operator shall maintain a record of these inspections. Notwithstanding section 17897.19(b)(2)(B), the reports resulting from these inspections need only be kept for three years from the date of the inspection.

Note: Authority cited: Section 44820, Public Resources Code.
# Article 3. Excavation Requirements

**§17897.21. Excavation Requirements**

(a) The owner or operator of any solid waste facility that disposes of asbestos-containing waste shall ensure that the excavation or disturbance of buried asbestos-containing waste will not pose a danger to the public, employees, and environment.

(b) Except as specified in subsection (g) of this section, an excavation management plan shall be prepared and submitted to the Enforcement Agency for review and approval at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste that has been buried at the disposal area. The excavation management plan shall include the following information:

## Self explanatory

1. Schedule starting and completion dates.

## A site map indicating the area to be disturbed and its relation to other activities and structures at the disposal site.

2. Map showing the location of the area where buried asbestos-containing waste is to be excavated or disturbed, locations of on-site structures, and environmental monitoring collection and control systems.

## Purpose of the activity

3. Reasons for disturbing the waste.

## The health and safety plan is required to protect the public, workers, and the environment in and around the excavation area. The certified industrial hygienist is required to ensure worker health and safety requirements are being met.

4. A health and safety plan identifying the health and safety issues regarding the proposed excavation and measures to be taken to protect public health, worker safety, and the environment. The plan shall be developed and prepared by an industrial hygienist certified by the American Board of Industrial Hygiene. This health and safety plan shall include work practices and engineering controls to be used to protect worker health and safety during excavation.

## Emission controls will probably be dictated by the local air pollution authority.

5. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated waste. The Enforcement Agency shall consult with the appropriate air quality control district when evaluating the proposed emissions control procedures.
<table>
<thead>
<tr>
<th>Location of excavated ACW should be specified in the plan.</th>
<th>(6) Location of any temporary storage site and the final disposal site.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A PE or REG certification is to ensure that technical standards will be met.</td>
<td>(c) The excavation management plan shall be prepared by a professional engineer or engineering geologist registered in California.</td>
</tr>
<tr>
<td>If the dates change, the disposal site must notify the EA of the new date(s).</td>
<td>(d) If the excavation will begin on a date other than the date specified in the plan, the owner or operator shall notify the Enforcement Agency at least 5 calendar days prior to the rescheduled start date by certified mail. If the completion date is delayed, the owner or operator shall notify the Enforcement Agency of the new completion date at least 2 calendar days before the original scheduled completion date by certified mail.</td>
</tr>
<tr>
<td>The EA needs to evaluate the plan based on:</td>
<td>(e) In evaluating the proposed excavation management plan, the Enforcement Agency will consider:</td>
</tr>
<tr>
<td>Is this a necessary activity?</td>
<td>(1) whether the excavation is necessary to the proposed use of the site, and will not increase the potential hazard to human health or the environment;</td>
</tr>
<tr>
<td>Does this reduce a hazard to health or the environment?</td>
<td>(2) whether the excavation is necessary to reduce a threat to human health, employees, and the environment; and</td>
</tr>
<tr>
<td>Do the local air district or regional water board have specific concerns?</td>
<td>(3) recommendations of the appropriate air quality control district and the regional water quality control board.</td>
</tr>
<tr>
<td>The EA must respond on the completeness of the plan within 30 days from receipt. The EA must notify the disposal site if it requires additional time to evaluate the plan.</td>
<td>(f) No later than 30 calendar days from receipt of the plan, the Enforcement Agency shall respond to the applicant regarding completeness of the plan. If the plan is incomplete, the applicant will be notified which parts of the plan are incomplete and the manner with which the plan can be made complete. If additional review time is needed, the applicant will be notified within 30 days of submittal of the plan.</td>
</tr>
<tr>
<td>In an emergency, a excavation management plan does not need to be submitted.</td>
<td>(g) The 45 day notice is not required if an emergency excavation is performed to prevent or diminish an imminent and substantial endangerment to human health or the environment.</td>
</tr>
</tbody>
</table>

Note: Authority cited: Section 44820, Public Resources Code.
Article 4.  Closure and Post Closure

§17897.24  General

ACW disposal sites need to meet the specific requirements for closure and post closure as required for other disposal sites.

The owner or operator shall comply with all applicable closure and post closure requirements as specified in article 7.8, chapter 3 and article 3.4, chapter 5 of this division.

Note: Authority cited: Section 44820, Public Resources Code.

Article 5.  LEA Standards and Certification

§17897.25  Designated ACW Program

LEAs may be authorized if they meet the following requirements:

Local Enforcement Agencies (LEA) shall meet the following requirements before being authorized to enforce this chapter.

(a) At a minimum, the LEA shall:

(1) meet the certification requirements as described in Article 2.1 of chapter 5 of this division.

(2) have provided field staff with training in compliance with Title 8 CCR, including but not limited to recognition of asbestos, respiratory protection, and selection and use of personal protective equipment. The LEA shall amend their Injury, Illness and Prevention Plan to comply with this requirement.

(3) submit an Enforcement Program Plan (EPP) amendment which addresses those elements modified by this authorization.

(4) have access to field staff trained in environmental sampling methodology and practice. The training shall include knowledge of sampling technique, field quality assurance/control, sample custody, sample collection and documentation.

(5) provide field staff with equipment necessary to comply with these requirement including but not limited to personal protective equipment and sample collection equipment.

PPE equipment includes air purifying respirators, protective clothing (e.g., tyvek®). Sampling equipment would include sample containers, custody seals, etc.
Submit the application for authorization to Permitting and Enforcement Division.

(b) The LEA shall make an application for authorization to the Deputy Director of the Permitting and Enforcement Division of the California Integrated Waste Management Board by cover letter with documentation establishing that the requirements of subsection (a) have been met.

LEA programs not meeting all the requirements may be given provisional authorization until they meet all requirements.

(c) The Board may make a provisional authorization to an LEA that meets the requirements of subsection (a)(1) and (2) of this section. A provisional authorization may authorize the LEA to implement specific provisions of this chapter. The Board may grant full authorization upon complete compliance with the provisions of this section.

The Board retains joint authority except when a local program has not been authorized. Then the Board is sole authority to enforce these regulations.

(d) In jurisdictions where the Board does not authorize a local program, the Board will be the enforcement agency for ACW.

Note: Authority cited: Sections 43200 & 44820, Public Resources Code. References: Title 14, CCR, Division 7, Article 2.1, Chapter 5; Title 8, CCR section 5192.
HOW DO LAND DISPOSAL RESTRICTIONS APPLY TO ACW DISPOSAL SITES?


All hazardous wastes in California are subject to either state or federal land disposal restrictions. Asbestos Containing Waste (ACW) is subject only to the California requirements in Title 22 CCR, Division 4.5, Chapter 18.

Restricted vs. Prohibited wastes:
**Restricted wastes** are hazardous wastes which are restricted from disposal to land. **Prohibited wastes** are restricted wastes which have a treatment standard in effect. California regulations make ALL hazardous wastes restricted wastes. All shipments of restricted wastes must be accompanied or preceded by notification. All shipments of ACW sent for disposal must have an accompanying notification. Typically the notification is sent in advance of the shipment and is kept on file at the disposal site.

Notification vs. Certification:
A **Notification statement** provides information about restricted waste and its treatment standard(s). A **Certification statement** provides assurance that the waste meets the appropriate treatment standard(s) and may be disposed to land.

Unless a variance or extension is granted, restricted waste becomes a prohibited waste on the effective date of the appropriate treatment standard(s) for that waste. ACW has a treatment standard (22 CCR 66268.114). Shipments of ACW to disposal sites require notifications and certifications. An exception to this requirement is for generators with CA ID numbers issued for residential asbestos abatement or 90 day provisional numbers (see the Text box above). These generators are not required to send a notification and certification.

Title 22 regulations specify that non-RCRA wastes that have been rendered nonhazardous are not subject to the state's LDR program. If ACW has been rendered non-hazardous by treatment, it is not subject to the treatment standard.

**ACW Treatment Standards (22 CCR 66268.114)**
ACW must be “treated” by one of the following means prior to disposal:
1) Mixed to form a slurry, discharge no emissions from the process, seal in leak tight containers or packaging
2) Process into a non-friable form

Use an alternative treatment method that achieves a “substantially equivalent or greater level of performance” per section 25179.6(b)(2) Health and Safety Code.
WHAT’S IN AN OPERATING RECORD?
A written operating record is required at ACW disposal sites and must be kept on-site until closure. The operating record shall include:

- **Description** and quantity of ACW received.
- **Dates** of disposal at the site.
- **Location** and quantity of ACW within the facility. The location of ACW is cross-referenced to manifest document numbers. A map or diagram should note each cell with ACW.
- **Incident reports** if contingency plan implemented.
- **Inspection records and results** (Note: only required to maintain for last 3 years.)
- **Closure cost estimates** and post-closure estimates if applicable.
- **Land disposal restriction records**, notices, certification and demonstration, if applicable, per 66268.7 and 66268.8.

WHAT’S IN A CONTINGENCY PLAN?
A contingency plan is required for all ACW disposal sites. A written contingency plan must include the following:

- Description of the **actions** facility personnel shall take in response to a HW release.
- **Arrangements** agreed to by applicable state and local emergency authorities.
- Updated list of **emergency coordinators** with names, addresses and phone numbers (office and home).
- List of all **emergency equipment**, location, and capabilities.
- **Evacuation plan** for facility personnel with evacuation signals, evacuation routes and alternate routes.
- Current telephone number of **Office of Emergency Services**.

How’s an Operating Record different from the Disposal Site Records?
An Operating Record is required of all hazardous waste treatment, storage and disposal facilities. The operating record contains information about the quantity and location of the waste at the disposal site, closure information, records of inspections, manifests and other related information. The disposal site records only include weight and volume records for incoming waste, subsurface records recording cuts made and depth to the water table, and a log of special occurrences.

If they already have a Business Plan, do they need to prepare a Contingency Plan?
State Law requires that businesses that have regulated quantities or types of hazardous materials to file disclosure information and plans with emergency planning and response agencies. Health and Safety Code, Chapter 6.95. Hazardous Materials Release Response Plans and Inventory is where the state law is found. Essentially, the business plans filed under chapter 6.95 meet the requirements of the contingency plan. However, a business plan must address the following areas to meet the contingency plan requirements:

- the specific procedures for evaluating the characteristics and impacts of incidents involving a release, evaluating the need for evacuation of the adjacent areas, cleaning and repairing emergency equipment and noting the incident in the operating record
- the address of the emergency coordinator and alternates in the order in which they will assume responsibility
- a description of the arrangements made with local emergency agencies
- specific evacuation routes and alternate routes
- a list of all the emergency equipment located at the site identifying the location, description and capabilities of the emergency equipment
Copies of contingency plan shall be submitted to following:
- local police departments
- fire departments
- hospitals
- State and local emergency response teams

Contingency plan shall be amended whenever:
- applicable regulations are revised
- the plan fails in an emergency
- the facility changes its design, construction, operation, maintenance
- the list of emergency coordinators changes
- the list of emergency equipment changes.

WHEN ARE INSPECTIONS REQUIRED?

A written inspection schedule is required for ACW disposal sites. These are self-monitoring inspections conducted by the operator of the disposal site. An inspection schedule must include the following:
- all safety and emergency equipment
- security devices
- operating and structural equipment
- identify types of problems (malfunctions or deterioration)
- specify items and frequency for inspections

Inspection records shall be recorded in an inspection log for three years from the date of the inspection and include at a minimum:
- date and time of inspection
- name of the inspector
- notation of observations made
- date and nature of repairs or remedial actions.

WHAT SHOULD BE IN A TRAINING PROGRAM?

The following requirements apply to training programs for ACW disposal sites.

Minimum Standards for Training Programs (to be completed within six months):
To ensure that personnel are able to respond effectively to emergencies, the training program must familiarize them with the following emergency procedures, emergency equipment, and emergency systems, where applicable:
- procedures for using, inspecting, repairing, and replacing facility emergency equipment
- communications or alarm systems
- response to fires or explosions
- shutdown of operations

The training program should also include training which familiarizes employees with recognition and appropriate management of ACW contaminated with another hazardous waste.

The owner or operator must maintain the following documents at the disposal site:
- **job title** for each position related to ACW
- **name of employee** filling each position
- written **job description** for each position, including:
  - requisite skill, education, or other qualifications
  - duties of facility personnel assigned to each position
- written **description of type and amount** of both introductory and continuing education for persons filling a position
- **records** documenting that personnel have received and completed the required training or job experience