Proposed REGULATIONS
~~CALIFORNIA EMERGENCY MANAGEMENT AGENCY~~
CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES
TEXT OF REGULATIONS

CALIFORNIA CODE OF REGULATIONS

TITLE 19. PUBLIC SAFETY

DIVISION 2. ~~CALIFORNIA EMERGENCY MANAGEMENT AGENCY~~ CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES

CHAPTER 4.5 CALIFORNIA ACCIDENTAL RELEASE PREVENTION (CalARP) PROGRAM

Detailed Analysis

Article 1. General.

Section 2735.1 Purpose.

The California Accidental Release Prevention (CalARP) Program includes the federal Accidental Release Prevention Program [Title 40, Code of Federal Regulations (CFR) Part 68] with certain additions specific to the state pursuant to Article 2, Chapter 6.95, of the Health and Safety Code (HSC). The purpose of the CalARP Program is to prevent the accidental releases of regulated substances. The list of regulated substances ~~are~~ is in Section 2770.5 of this chapter.

Stationary sources with more than a threshold quantity of a regulated substance shall be evaluated to determine the potential for and impacts of accidental releases from that covered process. Under conditions specified by this chapter, the owner or operator of a stationary source may be required to develop and submit a risk management plan (RMP). The RMP components and submission requirements are identified in Article 3 of this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531.2, 25533, 25535.1, and 25543, Health and Safety Code.

Section 2735.2 Scope.

This chapter sets forth:

(a) the list of regulated substances and thresholds,

(b) the requirements for owners and operators of stationary sources concerning the prevention of accidental releases,

(c) the accidental release prevention programs approved under Section 112(r) of the federal Clean Air Act (CAA) Amendments of 1990 and mandated under the CalARP Program, and

(d) how the CalARP Program relates to the state's Unified Program.

The list of substances, threshold quantities, and accident prevention regulations promulgated under this chapter do not in any way limit the general duty provisions under Section 112(r)(1) of the federal CAA.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531, 25532, and 25533, Health and Safety Code; and Section 68.1, Part 68, Title 40, Code of Federal Regulations.

Section 2735.3 Definitions.

For the purposes of this chapter only:

(a) "AA" means Administering Agency, the local agency responsible to implement the CalARP Program. In most instances, the Certified Unified Program Agency (CUPA) has this responsibility. When there is no CUPA, the implementing agency is the agency designated by the Secretary for Environmental Protection pursuant to Section 25404.3(f) of HSC or the agency designated by Cal ~~EMA~~ OES pursuant to 25533(f) of HSC.

(b) "Accidental release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

(c) "Administrative controls" means written procedural mechanisms used for hazard control.

(d) "Administrator" means the administrator of the USEPA.

(e) "AIChE/CCPS" means the American Institute of Chemical Engineers/Center for Chemical Process Safety.

(f) "API" means the American Petroleum Institute.

(g) "Article" means a manufactured item, as defined under Section 5189 of Title 8 of the California Code of Regulations (CCR), that is formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.

(h) "ASME" means the American Society of Mechanical Engineers.

(i) "Cal ~~EMA~~ OES" means the California ~~Emergency Management Agency~~ Governor's Office of Emergency Services.

(j) "Cal OSHA" means the California Occupational Safety and Health Administration.

(k) "CAS" means the Chemical Abstracts Service.

(l) "CFR" means the Code of Federal Regulations.

(m) "Catastrophic release" means a major uncontrolled emission, fire, or explosion, involving one or more regulated substances that presents an imminent and substantial endangerment to public health and the environment.

(n) "Classified information," as defined in the Classified Information Procedures Act, Appendix 3 of Section 1(a) of Title 18 of the United States Code, means "any information or material that has been determined by the United States Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security."

(o) "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions.

(p) "Covered process" means a process that has a regulated substance present in more than a threshold quantity as determined under Section 2770.2 of this chapter.

(q) "Crude oil" means any naturally occurring, unrefined petroleum liquid.

(r) "DOT" means the United States Department of Transportation.

(s) "Environmental receptor" means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in Section 2750.2(a), as a result of an accidental release and that can be identified on local United States Geological Survey maps.

(t) "Field gas" means gas extracted from a production well before the gas enters a natural gas processing plant.

(u) "Hot work" means work involving electric or gas welding, cutting, brazing, or similar flame or spark-producing operations.

(v) "Injury" means any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization.

(w) "Interested persons" means those residents, workers, students and others who would be potentially affected by an accidental or catastrophic release.

(x) "Major change" means introduction of a new process, process equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard.

(y) "Mechanical integrity" means the process of ensuring that process equipment is fabricated from the proper materials of construction and is properly installed, maintained, and replaced to prevent failures and accidental releases.

(z) "Medical treatment" means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.

(aa) "Mitigation or mitigation system" means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function.

(bb) "Modified stationary source" means a stationary source which has undergone an addition or change which qualifies as a "major change" as defined in (v) of this section.

(cc) "NAICS" means the North American Industry Classification System.

(dd) "NFPA" means the National Fire Protection Association.

(ee) "Natural gas processing plant" (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both, classified as North American Industrial Classification System (NAICS) code 211112 (previously Standard Industrial Classification (SIC) code 1321).

(ff) "New stationary source" means a stationary source that now has a covered process that is not currently in the CalARP program.

(~~ee~~gg) "Offsite" means areas beyond the property boundary of the stationary source, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.

(~~ff~~hh) "OSHA" means the Occupational Safety and Health Administration.

(~~gg~~ii) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(~~hh~~jj) "Part 68" means Part 68 of Subpart A of Subchapter C of Chapter I of Title 40 of CFR.

(~~ii~~kk) "Petroleum refining process unit" means a process unit used in an establishment primarily engaged in petroleum refining as defined in NAICS code 32411 for petroleum refining (formerly SIC code 2911) and used for the following: (1) producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants; (2) separating petroleum; or (3) separating, cracking, reacting, or reforming intermediate petroleum streams. Examples of such units include, but are not limited to, petroleum based solvent units, alkylation units, catalytic hydrotreating, catalytic hydrorefining, catalytic hydrocracking, catalytic reforming, catalytic cracking, crude distillation, lube oil processing, hydrogen production,

isomerization, polymerization, thermal processes, and blending, sweetening, and treating processes. Petroleum refining process units include sulfur plants.

(~~jj~~ll) "Population" means the public.

(~~kk~~mm) "Process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(~~ll~~nn) "Produced water" means water extracted from the earth from an oil or natural gas production well, or that is separated from oil or natural gas after extraction.

(~~mm~~oo) "Public" means any person except employees or contractors at the stationary source.

(~~nn~~pp) "Public receptor" means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.

(~~oo~~qq) "Qualified person" means a person who is qualified to attest, at a minimum to: (1) the validity and appropriateness of the process hazard analyses (PHA) performed pursuant to Section 2760.2; (2) the completeness of a risk management plan; and (3) the relationship between the corrective steps taken by the owner or operator following the PHAs and those hazards which were identified in the analyses.

(~~pp~~rr) "Qualified position" means a person occupying a position who is qualified to attest, at a minimum to: (1) the validity and appropriateness of the PHA performed pursuant to Section 2760.2; (2) the completeness of a risk management plan; and (3) the relationship between the corrective steps taken by the owner or operator following the PHAs and those hazards which were identified in the analyses.

(~~qq~~ss) "Regulated substance" means any substance, unless otherwise indicated, listed in Section 2770.5 of this chapter.

(~~rr~~tt) "Replacement in kind" means a replacement that satisfies the design specifications.

(~~ss~~uu) "Retail facility" means a stationary source at which more than one-half of the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

(vv) "Revalidation" means a critical review of a hazard review or a process hazard analysis (PHA) with qualified team members of the most recent hazard review or PHA studies to verify that past studies remain valid and that changes made to the covered process are

properly assessed. This critical review is to ensure that hazards are well understood, and existing safeguards are properly identified, past recommendations have been addressed, the overall risk ranking of each scenario is accurate, and relevant incidents and near misses at the stationary source and industry are evaluated. For situations when past studies cannot be readily revalidated, a new complete hazard review or PHA may be warranted.

(~~tt~~ww) "RMP" means the risk management plan as described by the component elements identified in Article 3 of this chapter.

(~~uu~~xx) "Stationary source" means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this chapter. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulations under Part 192, 193, or 195 of Title 49 of CFR, or a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under Section 60105 of Title 49 of USC. A stationary source does not include naturally occurring hydrocarbon reservoirs. Properties shall not be considered contiguous solely because of a railroad or pipeline right-of-way.

(~~vv~~yy) "Threshold quantity" means the quantity specified for a regulated substance pursuant to Section 2770.5 and determined to be present at a stationary source as specified in Section 2770.2 of this chapter.

(~~ww~~zz) "Trade secret" means trade secrets as defined in Section 6254.7 of Subdivision (d) of the Government Code and Section 1060 of the Evidence Code and includes information submitted to an administering agency which has been designated by the stationary source as trade secret and which shall not be released by the AA except to authorized officers and employees of other governmental agencies, and only in connection with the official duties of that officer or employee pursuant to any law for the protection of health and safety. Trade secret information is to be handled pursuant to Section 25538 of HSC.

(aaa) "Turnaround" means a planned process shutdown for the purpose of repair, maintenance, process modification, equipment upgrade or other significant process activity.

(~~xx~~bbb) "Typical meteorological conditions" means the temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station.

(~~yy~~ccc) "Vessel" means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

(~~zz~~ddd) "Worst-case release" means the release of the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint defined in Section 2750.2(a) of this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25501 and 25532, Health and Safety Code; and Section 68.3, Part 68, Title 40, Code of Federal Regulations.

Section 2735.4 Applicability.

(a) The requirements of this chapter apply to an owner or operator of a stationary source with more than a threshold quantity of a regulated substance in a process. Regulated substances are listed in three separate tables in Section 2770.5 of this chapter. An owner or operator of a stationary source shall comply with one of the following:

(1) If a stationary source has a process with more than a threshold quantity of a regulated substance as listed in Table 1 or 2 of Section 2770.5, the owner or operator shall comply with the provisions of this chapter pursuant to the time frames identified in Section 2745.1(b);

(2) If a stationary source has a process with more than a threshold quantity of a regulated substance as listed in Table 3 of Section 2770.5, and the AA makes a determination pursuant to Section 25534 of HSC that an RMP is required, the owner or operator shall comply with the appropriate provisions of this chapter pursuant to the time frame identified in Section 2745.1(d) or (e); or,

(3) If a stationary source has a process with more than a threshold quantity of a regulated substance as listed in Tables 1 or 2 and Table 3 of Section 2770.5, the owner or operator shall comply with the provision of this chapter pursuant to the time frames identified in Section 2745.1(b).

(b) The CalARP Program defines three program levels with different levels of requirements depending upon the complexity, accident history, and potential impact of releases of regulated substances.

(c) Program 1 eligibility requirements. A covered process is eligible for Program 1 requirements as provided in Section 2735.5(d) if it meets all of the following requirements:

(1) For the five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance has led to any of the following offsite consequences:

(A) Death;

(B) Injury; or,

(C) Response or restoration activities for an exposure of an environmental receptor or a public receptor;

(2) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under Article 4 of Section 2750.3 is less than the distance to any public receptor, as defined in Section 2735.3 (~~nn~~pp) and Section 2750.5; and,

(3) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.

(d) Program 2 eligibility requirements. A covered process is subject to Program 2 requirements if it does not meet the eligibility requirements of either section (c) or (e).

(e) Program 3 eligibility requirements. A covered process is subject to Program 3 if the process does not meet the requirements of section (c), and if any of the following conditions apply:

(1) The process is in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532.

(2) The process is subject to the ~~federal or state~~ OSHA or Cal OSHA process safety management standards of Section 1910.119 of Title 29 of CFR or Section 5189 of Title 8 of CCR.

(3) The AA determines that the accident risk posed by the regulated substance in a process above the threshold quantity as listed in Table 3 of Section 2770.5, because of the nature and quantity of the regulated substance involved, requires the additional safety measures afforded by Program 3 requirements, pursuant to Section 25534 of HSC.

(f) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator shall comply with the requirements of the new Program level that applies to the process and update the RMP as provided in Section 2745.10.

(g) The provisions of this chapter shall not apply to an Outer Continental Shelf ("OCS") source, as defined in Section 55.2 of Title 40 of CFR.

NOTE: Authority cited: Sections 25531, 25534.05, Health and Safety Code. Reference: Sections 25534, 25535 (d), and 25536, Health and Safety Code; and Section 68.10, Part 68, Title 40, Code of Federal Regulations.

Section 2735.5 General Requirements.

(a) Coordination. The owner or operator of a stationary source shall closely coordinate with the AA to implement the requirements of this chapter and to determine the appropriate level of documentation required for an RMP to comply with Sections 2745.3 through 2745.9 of this chapter. This requirement shall not preclude public access to RMP information. Classified information need not be included in the RMP but shall be made available to the AA to the extent allowable by law. Trade secrets are protected pursuant to Section 25538 of HSC.

(b) General requirements for RMPs.

(1) The owner or operator of a stationary source that is subject to this chapter, pursuant to Section 2735.4, shall submit an RMP which includes all requirements described in Section 2745.3 through Section 2745.9.

(2) The RMP shall include a registration that reflects all covered processes.

(c) Model RMPs may be used by stationary sources if accepted for use by AAs, in consultation with Cal ~~EMA~~ OES. Model RMPs for a process that has in excess of a threshold quantity of a regulated substance listed in Table 1 or 2 of Section 2770.5 must also be recognized by USEPA. Cal ~~EMA~~ OES may limit the use, application, or scope of these models.

(d) Program 1 requirements. In addition to meeting the requirements of section (b), the owner or operator of a stationary source with a process eligible for Program 1, as provided in Section 2735.4(c) shall:

(1) Analyze the worst-case release scenario for the process(es), as provided in Section 2750.3; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in Section 2750.2(a); and submit in the RMP the worst-case release scenario as provided in Section 2745.4;

(2) Complete the five-year accident history for the process as provided in Section 2750.9 of this chapter and submit it in the RMP as provided in Section 2745.5;

(3) Ensure that response actions have been coordinated with local emergency planning and response agencies (e.g. site visits by first responders); and,

(4) Certify in the RMP the following: "Based on the criteria in Section 2735.4 of Title 19 of CCR, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is less than the distance to the nearest public receptor: [list process(es)]. Within the past five years, the process(es) has (have) had no accidental release that caused offsite impacts provided in the risk management program Section 2735.4 (c)(1). No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a release of a regulated substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the RMP. The undersigned certifies that, to the best of my

knowledge, information, and belief, formed after reasonable inquiry, the information submitted is true, accurate, and complete. (Signature, title, date signed)."

(e) Program 2 requirements. In addition to meeting the requirements of section (b), the owner or operator of a stationary source with a process subject to Program 2, as provided in Section 2735.4(d), shall:

(1) Develop and implement a management system as provided in Section 2735.6;

(2) Conduct a hazard assessment as provided in Sections 2750.1 through 2750.9;

(3) Implement the Program 2 prevention steps provided in Sections 2755.1 through 2755.7 or implement the Program 3 prevention steps provided Sections 2760.1 through 2760.12;

(4) Develop and implement an emergency response program as provided in Sections 2765.1 ~~to~~ and 2765.2; and

(5) Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in Section 2745.6.

(f) Program 3 requirements. In addition to meeting the requirements of section (b), the owner or operator of a stationary source with a process subject to Program 3, as provided in Section 2735.4(e) shall:

(1) Develop and implement a management system as provided in Section 2735.6;

(2) Conduct a hazard assessment as provided in Sections 2750.1 through 2750.9;

(3) Implement the prevention requirements of Sections 2760.1 through 2760.12;

(4) Develop and implement an emergency response program as provided in Sections 2765.1 ~~to~~ and 2765.2; and,

(5) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in Section 2745.7.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533, 25534, 25534.05 and 25538, Health and Safety Code; and Section 68.12, Part 68, Title 40, Code of Federal Regulations.

Section 2735.6 CalARP Program Management System.

(a) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 shall develop a management system to oversee the implementation of the risk management program elements.

(b) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements.

(c) When responsibility for implementing individual requirements of this chapter is assigned to persons other than the person identified under section (b), the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.1, 25535.1, 25535 and 25536, Health and Safety Code; and Section 68.15, Part 68, Title 40, Code of Federal Regulations.

Section 2735.7 Emergency Information Access.

Upon request of a state or local emergency response agency the AA shall provide immediate access to all components of the CalARP Program. If any of the components of the CalARP Program are designated as "trade secret" as defined in Section 6254.7(d) of the Government Code and Section 1060 of the Evidence Code, the emergency response agency or agencies shall be given notice that the information released shall be used only in connection with the official duties of the agency or agencies and shall not otherwise be released.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25538(c) and 25539, Health and Safety Code.

Article 2. Registration.

2740.1 Registration.

Section 2740.1 Registration.

(a) If an RMP is required under Section 2735.4(a)(1) and (a)(3), the owner or operator of the stationary source shall complete the registration information required in (d) of this section and submit it with the RMP to USEPA, with a copy provided to the AA.

(b) If an RMP is required under Section 2735.4(a)(2), the owner or operator of the stationary source shall complete the registration information required in (d) of this section and submit it with the RMP to the AA.

(c) The AA may request a registration from a stationary source covered by this chapter prior to submittal of the RMP. Registration submitted prior to an RMP submittal shall include a certification of accuracy.

(d) The registration shall include the following data:

(1) Stationary source name, street, city, county, state, zip code, latitude, and longitude, method for obtaining latitude and longitude, and description of location that latitude and longitude represent;

(2) The stationary source Dun and Bradstreet number;

(3) Name and Dun and Bradstreet number of the corporate parent company;

(4) The name, telephone number, and mailing address of the owner or operator;

(5) The name and title of the person or position with overall responsibility for RMP elements and implementation, and (optional) the e-mail address for that person or position;

(6) The name, title, telephone number, and 24-hour telephone number, and, as of June 21, 2004, the e-mail address (if an e-mail address exists) of the emergency contact;

(7) For each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the five- or six-digit NAICS code that most closely corresponds to the process, and the Program level of the process;

(8) The stationary source USEPA identifier;

(9) The number of full-time employees at the stationary source;

(10) Whether the stationary source is subject to Section 5189 of Title 8 of CCR;

(11) Whether the stationary source is subject to Part 355 of Title 40 of CFR;

(12) If the stationary source has a CAA Title V operating permit, the permit number;

(13) The date of the last safety inspection of the stationary source by a federal, state, or local government agency and the identity of the inspecting entity;

(14) As of June 21, 2004, the name, the mailing address, and the telephone number of the contractor who prepared the RMP (if any);

(15) Source or ~~P~~parent ~~C~~company ~~E~~e-~~M~~mail ~~A~~address (Optional);

(16) Source ~~H~~homepage address (Optional);

(17) Phone number at the source for public inquiries (Optional);

(18) Local Emergency Planning Committee (Optional);

(19) OSHA Voluntary Protection Program status (Optional); and,

(20) As of June 21, 2004, the type of and reason for any changes being made to a previously submitted RMP; the types of changes to RMP are categorized as follows:

(A) Updates and re-submissions required under Section 2745.10(a) or (b);
(B) Corrections under Section 2745.10.5 or for purposes of correcting minor clerical errors, updating administrative information, providing missing data elements or reflecting facility ownership changes, and which do not require an update and re-submission as specified in Section 2745.10(a) or (b);
(C) De-registrations required under Section 2745.10(c) or (d); and,
(D) Withdrawals of an RMP for any facility that was erroneously considered subject to the CalARP Program.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531, 25534.05(a)(1), and 25533(b), Health and Safety Code; and Section 68.160, Part 68, Title 40, Code of Federal Regulations.

Article 3. Risk Management Plan Components and Submission Requirements.

Section 2745.1 Submission.

(a) The owner or operator of a stationary source, which handles more than a threshold quantity of a regulated substance in a process, shall determine the applicability of this chapter as set forth in Section 2735.4(a) and shall submit a single RMP to the AA. The RMP shall include the information required by Sections 2745.3 through 2745.9.

(b) The RMP information required by USEPA shall be submitted to USEPA no later than the latest of the following dates:

~~(1) June 21, 1999;~~

(~~2~~1) Three years after the date on which a regulated substance is first listed under Section 68.130, Part 68, Title 40 of CFR; or,

(~~3~~2) The date on which a regulated substance is first present in a process, above the threshold quantity, as listed on Section 2770.5 Table 1 or 2.

(c) The owner or operator of a stationary source shall submit a copy of USEPA required RMP information according to the time frame set forth in (b) of this section to the AA.

~~(d) If a determination is made pursuant to section 2735.4 (a)(2) that an existing stationary source must comply with this chapter, the owner or operator shall submit an RMP to the AA after the owner or operator has received a notice from the AA requesting submission of an RMP. The AA shall, in consultation with the owner or operator of a stationary source, establish an RMP submittal date. The AA shall not require submission of the RMP earlier than 12 months or later than 3 years after the notice has been issued to the owner or operator.~~

(~~e~~d) If a determination is made pursuant to section 2735.4(a)(2) that a new or modified stationary source must comply with this chapter, the owner or operator shall submit an RMP to the AA prior to the date in which a regulated substance is first present in a process above the listed threshold quantity, as listed on Section 2770.5.

(~~f~~e) This chapter does not require the owner or operator to submit external event analysis or supplemental information, required by the AA, to USEPA unless that information is required by federal law.

(~~g~~f) If a pesticide, as defined in Section 12753 of the Food and Agricultural Code, is used on a farm or nursery and is determined by the AA to pose a regulated substances accident risk; the AA shall first consult with the county agricultural commissioner or the Department of Food and Agriculture to evaluate whether the existing RMP is adequate in relation to the regulated substances accident risk. This paragraph does not prohibit, or limit the authority of an AA to conduct its duties.

~~(h) The owner or operator of any stationary source for which an RMP was submitted before June 21, 2004, shall revise the RMP to include information required by Section 2740.1(d)(6) and (d)(14), by June 21, 2004 in the manner specified by USEPA prior to that date. Any such submission shall also include the information required by Section 2740.1(d)(20) (indicating that the submission is a correction to include the information required by Section 2740.1(d)(6) and (d)(14) or an update under Section 2745.10). RMP revisions shall be consistent with Section 2735.5(a).~~

(~~i~~g) RMPs submitted under this Section shall be updated and corrected in accordance with Section 2745.10 and Section 2745.10.5.

(~~j~~h) Notwithstanding the provisions of Sections 2745.3 through 2745.9 the RMP shall exclude classified information. Subject to appropriate procedures to protect such information from public disclosure, classified data or information excluded from the RMP may be made available in a classified annex to the RMP for review by federal and state representatives who have received the appropriate security clearances required for the classified data or information being reviewed.

(~~k~~i) Upon request, the AA shall submit to Cal ~~EMA~~ OES copies of the RMP and the federal registration.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533, 25534, 25535.1, and 25536, Health and Safety Code; and Section 68.150, Part 68, Title 40, Code of Federal Regulations.

Section 2745.2 RMP Review Process.

~~(a)~~ The RMP review process shall include:

(~~1~~a) Consultation and review. The RMP shall be certified complete by a qualified person and the stationary source owner or operator and shall be submitted to the AA. Completeness shall be determined in accordance with Sections 2745.3 through 2745.9. The stationary source shall work closely with the AA to determine that the RMP contains an appropriate level of detail.

~~(2) Initial public notice. The AA shall publish notice in a local newspaper of general circulation that the RMP has been submitted and the AA has initiated the process for government and public review.~~

(~~3~~b) Deficiency notice. The AA shall review the RMP to determine if all the elements pursuant to Sections 2745.3 through 2745.9 are contained in the document and provide a written notice to the owner or operator of a stationary source of any deficiencies. The AA may authorize the air pollution control district (APCD) or air quality management district (AQMD) to conduct a technical review of the RMP.

(~~A~~1) The owner or operator of the stationary source shall have 60 calendar days from receipt of the notification of RMP deficiencies to make any corrections. An owner or operator of the stationary source may request, in writing, a one-time 30 calendar day extension to correct deficiencies. At the end of the 60 calendar days, and any extension period if applicable, the stationary source shall resubmit the corrected, revised RMP to the AA. Failure to correct deficiencies during the specified time frame shall subject the owner or operator of the stationary source to the penalties specified in Sections 25540 and 25541 of HSC.

(~~B~~2) If no deficiencies are identified, the AA shall accept the RMP as complete and submit the RMP for formal public review.

(~~4~~c) Formal public review. Within 15 calendar days after the AA determines that the RMP is complete, the AA shall make the RMP available to the public for review and comment by publishing a notice in a local newspaper of general circulation~~, and, optionally,~~or on the AA's Website. The notice shall describe the RMP and state a location where it may be reviewed. The AA shall directly notify individuals and organizations who have specifically requested to be notified. The public shall have 45 calendar days to comment following the publication date of the notice. The AA shall review all public comments.

(~~5~~d) Evaluation review. The evaluation review shall be conducted by the AA at the end of the formal public review period. The AA shall take the public comments into consideration during the evaluation review. The AA shall consider standard application of engineering and scientific principles, site specific characteristics, technical accuracy, severity of offsite consequences, and other information in the possession of or reviewed by the AA. The evaluation review may include inspections and onsite document review of records and data which may not be in the possession of the AA.

(~~6~~e) The evaluation review shall be completed by the AA as follows:

(~~A~~1)For an RMP which includes only Program 1 or Program 2 processes, the evaluation review shall be completed within 36 months.

(~~B~~2)For an RMP which includes a Program 3 process, the evaluation review shall be completed within 24 months.

(~~C~~3)The evaluation review does not include time for corrections of deficiencies pursuant to section (~~3~~b)(~~A~~1).

(~~7~~f) Inspection or audit authority. Nothing in this section shall preclude the authority of an AA to inspect or audit a stationary source.

(~~8~~g) Public access. Subject to the requirements of section 2775.5(b), t ~~T~~he public shall have access to the RMP, including any electronic data developed as part of the USEPA reporting requirements. Classified information need not be included. Trade secrets are protected pursuant to Section 25538 of HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531.1, 25534.5, 25535, 25535.2 and 25538, Health and Safety Code.

Section 2745.3 RMP Executive Summary Component.

The owner or operator shall provide in the RMP, for all Program levels, an executive summary that includes a brief description of the following elements:

(a) The accidental release prevention and emergency response policies at the stationary source;

(b) The stationary source and regulated substances handled;

(c) The general accidental release prevention program and chemical-specific prevention steps;

(d) The five-year accident history;

(e) The emergency response program; and,

(f) Planned changes to improve safety.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.155, Part 68, Title 40, Code of Federal Regulations.

Section 2745.4 RMP Offsite Consequence Analysis Component.

(a) The owner or operator shall submit the following information in the RMP:

(1) Program 1 processes: One worst-case release scenario for each Program 1 process; and,

(2) Program 2 and 3 processes: One worst-case release scenario to represent all regulated toxic substances held above the threshold quantity and one worst-case release scenario to represent all regulated flammable substances held above the threshold quantity.

(A) If additional worst-case scenarios for toxics or flammables are required by Section 2750.3(a)(2)(C), the owner or operator shall submit the same information on the additional scenario(s).

(B) The owner or operator shall also submit information on one alternative release scenario for each regulated toxic substance held above the threshold quantity and one alternative release scenario to represent all regulated flammable substances held above the threshold quantity.

(b) The owner or operator shall submit the following data:

(1) Chemical name;

(2) Percentage weight of the chemical in a liquid mixture (toxics only);

(3) Physical state (toxics only);

(4) Basis of results (give model name if used);

(5) Scenario (explosion, fire, toxic gas release, or liquid spill and vaporization);

(6) Quantity released in pounds;

(7) Release rate;

(8) Release duration;

(9) Wind speed and atmospheric stability class (toxics only);

(10) Topography (toxics only);

(11) Distance to endpoint;

(12) Public and environmental receptors within the distance;

(13) Passive mitigation considered; and,

(14) Active mitigation considered (alternative releases only).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531.1 and 25534.05, Health and Safety Code; and Section 68.165, Part 68, Title 40, Code of Federal Regulations.

Section 2745.5 RMP Five-year Accident History Component.

The owner or operator shall submit as part of the RMP the information required by Section 2750.9(b) on each accident covered by Section 2750.9(a).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25543.1, Health and Safety Code; and Section 68.168, Part 68, Title 40, Code of Federal Regulations.

Section 2745.6 RMP Program 2 Prevention Program Component.

(a) For each Program 2 process, the owner or operator shall provide in the RMP the information indicated in sections (b) through (l). If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five- or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the chemical(s) covered.

(d) The date of the most recent review or revision of the safety information and a list of federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement.

(e) The date of completion of the most recent hazard review or update.

(1) The expected date of completion of any changes resulting from the hazard review;

(2) Major hazards identified;

(3) Process controls in use;

(4) Mitigation systems in use;

(5) Monitoring and detection systems in use; and,

(6) Changes since the last hazard review.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs;

(1) The type of training provided - classroom, classroom plus on the job, on the job; and,

(2) The type of competency testing used.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(i) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.

(j) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

(k) The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.

(l) The owner or operator shall submit the following external events analysis information:

(1) The types of natural and human caused external events considered in PHA Section 2760.2 or Hazard Review Section 2755.2.

(2) The estimated magnitude or scope of external events which were considered. If not known, the owner or operator of the stationary source shall work closely with the AA to determine what is required. If seismic events are applicable, the parameters used in the consideration of the seismic analysis and which edition of the ~~Uniform~~ Building Code was used when the process was designed.

(3) For each external event, with a potential to create a release of a regulated substance that will reach an endpoint offsite, apply sections (e)(1) through (e)(6).

(4) The date of the most recent field verification that equipment is installed and maintained as designed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.170, Part 68, Title 40, Code of Federal Regulations.

Section 2745.7 RMP Program 3 Prevention Program Component.

(a) For each Program 3 process, the owner or operator shall provide the information indicated in sections (b) through (q). If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five- or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the substance(s) covered.

(d) The date on which the safety information was last reviewed or revised.

(e) The date of completion of the most recent PHA or update and the technique used.

(1) The expected date of completion of any changes resulting from the PHA;

(2) Major hazards identified;

(3) Process controls in use;

(4) Mitigation systems in use;

(5) Monitoring and detection systems in use; and,

(6) Changes since the last PHA.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs.

(1) The type of training provided--classroom, classroom plus on the job, on the job; and,

(2) The type of competency testing used.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(i) The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures.

(j) The date of the most recent pre-startup safety review.

(k) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.

(l) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

(m) The date of the most recent review or revision of employee participation plans.

(n) The date of the most recent review or revision of hot work permit procedures.

(o) The date of the most recent review or revision of contractor safety procedures.

(p) The date of the most recent evaluation of contractor safety performance.

(q) The owner or operator shall submit the following external events analysis information:

(1) The types of natural and human caused external events considered in PHA Section 2760.2;

(2) The magnitude or scope of external events which were considered. If not known, the owner or operator of the stationary source shall work closely with the AA to determine what is required. If seismic events are applicable, the parameters used in the consideration of the seismic analysis and which edition of the Uniform Building Code was used when the process was designed;

(3) For each external event, with a potential to create a release of a regulated substance that will reach an endpoint offsite, apply Sections (e)(1) through (e)(6); and,

(4) The date of the most recent field verification that equipment is installed and maintained as designed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.175, Part 68, Title 40, Code of Federal Regulations.

Section 2745.8 RMP Emergency Response Program Component.

(a) The owner or operator shall provide in the RMP the following information:

(1) Do you have a written emergency response plan?

(2) Does the plan include specific actions to be taken in response to an accidental release of a regulated substance?

(3) Does the plan include procedures for informing the public and local agencies responsible for responding to accidental releases?

(4) Does the plan include information on emergency health care?

(5) The date of the most recent review or update of the emergency response plan.

(6) The date of the most recent emergency response training for employees.

(b) The owner or operator shall provide the name and telephone number of the primary local emergency response agency with which the plan is coordinated.

(c) The owner or operator shall list other federal or state emergency plan requirements to which the stationary source is subject.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.180, Part 68, Title 40, Code of Federal Regulations.

Section 2745.9 RMP Certification.

(a) For Program 1 processes, the owner or operator shall submit in the RMP the certification statement provided in Section 2735.5(d)(4).

(b) For all other covered processes, the owner or operator shall submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.185, Part 68, Title 40, Code of Federal Regulations.

Section 2745.10 RMP Updates.

(a) The owner or operator of a stationary source which has a regulated substance listed in Table 1 or Table 2 in Section 2770.5 in quantities greater than the corresponding thresholds listed in Table 1 or 2 shall review and update the RMP and submit it in a method and format to a central point specified by USEPA and to the AA as of the date of submission. The owner or operator of a stationary source shall revise and update the RMP submitted under Section 2745.1 as follows:

(1) At least once every five years from the date of its initial submission or most recent update required by sections (a)(2) through (a)(7), whichever is later. For purposes of determining the date of initial submissions, RMPs submitted before June 21, 1999 are considered to have been submitted on June 21, 1999;

(2) No later than three years after a newly regulated substance is first listed by USEPA**;**

(3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;

(4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;

(5) Within six months of a change that requires a revised PHA or hazard review;

(6) Within six months of a change that requires a revised offsite consequence analysis as provided in section 2750.7; and,

(7) Within six months of a change that alters the Program level that applied to any covered process.

(b) The owner or operator of a stationary source which has regulated substances in a process listed in Section 2770.5 in quantities greater than Table 3 thresholds and less than thresholds in Table~~s~~ 1 ~~or 2~~ shall revise and update the RMP submitted under Section 2745.1. The updated RMP shall be submitted to the AA as follows:

(1) At least once every five years from the date of its initial submission or most recent update required by sections (b)(2) through (b)(7),

(2) No later than three years after a newly regulated substance is first listed by Cal ~~EMA~~ OES;

(3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;

(4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;

(5) Within six months of a change that requires a revised PHA or hazard review;

(6) Within six months of a change that requires a revised offsite consequence analysis as provided in Section 2750.7; and,

(7) Within six months of a change that alters the Program level that applied to any covered process.

(c) If a stationary source is no longer subject to the applicability requirements of Section 2735.4(a)(1), the owner or operator shall submit a de-registration pursuant to Section 2740.1(a) to USEPA within six months indicating that the stationary source is no longer covered. A copy of the de-registration shall also be submitted to the AA.

(d) If a stationary source is no longer subject to the applicability requirements of Section 2735.4(a)(2) the owner or operator shall submit a de-registration pursuant to Section 2740.1(b) to the AA within six months indicating that the stationary source is no longer covered.

(e) Revised RMPs shall be subject to the public review process outlined in Section 2745.2.

(f) Within 30 days of a change in the owner or operator, the new owner or operator shall contact the AA to update registration information. The new owner or operator shall determine if RMP changes are necessary.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.190, Part 68, Title 40, Code of Federal Regulations.

Section 2745.10.5 Required RMP Corrections.

~~(a)~~ The owner or operator of a stationary source for which a RMP was submitted shall correct the RMP as follows:

(~~1~~a) New accident history information – For any accidental release meeting the five-year accident history reporting criteria of Section 2750.9, the owner or operator shall submit the data required under Sections 2745.5, 2745.6(j), and 2745.7(l) with respect to that accident within six months of the release or by the time the RMP is updated under Section 2745.10, whichever is earlier.

(~~2~~b) Emergency Contact information – Beginning June 21, 2004, within one month of any change in the emergency contact information required under Section 2740.1(d)(6), the owner or operator shall submit a correction of that information.

NOTE: Authority cited: Sections 25531, 25533, and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.195, Part 68, Title 40, Code of Federal Regulations.

Section 2745.11 Covered Process Modification.

(a) When an owner or operator intends to make a modification to a stationary source relating to a covered process and the modification may result in a significant increase in either: the amount of regulated substances handled at the stationary source as compared to the amount of regulated substances identified in the stationary source's RMP, or the risk of handling a regulated substance as compared to the amount of risk identified in the stationary source's RMP, then the owner or operator shall do all of the following:

(1) Where reasonably possible, notify the AA in writing of the owner or operator's intent to modify the stationary source at least five calendar days before implementing any modifications. As part of the notification process, the owner or operator shall consult with the AA when determining whether the RMP should be reviewed and revised. Where prenotification is not reasonably possible, the owner or operator shall provide written notice to the AA no later than 48 hours following the modification.

(2) Establish procedures to manage the proposed modification, which shall be substantially similar to the procedures specified in Sections 2760.6 and 2760.7, and notify the AA that the procedures have been established.

(b) The owner or operator of the stationary source shall revise the appropriate documents, as required pursuant to section (a), expeditiously, but not later than 60 days from the date of the stationary source modification.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25543.2, Health and Safety Code.

Section 2745.12 Certificate of Occupancy.

New or modified stationary sources shall comply with Section 65850.2(b) of the Government Code prior to the issuance of a certificate of occupancy.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.2, Health and Safety Code.

Article 4. Hazard Assessment.

2750.1 Hazard Assessment Applicability.

Section 2750.1 Hazard Assessment Applicability.

The owner or operator of a stationary source subject to this chapter with a Program 1 process shall prepare a worst-case release scenario analysis as provided in Section 2750.3 and complete the five-year accident history as provided in Section 2750.9. The owner or operator of a Program 2 or 3 process shall comply with all sections in this article for these processes.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.20, Part 68, Title 40, Code of Federal Regulations.

Section 2750.2 Offsite Consequence Analysis Parameters.

(a) Endpoints. The following endpoints shall be used for analyses of offsite consequences:

(1) Toxic endpoints for Table 1 and Table 3 regulated substances (Section 2770.5), are provided in Appendix A of this chapter.

~~(2) Use the toxic endpoints in Appendix A for regulated substances listed on both Table 1 and Table 3 (Section 2770.5).~~

~~(3) Toxic endpoints for regulated substances listed only on Table 3 (Section 2770.5), shall be provided by OES as developed in consultation with the CalEPA, Office of Health Hazard Assessment.~~

(42) Flammables. For Table 2 regulated flammable substances (Section 2770.5), flammable endpoints vary according to the scenarios studied, based upon the following:

(A) Explosion. An overpressure of 1 psi.

(B) Radiant heat/exposure time. A radiant heat of 5 kw/m^2 for 40 seconds.

(C) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.

(b) Wind speed/atmospheric stability class. For the worst-case release analysis, the owner or operator shall use a wind speed of 1.5 meters per second and F atmospheric stability class. If the owner or operator can demonstrate that local meteorological data applicable to the stationary source show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner or operator may use the typical meteorological conditions for the stationary source.

(c) Ambient temperature/humidity. For worst-case release analysis of a regulated toxic substance, the owner or operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site, based on temperature/humidity data gathered at the stationary source or at a local meteorological station; an owner or operator using the RMP Offsite Consequence Analysis Guidance may use 25 degrees centigrade and 50 percent humidity as values for these variables. For analysis of alternative scenarios, the owner or operator may use typical temperature/humidity data gathered at the stationary source or at a local meteorological station.

(d) Height of release. The worst-case release of a regulated toxic substance shall be analyzed assuming a ground level (0 feet) release. For an alternative scenario analysis of a regulated toxic substance, release height may be determined by the release scenario.

(e) Surface roughness. The owner or operator shall use either urban or rural topography, as appropriate. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means there are no buildings in the immediate area and the terrain is generally flat and unobstructed.

(f) Dense or neutrally buoyant gases. The owner or operator shall ensure that tables or models used for dispersion analysis of regulated toxic substances appropriately account for gas density.

(g) Temperature of released substance. For worst case, liquids other than gases liquefied by refrigeration only shall be considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for the stationary source, or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.22, Part 68, Title 40, Code of Federal Regulations.

Section 2750.3 Worst-Case Release Scenario Analysis.

(a) The owner or operator shall analyze and report in the RMP:

(1) For Program 1 processes, one worst-case release scenario including an offsite consequence analysis, for each Program 1 process using the offsite consequence analysis parameters in Section 2750.2;

(2) For Program 2 and 3 processes:

(A) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint as defined in Section 2750.2(a) resulting from an accidental release of regulated toxic substances from covered processes under worst-case conditions defined in Section 2750.2 (b) through (g);

(B) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in Section 2750.2(a) resulting from an accidental release of regulated flammable substances from covered processes under worst-case conditions defined in Section 2750.2; and,

(C) Additional worst-case release scenarios for a hazard class if a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under sections (a)(2)(A) or (a)(2)(B).

(b) Determination of worst-case release quantity. The worst-case release quantity shall be the greater of the following:

(1) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity; or

(2) For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.

(c) Worst-case release scenario - toxic gases.

(1) For regulated toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under section (b), is released as a gas over 10 minutes. The release rate shall be assumed to be the total quantity divided by 10 unless passive mitigation systems are in place.

(2) For regulated toxic gases handled as refrigerated liquids at ambient pressure:

(A) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 centimeter or less, the owner or operator shall assume that the substance is released as a gas in 10 minutes;

(B) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the

quantity in the vessel or pipe, as determined under section (b), is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in section (d).

(d) Worst-case release scenario - toxic liquids.

(1) For regulated toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under section (b), is spilled instantaneously to form a liquid pool.

(A) The surface area of the pool shall be determined by assuming that the liquid spreads to 1 centimeter deep unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. Where passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate.

(B) If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

(2) The volatilization rate shall account for the highest daily maximum temperature occurring in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution.

(3) The rate of release to air shall be determined from the volatilization rate of the liquid pool. The owner or operator may use the methodology in the RMP Offsite Consequence Analysis Guidance or any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(e) Worst-case release scenario - flammable gases. The owner or operator shall assume that the quantity of the substance, as determined under section (b) and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT equivalent methods.

(1) For regulated flammable substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under section (b), is released as a gas over 10 minutes. The total quantity shall be assumed to be involved in the vapor cloud explosion.

(2) For flammable gases handled as refrigerated liquids at ambient pressure:

(A) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of one centimeter or less, the owner or operator shall assume that the total quantity of the substance is released as a gas in 10 minutes, and the total quantity will be involved in the vapor cloud explosion.

(B) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the quantity in the vessel or pipe, as determined under section (b), is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in section (d). The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(f) Worst-case release scenario - flammable liquids. The owner or operator shall assume that the quantity of the substance, as determined under section (b) and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT equivalent methods.

(1) For regulated flammable substances that are normally liquids at ambient temperature, the owner or operator shall assume that the entire quantity in the vessel or pipe, as determined under section (b), is spilled instantaneously to form a liquid pool. For liquids at temperatures below their atmospheric boiling point, the volatilization rate shall be calculated at the conditions specified in section (d).

(2) The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(g) Parameters to be applied. The owner or operator shall use the parameters defined in Section 2750.2 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the AA access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(h) Consideration of passive mitigation. Passive mitigation systems may be considered for the analysis of worst case provided that the mitigation system is capable of withstanding the release event triggering the scenario and would still function as intended.

(i) Factors in selecting a worst-case scenario. Notwithstanding the provisions of section (b), the owner or operator shall select as the worst case for flammable regulated substances or the worst case for regulated toxic substances, a scenario based on the following factors if

such a scenario would result in a greater distance to an endpoint defined in Section 2750.2(a) beyond the stationary source boundary than the scenario provided under section (b):

(1) Smaller quantities handled at higher process temperature or pressure; and,

(2) Proximity to the boundary of the stationary source.

(j) Solids. In performing an offsite consequence analysis for solids that are listed in Section 2770.5 Table 3, an owner or operator may use a USEPA, California Air Resources Board, or Cal ~~EMA~~ OES approved model which appropriately considers the dispersion and settling of particles. For the worst case scenario, the owner or operator shall assume a one-hour release and pursuant to Section 2750.2(b), use a wind speed of 1.5 meters per second and F atmospheric stability class.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.25, Part 68, Title 40, Code of Federal Regulations.

Section 2750.4 Alternative Release Scenario Analysis.

(a) The number of scenarios. The owner or operator shall identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes.

(b) Scenarios to consider.

(1) For each scenario required under section (a), the owner or operator shall select a scenario:

(A) That is more likely to occur than the worst-case release scenario under Section 2750.3; ~~and,~~

(B) That will reach an endpoint offsite, unless no such scenario exists~~.~~; and,

(C) That will reach a public receptor, unless no such scenario exists.

(2) Release scenarios considered should include, but are not limited to, the following, where applicable:

(A) Transfer hose releases due to splits or sudden hose uncoupling;

(B) Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds;

(C) Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure;

(D) Vessel overfilling and spill, or over pressurization and venting through relief valves or rupture disks; and,

(E) Shipping container mishandling and breakage or puncturing leading to a spill.

(c) Parameters to be applied. The owner or operator shall use the parameters defined in Section 2750.2 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the AA access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(d) Consideration of mitigation. Active and passive mitigation systems may be considered provided they are capable of withstanding the event that triggered the release and would still be functional.

(e) Factors in selecting scenarios. The owner or operator shall consider the following in selecting alternative release scenarios:

(1) The five-year accident history provided in Section 2750.9; ~~and,~~

(2) Accidents/incidents or events in related industries available through trade magazines, industry associations and other publicly available sources; either digital or print, and

(~~2~~3) Failure scenarios identified under Section 2755.2 or 2760.2.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.28, Part 68, Title 40, Code of Federal Regulations.

Section 2750.5 Defining Offsite Impacts to the Population.

(a) The owner or operator shall estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 2750.2(a).

(b) Population to be defined. Population shall include residential population. The presence of institutions (schools, hospitals, long term health care facilities, child day care facilities,

prisons), parks and recreational areas, and major commercial, office, and industrial buildings shall be noted in the RMP.

(c) Data sources acceptable. The owner or operator may use the most recent Census data, or other more accurate information if it is available, to estimate the population potentially affected.

(d) Level of accuracy. Population shall be estimated to two significant digits.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531 and 25534.1 Health and Safety Code; and Section 68.30, Part 68, Title 40, Code of Federal Regulations.

Section 2750.6 Defining Offsite Impacts to the Environment.

(a) The owner or operator shall list in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 2750.2(a).

(b) Data sources acceptable. The owner or operator may rely on information provided on local United States Geological Survey (USGS) maps or on any data source containing USGS data to identify environmental receptors.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.33, Part 68, Title 40, Code of Federal Regulations.

Section 2750.7 Offsite Consequence Analysis Review and Update.

(a) The owner or operator shall document the review and update of the offsite consequence analyses at least once every five years.

(b) If changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised RMP as provided in Section 2745.10.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.36, Part 68, Title 40, Code of Federal Regulations.

Section 2750.8 Offsite Consequence Analysis Documentation.

The owner or operator shall maintain the following records on the offsite consequence analyses:

(a) For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection. Assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.

(b) For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios. Assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

(c) Documentation of estimated quantity released, release rate, and duration of release.

(d) Methodology, including the model used to determine distance to endpoints.

(e) Data used to estimate population and environmental receptors potentially affected.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.39, Part 68, Title 40, Code of Federal Regulations.

Section 2750.9 Five-year Accident History.

(a) The owner or operator shall include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

(b) Data required. For each accidental release included, the owner or operator shall report the following information:

(1) Date, time, and approximate duration of the release;

(2) Regulated substance(s) released;

(3) Estimated quantity released in pounds and, for mixtures containing regulated toxic substances, percentage concentration by weight of the released regulated toxic substance in the liquid mixture;

(4) Five- or six-digit NAICS code that most closely corresponds to the process;

(5) The type of release event and its source;

(6) Weather conditions, if known;

(7) On-site impacts;

(8) Known offsite impacts;

(9) Initiating event and contributing factors if known;

(10) Whether offsite responders were notified if known; and,

(11) Operational or process changes that resulted from investigation of the release and that have been made by the time this information is submitted in accordance with Section 2745.5.

(c) Level of accuracy. Numerical estimates shall be provided to two significant digits.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.42, Part 68, Title 40, Code of Federal Regulations.

Article 5. Program 2 Prevention Program.

Section 2755.1 Safety Information.

(a) The owner or operator shall compile and maintain the following up-to-date safety information related to the regulated substances, processes, and equipment:

(1) Material Safety Data Sheets that meet the requirements of Section 5189 of Title 8 of CCR;

(2) Maximum intended inventory of equipment in which the regulated substances are stored or processed;

(3) Safe upper and lower temperatures, pressures, flows, and compositions;

(4) Equipment specifications; and,

(5) Codes and standards used to design, build, and operate the process.

(b) The owner or operator shall ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with federal or state regulations that address industry-specific safe design or with industry-specific design codes and standards may be used to demonstrate compliance with this section.

(c) The owner or operator shall update the safety information if a major change occurs that makes the information inaccurate.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.48, Part 68, Title 40, Code of Federal Regulations.

Section 2755.2 Hazard Review.

(a) The owner or operator shall conduct a review of the hazards associated with the regulated substances, processes, and procedures. The review shall identify the following:

(1) The hazards associated with the process and regulated substances;

(2) Opportunities for equipment malfunctions or human errors that could cause an accidental release;

(3) The safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and,

(4) Any steps used or needed to detect or monitor releases.

(b) The owner or operator of a stationary source shall consult with the AA to decide which hazard review methodology is best suited to determine and evaluate the hazards of the process being analyzed.

(c) The owner or operator may use checklists, if acceptable to the AA, developed by persons or organizations knowledgeable about the process and equipment as a guide to conducting the review. <u>The hazard review shall be performed by a team familiar with process operations and shall include at least one employee who has experience and knowledge specific to the process being reviewed.</u> For processes designed to meet industry standards or federal or state design rules, the hazard review shall, by inspecting all equipment, determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.

(d) The hazard review shall include the consideration of applicable external events, including seismic events.

(e) The owner or operator shall document the results of the hazard review and ensure that problems identified are resolved ~~in a timely manner~~. <u>The owner or operator shall enter into an agreement with the AA on a timetable for resolution of these problems. Otherwise these</u>

resolutions shall be completed within ~~five~~ two and one half (2.5) years of performing the hazard review or the next planned turnaround for items requiring a turnaround. These timelines shall not apply to any hazard review completed prior to ~~July 1, 2014~~. , 2014. The final resolution taken to address the hazard review recommendation and the actual completion date shall be documented.

(f) The hazard review shall be updated and revalidated at least once every five years. The owner or operator shall also conduct reviews whenever a major change in the process occurs. All issues identified in the hazard review shall be resolved before startup of the changed process.

(g) A hazard review may be revalidated only once between full hazard reviews, unless the AA agrees in writing that a full hazard review is unwarranted.

(h) The owner or operator shall retain hazard reviews and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in (e) for the life of the process.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.50, Part 68, Title 40, Code of Federal Regulations.

Section 2755.3 Operating Procedures.

(a) The owner or operator shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for that process. Operating procedures or instructions provided by equipment manufacturers or developed by persons or organizations knowledgeable about the process and equipment may be used as a basis for a stationary source's operating procedures.

(b) The procedures shall address the following:

(1) Initial startup;

(2) Normal operations;

(3) Temporary operations;

(4) Emergency shutdown and operations;

(5) Normal shutdown;

(6) Startup following a normal or emergency shutdown or a major change that requires a hazard review;

(7) Consequences of deviations and steps required to correct or avoid deviations; and,

(8) Equipment inspections.

(c) The owner or operator shall ensure that the operating procedures are developed and/or updated, ~~if~~ as necessary~~, whenever a major change occurs and prior to startup of the changed process.~~ to reflect current practice, or whenever the tasks or steps to perform on the covered process are found to be inadequate or inaccurate.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.52, Part 68, Title 40, Code of Federal Regulations.

Section 2755.4 Training.

(a) The owner or operator shall ensure that each employee presently operating a process, and each employee newly assigned to a covered process has been trained or tested competent in the operating procedures provided in Section 2755.3 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.

(c) The owner or operator may use training conducted under federal or state regulations or under industry-specific standards or codes or training conducted by covered process equipment vendors to demonstrate compliance with this section to the extent that the training meets the requirements of this section.

(d) The owner or operator shall ensure that operators are trained in any updated or new procedures prior to ~~startup of a process after a major change~~. needing to use the procedures.

(e) The owner or operator shall document initial and refresher training for each employee.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.54, Part 68, Title 40, Code of Federal Regulations.

Section 2755.5 Maintenance.

(a) The owner or operator shall prepare and implement written procedures to maintain the on-going mechanical integrity of the process equipment. The owner or operator may use procedures or instructions provided by covered process equipment vendors or procedures in

federal or state regulations or industry codes as the basis for stationary source maintenance procedures.

(b) The owner or operator shall train or cause to be trained each employee involved in maintaining the on-going mechanical integrity of the process. To ensure that the employee can perform the job tasks in a safe manner, each such employee shall be trained in the hazards of the process, in how to avoid or correct unsafe conditions, and in the procedures applicable to the employee's job tasks.

(c) The owner or operator shall ensure that each ~~Any maintenance~~ contractor ~~shall ensure that each contract maintenance~~ can document that their employees are ~~is~~ trained to perform the maintenance and appropriate operation procedures developed under section (a).

(d) The owner or operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.56, Part 68, Title 40, Code of Federal Regulations.

Section 2755.6 Compliance Audits.

(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this article at least every three years to verify that the procedures and practices developed under this chapter are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) The owner or operator shall develop a report of the audit findings.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit. The owner or operator shall enter into an agreement with the AA on a timetable for resolution of these findings. Otherwise these responses will be completed within ~~three~~ one and one half (1.5) years after performing the compliance audit, or the next planned turnaround for items requiring a turnaround. These timelines shall not apply to any compliance audit completed prior to ~~July 1, 2014~~ , 2014. ~~and d~~Document ~~that~~ the actual completion dates when deficiencies ~~have been~~ were corrected.

(e) The owner or operator shall retain the two most recent compliance audit reports. ~~This requirement does not apply to any compliance audit report that is more than five years old.~~

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.58, Part 68, Title 40, Code of Federal Regulations.

Section 2755.7 Incident Investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in, a catastrophic release.

(b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(c) A summary shall be prepared at the conclusion of the investigation which includes at a minimum:

~~(1) Date of incident;~~

(~~2~~1) Date ~~and time~~ the investigation began;

(~~3~~2) A description of the incident, including all of the data required under 2750.9(b); and,

~~(4) The factors that contributed to the incident; and,~~

(~~5~~3) Any recommendations resulting from the investigation.

(d) The owner or operator shall promptly address and resolve the investigation findings and recommendations. The owner or operator shall enter into an agreement with the AA on a timetable for resolution of these findings and recommendations. Otherwise these resolutions shall be completed no later than ~~three~~ one and one half (1.5) years after ~~performing~~ the completion of the incident investigation, or two (2) years after the date of the incident, whichever is the earlier of the two dates, or the next planned turnaround for those items requiring a turnaround. Resolutions and corrective actions with actual completion dates shall be documented.

(e) The findings shall be reviewed with all affected personnel whose job tasks are affected by the findings.

(f) Investigation summaries shall be retained for five years.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.60, Part 68, Title 40, Code of Federal Regulations.

Article 6. Program 3 Prevention Program.

Section 2760.1 Process Safety Information.

(a) In accordance with the schedule set forth in Section 2760.2, the owner or operator shall complete a compilation of written process safety information before conducting any PHA required by the chapter. The compilation of written process safety information ~~is~~ shall be maintained and kept up-to-date to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

(b) Information pertaining to the hazards of the regulated substances in the process. This information shall consist of at least the following:

(1) Toxicity information;

(2) Permissible exposure limits;

(3) Physical data;

(4) Reactivity data and chemical compatibility data during handling, use and application at the stationary source;

(5) Corrosivity data;

(6) Thermal and chemical stability data; and,

(7) Hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

NOTE TO SECTION (b): Material Safety Data Sheets meeting the requirements of Section 5189 of Title 8 of CCR may be used to comply with this requirement to the extent they contain the information required by this subsection.

(c) Information pertaining to the technology of the process.

(1) Information concerning the technology of the process shall include at least the following:

(A) A block flow diagram or simplified process flow diagram;

(B) Process chemistry;

(C) Maximum intended inventory;

(D) Safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and,

(E) An evaluation of the consequences of deviations.

(2) Where the original technical information no longer exists, such information may be developed in conjunction with the PHA in sufficient detail to support the analysis.

(d) Information pertaining to the equipment in the process.

(1) Information pertaining to the equipment in the process shall include:

(A) Materials of construction;

(B) Piping and instrument diagrams (P&ID's);

(C) Electrical classification;

(D) Relief system design and design basis;

(E) Ventilation system design;

(F) Design codes and standards employed;

(G) Material and energy balances for processes built after June 21, 1999; and,

(H) Safety systems (e.g., interlocks, detection, or suppression systems).

(2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

(3) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.65, Part 68, Title 40, Code of Federal Regulations.

Section 2760.2 Process Hazard Analysis [PHA].

(a) The owner or operator shall perform an initial PHA (hazard evaluation) on processes covered by this article. The PHA shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. ~~The owner or operator shall determine and document the priority order for conducting PHAs based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process~~. The PHA shall be conducted as soon as possible during the development of the CalARP Program, but not later than the date of submittal of the RMP. Notwithstanding section (c) below, PHAs completed to comply with Section 5189 of Title 8 of CCR are acceptable as initial PHAs. These PHAs shall be updated and revalidated, based on their completion date.

(b) The owner or operator shall work closely with AAs in deciding which PHA methodology is best suited to determine the hazards of the process being analyzed. The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed:

(1) What-If;

(2) Checklist;

(3) What-If / Checklist;

(4) Hazard and Operability Study (HAZOP);

(5) Failure Mode and Effects Analysis (FMEA);

(6) Fault Tree Analysis; or,

(7) An appropriate equivalent methodology.

(c) The PHA shall address:

(1) The hazards of the process;

(2) The identification of any previous incident which had a likely potential for catastrophic consequences;

(3) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. (Acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors.);

(4) Consequences of failure of engineering and administrative controls;

(5) Stationary source siting;

(6) Human factors;

(7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls; and,

(8) The PHA shall include the consideration of external events, including seismic events, if applicable. PHAs completed for other programs where external events were not considered shall be updated to include external events.

(d) The PHA shall be performed by a team with expertise in engineering and process operations, and the team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific PHA methodology being used.

(e) The owner or operator shall establish a system to ~~promptly~~ address the team's findings and recommendations; assure that the recommendations are resolved ~~in a timely manner~~ and ~~that the resolution is~~ documented; document what actions are to be taken; ~~complete actions as soon as possible;~~ develop a written schedule of when these actions are to be completed; complete these actions on a time table agreed upon with the AA, or within ~~five~~ two and one half (2.5) years of performing the PHA, or the next planned turnaround, for those items that require a turnaround; document the final resolution taken to address each recommendation and actual completion date; and communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. . The above timelines shall not apply to any process hazard analysis completed prior to ~~July 1, 2014~~ , 2014.

(f) At least every five years after the completion of the initial PHA, the PHA shall be updated and revalidated by a team meeting the requirements in section (d), to assure that the PHA is consistent with the current process. Notwithstanding section (c), updated and revalidated PHA[s] completed to comply with Section 5189 of Title 8 of CCR are acceptable to meet the requirements of this section.

(g) The owner or operator shall retain PHAs and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in section (e), for the life of the process.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.67, Part 68, Title 40, Code of Federal Regulations.

Section 2760.3 Operating Procedures.

(a) The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements:

(1) Steps for each operating phase:

(A) Initial startup;

(B) Normal operations;

(C) Temporary operations;

(D) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner;

(E) Emergency operations;

(F) Normal shutdown; and,

(G) Startup following a turnaround, or after an emergency shutdown.

(2) Operating limits:

(A) Consequences of deviation; and,

(B) Steps required to correct or avoid deviation.

(3) Safety and health considerations:

(A) Properties of, and hazards presented by, the chemicals used in the process;

(B) Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment;

(C) Control measures to be taken if physical contact or airborne exposure occurs;

(D) Quality control for raw materials and control of hazardous chemical inventory levels; and,

(E) Any special or unique hazards.

(4) Safety systems and their functions.

(b) Operating procedures shall be readily accessible to employees who work in or maintain a process.

(c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.

(d) The owner or operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.69, Part 68, Title 40, Code of Federal Regulations.

Section 2760.4 Training.

(a) Initial training.

(1) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in Section 2760.3. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.

(2) In lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

(c) Training documentation. The owner or operator shall ascertain that each employee involved in operating a process has received and understood the training required by this section. The owner or operator shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.71, Part 68, Title 40, Code of Federal Regulations.

Section 2760.5 Mechanical Integrity.

(a) Application. Sections (b) through (f) of this section apply to the following process equipment:

(1) Pressure vessels and storage tanks;

(2) Piping systems (including ~~piping~~ ancillary components such as valves);

(3) Relief and vent systems and devices;

(4) Emergency shutdown systems;

(5) Controls (including monitoring devices and sensors, alarms, and interlocks); and,

(6) Pumps, compressors and their drivers.

(b) Written procedures. The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.

(c) Training for process maintenance activities. The owner or operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(d) Inspection and testing.

(1) Inspections and tests shall be performed on process equipment.

(2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.

(3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

(4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(e) Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in Section 2760.1) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(f) Quality assurance.

(1) In the construction of new plants and equipment, the owner or operator shall assure that equipment as it is fabricated is suitable for the process application for which they will be used.

(2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

(3) The owner or operator shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.73, Part 68, Title 40, Code of Federal Regulations.

Section 2760.6 Management of Change.

(a) The owner or operator shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.

(b) The procedures shall assure that the following considerations are addressed prior to any change:

(1) The technical basis for the proposed change;

(2) Impact of change on safety and health;

(3) Modifications to and/or development of new operating and maintenance procedures;

(4) Necessary time period for the change; and,

(5) Authorization requirements for the proposed change.

(c) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.

(d) If a change covered by this section results in a change in the process safety information required by Section 2760.1, such information shall be updated accordingly.

(e) If a change covered by this section results in a change in the operating procedures or practices required by Section 2760.3, and/or results in a change in the written procedures to maintain the ongoing integrity of process equipment required by Section 2760.5, such procedures or practices shall be updated ~~accordingly~~ prior to start-up of the process.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.75, Part 68, Title 40, Code of Federal Regulations.

Section 2760.7 Pre-Startup Safety Review.

(a) The owner or operator shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.

(b) The pre-startup safety review shall confirm, as a verification check, independent of the management of change process, that prior to the introduction of regulated substances to a process:

(1) Construction and equipment is in accordance with design specifications;

(2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;

(3) For new stationary sources, a PHA has been performed and recommendations have been resolved or implemented before startup, and modified stationary sources meet the requirements contained in management of change, Section 2760.6; and,

(4) Training of each employee involved in operating a process has been completed.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.77, Part 68, Title 40, Code of Federal Regulations.

Section 2760.8 Compliance Audits.

(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this article at least every three years to verify that the procedures and practices developed under the chapter are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) A report of the scope, methods used, results and findings of the audit shall be developed. This report, including results, shall be available for AA review.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit. The owner or operator shall enter into an agreement with the AA on a timetable for resolution of these findings. Otherwise these responses will be completed ~~three~~ one and one half (1.5) years after performing the compliance audit, or the next planned turnaround for items requiring a turnaround. These timelines shall not apply to any compliance audit completed prior to ~~July 1, 2014~~ , 2014. ~~and d~~Document ~~that~~ the actual completion dates when deficiencies ~~have been~~ were corrected.

(e) The owner or operator shall retain the two most recent compliance audit reports.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.79, Part 68, Title 40, Code of Federal Regulations.

Section 2760.9 Incident Investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in, a catastrophic release.

(b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(c) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(d) A report shall be prepared at the conclusion of the investigation which includes at a minimum:

~~(1) Date of incident;~~

(~~2~~1) Date ~~and time~~ the investigation began;

(~~3~~2) A description of the incident, including all of the data required under 2750.9(b); and,

~~(4) The factors that contributed to the incident; and,~~

(~~5~~3) Recommendations resulting from the investigation.

(e) The owner or operator shall establish a system to promptly address and resolve the incident report findings and recommendations. The owner or operator shall enter into an agreement with the AA on a timetable for resolution of these findings and recommendations. Otherwise these resolutions shall be completed no later than ~~three~~ one and one half (1.5) years after ~~performing~~ the completion of the incident investigation, or two (2) years after the date of the incident, whichever is the earlier of the two dates, or the next planned turnaround for those items requiring a turnaround. Resolutions and corrective actions with actual completion dates shall be documented.

(f) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.

(g) Incident investigation reports shall be retained for five years.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.81, Part 68, Title 40, Code of Federal Regulations.

Section 2760.10 Employee Participation.

(a) The owner or operator shall develop a written plan of action regarding the implementation of the employee participation required by this section.

(b) The owner or operator shall consult with employees and their representatives on the conduct and development of PHA and on the development of the other elements of process safety management in this chapter.

(c) The owner or operator shall provide employees and their representatives with access to PHAs and to all other information required to be developed under this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.83, Part 68, Title 40, Code of Federal Regulations.

Section 2760.11 Hot Work Permit.

(a) The owner or operator shall issue a hot work permit for hot work operations conducted on or near a covered process.

(b) The permit shall document that the fire prevention and protection requirements in Section 5189 of Title 8 of CCR have been implemented prior to beginning the hot work operations;

it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.85, Part 68, Title 40, Code of Federal Regulations.

Section 2760.12 Contractors.

(a) Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.

(b) Owner or operator responsibilities.

(1) The owner or operator, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.

(2) The owner or operator shall inform the contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(3) The owner or operator shall explain to the contract owner or operator the applicable provisions of Article 7.

(4) The owner or operator shall develop and implement safe work practices consistent with Section 2760.3(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.

(5) The owner or operator shall periodically evaluate and document the evaluation of the performance of the contract owner or operator in fulfilling their obligations as specified in section (c).

(c) Contract owner or operator responsibilities.

(1) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his or her job.

(2) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his or her job and the process, and the applicable provisions of the emergency action plan.

(3) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.

(4) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by Section 2760.3(d).

(5) The contract owner or operator shall advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.87, Part 68, Title 40, Code of Federal Regulations.

Article 7. Emergency Response Program.

Section 2765.1 Emergency Response Applicability.

(a) Except as provided in section (b), the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of Section 2765.2.

(b) The owner or operator of a stationary source whose employees will not respond to accidental releases of regulated substances need not comply with Section 2765.2 provided that they meet the following:

(1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under Section 11003 of Title 42 of the United States Code (USC), is included in the city or county Hazardous Materials Area plans and/or is included in the business plan program, pursuant to Chapter 6.95, Article 1 of the Health & Safety Code. The owner or operator must document that response actions have been coordinated with the local fire department and hazardous materials response agencies;

(2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator must document that ~~has coordinated~~ response actions have been coordinated with the local fire department and hazardous materials response agencies; and,

(3) Appropriate mechanisms and written procedures are in place to notify emergency responders when there is a need for a response.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.90, Part 68, Title 40, Code of Federal Regulations.

Section 2765.2 Emergency Response Program.

(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. The emergency response program shall include the following elements:

(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:

(A) Procedures for informing and interfacing with the public and local emergency response agencies about accidental releases, emergency planning, and emergency response;

(B) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and,

(C) Procedures and measures for emergency response after an accidental release of a regulated substance;

(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;

(3) Training for all employees in relevant procedures and relevant aspects of the Incident Command System; and,

(4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.

(b) A written plan that complies with the contingency plan format developed pursuant to Section 25503.4 of HSC and that, among other matters, includes the elements provided in section (a), shall satisfy the requirements of this section if the owner or operator also complies with section (c). The contingency plan format shall be provided by Cal ~~EMA~~ OES upon request.

(c) The emergency response plan developed under section (a)(1) shall be coordinated with the community emergency response plan developed under Section 11003 of Title 42 of USC. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

(d) The owner or operator is not required to meet the business plan requirements if the emergency response plan developed under this section is consistent with the business plan requirements pursuant to Sections 2731 and 2732 of Title 19 of CCR. This does not exempt the owner or operator from requirements which relate to the annual inventory or emergency response planning for hazardous materials which are not regulated substances.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25531 and 25537.5, Health and Safety Code; and Section 68.95, Part 68, Title 40, Code of Federal Regulations.

Article 8. Regulated Substances for Accidental Release Prevention.

Section 2770.1 Purpose.

This article lists regulated substances pursuant to Section 2770.5 (Tables 1, 2, or 3), identifies specific threshold quantities, and establishes the requirements for petitioning to add, delete, or change the threshold for regulated substances.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25532(g), (j), and (l), 25543.1, and 25543.3, Health and Safety Code; and Section 68.100, Part 68, Title 40, Code of Federal Regulations.

Section 2770.2 Threshold Determination.

(a) A threshold quantity of a regulated substance is present at a stationary source if the total quantity of a regulated substance contained in a process exceeds the threshold listed in Section 2770.5.

(b) For the purpose of determining whether more than a threshold quantity of a regulated substance is present at the stationary source, the following apply:

(1) Concentrations of a regulated toxic substance in a mixture:

(A) A mixture of less than one percent by weight of a regulated toxic substance need not be considered when determining whether more than a threshold quantity is present at the stationary source. A mixture containing a regulated toxic substance is regulated if the concentration of the toxic substance present in the mixture is one percent or greater by weight. The owner or operator of a stationary source

shall only consider the weight of the regulated substance in the mixture, not the entire weight of the mixture.

(B) The owner or operator of a stationary source, when determining whether more than a threshold quantity of a regulated toxic substance in a mixture (one percent or greater by weight, pursuant to (A)) is present at the stationary source, need not consider portions of the process which can be demonstrated to have a partial pressure of the regulated substance in the mixture (solution), under the handling or storage conditions, which is less than 10 millimeters of mercury (mm Hg). The owner or operator of the stationary source shall document any exempted portions of processes where the partial pressure measurements or estimates are less than 10 mm Hg.

(C) The exemption regarding 10 mm Hg of partial pressure in (B) does not apply to:

(i) Regulated substances which are solids as noted in Section 2770.5, Table 3;

(ii) Those regulated substances that failed the evaluation pursuant to Section 25532(g)(2) of HSC as noted in Section 2770.5, Table 3; or,

(iii) Oleum, toluene 2,4-diisocyanate, toluene 2,6-diisocyanate and toluene diisocyanate (unspecified isomer) as noted in Section 2770.5.

(2) Concentrations of a regulated flammable substance in a mixture. A mixture of less than one percent by weight of a regulated flammable substance need not be considered when determining whether more than a threshold quantity is present at the stationary source. Except as provided in Sections (b)(2)(A) and (2)(B) of this section, if the concentration of the substance in the mixture is one percent or greater by weight of the mixture, then, for the purpose of determining whether a threshold quantity is present at the stationary source, the entire weight of the mixture shall be treated as the regulated substance unless the owner or operator can demonstrate that the mixture itself does not have a NFPA flammability hazard rating of 4. The demonstration shall be in accordance with the definition of flammability hazard rating 4 in the NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, NFPA, Quincy, MA, 1996. (Available from the NFPA, 1 Batterymarch Park, Quincy, MA 02269-9101. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552 (a) and 1 CFR part 51. Copies may be inspected at the Environmental Protection Agency Air Docket (6102), Attn: Docket No. A-96-08, Waterside Mall, 401 M. St. SW., Washington D.C.; or at the Office of Federal Register at 800 North Capitol St., NW, Suite 700, Washington, D.C.) Boiling point and flash point shall be defined and determined in accordance with NFPA 30, Flammable and Combustible Liquids Code, NFPA, Quincy, MA, 1996. (Available from the NFPA, 1 Batterymarch Park, Quincy, MA 02269-9101. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552 (a) and 1 CFR part 51. Copies may be inspected at the Environmental Protection Agency Air Docket (6102), Attn: Docket No. A-96-08, Waterside Mall, 401 M. St. SW.,

Washington D.C.; or at the Office of Federal Register at 800 North Capitol St., NW, Suite 700, Washington, D.C.) The owner or operator shall document the NFPA flammability hazard rating.

(A) Gasoline. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source.

(B) Naturally occurring hydrocarbon mixtures. Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include any combination of the following: condensate, crude oil, field gas, and produced water, each as defined in Section 2735.3.

(3) Articles. Regulated substances contained in articles need not be considered when determining whether more than a threshold quantity is present at the stationary source.

(4) Uses. Regulated substances, when in use for the following purposes, need not be included in determining whether more than a threshold quantity is present at the stationary source:

(A) Use as a structural component of the stationary source;

(B) Use of products for routine janitorial maintenance;

(C) Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substance; and,

(D) Use of regulated substances present in process water or non-contact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.

(5) Activities in laboratories. If a regulated substance is manufactured, processed, or used in a laboratory at a stationary source under the supervision of a technically qualified individual as defined in Section 720.3(ee) of Chapter 1 of Title 40 of CFR, the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exemption does not apply to:

(A) Specialty chemical production;

(B) Manufacture, processing, or use of substances in pilot plant scale operations; and,

(C) Activities conducted outside the laboratory.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25532(j) and (l) and 25543.3, Health and Safety Code; and Section 68.115, Part 68, Title 40, Code of Federal Regulations.

Section 2770.3 ~~(Reserved).~~ Petition Process.

(a) Any person may petition the Director of Cal OES to modify, by addition, deletion, or by amendment of the threshold value, the list of regulated substances identified in section 2770.5, Table 3. The Office of Environmental Health Hazard Assessment shall make a recommendation to the Director, based on a review of all available data, pursuant to HSC Section 25543.1(f).

(1) The Director may grant or deny the petition based on:

(A) The information presented by the petitioner;

(B) The recommendation of the Office of Environmental Health Hazard Assessment;

(C) Comments and recommendations of the administering agencies, and;

(D) Comments on the petition received from the public.

(2) A substance may be added to the list if, in the case of an accidental release, it is known to cause or may be reasonably anticipated to cause death, injury, or serious adverse effects to human health or the environment.

(3) A threshold value for a substance, listed in section 2770.5, Table 3, may be lowered if, based upon the best available scientific data, it can be shown that the risk to human health, safety or the environment is worse than previously believed.

(4) A substance may be deleted from the list if adequate data on the health and environmental effects of the substance are available to determine that the substance, in the case of an accidental release, is not known to cause and may not be reasonably anticipated to cause death, injury, or serious adverse effects to human health or the environment.

(5) A threshold value for a substance, listed in section 2770.5, Table 3, may be raised if , based on the best available scientific data, it can be shown that the risk to human health, safety or the environment is not as great as previously believed.

(6) The burden of proof is on the petitioner to demonstrate that the criteria for addition, deletion, or threshold modification are met. A petition will be denied if this demonstration is not made.

(7) The Director will not accept additional petitions on the same substance following publication of a final notice of the decision to grant or deny a petition, unless new data becomes available that could significantly affect the basis for the decision.

(8) Petitions to modify the list of regulated substances must contain the following:

(A) Name and address of the petitioner and a brief description of the organization(s) that the petitioner represents, if applicable;

(B) Name, address, telephone number, and (optionally) e-mail address of a contact person for the petition;

(C) If proposing to delete a substance or to raise or lower a threshold, the chemical name as listed in section 2770.5, Table 3. If proposing to add a substance, common chemical name(s), common synonym(s), Chemical Abstracts Service number, and chemical formula and structure;

(D) Action requested (add or delete a substance, raise or lower a threshold);

(E) Rationale supporting the petitioner's position; that is, how the substance meets the criteria for addition, deletion or threshold modification. A short summary of the rationale must be submitted along with a more detailed narrative; and

(F) Supporting data; that is, the petition must include sufficient information to scientifically support the request to modify the list. Such information shall include, but not be limited to:

(i) A list of all support documents;

(ii) Documentation of literature searches conducted, including, but not limited to, identification of the database(s) searched, the search strategy, dates covered, and printed results;

(iii) Effects data (animal, human, and environmental test data) indicating the potential for death, injury, or serious adverse human and environmental impacts from acute exposure following an accidental release; printed copies of the data sources, in English, should be provided; and

(iv) Exposure data or previous accident history data, indicating the potential for serious adverse human health or environmental effects from an accidental release. These data may include, but are not limited to, physical and chemical properties of the substance, such as vapor pressure; modeling results, including data and assumptions used and model documentation; and historical accident data, citing data sources.

(9) Any petition submitted pursuant to this section shall be accompanied by a submission fee, to be established by Cal OES. The purpose of this fee is to defray the reasonable costs incurred by Cal OES and the Office of Environmental Health Hazard Assessment in carrying out the evaluation of the petition, as required by this section.

(10) Upon receipt of any petition pursuant to this section, Cal OES shall notify the administering agencies of the petition and shall receive comments from the administering agencies. All such comments shall be retained and shall be responded to in writing.

(11) Upon receipt of any petition pursuant to this section, Cal OES shall notify the public of the petition and shall receive comments from the public. All such comments shall be retained and shall be responded to in writing.

(12) Within 18 months of receipt of a petition, the Director shall publish in the Cal OES website a notice either denying the petition or granting the petition and shall commence rulemaking to effect the change, if any.

(b) Any person wishing to effect a change in the list of regulated substances identified in section 2770.5, Tables 1 or 2, may petition the Administrator of USEPA, pursuant to section 68.120 of Title 40, Code of Federal Regulations, to modify, by addition or deletion, the list of regulated substances identified in section. 68.130 of Title 40, CFR. If the Administrator grants the petition, a notice of this grant and the proposed change in the listing will be published in the Federal Register. Within 12 months of the amended listing in 40 CFR 68.130, Cal OES shall commence rulemaking to make section 2770.5, Tables 1 or 2, conform to 40 CFR 68.130.

NOTE: Authority cited: Sections 25531, 25534.05 and 25543.1, Health and Safety Code. Reference: Sections 25531 and 25543.1, Health and Safety Code; and Section 68.120, Part 68, Title 40, Code of Federal Regulations.

Section 2770.4 Exemptions.

Agricultural nutrients. Ammonia used as an agricultural nutrient, when held by farmers, is exempt from all provisions of this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.125, Part 68, Title 40, Code of Federal Regulations.

Section 2770.4.1 Exclusion.

Flammable substances used as fuel or held for sale as fuel at retail facilities. A flammable substance listed in Section 2770.5, Table 2, is nevertheless excluded from all provisions of this chapter when the substance is used as a fuel or held for sale as a fuel at a retail facility.

NOTE: Authority cited: Sections 25531, 25533, and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.126, Part 68, Title 40, Code of Federal Regulations.

Section 2770.5 List of Substances.

Regulated toxic and flammable substances under Section 112(r) of the federal CAA are the substances listed in Tables 1 and 2. Table 3 lists those regulated substances pursuant to Section 25532(g)(2) of HSC. Threshold quantities for listed toxic and flammable substances are specified in the tables.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25532(g)(2) and 25543.3, Health and Safety Code; and Section 68.130, Part 68, Title 40, Code of Federal Regulations.

Table 1. Federal Regulated Substances List and Threshold Quantities for Accidental Release Prevention

Chemical Name	Also on Table 3 [f]	CAS Number	Threshold quantity (lbs)	Basis for listing
Acrolein [2-Propenal]	yes	107-02-8	5,000	b
Acrylonitrile [2-Propenenitrile]	yes	107-13-1	20,000	b
Acrylyl chloride [2-Propenoyl chloride]	yes	814-68-6	5,000	b
Allyl alcohol [2-Propen-l-ol]	yes	107-18-6	15,000	b
Allylamine [2-Propen-l-amine]	yes	107-11-9	10,000	b
Ammonia (anhydrous)	yes	7664-41-7	10,000	a,b
Ammonia (conc 20% or greater)	yes	7664-41-7	20,000	a,b
Arsenous trichloride	yes	7784-34-1	15,000	b
Arsine	yes	7784-42-1	1,000	b
Boron trichloride [Borane, trichloro-]	yes	10294-34-5	5,000	b
Boron trifluoride [Borane, trifluoro-]	yes	7637-07-2	5,000	b
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro [oxybis[metane]]]-, T-4-	yes	353-42-4	15,000	b
Bromine	yes	7726-95-6	10,000	a,b
Carbon disulfide	yes	75-15-0	20,000	b
Chlorine	yes	7782-50-5	2,500	a,b
Chlorine dioxide [Chlorine oxide (ClO2)]	no	10049-04-4	1,000	c
Chloroform [Methane, trichloro-]	yes	67-66-3	20,000	b
Chloromethyl ether [Methane, oxybis[chloro-]]	yes	542-88-1	1,000	b
Chloromethyl methyl ether [Methane, chloromethoxy-]	yes	107-30-2	5,000	b
Crotonaldehyde [2-Butenal]	yes	4170-30-3	20,000	b
Crotonaldehyde, (E)- [2-Butenal, (E)-]	yes	123-73-9	20,000	b
Cyanogen chloride	no	506-77-4	10,000	c
Cyclohexylamine [Cyclohexanamine]	yes	108-91-8	15,000	b
Diborane	yes	19287-45-7	2,500	b
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	yes	75-78-5	5,000	b
1,1-Dimethylhydrazine [Hydrazine,1,1-dimethyl-]	yes	57-14-7	15,000	b
Epichlorohydrin [Oxirane, (chloromethyl)-]	yes	106-89-8	20,000	b
Ethylenediamine [1,2-Ethanediamine]	yes	107-15-3	20,000	b
Ethyleneimine [Aziridine]	yes	151-56-4	10,000	b
Ethylene oxide [Oxirane]	yes	75-21-8	10,000	a,b
Fluorine	yes	7782-41-4	1,000	b
Formaldehyde (solution)	yes	50-00-0	15,000	b
Furan	yes	110-00-9	5,000	b
Hydrazine	yes	302-01-2	15,000	b
Hydrochloric acid (conc 37% or greater)	no	7647-01-0	15,000	d
Hydrocyanic acid	yes	74-90-8	2,500	a,b
Hydrogen chloride (anhydrous) [Hydrochloric acid]	yes	7647-01-0	5,000	a
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	yes	7664-39-3	1,000	a,b
Hydrogen selenide	yes	7783-07-5	500	b
Hydrogen sulfide	yes	7783-06-4	10,000	a,b
Iron, pentacarbonyl- [Iron carbonyl (Fe(CO)5), (TB-5-11)-]	yes	13463-40-6	2,500	b
Isobutyronitrile [Propanenitrile, 2-methyl-]	yes	78-82-0	20,000	b
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	yes	108-23-6	15,000	b
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	yes	126-98-7	10,000	b
Methyl chloride [Methane, chloro-]	no	74-87-3	10,000	a

Table 1. Federal Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 3 [f]	CAS Number	Threshold quantity (lbs)	Basis for listing
Methyl chloroformate [Carbonochloridic acid, methylester]	yes	79-22-1	5,000	b
Methyl hydrazine [Hydrazine, methyl-]	yes	60-34-4	15,000	b
Methyl isocyanate [Methane, isocyanato-]	yes	624-83-9	10,000	a,b
Methyl mercaptan [Methanethiol]	yes	74-93-1	10,000	b
Methyl thiocyanate [Thiocyanic acid, methyl ester]	yes	556-64-9	20,000	b
Methyltrichlorosilane [Silane, trichloromethyl-]	yes	75-79-6	5,000	b
Nickel carbonyl	yes	13463-39-3	1,000	b
Nitric acid (conc 80% or greater)	yes	7697-37-2	15,000	b
Nitric oxide [Nitrogen oxide (NO)]	yes	10102-43-9	10,000	b
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] [1]	no	8014-95-7	10,000	e
Peracetic acid [Ethaneperoxoic acid]	yes	79-21-0	10,000	b
Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	yes	594-42-3	10,000	b
Phosgene [Carbonic dichloride]	yes	75-44-5	500	a,b
Phosphine	yes	7803-51-2	5,000	b
Phosphorus oxychloride [Phosphoryl chloride]	yes	10025-87-3	5,000	b
Phosphorus trichloride [Phosphorous trichloride]	yes	7719-12-2	15,000	b
Piperidine	yes	110-89-4	15,000	b
Propionitrile [Propanenitrile]	yes	107-12-0	10,000	b
Propyl chloroformate [Carbonochloridic acid, propylester]	yes	109-61-5	15,000	b
Propyleneimine [Aziridine, 2-methyl-]	yes	75-55-8	10,000	b
Propylene oxide [Oxirane, methyl-]	yes	75-56-9	10,000	b
Sulfur dioxide (anhydrous)	yes	7446-09-5	5,000	a,b
Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	yes	7783-60-0	2,500	b
Sulfur trioxide	yes	7446-11-9	10,000	a,b
Tetramethyllead [Plumbane, tetramethyl-]	yes	75-74-1	10,000	b
Tetranitromethane [Methane, tetranitro-]	yes	509-14-8	10,000	b
Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	yes	7550-45-0	2,500	b
Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] [1]	yes	584-84-9	10,000	a
Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] [1]	yes	91-08-7	10,000	a
Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-] [1]	no	26471-62-5	10,000	a
Trimethylchlorosilane [Silane, chlorotrimethyl-]	yes	75-77-4	10,000	b
Vinyl acetate monomer [Acetic acid ethenyl ester]	yes	108-05-4	15,000	b

1 The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where this regulated substance is handled at partial pressures below 10 mm Hg does not apply to this substance.

Note - Basis for Listing:
a Mandated for listing by Congress.
b On EHS list, vapor pressure 10 mmHg or greater.
c Toxic gas.
d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.
e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.
f This column identifies substances which may appear on Table 3. Table 3 may not have concentration limitations.

Table 2. Federal Regulated Flammable Substances List [1] and Threshold Quantities for Accidental Release Prevention

Chemical Name	CAS Numbers	Threshold quantity (lbs)	Basis for listing
Acetaldehyde	75-07-0	10,000	g
Acetylene [Ethyne]	74-86-2	10,000	f
Bromotrifluorethylene [Ethene, bromotrifluoro-]	598-73-2	10,000	f
1,3-Butadiene	106-99-0	10,000	f
Butane	106-97-8	10,000	f
1-Butene	106-98-9	10,000	f
2-Butene	107-01-7	10,000	f
Butene	25167-67-3	10,000	f
2-Butene-cis	590-18-1	10,000	f
2-Butene-trans [2-Butene, (E)]	624-64-6	10,000	f
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000	f
Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000	f
2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000	g
1-Chloropropylene [1-Propene, 1-chloro-]	590-21-6	10,000	g
Cyanogen [Ethanedinitrile]	460-19-5	10,000	f
Cyclopropane	75-19-4	10,000	f
Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000	f
Difluoroethane [Ethane, 1,1-difluoro-]	75-37-6	10,000	f
Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000	f
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000	f
Ethane	74-84-0	10,000	f
Ethyl acetylene [1-Butyne]	107-00-6	10,000	f
Ethylamine [Ethanamine]	75-04-7	10,000	f
Ethyl chloride [Ethane, chloro-]	75-00-3	10,000	f
Ethylene [Ethene]	74-85-1	10,000	f
Ethyl ether [Ethane, 1,1'-oxybis-]	60-29-7	10,000	g
Ethyl mercaptan [Ethanethiol]	75-08-1	10,000	g
Ethyl nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000	f
Hydrogen	1333-74-0	10,000	f
Isobutane [Propane, 2-methyl]	75-28-5	10,000	f
Isopentane [Butane, 2-methyl-]	78-78-4	10,000	g
Isoprene [1,3-Butadinene, 2-methyl-]	78-79-5	10,000	g
Isopropylamine [2-Propanamine]	75-31-0	10,000	g
Isopropyl chloride [Propane, 2-chloro-]	75-29-6	10,000	g
Methane	74-82-8	10,000	f
Methylamine [Methanamine]	74-89-5	10,000	f
3-Methyl-1-butene	563-45-1	10,000	f
2-Methyl-1-butene	563-46-2	10,000	g
Methyl ether [Methane, oxybis-]	115-10-6	10,000	f
Methyl formate [Formic acid, methyl ester]	107-31-3	10,000	g
2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000	f
1,3-Pentadinene	504-60-9	10,000	f
Pentane	109-66-0	10,000	g
1-Pentene	109-67-1	10,000	g
2-Pentene, (E)-	646-04-8	10,000	g
2-Pentene, (Z)-	627-20-3	10,000	g

Table 2. Federal Regulated Flammable Substances List [1] and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	CAS Numbers	Threshold quantity (lbs)	Basis for listing
Propadiene [1,2-Propadiene]	463-49-0	10,000	f
Propane	74-98-6	10,000	f
Propylene [1-Propene]	115-07-1	10,000	f
Propyne [1-Propyne]	74-99-7	10,000	f
Silane	7803-62-5	10,000	f
Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000	f
Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000	g
Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000	g
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000	f
Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000	f
Vinyl acetylene [1-Buten-3-yne]	689-97-4	10,000	f
Vinyl chloride [Ethene, chloro-]	75-01-4	10,000	a,f
Vinyl ethyl ether [Ethene, ethoxy-]	109-92-2	10,000	g
Vinyl fluoride [Ethene, fluoro-]	75-02-5	10,000	f
Vinylidene chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000	g
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000	f
Vinyl methyl ether [Ethene, methoxy-]	107-25-5	10,000	f

[1] A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this chapter (see Section 2770.4.1).

Note - Basis for Listing:
a Mandated for listing by Congress.
f Flammable gas.
g Volatile flammable liquid.

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Acetone Cyanohydrin [2]	no	75-86-5	1,000
Acetone Thiosemicarbazide	no	1752-30-3	1,000/10,000 [3]
Acrolein	yes	107-02-8	500
Acrylamide	no	79-06-1	1,000/10,000 [3]
Acrylonitrile	yes	107-13-1	10,000
Acrylyl Chloride	yes	814-68-6	100
Aldicarb	no	116-06-3	100/10,000 [3]
Aldrin	no	309-00-2	500/10,000 [3]
Allyl Alcohol	yes	107-18-6	1,000
Allylamine	yes	107-11-9	500
Aluminum Phosphide [4]	no	20859-73-8	500
Aminopterin	no	54-62-6	500/10,000 [3]
Amiton Oxalate	no	3734-97-2	100/10,000 [3]
Ammonia [5]	yes	7664-41-7	500
Aniline [2]	no	62-53-3	1,000
Antimycin A	no	1397-94-0	1,000/10,000 [3]
ANTU	no	86-88-4	500/10,000 [3]
Arsenic Pentoxide	no	1303-28-2	100/10,000 [3]
Arsenous Oxide	no	1327-53-3	100/10,000 [3]
Arsenous Trichloride	yes	7784-34-1	500
Arsine	yes	7784-42-1	100
Azinphos-Ethyl	no	2642-71-9	100/10,000 [3]
Azinphos-Methyl	no	86-50-0	10/10,000 [3]
Benzene, 1-(Chloromethyl)-4-Nitro-	no	100-14-1	500/10,000 [3]
Benzenearsonic Acid	no	98-05-5	10/10,000 [3]
Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	no	3615-21-2	500/10,000 [3]
Benzotrichloride [2]	no	98-07-7	100
Bicyclo[2.2.1] Heptane-2-Carbonitrile, 5-Chloro- 6-((((Methylamino) Carbonyl)Oxy)Imino)-, (1s-(1-alpha, 2-beta, 4-alpha, 5-alpha, 6E))-.	no	15271-41-7	500/10,000 [3]
Bis(Chloromethyl) Ketone	no	534-07-6	10/10,000 [3]
Bitoscanate	no	4044-65-9	500/10,000 [3]
Boron Trichloride	yes	10294-34-5	500
Boron Trifluoride	yes	7637-07-2	500
Boron Trifluoride Compound w/ Methyl Ether (1:1)	yes	353-42-4	1,000
Bromadiolone	no	28772-56-7	100/10,000 [3]
Bromine	yes	7726-95-6	500
Cadmium Oxide	no	1306-19-0	100/10,000 [3]
Cadmium Stearate	no	2223-93-0	1,000/10,000 [3]
Calcium Arsenate	no	7778-44-1	500/10,000 [3]
Camphechlor	no	8001-35-2	500/10,000 [3]
Cantharidin	no	56-25-7	100/10,000 [3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Carbachol Chloride	no	51-83-2	500/10,000 [3]
Carbamic Acid, Methyl-,o-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl)Methylene) Amino)-.	no	26419-73-8	100/10,000 [3]
Carbofuran	no	1563-66-2	10/10,000 [3]
Carbon Disulfide	yes	75-15-0	10,000
Chlorine	yes	7782-50-5	100
Chlormequat Chloride	no	999-81-5	100/10,000 [3]
Chloroacetic Acid	no	79-11-8	100/10,000 [3]
Chloroform	yes	67-66-3	10,000
Chloromethyl Ether	yes	542-88-1	100
Chloromethyl Methyl Ether	yes	107-30-2	100
Chlorophacinone	no	3691-35-8	100/10,000 [3]
Chloroxuron	no	1982-47-4	500/10,000 [3]
Chromic Chloride	no	10025-73-7	1/10,000 [3]
Cobalt Carbonyl	no	10210-68-1	10/10,000 [3]
Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato))(2-)-N,N',O,O')-.	no	62207-76-5	100/10,000 [3]
Colchicine	no	64-86-8	10/10,000 [3]
Coumaphos	no	56-72-4	100/10,000 [3]
Coumatetralyl	no	5836-29-3	500/10,000 [3]
Cresol, o-	no	95-48-7	1,000/10,000 [3]
Crimidine	no	535-89-7	100/10,000 [3]
Crotonaldehyde	yes	4170-30-3	1,000
Crotonaldehyde, (E)-	yes	123-73-9	1,000
Cyanogen Bromide	no	506-68-3	500/10,000 [3]
Cyanogen Iodide	no	506-78-5	1,000/10,000 [3]
Cyanuric Fluoride	no	675-14-9	100
Cycloheximide	no	66-81-9	100/10,000 [3]
Cyclohexylamine	yes	108-91-8	10,000
Decaborane(14)	no	17702-41-9	500/10,000 [3]
Dialifor	no	10311-84-9	100/10,000 [3]
Diborane	yes	19287-45-7	100
Diepoxybutane [2]	no	1464-53-5	500
Digitoxin	no	71-63-6	100/10,000 [3]
Digoxin	no	20830-75-5	10/10,000 [3]
Dimethoate	no	60-51-5	500/10,000 [3]
Dimethyldichlorosilane	yes	75-78-5	500
Dimethylhydrazine	yes	57-14-7	1,000
Dimethyl-p-Phenylenediamine	no	99-98-9	10/10,000 [3]
Dimethyl Sulfate [2]	no	77-78-1	500
Dimetilan	no	644-64-4	500/10,000 [3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Dinitrocresol	no	534-52-1	10/10,000 [3]
Dinoseb	no	88-85-7	100/10,000 [3]
Dinoterb	no	1420-07-1	500/10,000 [3]
Diphacinone	no	82-66-6	10/10,000 [3]
Disulfoton [2]	no	298-04-4	500
Dithiazanine Iodide	no	514-73-8	500/10,000 [3]
Dithiobiuret	no	541-53-7	100/10,000 [3]
Emetine, Dihydrochloride	no	316-42-7	1/10,000 [3]
Endosulfan	no	115-29-7	10/10,000 [3]
Endothion	no	2778-04-3	500/10,000 [3]
Endrin	no	72-20-8	500/10,000 [3]
Epichlorohydrin	yes	106-89-8	1,000
EPN	no	2104-64-5	100/10,000 [3]
Ergocalciferol	no	50-14-6	1,000/10,000 [3]
Ergotamine Tartrate	no	379-79-3	500/10,000 [3]
Ethylenediamine	yes	107-15-3	10,000
Ethylene Fluorohydrin	no	371-62-0	10
Ethyleneimine	yes	151-56-4	500
Ethylene Oxide	yes	75-21-8	1,000
Fenamiphos	no	22224-92-6	10/10,000 [3]
Fluenetil	no	4301-50-2	100/10,000 [3]
Fluorine	yes	7782-41-4	500
Fluoroacetamide	no	640-19-7	100/10,000 [3]
Fluoroacetic Acid	no	144-49-0	10/10,000 [3]
Fluoroacetyl Chloride	no	359-06-8	10
Fluorouracil	no	51-21-8	500/10,000 [3]
Formaldehyde [5]	yes	50-00-0	500
Formetanate Hydrochloride	no	23422-53-9	500/10,000 [3]
Formparanate	no	17702-57-7	100/10,000 [3]
Fuberidazole	no	3878-19-1	100/10,000 [3]
Furan	yes	110-00-9	500
Gallium Trichloride	no	13450-90-3	500/10,000 [3]
Hydrazine	yes	302-01-2	1,000
Hydrocyanic Acid	yes	74-90-8	100
Hydrogen Chloride (gas only)	yes	7647-01-0	500
Hydrogen Fluoride	yes	7664-39-3	100
Hydrogen Selenide	yes	7783-07-5	10
Hydrogen Sulfide	yes	7783-06-4	500
Hydroquinone [6]	no	123-31-9	500/10,000 [3]
Iron, Pentacarbonyl-	yes	13463-40-6	100
Isobenzan	no	297-78-9	100/10,000 [3]
Isobutyronitrile	yes	78-82-0	1,000

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Isocyanic Acid, 3,4-Dichlorophenyl Ester	no	102-36-3	500/10,000 [3]
Isodrin	no	465-73-6	100/10,000 [3]
Isophorone Diisocyanate	no	4098-71-9	100
Isopropyl Chloroformate	yes	108-23-6	1,000
Leptophos	no	21609-90-5	500/10,000 [3]
Lewisite [2]	no	541-25-3	10
Lindane	no	58-89-9	1,000/10,000 [3]
Lithium Hydride [4]	no	7580-67-8	100
Malononitrile	no	109-77-3	500/10,000 [3]
Manganese, Tricarbonyl Methylcyclopentadienyl [2]	no	12108-13-3	100
Mechlorethamine [2]	no	51-75-2	10
Mercuric Acetate	no	1600-27-7	500/10,000 [3]
Mercuric Chloride	no	7487-94-7	500/10,000 [3]
Mercuric Oxide	no	21908-53-2	500/10,000 [3]
Methacrylonitrile	yes	126-98-7	500
Methacryloyl Chloride	no	920-46-7	100
Methacryloyloxyethyl Isocyanate	no	30674-80-7	100
Methamidophos	no	10265-92-6	100/10,000 [3]
Methanesulfonyl Fluoride	no	558-25-8	1,000
Methidathion	no	950-37-8	500/10,000 [3]
Methiocarb	no	2032-65-7	500/10,000 [3]
Methomyl	no	16752-77-5	500/10,000 [3]
Methoxyethylmercuric Acetate	no	151-38-2	500/10,000 [3]
Methyl Bromide	no	74-83-9	1,000
Methyl 2-Chloroacrylate	no	80-63-7	500
Methyl Chloroformate	yes	79-22-1	500
Methyl Hydrazine	yes	60-34-4	500
Methyl Isocyanate	yes	624-83-9	500
Methyl Isothiocyanate [4]	no	556-61-6	500
Methyl Mercaptan	yes	74-93-1	500
Methylmercuric Dicyanamide	no	502-39-6	500/10,000 [3]
Methyl Phosphonic Dichloride [4]	no	676-97-1	100
Methyl Thiocyanate	yes	556-64-9	10,000
Methyltrichlorosilane	yes	75-79-6	500
Methyl Vinyl Ketone	no	78-94-4	10
Metolcarb	no	1129-41-5	100/10,000 [3]
Mexacarbate	no	315-18-4	500/10,000 [3]
Mitomycin C	no	50-07-7	500/10,000 [3]
Monocrotophos	no	6923-22-4	10/10,000 [3]
Muscimol	no	2763-96-4	500/10,000 [3]
Mustard Gas [2]	no	505-60-2	500
Nickel Carbonyl	yes	13463-39-3	1

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Nicotine Sulfate	no	65-30-5	100/10,000 [3]
Nitric Acid	yes	7697-37-2	1,000
Nitric Oxide	yes	10102-43-9	100
Nitrobenzene [2]	no	98-95-3	10,000
Nitrogen Dioxide	no	10102-44-0	100
Norbormide	no	991-42-4	100/10,000 [3]
Organorhodium Complex (PMN-82-147)	no	MIXTURE	10/10,000 [3]
Ouabain	no	630-60-4	100/10,000 [3]
Oxamyl	no	23135-22-0	100/10,000 [3]
Ozone	no	10028-15-6	100
Paraquat Dichloride	no	1910-42-5	10/10,000 [3]
Paraquat Methosulfate	no	2074-50-2	10/10,000 [3]
Parathion-Methyl	no	298-00-0	100/10,000 [3]
Paris Green	no	12002-03-8	500/10,000 [3]
Pentaborane	no	19624-22-7	500
Pentadecylamine	no	2570-26-5	100/10,000 [3]
Peracetic Acid	yes	79-21-0	500
Perchloromethylmercaptan	yes	594-42-3	500
Phenol	no	108-95-2	500/10,000 [3]
Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-	no	4418-66-0	100/10,000 [3]
Phenol, 3-(1-Methylethyl)-, Methylcarbamate	no	64-00-6	500/10,000 [3]
Phenoxarsine, 10,10'-Oxydi-	no	58-36-6	500/10,000 [3]
Phenyl Dichloroarsine [2]	no	696-28-6	500
Phenylhydrazine Hydrochloride	no	59-88-1	1,000/10,000 [3]
Phenylmercury Acetate	no	62-38-4	500/10,000 [3]
Phenylsilatrane	no	2097-19-0	100/10,000 [3]
Phenylthiourea	no	103-85-5	100/10,000 [3]
Phorate [2]	no	298-02-2	10
Phosacetim	no	4104-14-7	100/10,000 [3]
Phosfolan	no	947-02-4	100/10,000 [3]
Phosgene	yes	75-44-5	10
Phosmet	no	732-11-6	10/10,000 [3]
Phosphine	yes	7803-51-2	500
Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl) O-Ethyl Ester. [2]	no	50782-69-9	100
Phosphorus [4]	no	7723-14-0	100
Phosphorus Oxychloride	yes	10025-87-3	500
Phosphorus Pentachloride [4]	no	10026-13-8	500
Phosphorus Trichloride	yes	7719-12-2	1,000
Physostigmine	no	57-47-6	100/10,000 [3]
Physostigmine, Salicylate (1:1)	no	57-64-7	100/10,000 [3]

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Picrotoxin	no	124-87-8	500/10,000 [3]
Piperidine	yes	110-89-4	1,000
Potassium Arsenite	no	10124-50-2	500/10,000 [3]
Potassium Cyanide [4]	no	151-50-8	100
Potassium Silver Cyanide [4]	no	506-61-6	500
Promecarb	no	2631-37-0	500/10,000 [3]
Propargyl Bromide	no	106-96-7	10
Propiolactone, Beta- [2]	no	57-57-8	500
Propionitrile	yes	107-12-0	500
Propiophenone, 4-Amino-	no	70-69-9	100/10,000 [3]
Propyl Chloroformate	yes	109-61-5	500
~~Propylene Oxide~~	~~yes~~	~~75-56-9~~	~~10,000~~
~~Propyleneimine~~	~~yes~~	~~75-55-8~~	~~10,000~~
Prothoate	no	2275-18-5	100/10,000 [3]
Pyrene	no	129-00-0	1,000/10,000 [3]
Pyridine, 4-Amino-	no	504-24-5	500/10,000 [3]
Pyridine, 4-Nitro-, 1-Oxide	no	1124-33-0	500/10,000 [3]
Pyriminil	no	53558-25-1	100/10,000 [3]
Salcomine	no	14167-18-1	500/10,000 [3]
Sarin [2]	no	107-44-8	10
Selenious Acid	no	7783-00-8	1,000/10,000 [3]
Semicarbazide Hydrochloride	no	563-41-7	1,000/10,000 [3]
Sodium Arsenate	no	7631-89-2	1,000/10,000 [3]
Sodium Arsenite	no	7784-46-5	500/10,000 [3]
Sodium Azide (Na (N3)) [4]	no	26628-22-8	500
Sodium Cacodylate	no	124-65-2	100/10,000 [3]
Sodium Cyanide (Na (CN)) [4]	no	143-33-9	100
Sodium Fluoroacetate	no	62-74-8	10/10,000 [3]
Sodium Selenate	no	13410-01-0	100/10,000 [3]
Sodium Selenite	no	10102-18-8	100/10,000 [3]
Sodium Tellurite	no	10102-20-2	500/10,000 [3]
Stannane, Acetoxytriphenyl-	no	900-95-8	500/10,000 [3]
Strychnine	no	57-24-9	100/10,000 [3]
Strychnine Sulfate	no	60-41-3	100/10,000 [3]
Sulfur Dioxide	yes	7446-09-5	500
Sulfuric Acid [7]	no	7664-93-9	1,000
Sulfur Tetrafluoride	yes	7783-60-0	100
Sulfur Trioxide [4]	yes	7446-11-9	100
Tabun [2]	no	77-81-6	10
Tellurium Hexafluoride	no	7783-80-4	100

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

Chemical Name	Also on Table 1[1]	CAS Number	State Threshold Quantity (lbs)
Tetramethyllead	yes	75-74-1	100
Tetranitromethane	yes	509-14-8	500
Thallium Sulfate	no	10031-59-1	100/10,000 [3]
Thallous Carbonate	no	6533-73-9	100/10,000 [3]
Thallous Chloride	no	7791-12-0	100/10,000 [3]
Thallous Malonate	no	2757-18-8	100/10,000 [3]
Thallous Sulfate	no	7446-18-6	100/10,000 [3]
Thiocarbazide	no	2231-57-4	1,000/10,000 [3]
Thiofanox	no	39196-18-4	100/10,000 [3]
Thiosemicarbazide	no	79-19-6	100/10,000 [3]
Thiourea, (2-Chlorophenyl)-	no	5344-82-1	100/10,000 [3]
Thiourea, (2-Methylphenyl)-	no	614-78-8	500/10,000 [3]
Titanium Tetrachloride	yes	7550-45-0	100
Toluene-2,4-Diisocyanate [8]	yes	584-84-9	500
Toluene-2,6-Diisocyanate [8]	yes	91-08-7	100
Triamiphos	no	1031-47-6	500/10,000 [3]
Trichloro(Chloromethyl)Silane	no	1558-25-4	100
Trichloro(Dichlorophenyl)Silane	no	27137-85-5	500
Triethoxysilane	no	998-30-1	500
Trimethylchlorosilane	yes	75-77-4	1,000
Trimethylolpropane Phosphite	no	824-11-3	100/10,000 [3]
Trimethyltin Chloride	no	1066-45-1	500/10,000 [3]
Triphenyltin Chloride	no	639-58-7	500/10,000 [3]
Tris(2-Chloroethyl)Amine [2]	no	555-77-1	100
Valinomycin	no	2001-95-8	1,000/10,000 [3]
Vanadium Pentoxide	no	1314-62-1	100/10,000 [3]
Vinyl Acetate Monomer	yes	108-05-4	1,000
Warfarin	no	81-81-2	500/10,000 [3]
Warfarin Sodium	no	129-06-6	100/10,000 [3]
Xylylene Dichloride	no	28347-13-9	100/10,000 [3]
Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy)Imino) Pentanenitrile)-, (T-4)-.	no	58270-08-9	100/10,000 [3]
Zinc Phosphide [4]	no	1314-84-7	500

1 This column identifies substances which may appear on Table 1. Table 1 may have concentration limitations.

2 Substances that failed the evaluation pursuant to Section 25532(g)(2) of the HSC but remain listed pursuant to potential health impacts. The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

3 These extremely hazardous substances are solids. The lesser quantity listed applies only if in powdered form and with a particle size of less than 100 microns; or if handled in solution or in molten form; or the substance has an NFPA rating for reactivity of 2, 3, or 4. Otherwise, a 10,000 pound threshold applies. The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

Table 3. State Regulated Substances List and Threshold Quantities for Accidental Release Prevention
(Continued)

4 These extremely hazardous substances are reactive solids. The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

5 Appropriate synonyms or mixtures of extremely hazardous substances with the same CAS number are also regulated, e.g., formalin. The listing of ammonia includes anhydrous and aqueous forms of ammonia pursuant to Section 25532(g)(2).

6 Hydroquinone is exempt in crystalline form.

7 Sulfuric acid fails the evaluation pursuant to Section 25532(g)(2) of the HSC but remains listed as a Regulated Substance only under the following conditions:

a. If concentrated with greater than 100 pounds of sulfur trioxide or the acid meets the definition of oleum. (The Table 3 threshold for sulfur trioxide is 100 pounds.) (The Table 1 threshold for oleum is 10,000 pounds.)
b. If in a container with flammable hydrocarbons (flash point < 73^0 F).

8 The exemption in Section 2770.2(b)(1)(B) regarding portions of a process where these regulated substances are handled at partial pressures below 10 mm Hg does not apply to these substances.

Article 9. Other Requirements.

Section 2775.1 Recordkeeping.

The owner or operator shall maintain records supporting the implementation of this chapter for five years unless otherwise provided in Article 6 of this chapter.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25531, Health and Safety Code; and Section 68.200, Part 68, Title 40, Code of Federal Regulations.

Section 2775.2 Audits.

(a) In addition to inspections for the purpose of regulatory development and enforcement of the federal CAA, the AA shall periodically audit RMPs submitted under Article 3 of this chapter to review the adequacy of such RMPs and require revisions ~~of~~ to RMPs when necessary to ensure compliance with ~~Article 3 of~~ this chapter. To the extent possible, any audit shall be fully coordinated with the Unified Program elements at a stationary source.

(b) The AA shall select stationary sources for audits based on any of the following criteria:

(1) Accident history of the stationary source;

(2) Accident history of other stationary sources in the same industry;

(3) Quantity of regulated substances present at the stationary source;

(4) Location of the stationary source and its proximity to the public and environmental receptors;

(5) The presence of specific regulated substances;

(6) The hazards identified in the RMP; and,

(7) A plan providing for neutral, random oversight.

(c) Exemption from audits. A stationary source with a Star or Merit ranking under OSHA's voluntary protection program shall be exempt from audits under sections (b)(2) and (b)(7).

(d) In accordance with Section 25534.5 of HSC, the AA shall have access to the stationary source, supporting documentation, and any area where an accidental release could occur.

(e) Based on the audit, the AA may issue the owner or operator of a stationary source a written preliminary determination of necessary revisions to the stationary source's RMP to ensure that the RMP ~~meets~~ complies with the ~~criteria of Article 3~~ requirements of this chapter. The preliminary determination shall include an explanation for the basis for the revisions, reflecting industry standards and guidelines (such as AIChE/CCPS guidelines and NFPA, ISA, IIAR, ASME and API standards) to the extent that such standards and guidelines are applicable, and shall include a timetable for their implementation.

(f) Written response to a preliminary determination.

(1) The owner or operator shall respond in writing to a preliminary determination made in accordance with section (e). The response shall state that the owner or operator will implement the revisions contained in the preliminary determination in accordance with the timetable included in the preliminary determination or shall state that the owner or operator rejects the revisions in whole or in part. For each rejected revision, the owner or operator shall explain the basis for rejecting such revision. Such explanation may include substitute revisions.

(2) The written response under section (f)(1) shall be received by the AA within 90 days of the issue of the preliminary determination or a shorter period of time as the AA specifies in the preliminary determination as necessary to protect public health and the environment. Prior to the written response being due and upon written request from the owner or operator, the AA may provide in writing additional time for the response to be received.

(g) After providing the owner or operator an opportunity to respond under section (f), the AA may issue the owner or operator a written final determination of necessary revisions to the stationary source's RMP. ~~The AA shall develop a~~ A time-table for implementing these revisions shall be developed in consultation with the stationary source. Revisions must be completed as soon as practicable,but no later than one year after the final determination has been issued unless the AA agrees, in writing, upon a timetable before the resolution becomes overdue. The final determination may adopt or modify the revisions contained in the preliminary determination under section (e) or may adopt or modify the substitute revisions provided in the response under section (f). A final determination that adopts a revision rejected by the owner or operator shall include an explanation of the basis for the revision. A final determination that does not adopt a substitute revision provided under section (f) shall include an explanation of the basis for finding such substitute revision unreasonable.

(h) Thirty days after completion of the actions detailed in the implementation schedule set in the final determination under section (g), the owner or operator shall be in violation of ~~Article 3 of this chapter and~~ this section unless the owner or operator ~~revises the RMP~~ corrects the deficiencies as outlined in the final determination.

(i) The owner or operator shall document the actual completion dates when deficiencies were corrected. The public shall have access to the preliminary determinations, responses, and final determinations under this section in a manner consistent with Section 2775.5.

(j) Nothing in this section shall preclude, limit, or interfere in any way with the authority of USEPA or the state to exercise its enforcement, investigatory, and information gathering authorities under the federal CAA or the HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.05, 25534.5, and 25537, Health and Safety Code; and Section 68.220, Part 68, Title 40, Code of Federal Regulations.

Section 2775.3 Inspections.

The AA shall inspect every stationary source required to be registered pursuant to this chapter at least once every three years to determine whether the stationary source is in compliance with this chapter. The requirements of this section do not alter or affect the immunity provided a public entity pursuant to Section 818.6 of the Government Code. To the extent possible, any CalARP Program inspections shall be coordinated with the Unified Program.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.5, 25537, 25540.5, and 25541.3, Health and Safety Code; and Sections 68.215 and 68.210, Part 68, Title 40, Code of Federal Regulations.

Section 2775.4 Enforcement.

The owner or operator of a stationary source who violates the statutes or regulations established for the CalARP Program may be liable for penalties or enforcement pursuant to provisions in Article 2 of Chapter 6.95 of the HSC beginning with Section 25540.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.5, 25537, 25540.5, and 25541.3, Health and Safety Code; and Sections 68.215 and 68.220, Part 68, Title 40, Code of Federal Regulations.

Section 2775.5 Availability of Information to the Public.

(a) The RMP required under Article 3 of this chapter shall be available to the public pursuant to Section 25534.05(a)(4) of HSC, except for offsite consequence analysis data, pursuant to (b).

(b) The AA shall insure that any member of the public has access, by appointment, to a ~~paper~~ copy of the offsite consequence analysis data, pursuant to Section 2745.4. The member of the public may read, but not remove, ~~or mechanically~~ reproduce, print, scan or image the ~~paper~~ documents. The AA may require personal photo identification issued by a Federal, State or local government agency to the person, and may require the person's signature on a

sign-in sheet. The AA may limit a person's access to offsite consequence analysis data to 10 stationary sources in any calendar month.

(~~b~~c) The disclosure of classified information by the Department of Defense or other federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25534.05(a), 25535.2, and 25538, Health and Safety Code; ~~and~~ Section 68.210, Part 68, and Section 1400.3, Part 1400, Title 40, Code of Federal Regulations.

Section 2775.6 Permit Content and Air Permitting Authority or Cal ~~EMA~~ OES Requirements.

The requirements of this section apply to any stationary source subject to Section 2735.4(a)(1) of this chapter and Part 70 or 71 of Title 40 of CFR.

(a) The Part 70 or 71 of Title 40 of CFR permit for the stationary source shall contain:

(1) A statement listing Part 68 of Title 40 of CFR as an applicable requirement;

(2) Conditions that require the source owner or operator to submit:

(A) A compliance schedule for meeting the requirements of this chapter by the date provided in Section 2735.4(a)(1), or,

(B) As part of the compliance certification submitted under Section 70.6(c)(5) of Title 40 of CFR, a certification statement that the source is in compliance with all requirements of this chapter, including the registration and submission of the RMP.

(b) The owner or operator shall submit any additional relevant information requested by the AA, Cal ~~EMA~~ OES or the appropriate APCD or AQMD.

(c) For Part 70 or 71 of Title 40 of CFR permits issued prior to the deadline for registering and submitting the RMP and which do not contain permit conditions described in section (a), the owner or operator or the appropriate APCD or AQMD shall initiate permit revision or reopening according to the procedures of Part 70.7 or 71.7 of Title 40 of CFR to incorporate the terms and conditions consistent with section (a).

(d) The appropriate APCD or AQMD shall, at a minimum:

(1) Verify from the AA that the source owner or operator has registered and submitted an RMP or a revised plan when required by this chapter;

(2) Verify from the AA that the source owner or operator has submitted a source certification or in its absence has submitted a compliance schedule consistent with section (a)(2); and,

(3) Initiate enforcement action based on sections (d)(1) and (d)(2) as appropriate. The AQMD or APCD shall notify the AA and the AA shall notify Cal ~~EMA~~ OES of enforcement actions taken pursuant to this chapter.

(e) The fact that an owner or operator of a stationary source is subject to this chapter due to applicability under Section 2734.4(a)(2) shall not in itself subject the stationary source to the requirements of Part 70 or 71 of Title 40 of CFR.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533(b), 25535(a), and 25540.5, Health and Safety Code; and Section 68.215, Part 68, Title 40, Code of Federal Regulations.

Article 10. Local Program Evaluation.

Section 2780.1 Dispute Resolution.

(a) Disputes arising between the owner or operator of a stationary source and an AA under this chapter shall first be decided by the AA pursuant to a dispute resolution process. Each AA shall establish procedures necessary to implement this dispute resolution process. These procedures shall:

(1) Provide that the owner or operator of a stationary source may initiate the dispute resolution process by serving the AA with prompt, written notice of a dispute;

(2) Identify the official(s) or other employee(s) of the AA who will resolve disputes arising under this Section;

(3) Set procedures and timetables for providing argument and supporting materials to the AA;

(4) Require that the AA render a written decision within 120 days after the owner or operator of a stationary source initiates the dispute resolution process; and,

(5) Use the CUPA dispute resolution process, if the AA is also a CUPA, providing that such process is consistent with the criteria in (a)(1) through (4) above.

(b) The owner or operator of a stationary source may appeal the decision of an AA to the ~~Secretary~~ Director of Cal ~~EMA~~ OES by serving the ~~Secretary~~ Director with written notice of appeal. The notice of appeal shall be accompanied by:

(1) A copy of the decision of the AA,

(2) A copy of any written material that the owner or operator submitted to the AA during the dispute resolution process that the stationary source would want the ~~Secretary~~ Director to consider, and,

(3) A concise statement of the grounds upon which the owner or operator disputes the decision rendered by the AA. The notice of appeal and accompanying materials shall be served on the ~~Secretary~~ Director and the AA by certified mail, return receipt requested. Such service shall be effected no later than 30 days after the AA renders its decision, or, if the AA fails to render a timely decision, no later than 150 days after the owner or operator initiated the dispute resolution process with the AA.

(c) After receipt of the notice of appeal and accompanying materials, the ~~Secretary~~ Director shall provide a written acknowledgment of such receipt to the appealing party and the AA. At the time that the ~~Secretary~~ Director sends this acknowledgment, or at any later time, the ~~Secretary~~ Director, in his or her discretion, may request further materials, information or briefing from the stationary source or the AA, and the ~~Secretary~~ Director may set schedules for the submission of such materials, information or briefing. The ~~Secretary~~ Director shall also provide the opportunity for public comment on the dispute, and shall allow the stationary source and the AA the opportunity to respond to any comments submitted by the public.

(d) Within 120 days after the service of the notice of appeal, or, if the ~~Secretary~~ Director requires additional time in order to deal with the submission of materials, information, briefing, public comments or responses to public comments, within such extended time as is set by the ~~Secretary~~ Director, the ~~Secretary~~ Director shall issue his or her decision. The dispute shall be resolved according to the discretion of the ~~Secretary~~ Director. The ~~Secretary's~~ Director's decision shall be binding on all parties.

(e) Exhaustion of this dispute resolution process shall not be a prerequisite to the initiation, prosecution or conclusion of any criminal or civil enforcement action brought by the AA, the District Attorney or the State pursuant to Sections 25540, 25540.5, 25541, 25541.3, 25541.5 of HSC or any other provision of law.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.05(a)(3), Health and Safety Code.

Section 2780.2 Administering Agency Compliance.

Each AA shall comply with the regulations adopted in this chapter, unless Cal ~~EMA~~ OES assumes authority pursuant to Section 2780.6(c)(1)(D)(ii).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533(d) and 25534.05(e), Health and Safety Code.

Section 2780.3 Maintenance of Administering Agency Authorization and Reporting.

In assessing the performance of an AA, Cal ~~EMA~~ OES shall consider the following:

(a) Effectiveness of the AA program to ensure stationary source participation.

(b) Effectiveness of the procedures for records management.

(c) Type and amount of technical assistance provided to stationary sources.

(d) Stationary source inspections which are conducted to ensure compliance with this program.

(e) The AA process for public participation.

(f) Other required program elements necessary to implement and manage this program.

(g) Comments from interested parties regarding the effectiveness of the local program that raise public safety issues.

(h) The impact of the CalARP in reducing/eliminating significant releases.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25533(e), Health and Safety Code.

Section 2780.4 Coordination with the Unified Program.

(a) Cal ~~EMA~~ OES shall consider the standards under Section 2780.3 to support Cal ~~EMA~~ OES recommendations to the Secretary for Environmental Protection regarding local agency certification for the Unified Program pursuant to Section 25404.3 of HSC.

(b) As part of the periodic review requirement, Cal ~~EMA~~ OES shall consider the requirements of Section 2780.3 and Section 25404.4 of HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25404.3, Health and Safety Code.

Section 2780.5 Performance Audit Submission.

(a) Beginning in fiscal year 1998 (July 1, 1998 - June 30, 1999), the AA shall annually conduct an audit of its activities to implement the CalARP Program. This audit is subject to the periodic review carried out pursuant to Section 25404.4(a)(1) of HSC.

(b) An audit report shall be compiled annually based upon the previous fiscal year's activities and shall contain an executive summary and a brief description of how the AA is meeting the requirements of the program as listed in Section 2780.3. The audit shall include but is not limited to the following information:

(1) a listing of stationary sources which have been audited.

(2) a listing of stationary sources which have been requested to develop RMPs.

(3) a listing of stationary sources which have been inspected.

(4) a listing of stationary sources which have received public comments on the RMP.

(5) a list of new or modified stationary sources.

(6) a summary of enforcement actions initiated by the AA identifying each stationary source.

(7) a summary of the personnel and personnel years necessary to directly implement, administer, and operate the CalARP Program.

(8) a list of those stationary sources determined by the AA to be exempt from the chapter pursuant to Section 25534(b)(2).

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25533(e), Health and Safety Code.

Section 2780.6 Administering Agency Performance Evaluations.

(a) Cal ~~EMA~~ OES shall periodically review the AAs performance to ensure their ability to carry out the requirements of the CalARP Program pursuant to the requirements of Article 2, Chapter 6.95, of HSC and these regulations. This review shall be closely coordinated with the Unified Program periodic review process, pursuant to Section 25404.4 of HSC.

(b) Administering Agencies shall be reviewed using the standards adopted in Sections 2780.3 and 2780.5 of these regulations.

(c) If Cal ~~EMA~~ OES determines that an AA has failed to meet the performance requirements of subdivision (b), Cal ~~EMA~~ OES shall, as appropriate, initiate one of the following two processes:

(1) Process 1: Assumption of Authority by Cal ~~EMA~~ OES. Cal ~~EMA~~ OES shall serve the AA with a written Notice of Intent to Exercise Specific Powers (NOIESP), which shall inform the AA of the ~~Secretary's~~ Director's intent to implement the CalARP Program in the local jurisdiction pursuant to Section 25533(e) of HSC. The NOIESP shall state (i) the powers of the AA that Cal ~~EMA~~ OES will exercise; (ii) the date on which the exercise of authority shall commence; and, (iii) the reasons it is necessary for Cal ~~EMA~~ OES to assume this authority.

(A) Response to the NOIESP. Within 60 days after receipt of the NOIESP, the AA shall respond by: accepting the terms of the NOIESP; appealing the NOIESP; or submitting a proposed Program Improvement Agreement (PIA). If the AA fails to respond fully to the NOIESP within 60 days, the AA will be deemed to have accepted the terms of the NOIESP.

(i) Acceptance of the NOIESP. The AA may accept the assumption of authority described in the NOIESP by serving Cal ~~EMA~~ OES with written notice of such acceptance. After the AA accepts, or is deemed to have accepted, the terms of the NOIESP, Cal ~~EMA~~ OES shall schedule a public hearing pursuant to the terms of section (c)(1)(C).

(ii) Appeal. The AA may appeal the NOIESP by serving Cal ~~EMA~~ OES with: a written explanation of the factual or legal grounds for its appeal; any written supporting argument; and any relevant documentary evidence. After receipt of the appeal, Cal ~~EMA~~ OES shall follow the procedures set forth in section (c)(1)(B).

(iii) Submission of an PIA. The AA may respond to the NOIESP by serving Cal ~~EMA~~ OES with a proposed PIA. After reviewing the proposed PIA, Cal ~~EMA~~ OES shall either accept the PIA and follow the procedures set forth in section (c)(2) or reject the proposal and schedule a public hearing pursuant to the terms of section (c)(1)(C).

(B) Appeal Procedures. If the AA appeals the NOIESP, Cal ~~EMA~~ OES shall review the appeal to determine whether the AA has made a sufficient showing to warrant the reversal or modification of Cal ~~EMA's~~ OES' original decision. Upon completion of this review, Cal ~~EMA~~ OES shall affirm, modify, or reverse its original decision. Cal ~~EMA~~ OES shall make its resolution of the appeal available to the public.

(i) Affirmance. If Cal ~~EMA~~ OES affirms its original decision, it shall schedule a public hearing addressing its proposed exercise of the powers of the AA. This hearing will be conducted pursuant to section (c)(1)(C).

(ii) Reversal. If Cal ~~EMA~~ OES reverses its decision, Cal ~~EMA~~ OES shall serve the AA with written notice that the NOIESP has been withdrawn.

(iii) Modification. If, based on the appeal, Cal ~~EMA~~ OES decides to modify its original decision, Cal ~~EMA~~ OES shall (1) serve the AA with an amended NOIESP, specifying he powers Cal ~~EMA~~ OES intends to exercise; and (2) schedule a public hearing on this exercise of powers. This hearing will be conducted pursuant to section (c)(1)(C).

(C) Public Hearing Procedures. In the event that a public hearing is required under this section, the following procedures shall be employed:

(i) The hearing shall be conducted in the jurisdiction of the AA that received the NOIESP.

(ii) A notice of public hearing shall be published in a local newspaper. Notice of the hearing shall be served on the AA.

(iii) Within thirty days after the public hearing, the AA shall review the public hearing comments and serve Cal ~~EMA~~ OES with its responses, if any, to the comments presented at the public hearing.

(D) Cal ~~EMA~~ OES shall within 60 days review the comments presented at the public hearing and any responses submitted by the AA. Based upon this review, and after consulting with the Secretary for Environmental Protection (Secretary), Cal ~~EMA~~ OES, shall do one of the following:

(i) Approve the continued implementation of the program by the AA;

(ii) Assume authority to exercise the powers of the AA; or,

(iii) Refer the matter to the Secretary as specified in section (c)(2),with the recommendation for an PIA or decertification of the AA.

(E) In the event that Cal ~~EMA~~ OES assumes authority to exercise the powers of the AA, the AA shall, upon request, provide Cal ~~EMA~~ OES with all relevant records and documents.

(2) Process 2: Referral to the Secretary. As an alternative to the procedures set forth in subsection (c)(1), Cal ~~EMA~~ OES may refer the matter to the Secretary with a written recommendation that the Secretary institute proceedings to either: require the AA to enter into an PIA, or, decertify the AA pursuant to Section 25404.4(a), Chapter 6.11 of HSC.

(A) After Cal ~~EMA~~ OES issues this recommendation, the Secretary and Cal ~~EMA~~ OES shall follow the procedures specified in Chapter 6.11 of HSC and any regulations adopted thereto applicable to PIAs or decertification.

(B) If Cal ~~EMA~~ OES recommends an IPA, Cal ~~EMA~~ OES shall work with the Secretary to develop an PIA for the AA.

(C) If the AA fails to sign an PIA within a time frame specified by Cal ~~EMA~~ OES or the Secretary, Cal ~~EMA~~ OES, in its discretion, may either: invoke Section 25533(e) of HSC and issue an NOIESP pursuant to subsection (c)(1), or, recommend that the Secretary decertify the AA pursuant to Section 25404.4(a), Chapter 6.11, of HSC.

(d) When this section requires the service of a notice or other document, service shall be made by certified mail, return receipt requested. A copy of any such notice or document shall be served on the Secretary.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533(e) and (f), Health and Safety Code.

Section 2780.7 Cal ~~EMA~~ OES Authority.

Nothing in this Chapter shall limit the authority of Cal ~~EMA~~ OES pursuant to Section 25533(f) of HSC.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Sections 25533, 25540.5, 25541.3, and 25543, Health and Safety Code.

Article 11. Technical Assistance.

2785.1 Technical Assistance.

Section 2785.1 Technical Assistance.

(a) The owner or operator of a stationary source shall closely coordinate with the AA to ensure that appropriate technical standards are applied to the implementation of this chapter.

(b) The owner or operator of a stationary source shall request assistance from the AA when necessary to address compliance with this chapter or safety issues regarding unfamiliar processes.

NOTE: Authority cited: Sections 25531 and 25534.05, Health and Safety Code. Reference: Section 25534.05(a)(5), 25534.5, and 25535(a), Health and Safety Code.

Appendix A to Title 19, Division 2, Chapter 4.5~~, Subchapter 1~~
Table of Toxic Endpoints

[As defined in Section 2750.2 of this chapter]

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
75-86-5	Acetone cyanohydrin	0.025
1752-30-3	Acetone thiosemicarbazide	0.10
107-02-8	Acrolein [2-Propenal]	0.0011
79-06-1	Acrylamide	0.060
107-13-1	Acrylonitrile [2-Propenenitrile]	0.076
814-68-6	Acrylyl chloride[2-Propenoyl chloride]	0.00090
116-06-3	Aldicarb	0.00030
309-00-2	Aldrin	0.010
107-18-6	Allyl alcohol [2-Propen-1-ol]	0.036
107-11-9	Allylamine [2-Propen-1-amine]	0.0032
20859-73-8	Aluminum phosphide	0.0047
54-62-6	Aminopterin	0.025
3734-97-2	Amiton oxalate	0.0030
7664-41-7	Ammonia ~~(anhydrous)~~	0.14
~~7664-41-7~~	~~Ammonia (conc 20% or greater)~~	~~0.14~~
62-53-3	Aniline	0.046
1397-94-0	Antimycin A	0.0018
86-88-4	ANTU	0.010
1303-28-2	Arsenic pentoxide	0.003
1327-53-3	Arsenous oxide	0.003
7784-34-1	Arsenous trichloride	0.010
7784-42-1	Arsine	0.0019
2642-71-9	Azinphos ethyl	0.0039
86-50-0	Azinphos methyl	0.00070
100-14-1	Benzene, 1-(Chloromethyl)-4-nitro-	0.028
98-05-5	Benzenearsonic acid	0.00027
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(trifluoromethyl)-	0.013
98-07-7	Benzotrichloride	0.001
15271-41-7	Bicyclo[2.2.1] heptane-2-carbonitrile, 5-Chloro-6-((((methylamino) carbonyl) oxy) imino)-, (1s-(1-alpha, 2-beta, 4-alpha, 5-alpha, 6E))	0.019
534-07-6	Bis(Chloromethyl) ketone	0.0004
4044-65-9	Bitoscanate	0.020
10294-34-5	Boron trichloride [Borane, trichloro-]	0.010
7637-07-2	Boron trifluoride [Borane, trifluoro-]	0.028
353-42-4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]]-, T-4	0.023
28772-56-7	Bromadiolone	0.0010
7726-95-6	Bromine	0.0065
1306-19-0	Cadmium oxide	0.0040
2223-93-0	Cadmium stearate	0.00018
7778-44-1	Calcium arsenate	0.00150
8001-35-2	Camphechlor [Toxaphene]	0.020
56-25-7	Cantharidin	0.0043
51-83-2	Carbachol chloride	0.015
26419-73-8	Carbamic acid, Methyl-o-(((2,4-dimethyl-1, 3-dithiolan-2-yl) methylene) amino)-	0.0010

Appendix A to Title 19, Division 2, Chapter 4.5
Table of Toxic Endpoints
[As defined in Section 2750.2 of this chapter]
(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
1563-66-2	Carbofuran	0.00043
75-15-0	Carbon disulfide	0.16
7782-50-5	Chlorine	0.0087
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO2)]	0.0028
999-81-5	Chlormequat chloride	0.0070
79-11-8	Chloroacetic acid	0.026
67-66-3	Chloroform [Methane, trichloro-]	0.49
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]	0.00025
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	0.0018
3691-35-8	Chlorophacinone	0.0010
1982-47-4	Chloroxuron	0.010
10025-73-7	Chromic chloride	0.00152
10210-68-1	Cobalt Carbonyl	0.00027
62207-76-5	Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato))(2-)-N,N',O,O')-.	0.0004
64-86-8	Colchicine	0.00090
56-72-4	Coumaphos	0.00015
5836-29-3	Coumatetralyl	0.0165
95-48-7	Cresol, o-	0.100
535-89-7	Crimidine	0.0012
4170-30-3	Crotonaldehyde [2-Butenal]	0.029
123-73-9	Crotonaldehyde, (E)-, [2-Butenal, (E)-]	0.029
506-68-3	Cyanogen bromide	0.044
506-77-4	Cyanogen chloride	0.030
506-78-5	Cyanogen iodide	0.180
675-14-9	Cyanuric fluoride	0.00017
66-81-9	Cycloheximide	0.0020
108-91-8	Cyclohexylamine [Cyclohexanamine]	0.16
17702-41-9	Decaborane(14)	0.00075
10311-84-9	Dialifor	0.0050
19287-45-7	Diborane	0.0011
1464-53-5	Diepoxybutane	0.0035
71-63-6	Digitoxin	0.00018
20830-75-5	Digoxin	0.00020
60-51-5	Dimethoate	0.030
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	0.026
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	0.012
99-98-9	Dimethyl-p-phenylenediamine	0.00013
77-78-1	Dimethyl sulfate	0.00062
644-64-4	Dimetilan	0.025
534-52-1	Dinitrocresol	0.00050
88-85-7	Dinoseb	0.0045
1420-07-1	Dinoterb	0.025

Appendix A to Title 19, Division 2, Chapter 4.5

Table of Toxic Endpoints

[As defined in Section 2750.2 of this chapter]

(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
82-66-6	Diphacinone	0.0009
298-04-4	Disulfoton	0.0020
514-73-8	Dithiazanine iodide	0.020
541-53-7	Dithiobiuret	0.0050
316-42-7	Emetine, dihydrochloride	0.00015
115-29-7	Endosulfan	0.00080
2778-04-3	Endothion	0.017
72-20-8	Endrin	0.0003
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	0.076
2104-64-5	EPN	0.0005
50-14-6	Ergocalciferol	0.040
379-79-3	Ergotamine tartrate	0.010
107-15-3	Ethylenediamine [1,2-Ethanediamine]	0.49
371-62-0	Ethylene fluorohydrin	0.000060
151-56-4	Ethyleneimine [Aziridine]	0.018
75-21-8	Ethylene oxide [Oxirane]	0.090
22224-92-6	Fenamiphos	0.0009
4301-50-2	Fluenetil	0.0060
7782-41-4	Fluorine	0.0039
640-19-7	Fluoroacetamide	0.0058
144-49-0	Fluoroacetic acid	0.00047
359-06-8	Fluoroacetyl chloride	0.010
51-21-8	Fluorouracil	0.019
50-00-0	Formaldehyde ~~(solution)~~	0.012
23422-53-9	Formetanate hydrochloride	0.018
17702-57-7	Formparanate	0.0072
3878-19-1	Fuberidazole	0.0033
110-00-9	Furan	0.0012
13450-90-3	Gallium trichloride	0.032
302-01-2	Hydrazine	0.011
~~7647-01-0~~	~~Hydrochloric acid (conc 37% or greater)~~	~~0.030~~
74-90-8	Hydrocyanic acid	0.011
7647-01-0	Hydrogen chloride/~~(anhydrous) [~~Hydrochloric acid~~]~~	0.030
7664-39-3	Hydrogen fluoride/Hydrofluoric acid ~~(conc 50% or greater) [Hydrofluoric acid]~~	0.016
7783-07-5	Hydrogen selenide	0.00066
7783-06-4	Hydrogen sulfide	0.042
123-31-9	Hydroquinone	0.003
13463-40-6	Iron, pentacarbonyl-[Iron carbonyl (Fe(CO)5), (TB-5-11)-]	0.00044
297-78-9	Isobenzan	0.0020
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	0.14
102-36-3	Isocyanic acid, 3,4-dichlorophenyl ester	0.014
465-73-6	Isodrin	0.007
4098-71-9	Isophorone diisocyanate	0.00125

Appendix A to Title 19, Division 2, Chapter 4.5
Table of Toxic Endpoints
[As defined in Section 2750.2 of this chapter]
(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
108-23-6	Isopropyl chloroformate [Carbonochloride acid,1-methylethyl ester]	0.10
21609-90-5	Leptophos	0.030
541-25-3	Lewisite	0.00012
58-89-9	Lindane	0.050
7580-67-8	Lithium hydride	0.0001
109-77-3	Malononitrile	0.013
12108-13-3	Manganese, tricarbonyl methylcyclopentadienyl	0.00060
51-75-2	Mechlorethamine [Nitrogen Mustard 2]	0.000022
1600-27-7	Mercuric acetate	0.00001
7487-94-7	Mercuric chloride	0.00003
21908-53-2	Mercuric oxide	0.000027
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	0.0027
920-46-7	Methacryloyl chloride	0.0006
30674-80-7	Methacryloyloxyethyl isocyanate	0.00063
10265-92-6	Methamidophos	0.060
558-25-8	Methanesulfonyl fluoride	0.0125
950-37-8	Methidathion	0.020
2032-65-7	Methiocarb	0.015
16752-77-5	Methomyl	0.010
151-38-2	Methoxyethylmercuric acetate	0.000048
74-83-9	Methyl bromide	0.00388
74-87-3	Methyl chloride [Methane, chloro-]	0.82
80-63-7	Methyl 2-chloroacrylate	0.005
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	0.0019
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	0.0094
624-83-9	Methyl isocyanate [Methane, isocyanato-]	0.0012
556-61-6	Methyl isothiocyanate	0.033
74-93-1	Methyl mercaptan [Methanethiol]	0.049
502-39-6	Methylmercuric dicyanamide	0.000045
676-97-1	Methyl phosphonic dichloride	0.0014
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	0.085
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	0.018
78-94-4	Methyl vinyl ketone	0.00049
1129-41-5	Metolcarb	0.00480
315-18-4	Mexacarbate	0.014
50-07-7	Mitomycin C	0.023
6923-22-4	Monocrotophos	0.00063
2763-96-4	Muscimol	0.017
505-60-2	Mustard gas [Sulfure Mustard]	0.0001
13463-39-3	Nickel carbonyl	0.00067
65-30-5	Nicotine sulfate	0.0090
7697-37-2	Nitric acid ~~(conc 80% or greater)~~	0.026
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	0.031

Appendix A to Title 19, Division 2, Chapter 4.5
Table of Toxic Endpoints
[As defined in Section 2750.2 of this chapter]
(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
98-95-3	Nitrobenzene	0.10
10102-44-0	Nitrogen dioxide	0.00094
991-42-4	Norbormide	0.0038
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide]	0.010
MIXTURE	Organorhodium complex [PMN-82-147]	0.000292
630-60-4	Ouabain	0.0083
23135-22-0	Oxamyl	0.0017
10028-15-6	Ozone	0.0020
1910-42-5	Paraquat dichloride	0.0005
2074-50-2	Paraquat methosulfate	0.015
298-00-0	Parathion-methyl	0.00034
12002-03-8	Paris green	0.00338
19624-22-7	Pentaborane	0.00036
2570-26-5	Pentadecylamine	0.0020
79-21-0	Peracetic acid [Ethaneperoxoic acid]	0.0045
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	0.0076
108-95-2	Phenol	0.089
4418-66-0	Phenol, 2,2'-thiobis(4-chloro-6-methyl)-	0.0013
64-00-6	Phenol, 3-(1-methylethyl)-, methylcarbamate	0.016
58-36-6	Phenoxarsine,10,10'-oxydi-	0.014
696-28-6	Phenyl dichloroarsine	0.000061
59-88-1	Phenylhydrazine hydrochloride	0.05
62-38-4	Phenylmercury acetate	0.000168
2097-19-0	Phenylsilatrane	0.0010
103-85-5	Phenylthiourea	0.0030
298-02-2	Phorate	0.00004
4104-14-7	Phosacetim	0.0037
947-02-4	Phosfolan	0.0090
75-44-5	Phosgene [Carbonic dichloride]	0.00081
732-11-6	Phosmet	0.00054
7803-51-2	Phosphine	0.0035
50782-69-9	Phosphonothioic acid, methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester [VX]	0.000029
7723-14-0	Phosphorus	0.00075
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	0.0030
10026-13-8	Phosphorus pentachloride	0.0125
7719-12-2	Phosphorus trichloride [Phosphorous trichloride]	0.028
57-47-6	Physostigmine	0.0045
57-64-7	Physostigmine, Salicylate (1:1)	0.0025
124-87-8	Picrotoxin	0.015
110-89-4	Piperidine	0.022
10124-50-2	Potassium arsenite	0.003
151-50-8	Potassium cyanide	0.0050
506-61-6	Potassium silver cyanide	0.0200

Appendix A to Title 19, Division 2, Chapter 4.5
Table of Toxic Endpoints
[As defined in Section 2750.2 of this chapter]
(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
2631-37-0	Promecarb	0.016
106-96-7	Propargyl bromide	0.000030
57-57-8	Propiolactone, beta-	0.0015
107-12-0	Propionitrile [Propanenitrile]	0.0037
70-69-9	Propiophenone, 4-amino-	0.0056
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	0.010
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	0.12
75-56-9	Propylene oxide [Oxirane, methyl-]	0.59
2275-18-5	Prothoate	0.0017
129-00-0	Pyrene	0.0025
504-24-5	Pyridine, 4-amino-	0.020
1124-33-0	Pyridine, 4-nitro-, 1-oxide	0.080
53558-25-1	Pyriminil	0.0062
14167-18-1	Salcomine	0.039
107-44-8	Sarin	0.000035
7783-00-8	Selenious acid	0.000327
563-41-7	Semicarbazide hydrochloride	0.10
7631-89-2	Sodium arsenate	0.000027
7784-46-5	Sodium arsenite	0.0006
26628-22-8	Sodium azide	0.00029
124-65-2	Sodium cacodylate	0.003
143-33-9	Sodium cyanide	0.0025
62-74-8	Sodium fluoroacetate	0.0002
13410-01-0	Sodium selenate	0.000479
10102-18-8	Sodium selenite	0.000438
10102-20-2	Sodium tellurite	0.0075
900-95-8	Stannane, acetoxytriphenyl-	0.000345
57-24-9	Strychnine	0.00030
60-41-3	Strychnine sulfate	0.0050
7446-09-5	Sulfur dioxide ~~(anhydrous)~~	0.0078
7664-93-9	Sulfuric acid	0.0002
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	0.0092
7446-11-9	Sulfur trioxide	0.010
77-81-6	Tabun	0.000014
7783-80-4	Tellurium hexafluoride	0.0010
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	0.0040
509-14-8	Tetranitromethane [Methane, tetranitro-]	0.0040
10031-59-1	Thallium sulfate	0.002
6533-73-9	Thallous carbonate	0.002
7791-12-0	Thallous chloride	0.002
2757-18-8	Thallous malonate	0.002
7446-18-6	Thallous sulfate	0.00062
2231-57-4	Thiocarbazide	0.10

Appendix A to Title 19, Division 2, Chapter 4.5
Table of Toxic Endpoints
[As defined in Section 2750.2 of this chapter]
(Continued)

CAS Number	Chemical Name	Toxic Endpoint (mg/l)
39196-18-4	Thiofanox	0.0085
79-19-6	Thiosemicarbazide	0.0015
5344-82-1	Thiourea, (2-chlorophenyl)-	0.0046
614-78-8	Thiourea, (2-methylphenyl)-	0.050
7750-45-0	Titanium tetrachloride [Titanium chloride (TiCl4) (T-4)-]	0.020
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-]	0.0070
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-]	0.0070
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-]	0.0070
1031-47-6	Triamiphos	0.010
1558-25-4	Trichloro(chloromethyl)silane	0.055
27137-85-5	Trichloro(dichlorophenyl)silane	0.084
998-30-1	Triethoxysilane	0.00336
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	0.050
824-11-3	Trimethylolpropane phosphite	0.0025
1066-45-1	Trimethyltin chloride	0.000168
639-58-7	Triphenyltin chloride	0.000325
555-77-1	Tris(2-chloroethyl)amine [Nitrogen Mustard 3]	0.000022
2001-95-8	Valinomycin	0.0025
1314-62-1	Vanadium pentoxide	0.00050
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	0.26
81-81-2	Warfarin	0.020
129-06-6	Warfarin sodium	0.0090
28347-13-9	Xylylene dichloride	0.0020
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy) Imino) Pentanenitrile)-, (T-4)-	0.0090
1314-84-7	Zinc phosphide	0.011