PROPOSED TEXT

CALIFORNIA CODE OF REGULATIONS TITLE 8. INDUSTRIAL RELATIONS DIVISION 1. DEPARTMENT OF INDUSTRIAL RELATIONS CHAPTER 4. DIVISION OF INDUSTRIAL SAFETY SUBCHAPTER 7. GENERAL INDUSTRY SAFETY ORDERS

This document uses strikeout and underline to specify text changes. If using assistive technology, please adjust your settings to recognize underline, strikeout, and ellipsis.

Legend:

- *Text in single underline is proposed new text.
- *Text in single strikeout is deleted text.
- * * * * * means there is existing text in the section that is not being amended nor repealed; therefore, it is not being included

GROUP 16. CONTROL OF HAZARDOUS SUBSTANCES ARTICLE 109. HAZARDOUS SUBSTANCES AND PROCESSES

- 1. Amend Section 5189.1.
- § 5189.1. Process Safety Management for Petroleum Refineries.

* * * * *

(c) Definitions.

* * * * *

Employee Representative. An employee, who is on-site and qualified for the task, selected by a union or by the employees in the absence of a union. A union representative, where a union exists, or an employee-designated representative in the absence of a union that is on-site and qualified for the task. The term 'employee representative' is to be construed broadly, and may include the local union, the international union, or a refinery or contract an employee at the site-designated by these parties, such as the safety and health committee representative at the site. Nothing in this subsection shall be construed to supersede an employee representative selection process in a collective bargaining agreement.

* * * * *

Hierarchy of Hazard Control. Hazard prevention and control measures, in priority order, to eliminate or minimize a hazard. Hazard prevention and control measures ranked from most effective to least effective are: First Order Inherent Safety, Second Order Inherent Safety, and passive, active and procedural protection layers.

Highly Hazardous Material. A flammable liquid or flammable gas, or a toxic or reactive substance. Highly hazardous material does not include any substance in quantities below the lesser of the thresholds set forth in the California Hazardous Materials Business Plan rule at Health and Safety Code section 25507(a)(1)(A) or Tables 1, 2, and 3 in CCR, title 19, section 5130.6.

* * * * *

Major Change. Any of the following:

- •(1) Introduction of a new process,
- (2) Introduction of new process equipment, or
- (3) Introduction of new highly hazardous material;

that results in a Any operational change outside of established safe operating limits; or,

•<u>(4)</u> Any alteration that introduces a new process safety hazard or worsens an existing process safety hazard. in a process, process equipment, or process chemistry, that results in any operational change outside of established safe operating limits. An alteration in process or process equipment does not include a replacement in kind.

For subsections 2, 3, and 4, an introduction of new process equipment or alteration in process or process equipment must result in an operational change outside of established safe operating limits to be considered a major change.

* * * * *

- (I) Hierarchy of Hazard Controls Analysis.
- (1) The employer shall conduct a Hierarchy of Hazard Controls Analysis (HCA) as a standalone analysis for all existing processes. For the HCA on existing processes, the team shall review the PHA while conducting the HCA. The HCA for existing processes shall be performed in accordance with the following schedule, and may be performed in conjunction with the PHA schedule:
- (A) No less than 50% of existing processes within three (3) years of the effective date of this section.
- (B) Remaining processes within five (5) years of the effective date of this section.

- (C) All HCAs for existing processes shall be updated and revalidated as standalone analyses at least once every five (5) years, and may be performed in conjunction with the PHA schedule.
- (2) The employer shall also conduct an HCA in a timely manner as follows:
- (A) For all recommendations made by a PHA team for each scenario that identifies the potential for a major incident, pursuant to subsection (e);
- (B) For all recommendations that result from the investigation of a major incident, pursuant to subsection (o);
- (C) As part of a MOC review, whenever a major change is proposed, pursuant to subsection (n); and,
- (D) During the design and review of new processes, new process units and new facilities, and their related process equipment.
- (3) HCAs shall be documented, performed, updated and revalidated by a team with expertise in engineering and process operations. The team shall include one member knowledgeable in the HCA methodology being used and at least one operating employee who currently works on the process and has expertise and experience specific to the process being evaluated. The employer shall provide for employee participation pursuant to subsection (q). As necessary, the team shall consult with individuals with expertise in damage mechanisms, process chemistry and control systems.
- (4) The HCA team shall:
- (A) Compile or develop all risk-relevant data for each process or recommendation;
- (B) Identify, characterize and prioritize risks posed by each process safety hazard;
- (C) Identify, analyze and document all inherent safety measures and safeguards for each process safety hazard in the following sequence and priority order, from most preferred to least preferred: first order inherent safety measures; second order inherent safety measures; passive safeguards; active safeguards; and procedural safeguards. For purposes of this section, first order inherent safety measures are considered to be most effective and procedural safeguards are considered to be least effective;
- (D) Identify, analyze, and document relevant, publically available information on inherent safety measures and safeguards. This information shall include inherent safety measures and safeguards that have been: 1. achieved in practice by the petroleum refining industry and related industrial sectors; and 2. required or recommended for the petroleum refining industry and related industrial sectors, by a federal or state agency, or local California agency, in a regulation or report Note: This information may include

inherent safety measures and safeguards that have been: 1. achieved in practice by the petroleum refining industry and related industrial sectors; and 2. required or recommended for the petroleum refining industry and related industrial sectors, by a federal or state agency, or local California agency, in a regulation or report; and,

- (E) For each process safety hazard identified in subsection (I)(4), develop written recommendations in the following sequence and priority order. The HCA team shall consider all process safety hazards that may be impacted by a particular safety measure or safeguard and shall select those safety measures or safeguards that, in the team's judgment, are most effective at reducing all such process safety hazards.
- 1. Eliminate hazards to the greatest extent feasible using first order inherent safety measures;
- 2. Reduce any remaining hazards to the greatest extent feasible using second order inherent safety measures;
- 3. Effectively reduce remaining risks using passive safeguards;
- 4. Effectively reduce remaining risks using active safeguards; and,
- 5. Effectively reduce remaining risks using procedural safeguards.
- (5) The HCA team shall complete an HCA report within 90 calendar days of developing the recommendations. The report shall include:
- (A) A description of the composition, experience and expertise of the team;
- (B) A description of the HCA methodology used by the team;
- (C) A description of each process safety hazard analyzed by the team, pursuant to subsection (I)(4)(B);
- (D) A description of the inherent safety measures and safeguards analyzed by the team, pursuant to subsection (I)(4)(C); and,
- (E) The rationale for the inherent safety measures and safeguards recommended by the team for each process safety hazard, pursuant to subsection (I)(4)(E).; and
- (F) The rationale for not recommending any inherent safety measures and safeguards analyzed by the team and identified pursuant to subsection (I)(4)(D).
- (6) The employer shall implement all recommendations in accordance with subsection (x).
- (7) The employer shall retain all HCA reports for the life of each process.

* * * * * *

- (p) Emergency Planning and Response.
- (A) The employer shall develop, implement and maintain an effective Emergency Action Plan pursuant to CCR Title 8, Section 3220.
- (q) Employee Participation.
- (1) In consultation with employees and employee representatives, the employer shall develop, implement and maintain a written plan to effectively provide for employee participation in all PSM elements, pursuant to this section. The plan shall include provisions that provide for the following:
- (A) Effective participation by affected operating and maintenance employees and employee representatives, throughout all phases, in performing PHAs, DMRs, HCAs, MOCs, Management of Organizational Change assessments (MOOCs), Process Safety Culture Assessments (PSCAs), Incident Investigations, SPAs and PSSRs;
- (B) Effective participation by affected operating and maintenance employees and employee representatives, throughout all phases, in the development, training, implementation and maintenance of the PSM elements required by this section; and,
- (C) Access by employees and employee representatives to all documents or information developed or collected by the employer pursuant to this section, including information that might be subject to protection as a trade secret.
- (D) With respect to employee participation in the PSM activities required by this section, an employer will allow for "effective participation" by employees in such activities if it provides advance notice of each such PSM activity and considers input provided by individuals participating in such PSM activities, including the employee representative, as specified in subsection (x). If the requisite advance notice is provided as specified above, an employer shall not be required to delay any PSM activity due to the failure by a union, or employees in the absence of a union, to select an employee representative, or the failure of a selected employee representative to participate in the noticed PSM activity. Nothing in this subsection shall be construed to require an employer to accept recommendations or findings of employee representatives.
- (2) Authorized collective bargaining agents may select (A) employee(s) to participate in everall PSM program development and implementation planning and (B) employee(s) to participate in PSM teams and other activities, pursuant to this section. The written employee-participation plan will determine how employees are selected to participate in overall PSM program development and implementation planning and to participate in PSM teams and other activities, pursuant to this section. Any such employees shall be on-site and qualified for the task for which they are selected and shall be subject to all provisions of subsection (q)(1) applicable to employee representatives.

- (3) Where employees are not represented by an authorized collective bargaining agent, the employer shall establish effective procedures in consultation with employees for the selection of employee representatives.
- (4) Nothing in this subsection shall preclude the employer from requiring an employee or employee representative to whom information is made available under subsection (q)(1)(C) to enter into a confidentiality agreement prohibiting him or her from disclosing such information, as set forth in CCR Title 8, Section 5194(i).
- (5) Within ninety (90) calendar days of the effective date of this section, the employer in consultation with employee and employee representatives, shall develop and implement the following:
- (A) Effective Stop Work procedures that ensure:
- 1. The authority of all employees, including employees of contractors, to refuse to perform a task where doing so could reasonably result in death or serious physical harm;
- 2. The authority of all employees, including employees of contractors, to recommend to the operator in charge of a unit that an operation or process be partially or completely shut-down, based on a process safety hazard; and,
- 3. The authority of the qualified operator in charge of a unit to partially or completely shut-down an operation or process, based on a process safety hazard.
- (B) Effective procedures to ensure the right of all employees, including employees of contractors, to anonymously report hazards. The employer shall respond in writing within thirty (30) calendar days to written hazard reports submitted by employees, employee representatives, contractors, employees of contractors and contractor employee representatives. The employer shall prioritize and promptly respond to and correct hazards that present the potential for death or serious physical harm.
- (6) The employer shall document the following:
- (A) Recommendations to partially or completely shut-down an operation or process, pursuant to subsection (q)(5)(A)(2);
- (B) Partial or complete shut-down of an operation or process, pursuant to subsection (q)(5)(A)(3); and,
- (C) Written reports of hazards, and the employer's response, pursuant to subsection (q)(5)(B).

* * * * *

Note: Authority cited: Sections 142.3 and 7856, Labor Code. Reference: Sections 142.3, 7855, 7856, 7857, 7858, 7859, 7860, 7861, 7862, 7863, 7864, 7865, 7866, 7867 and 7868, Labor Code.