STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 4. Construction Safety Orders
Article 4. Dusts, Fumes, Mists, Vapors, and Gases

Amend Section 1529 as follows:
§ 1529. Asbestos.

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(k) * * *
(1) Hazard communication.
(A) This section applies to the communication of information concerning asbestos hazards in construction activities to facilitate compliance with this standard. Most asbestos-related construction activities involve previously installed building materials. Building owners often are the only and/or best sources of information concerning them. Therefore, they, along with employers of potentially exposed employees, are assigned specific information conveying and retention duties under this section.
Installed Asbestos Containing Building Material. Employers and building owners shall identify TSI and sprayed or troweled on surfacing materials in buildings as asbestos-containing, unless they determine in compliance with subsection (k)(5) of this section that the material is not asbestos-containing. Asphalt and vinyl flooring material installed no later than 1980 must also be considered as asbestos containing unless the employer, pursuant to subsection (g)(8)(A)9. of this section determines that it is not asbestos-containing. If the employer/building owner has actual knowledge, or should have known through the exercise of due diligence, that other materials are asbestos-containing, they too must be treated as such. When communicating information to employees pursuant to this standard, owners and employers shall identify "PACM" as ACM. Additional requirements relating to communication of asbestos work on multi-employer worksites are set out in subsection (d) of this section.
(B) The employer shall include asbestos in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of asbestos and safety data sheets, and is trained in accordance with the provisions of HCS and subsections (k)(9) and (10) of this section. The employer shall provide information on at least the following hazards: Cancer and lung effects.

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(7) Signs.

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(B) 1. The warning signs required by subsection (k)(7) of this section shall bear the following information:
~~DANGER ASBESTOS CANCER AND LUNG DISEASE HAZARD AUTHORIZED PERSONNEL ONLY~~
DANGER
ASBESTOS
MAY CAUSE CANCER

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CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
2. In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:
~~RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA~~
WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA
3. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (k)(7)(B)1. of this section:
DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD AUTHORIZED PERSONNEL ONLY
4. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (k)(7)(B)2. of this section:
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

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(8) Labels.

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(B) ~~Labels shall be printed in large, bold letters on a contrasting background.~~ The employer shall ensure that such labels comply with subsection (k) of this section.
(C) ~~Labels shall be used in accordance with the requirements of Section 5194 (f) of the General Industry Safety Orders, and shall contain the following information:~~ The employer shall ensure that labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers bear the following information:
DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST
(D)1. Prior to June 1, 2015, employers may include the following information on raw materials, mixtures or labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers in lieu of the labeling requirements in subsections (k)(8)(B) and (k)(8)(C) of this section:
DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
2. ~~(D)~~ Labels shall contain a warning statement against breathing asbestos fibers.

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NOTE: Authority cited: Sections 142.3, 6501.5, 9020, 9021.5, 9021.9, 9030 and 9040, Labor Code. Reference: Sections 142.3, 6501.5, 6501.7, 6501.8, 6501.9, 6502, 9003, 9004(b), 9005, 9006, 9009, 9020, 9021.5, 9021.9, 9030 and 9040, Labor Code; Section 25910, Health and Safety Code; and Sections 7180, 7180.5, 7181, 7182, 7183, 7183.5, 7184, 7185, 7187, 7189, 7189.5 and 7189.7, Business and Professions Code.

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Amend Section 1532 as follows:
§ 1532. Cadmium.

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(i) * * *
(2) * * *
(D) The employer shall assure that containers of contaminated protective clothing and equipment that are to be taken out of the change rooms or the workplace for laundering, cleaning, maintenance or disposal shall bear labels in accordance with subsection (m)(3)(B) of this section.

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(k) * * *
(7) Waste, scrap, debris, bags, containers, personal protective equipment, and clothing contaminated with cadmium and consigned for disposal shall be collected and disposed of in sealed impermeable bags or other closed, impermeable containers. These bags and containers shall be labeled in accordance with subsection (m)(3)(B) of this section.

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(m) Communication of Cadmium Hazards to Employees.
(1) Hazard communication. The employer shall include cadmium in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of cadmium and safety data sheets, and is trained in accordance with the provisions of HCS and subsection (m)(4) of this section. The employer shall provide information on at least the following hazards: Cancer; lung effects; kidney effects; and acute toxicity effects.
~~General. In communications concerning cadmium hazards, employers shall comply with the requirements of the Hazard Communication Standard, section 5194, including but not limited to the requirements concerning warning signs and labels, material safety data sheets (MSDS), and employee information and training. In addition, employers shall comply with the following requirements:~~
(2) Warning Signs.
(A) Warning signs shall be provided and displayed in regulated areas. In addition, warning signs shall be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area.

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(B) Warning signs required by subsection (m)(2)(A) shall bear the following ~~information:~~ legend:
DANGER
CADMIUM
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS AND KIDNEYS
WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY
(C) The employer shall ensure that signs required by this subsection (m)(2) are illuminated, cleaned, and maintained as necessary so that the legend is readily visible.
(D) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (m)(2)(B) of this section:
DANGER
CADMIUM
CANCER HAZARD
CAN CAUSE LUNG AND KIDNEY DISEASE AUTHORIZED PERSONNEL ONLY
RESPIRATORS REQUIRED IN THIS AREA
~~(C) The employer shall assure that signs required by this subsection are illuminated, cleaned, and maintained as necessary so that the legend is readily visible.~~
(3) Warning Labels.
(A) Shipping and storage containers containing cadmium~~,~~or cadmium compounds~~, or cadmium contaminated clothing, equipment, waste, scrap, or debris~~ shall bear appropriate warning labels, as specified in subsection (m)(1)~~3)(B)~~.
(B) The warning labels for containers of cadmium-contaminated protective clothing, equipment, waste, scrap, or debris shall include at least the following information:
DANGER
CONTAINS CADMIUM
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS AND KIDNEYS
AVOID CREATING DUST
(C) Where feasible, installed cadmium products shall have a visible label or other indication that cadmium is present.
(D) Prior to June 1, 2015, employers may include the following information on shipping and storage containers containing cadmium, cadmium compounds, or cadmium-contaminated clothing, equipment, waste, scrap, or debris in lieu of the labeling requirements specified in subsections (m)(3)(A) and (m)(3)(B) of this section:
DANGER
CONTAINS CADMIUM
CANCER HAZARD
AVOID CREATING DUST

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CAN CAUSE LUNG AND KIDNEY DISEASE
~~(C) Where feasible, installed cadmium products shall have a visible label or other indication that cadmium is present.~~

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NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 1532.1 as follows:
§ 1532.1. Lead.

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(g) * * *
(2) * * *
(G) 1. The employer shall assure that the containers of contaminated protective clothing and equipment required by subsection (g)(2)(E) of this section are labeled as follows:
DANGER: CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.
2. Prior to June 1, 2015, employers may include the following information on bags or containers of contaminated protective clothing and equipment required by subsection (g)(2)(E) in lieu of the labeling requirements in subsection (g)(2)(G)1. of this section:
Caution: Clothing contaminated with lead. Do not remove dust by blowing or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state, or federal regulations.

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(*l*) Communication of hazards. ~~Employee information, training and certification.~~
(1) General.
(A) ~~The employer shall communicate information concerning lead hazards according to the requirements of the Hazard Communication Standard, section 5194, including but not limited to the requirements concerning warning signs and labels, material safety data sheets (MSDS), and employee information and training.~~ Hazard communication. The employer shall include lead in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of lead and safety data sheets, and is trained in accordance with the provisions of HCS and subsection (*l*) of this section. The employer shall ensure that at least the following hazards are addressed:
1. Reproductive/developmental toxicity;
2. Central nervous system effects;

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3. Kidney effects;
4. Blood effects; and
5. Acute toxicity effects.

*****

(m) Signs.
(1) General.
~~(A) The employer may use signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs required by this subsection.~~
~~(B) The employer shall assure that no statement appears on or near any sign required by this subsection which contradicts or detracts from the meaning of the required sign.~~
~~(2) Signs.~~
(A) The employer shall post the following warning signs in each regulated area or work area where an employee's exposure to lead is above the PEL.
DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA
(B) The employer shall ensure that no statement appears on or near any sign required by this subsection (m) that contradicts or detracts from the meaning of the required sign.
(C) The employer shall ensure that signs required by this subsection (m) are illuminated and cleaned as necessary so that the legend is readily visible.
(D) The employer may use signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs required by this subsection (m).
(E) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (m)(1)(A) of this section:
WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING
~~(B) The employer shall assure that signs required by this subsection are illuminated and cleaned as necessary so that the legend is readily visible.~~

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Appendix B to §1532.1 – Employee Standard Summary

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XI. Signs - Subsection (m)
The standard requires that the following warning sign be posted in each regulated area or work areas where the exposure to lead exceeds the PEL:

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DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA
Prior to June 1, 2016, employers may use the following legend in lieu of that specified above:
WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

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NOTE: Authority cited: Sections 142.3 and 6717, Labor Code. Reference: Sections 142.3 and 6717, Labor Code.

Amend Section 1532.2 as follows:
§ 1532.2. Chromium (VI).

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(g) * * *
(2) * * *
(D) The employer shall ensure that b~~B~~ags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal shall be labeled in accordance with the requirements of the Hazard Communication Standard, Section 5194.
* * * * *
(j) * * *
(1) ~~General. In addition to the requirements of the Hazard Communication Standard, Section 5194, employers shall comply with the following requirements.~~
Hazard communication. The employer shall include chromium (VI) in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of chromium and safety data sheets, and is trained in accordance with the provisions of Section 5194 and subsection (j)(2) of this section. The employer shall provide information on at least the following hazards: Cancer; eye irritation; and skin sensitization.
* * * * *

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

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Amend Section 1535 as follows:
§ 1535. Methylenedianiline.

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(*l*) * * *
(1) Hazard communication. The employer shall include Methylenedianiline (MDA) in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of MDA and safety data sheets, and is trained in accordance with the provisions of HCS and subsection (*l*)(3) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; liver effects; and skin sensitization.
(2) Signs and labels.
(A) Signs.
1. The employer shall post and maintain legible signs demarcating regulated areas and entrances or access_ways to regulated areas that bear the following legend:
DANGER
MDA
MAY CAUSE CANCER
CAUSES DAMAGE TO THE LIVER
RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE REQUIRED IN THIS AREA
AUTHORIZED PERSONNEL ONLY
2. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (*l*)(2)(A)1. of this section:
DANGER
MDA
MAY CAUSE CANCER
LIVER TOXIN
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING MAY BE REQUIRED TO BE WORN IN THIS AREA
(B) Labels.
1. The employer shall ensure that labels or other appropriate forms of warning are provided for containers of MDA within the workplace. The labels shall comply with the requirements of section 5194(f) and shall include one of the following ~~legends:~~ information for pure MDA and mixtures containing MDA:
DANGER
CONTAINS MDA
MAY CAUSE CANCER
CAUSES DAMAGE TO THE LIVER

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2. Prior to June 1, 2015, employers may include the following information workplace labels in lieu of the labeling requirements in subsection (*l*)(2)(B)1. of this section:
a~~1~~. For pure MDA:
DANGER
CONTAINS MDA
MAY CAUSE CANCER
LIVER TOXIN
b~~2~~. For mixtures containing MDA:
DANGER
CONTAINS MDA
CONTAINS MATERIALS WHICH MAY CAUSE CANCER
LIVER TOXIN
~~(2) Material safety data sheets (MSDS). Employers shall obtain or develop, and shall provide access to their employees, to a material safety data sheet (MSDS) for MDA.~~

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NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

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Subchapter 7. General Industry Safety Orders
Group 16. Control of Hazardous Substances
Article 107. Dusts, Fumes, Mists, Vapors and Gases

Amend Section 5150 as follows:
§ 5150. Ventilation and Personal Protective Equipment Requirements for Welding, Brazing and Cutting.

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(f) *Hazard communication.* The employer shall include the potentially hazardous materials employed in fluxes, coatings, coverings, and filler metals, all of which are potentially used in welding and cutting, or are released to the atmosphere during welding and cutting, in the program established to comply with the Hazard Communication Standard (Section 5194). The employer shall ensure that each employee has access to labels on containers of such materials and safety data sheets, and is trained in accordance with the provisions of Section 5194. Potentially hazardous materials shall include but not be limited to the materials listed in Articles 107, 109 and 110 of these Orders. ~~Precautionary Labels. Hazardous materials used in welding and cutting shall bear precautionary labels as described by this subsection. Any label may be used which describes the hazards of and lists the precautionary measures for a hazardous material in a manner equivalent to that included in this subsection.~~

(1) Additional considerations for hazard communication in welding, cutting, and brazing.

(A) The suppliers shall determine and shall label in accordance with Section 5194 any hazards associated with the use of their materials in welding, cutting, and brazing.

(B) In addition to any requirements imposed by Section 5194, all filler metals and fusible granular materials shall carry the following notice, as a minimum, on tags, boxes, or other containers:

Do not use in areas without adequate ventilation. See ANSI Z49.1–1967 Safety in Welding, Cutting, and Allied Processes published by the American Welding Society.

(C) Where brazing (welding) filler metals contain cadmium in significant amounts, the labels shall indicate the hazards associated with cadmium including cancer, lung and kidney effects, and acute toxicity effects.

(D) Where brazing and gas welding fluxes contain fluorine compounds, the labels shall indicate the hazards associated with fluorine compounds including eye and respiratory tract effects.

(2) Prior to June 1, 2015, employers may include the following information on labels in lieu of the labeling requirements in subsection (f)(1)(v):

(A) ~~(1)~~ All filler metals and fusible granular materials shall carry the following notice, as a minimum, on tags, boxes or other containers:

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CAUTION
Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. Use adequate ventilation.

(B) ~~(2)~~ Filler metals containing cadmium and cadmium-plated materials shall carry the following notice on tags, boxes or other containers:

WARNING
CONTAINS CADMIUM. POISONOUS FUMES MAY BE FORMED ON HEATING.
Do not breathe fumes. Use only with adequate ventilation such as fume collectors, exhaust ventilators, or supplied-air respirators. If chest pain, cough, or fever develops after use, call physician immediately.
NOTE: The intent of calling a physician is to provide immediate medical services.

(C) ~~(3)~~ Containers of fluoride fluxes shall bear the following statement:

CAUTION
CONTAINS FLUORIDES
This flux when heated gives off fumes that may irritate eyes, nose, and throat.
1. Avoid fumes--use only in well-ventilated spaces.
2. Avoid contact of flux with eyes or skin.
3. Do not take internally. ~~(Title 24, T8-5150(a), (b))~~
NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Subchapter 7. General Industry Safety Orders
Group 16. Control of Hazardous Substances
Article 109. Hazardous Substances and Processes

Amend Section 5189 as follows:
§ 5189. Process Safety Management of Acutely Hazardous Materials.
(a) …
(b) Application.
(1) These regulations shall apply to a process which involves a chemical at or above the specified threshold quantities listed in Appendix A or a process which involves a ~~flammable liquid or gas as defined in subsection (c)~~ Category 1 flammable gas (as defined in Section 5194) or a flammable liquid with a flashpoint below 100 °F (37.8 °C) on site in one location, in a quantity of 10,000 pounds (4535.9 kg) or more.
EXCEPTIONS:
(1) Flammable liquids with a flashpoint below 100 °F (37.8 °C) stored in atmospheric tanks or transferred which are kept below their normal boiling point without benefit of chilling or refrigeration.

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NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3 and 7856, Labor Code.

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Amend Section 5190 as follows:
§ 5190. Cotton Dust.

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(j) Signs.
(A) The employer shall post the following warning sign in each work area where the permissible exposure limit for cotton dust is exceeded:
DANGER
COTTON DUST
CAUSES DAMAGE TO LUNGS
(BYSSINOSIS)
WEAR RESPIRATORY PROTECTION IN THIS AREA
(2) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (j)(1) of this section:
WARNING!
COTTON DUST WORK AREA
May Cause Lung Injury

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(Byssinosis)
RESPIRATOR REQUIRED IN THIS AREA

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NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

*****

Amend Section 5191 as follows:
§ 5191. Occupational Exposure to Hazardous Chemicals in Laboratories.

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(b) * * *
~~Compressed gas.~~
~~(1) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70° F (21.1° C); or~~
~~(2) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130° F (54.4° C) regardless of the pressure at 70° F (21.1° C); or~~
~~(3) A liquid having a vapor pressure exceeding 40 psi at 100° F (37.8° C) as determined by ASTM D-323-72.~~

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~~Explosive. A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.~~

*****

Hazardous chemical. A<u>ny</u> chemical <u>which is classified as health hazard or simple asphyxiant in accordance with the Hazard Communication Standard (Section 5194).</u>
~~for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic systems, and agents which damage the lungs, skin, eyes, or mucous membranes.~~
~~Appendices A and B of the Hazard Communication Standard (Section 5194) provide further guidance in defining the scope of health hazards and determining whether or not a chemical is to be considered hazardous for purposes of this regulation.~~
<u>Health hazard. A chemical that is classified as posing one of the following hazardous effects: Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A of the Hazard Communication Standard (Section 5194) and Section 5194(c) (definition of "simple asphyxiant").</u>

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Mutagen. Chemicals that cause permanent changes in the amount or structure of the genetic material in a cell. Chemicals classified as mutagens in accordance with the Hazard Communication Standard (Section 5194) shall be considered mutagens for purposes of this section.

~~Organic peroxide. An organic compound that contains the bivalent -o-o- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.~~

~~Oxidizer. A chemical other than a blasting agent or explosive as defined in Section 5237(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.~~

Physical hazard. A chemical ~~for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.~~ that is classified as posing one of the following hazardous effects: Explosive; flammable (gases, aerosols, liquids, or solids); combustible liquid; oxidizer (liquid, solid, or gas); self-reactive; pyrophoric (gas, liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; in contact with water emits flammable gas; water-reactive; or combustible dust. The criteria for determining whether a chemical is classified as a physical hazard are in Appendix B of the Hazard Communication Standard (Section 5194) and Section 5194(c) (definitions of "combustible dust," “combustible liquid,” “water-reactive” and "pyrophoric gas").

*****

Reproductive toxins. Chemicals which affect the reproductive capabilities including chromosomal damage (mutations), ~~and~~ effects on fetuses (teratogenesis)~~.~~, adverse effects on sexual function and fertility in adult males and females, as well as adverse effects on the development of the offspring. Chemicals classified as reproductive toxins in accordance with the Hazard Communication Standard (Section 5194) shall be considered reproductive toxins for purposes of this section.

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~~Unstable (reactive). A chemical which is the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.~~

~~Water-reactive. A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.~~

*****

(f) * * *

(3) * * *

(E) The location and availability of known reference material on the hazards, safe handling, storage and disposal of hazardous chemicals found in the laboratory including, but not limited to, ~~Material~~ Safety Data Sheets received from the chemical supplier.

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(h) * * *
(1) * * *
(B) Employers shall maintain in the workplace any ~~material~~ safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible to laboratory employees during each work shift when they are in their work area(s).

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(2) * * *
(C) If the chemical substance is produced for commercial purposes by another user outside of the laboratory, the employer shall comply with the Hazard Communication Standard (Section 5194) including the requirements for preparation of ~~material~~ safety data sheets and labeling.

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Appendix A --National Research Council Recommendations Concerning Chemical Hygiene in Laboratories (Non-Mandatory)

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G. Safety Data Sheets
Safety data sheets are presented in "Prudent Practices" for the chemicals listed below. (Asterisks denote that comprehensive safety data sheets are provided).

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NOTE: Authority cited: Sections 142.3 and 9020, Labor Code. Reference: Sections 142.3, 9004(d), 9009 and 9020, Labor Code.

*****

Amend Section 5192 as follows:
§ 5192. Hazardous Waste Operations and Emergency Response.
(a) * * *
(3) * * *
Health hazard: A chemical, mixture of chemicals or a pathogen for which there is statistically significant evidence, based on at least one study conducted in accordance with established scientific principles, that acute or chronic health effects may occur in exposed employees. ~~The term "health hazard" includes chemicals which are carcinogens; toxic or highly toxic agents; reproductive toxins; irritants; corrosives; sensitizers; hepatotoxins; nephrotoxins; neurotoxins; agents which act on the hematopoietic system; and agents which damage the lungs, skin, eyes, or mucous membranes.~~ It also includes stress due to temperature extremes. ~~Further definition of the terms used above can be found in Title 8, California Code of Regulations, Section 5194.~~ <u>The term health hazard includes chemicals that are classified in accordance with the Hazard Communication Standard, Section 5194, as posing one of the following hazardous effects: Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity;</u>

specific target organ toxicity (single or repeated exposure); aspiration toxicity or simple asphyxiant. (See Appendix A to Section 5194 -- Health Hazard Criteria (Mandatory) for the criteria for determining whether a chemical is classified as a health hazard.)

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NOTE: Authority cited: Sections 142.3 and 142.7, Labor Code. Reference: Sections 142.3 and 142.7, Labor Code.

*****

Amend Section 5194 as follows:

§ 5194. Hazard Communication.

(a) ~~(Reserved)~~Purpose.

(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are classified, and that information concerning the classified hazards is transmitted to employers and employees. The requirements of this section are intended to be consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 3. The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets and employee training.

(2) This occupational safety and health standard is intended to address comprehensively the issue of classifying the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees. Classifying the potential hazards of chemicals and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for: developing and maintaining a written hazard communication program for the workplace, including lists of hazardous chemicals present; labeling of containers of chemicals in the workplace, as well as of containers of chemicals being shipped to other workplaces; preparation and distribution of safety data sheets to employees and downstream employers; and development and implementation of employee training programs regarding hazards of chemicals and protective measures.

(b) Scope and Application.

(1) This section requires manufacturers or importers to ~~assess~~ classify the hazards of chemicals ~~substances~~ which they produce or import, and all employers to provide information to their employees about the hazardous chemicals ~~substances~~ to which they may be exposed, by means of a hazard communication program, labels and other forms of warning, ~~material~~ safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers.

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(3) This section applies to laboratories that primarily provide quality control analyses for manufacturing processes or that produce hazardous chemicals ~~substances~~ for commercial purposes, and to all other laboratories except those under the direct supervision and regular

observation of an individual who has knowledge of the physical hazards, health hazards, and emergency procedures associated with the use of the particular hazardous chemicals ~~substances~~ involved, and who conveys this knowledge to employees in terms of safe work practices. Such excepted laboratories must also ensure that labels of incoming containers of hazardous chemicals ~~substances~~ are not removed or defaced pursuant to section 5194(f)(1)~~(4)~~, and must maintain any ~~material~~ safety data sheets that are received with incoming shipments of hazardous chemicals ~~substances~~ and ensure that they are readily available to laboratory employees pursuant to section 5194(g).

(4) This section does not require labeling of the following chemicals ~~substances~~:

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(C) Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, ~~and~~ Firearms and Explosives; and;

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(5) This section does not apply to:

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(I) Work operations where employees only handle chemicals ~~substances~~ in sealed containers which are not opened under normal conditions of use (such as are found in marine cargo handling, warehousing, or transportation); however, this section does apply to these operations as follows:

1. Employers shall ensure that labels on incoming containers of hazardous chemicals ~~substances~~ are not removed or defaced;
2. Employers shall maintain copies of any ~~material~~ safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals ~~substances~~, shall obtain a ~~material~~ safety data sheet for sealed containers of hazardous chemicals ~~substances~~ received without a ~~material~~ safety data sheet if an employee requests the ~~material~~ safety data sheet, and shall ensure that the ~~material~~ safety data sheets are readily accessible during each work shift to employees when they are in their work area(s); and,

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(6) Proposition 65 Warnings.

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(F) All terms and provisions of subsection (b)(6) shall have the same meaning as the following 22 CCR Sections in effect on May 9, 1991: 12201(a), 12201(b), 12201(c), 12201(d), 12201(f), 12201(k), 12502, 12601, 12701(a), 12701(b), 12701(d), 12703, 12705, 12707, 12709, 12711, 12721, 12801, 12803, 12805, 12821 and 12901. The above listed 22 CCR Sections in effect on May 9, 1991 are printed in Appendix ~~E~~G to this section. Additionally, all terms and provisions of subsection (b)(6) shall have the same meaning as in the Act and in 22 CCR Section 12000.

(c) Definitions.

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Chemical.
Any substance, or mixture of substances.
Chemical name.
The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical ~~substance~~ for the purpose of conducting a hazard ~~evaluation~~ classification.
Chief.
The Chief of the Division of Occupational Safety and Health, P.O. Box 420603, San Francisco, CA 94142, or designee.
Classification.
Identification of relevant data regarding the hazards of a chemical; review of those data to ascertain the hazards associated with the chemical; and decision regarding whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

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~~Compressed gas.~~
~~Compressed gas means:~~
~~(A) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70° F (21.1° C); or~~
~~(B) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130° F (54.4° C) regardless of the pressure at 70° F (21.1° C); or~~
~~(C) A liquid having a vapor pressure exceeding 40 psi at 100° F (37.8° C) as determined by ASTM D-323-72.~~

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~~Explosive. A substance that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.~~

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~~Hazard warning.~~
~~Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the health hazards and physical hazards of the substance(s) in the container(s).~~
Hazard category.
The division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.
Hazard class.

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The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.
Hazard not otherwise classified (HNOC).
An adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).
Hazard statement.
A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.
Hazardous chemical.
Any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, combustible liquid, water-reactive, pyrophoric gas, or hazard not otherwise classified
~~Hazardous substance.~~
~~Any substance which is a physical hazard or a health hazard~~ or is included in the List of Hazardous Substances prepared by the Director pursuant to Labor Code section 6382.
Health hazard.
A chemical ~~substance~~ for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes ~~substances which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.~~ chemicals which are classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to this section--Health Hazard Criteria.
~~Appendix A provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B describes the criteria to be used to determine whether or not a substance is to be considered hazardous for purposes of this standard.~~
~~Identity.~~
~~Any chemical or common name which is indicated on the material safety data sheet (MSDS) for the substance. The identity used shall permit crossreferences to be made among the required list of hazardous substances, the label and the MSDS.~~

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Label.
~~Any written, printed, or graphic material displayed on or affixed to containers of hazardous substances~~. An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.
Label elements.
The specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.
Manufacturer.
A person who produces, synthesizes, extracts, or otherwise makes a hazardous chemical ~~substance~~.
~~Material safety data sheet (MSDS). Written or printed material concerning a hazardous substance which is prepared in accordance with section 5194(g).~~
Mixture.
~~Any solution or intimate admixture of two or more substances, at least one of which is present as a hazardous substance, which do not react chemically with each other.~~ A combination or a solution composed of two or more substances in which they do not react.

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~~Organic peroxide.~~
~~An organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.~~
~~Oxidizer.~~
~~A substance other than a blasting agent or explosive as defined in section 5237(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.~~
Physical hazard.
~~A substance for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.~~ A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to section 5194 -- Physical Hazard Criteria.
Pictogram.
A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.
Precautionary statement.

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A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

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Product identifier.
The name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

Pyrophoric gas.
A ~~substance~~ chemical that will ignite spontaneously in air at a temperature of 130° degrees F (54.4° degrees C) or below.

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Safety data sheet (SDS).
Written or printed material concerning a hazardous chemical that is prepared in accordance with section 5914(g).

Signal word.
A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

Simple asphyxiant.
A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

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Substance.
~~Any element, chemical compound or mixture of elements and/or compounds.~~ Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Trade secret.
Any confidential formula, pattern, process, device, information, or compilation of information which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it. A trade secret shall not include chemical identity information which is readily discoverable through qualitative analysis. Appendix ~~D~~ E to section 5194–Definition of Trade Secret sets out the criteria to be used in evaluating trade secrets.

~~Unstable (reactive).~~
~~A substance which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.~~

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~~Water-reactive.~~
~~A substance that reacts with water to release a gas that is either flammable or presents a health hazard.~~

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(d) Hazard ~~Determination~~ Classification.
(1) Manufacturers and importers shall evaluate chemicals ~~substances~~ produced in their workplaces or imported by them to ~~determine if they are hazardous~~ classify the chemicals in accordance with this section. For each chemical, the manufacturer or importer shall determine the hazard classes, and where appropriate, the category of each class that apply to the chemical being classified. Employers are not required to ~~evaluate~~ classify chemicals ~~substances~~ unless they choose not to rely on the ~~evaluation~~ classification performed by the manufacturer or importer for the chemical ~~substance~~ to satisfy this requirement.
(2) Manufacturers, importers, or employers ~~evaluating~~ classifying chemicals ~~substances~~ shall identify and consider the full range of available scientific literature and other evidence concerning ~~such~~ the potential hazards. For health hazards, evidence which is statistically significant and which is based on at least one positive study conducted in accordance with established scientific principles is considered to be sufficient to establish a hazardous effect if the results of the study meet the definitions of health hazards in this section. Appendix A to section 5194 shall be consulted for ~~the scope of~~ classification of health hazards covered, and Appendix B to section 5194 shall be consulted for the ~~criteria to be followed with respect to the completeness of the evaluation, and the data to be reported.~~ classification of physical hazards.
(3) The manufacturer, importer, or employer classifying chemicals ~~evaluating substances~~ shall treat any of the following sources as establishing that the chemical ~~substances~~ listed in them are hazardous:
(A) The list of hazardous substances prepared by the Director pursuant to Labor Code section 6382 and as promulgated in title 8, California Code of Regulations, section 339. The concentrations and footnotes which are applicable to the list shall be understood to modify the same substance on all other source lists or hazard determinations set forth in sections 5194(d)(3)(B)-5194(d)(5)(C~~D~~).
(B) 29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).
(C) Threshold Limit Values for Chemical Substances in the Work Environment, American Conference of Governmental Industrial Hygienists (ACGIH) (latest edition).
The manufacturer, importer, or employer is still responsible for classifying ~~evaluating~~ the hazards associated with the chemicals ~~substances~~ in these source lists in accordance with the requirements of the standard.
(4) Manufacturers, importers, and employers classifying chemicals ~~evaluating substances~~ shall treat any of the following sources as establishing that a chemical ~~substance~~ is a carcinogen or potential carcinogen for hazard communication purposes:

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(A) National Toxicology Program (NTP), *Annual Report on Carcinogens*, (latest edition).
(B) International Agency for Research on Cancer (IARC) *Monographs* (latest editions).
(C) 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration.
Note to (d)(4): The registry of Toxic Effects of Chemical Substances published by the National Institute for Occupational Safety and Health indicates whether a substance has been found by NTP or IARC to be a potential carcinogen.
(5) ~~The manufacturer, importer, or employer shall determine the hazards of mixtures of substances as follows:~~ Mixtures.
(A) Manufacturers, importers, or employers evaluating chemicals shall follow the procedures described in Appendices A and B to section 5194 to classify the hazards of the chemicals, including determinations regarding when mixtures of the classified chemicals are covered by this section.
(B) When classifying mixtures they produce or import, manufacturers and importers of mixtures may rely on the information provided on the current safety data sheets of the individual ingredients except where the manufacturer or importer knows, or in the exercise of reasonable diligence should know, that the safety data sheet misstates or omits information required by this section.
~~(A) If a mixture has been tested as a whole to determine its hazards, the results of such testing shall be used to determine whether the mixture is hazardous;~~
~~(B) If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture, except that the mixture shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1 percent or greater which is considered to be a carcinogen under section 5194(d)(4);~~
~~(C) If a mixture has not been tested as a whole to determine whether the mixture is a physical hazard, the manufacturer, importer, or employer may use whatever scientifically valid data is available to evaluate the physical hazard potential of the mixture; and~~
(C~~D~~) If the manufacturer, importer, or employer has evidence to indicate that a component present in the mixture in concentrations of less than one percent (or in the case of carcinogens, less than 0.1 percent) could be released in concentrations which would exceed an established permissible exposure limit or ACGIH Threshold Limit Value, or could present a health hazard to employees in those concentrations, the mixture shall be assumed to present the same hazard.
(6) Manufacturers, importers, or employers ~~evaluating hazardous substances~~ classifying chemicals shall describe in writing the procedures they use to determine the hazards of the ~~substance~~ chemicals they evaluate. The written procedures are to be made available, upon request, to employees, their designated representatives, the Director, and NIOSH. The written description may be incorporated into the written hazard communication program required under section 5194(e).

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(e) Written Hazard Communication Program.
(1) Employers shall develop, implement, and maintain at the workplace a written hazard communication program for their employees which at least describes how the criteria specified in sections 5194(f), (g), and (h) for labels and other forms of warning, ~~material~~ safety data sheets, and employee information and training will be met, and which also includes the following:
(A) A list of the hazardous chemicals ~~substances~~ known to be present using a~~n identity~~ product identifier that is referenced on the appropriate ~~material~~ safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and

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(2) In multi-employer workplaces, the written hazard communication program shall include the methods employers will use to inform any employers sharing the same work area of the hazardous chemicals ~~substances~~ to which their employees may be exposed while performing their work, and any suggestions for appropriate protective measures, including the following:
(A) The methods the employer will use to provide the other employer(s) with access to the ~~material~~ safety data sheet, or to make it available at a central location in the workplace, for each hazardous chemical ~~substance~~ the other employer(s)' employees may be exposed to while working;

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(f) Labels and Other Forms of Warning.
(1) Labels on shipped containers. The manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals ~~substances~~ leaving the workplace is labeled, tagged or marked. Hazards not otherwise classified do not have to be addressed on the container. Where the manufacturer or importer is required to label, tag or mark the following information shall be provided: ~~with the following information:~~
~~(A) Identity of the hazardous substance(s);~~
~~(B) Appropriate hazard warnings; and~~
~~(C) Name and address of the manufacturer, importer, or other responsible party.~~
(A) Product identifier;
(B) Signal word;
(C) Hazard statement(s);
(D) Pictogram(s);
(E) Precautionary statement(s); and,
(F) Name, address, and telephone number of the manufacturer, importer, or other responsible party.
~~Exception to (f)(1): For solid metal (such as a steel beam or a metal casting) that is not exempted as an article due to its downstream use, the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent shipments to the same employer unless the information on the label changes. The label may be transmitted with the initial shipment itself, or with the material safety data sheet that is to be provided prior to or at the time of the first shipment. This exception to requiring labels on every container of hazardous~~

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~~substances is only for the solid metal itself and does not apply to hazardous substances used in conjunction with, or known to be present with, the metal and to which the employees handling the metal may be exposed (for example, cutting fluids or lubricants).~~
(2) The manufacturer, importer, or distributor shall ensure that the information provided under section 5194 (f)(1)(A) through (E) is in accordance with Appendix C to section 5194, for each hazard class and associated hazard category for the hazardous chemical, prominently displayed, and in English (other languages may also be included if appropriate).
(3) ~~If the hazardous substance is regulated by these orders in a substance-specific health standard, the manufacturer, importer, distributor, or employer shall ensure that the labels or other forms of warning used are in accordance with the requirements of that standard.~~ The manufacturer, importer, or distributor shall ensure that the information provided under section 5194 (f)(1)(B) through (D) is located together on the tag, label or mark.
(4) Solid materials.
(A) For solid metal (such as a steel beam or a metal casting) that is not exempted as an article due to its downstream use the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent shipments to the same employer unless the information on the label changes;
(B) The label may be transmitted with the initial shipment itself, or with the safety data sheet that is to be provided prior to or at the time of the first shipment; and,
(C) This exception to requiring labels on every container of hazardous chemicals is only for the solid material itself, and does not apply to hazardous chemicals used in conjunction with, or known to be present with, the material and to which employees handling the items in transit may be exposed (for example, cutting fluids or lubricants).
(5) ~~(2)~~Manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals ~~substances~~ leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (18 U.S.C. 1801 et seq.) and regulations issued under that Act by the Department of Transportation.
(6) Workplace labeling. ~~(4)~~ Except as provided in sections 5194(f)~~(5)~~(7) and (f)~~(6)~~(8) the employer shall ensure that each container of hazardous ~~substances~~ chemicals in the workplace is labeled, tagged, or marked with ~~the following information~~ either:
~~(A) Identity of the hazardous substance(s) contained therein; and~~
~~(B) Appropriate hazard warnings.~~
(A) The information specified under section 5194 (f)(1)(A) through (E) for labels on shipped containers; or,
(B) Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

(7) ~~(5)~~ The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by section 5194(f)(~~4~~6) to be on a label. The written materials shall be readily accessible to the employees in their work area throughout each work shift. In construction, the employer may use such written materials in lieu of affixing labels to individual containers as long as the alternative method identifies and accompanies the containers to which it is applicable and conveys the information required to be on a label.

(8) ~~(6)~~ The employer is not required to label portable containers into which hazardous ~~substances~~ chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer. ~~In construction, the employer is not required to label portable containers into which hazardous substances are transferred from labeled containers, so long as either the labeled container stays on the jobsite or the employer has complied with section 5194(f)(5).~~

(9) ~~(7)~~ The employer shall not remove or intentionally deface existing labels on incoming containers of hazardous ~~substances~~ chemicals, unless the container is immediately marked with the required information.

~~(8)~~(10) The employer shall ensure that workplace labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

~~(9) The manufacturer, importer, distributor, or employer need not affix new labels to comply with this section if existing labels already convey the required information.~~

~~(10)~~(11) Manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a ~~substance~~ chemical shall revise the labels for the ~~substance~~ chemical within three months of becoming aware of the new information. Labels on containers of hazardous chemicals ~~substances~~ shipped after that time shall contain the new information. If the ~~substance~~ chemical is not currently produced or imported, the manufacturer, importer, distributor, or employer shall add the information to the label before the ~~substance~~ chemical is shipped or introduced into the workplace again.

(g) ~~Material~~ Safety Data Sheets.

(1) Manufacturers and importers shall obtain or develop a ~~material~~ safety data sheet for each hazardous ~~substance~~ chemical they produce or import. Employers shall have a ~~material~~ safety data sheet for each hazardous ~~substance~~ chemical which they use.

Note to (g)(1): Employers should also refer to section 3204 concerning information to be retained after a particular ~~substance~~ chemical is no longer in use.

(2) ~~Each material safety data sheet shall be~~ The manufacturer or importer preparing the safety data sheet shall ensure that it is in English (although the employer may maintain copies in other languages as well) and ~~shall contain at least the following information:~~ includes at least the

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following section numbers and headings, and associated information under each heading, in the order listed (See Appendix D to section 5194--Safety Data Sheets, for the specific content of each section of the safety data sheet):

(A) Section 1, Identification; ~~The identity used on the label, and, except as provided for in section 5194(i) on trade secrets:~~

~~1. If the hazardous substance is a single substance, its chemical and common name(s) and CAS number(s);~~

~~2. If the hazardous substance is a mixture which has been tested as a whole to determine its hazards, the chemical, common name(s), and CAS number(s) of the ingredients which contribute to these known hazards, and the common name(s) of the mixture itself; or,~~

~~3. If the hazardous substance is a mixture which has not been tested as a whole:~~

~~a. The chemical and common name(s), and CAS number(s) of all ingredients which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that substances identified as carcinogens under subsection 5194(d)(4) shall be listed if the concentrations are 0.1% or greater;~~

~~b. The chemical and common name(s), and CAS number(s) of all ingredients which comprise less than 1% (0.1% for carcinogens) of the mixture, if there is evidence that the ingredient(s) could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health hazard to employees; and,~~

~~c. The chemical, common name(s), and CAS number(s) of all ingredients which have been determined to present a physical hazard when present in the mixture;~~

(B) Section 2, Hazard(s) identification; ~~Physical and chemical properties of the hazardous substance (such as vapor pressure, flash point);~~

(C) Section 3, Composition/information on ingredients; ~~The physical hazards of the hazardous substance, including the potential for fire, explosion, and reactivity;~~

(D) Section 4, First-aid measures; ~~The health hazards of the hazardous substance, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the substance;~~

(E) Section 5, Fire-fighting measures; ~~The potential route(s) of entry;~~

(F) Section 6, Accidental release measures; ~~The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit used or recommended by the manufacturer, importer, or employer preparing the material safety data sheet, where available.~~

(G) Section 7, Handling and storage; ~~Whether the hazardous substance is listed in the National Toxicology Program (NTP) *Annual Report on Carcinogens* (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) *Monographs*, (latest editions), or by OSHA;~~

(H) Section 8, Exposure controls/personal protection; ~~Any generally applicable precautions for safe handling and use which are known to the manufacturer, importer, or employer preparing the material safety data sheet, including the appropriate hygienic practices, protective measures~~

~~during repair and maintenance of contaminated equipment, and procedures for cleanup of spills and leaks;~~
(I) Section 9, Physical and chemical properties; ~~Any generally applicable control measures which are known to the manufacturer, importer or employer preparing the material safety data sheet, such as appropriate engineering controls, work practices, or personal protective equipment;~~
(J) Section 10, Stability and reactivity; ~~Emergency and first-aid procedures;~~
(K) Section 11, Toxicological information; ~~The date of preparation of the material safety data sheet or the last change to it;~~
(L) Section 12, Ecological information; ~~The name, address and telephone number of the manufacturer, importer, employer, or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous substance and appropriate emergency procedures, if necessary; and,~~
(M) Section 13, Disposal considerations;
(N) Section 14, Transport information;
(O) Section 15, Regulatory information; and
(P) Section 16, Other information, including date of preparation or last revision.
(Q) A description in lay terms, if not otherwise provided, on either a separate sheet or with the body of the information specified in this section, of the specific potential health risks posed by the hazardous chemical ~~substance~~ intended to alert any person reading the information.
NOTE to section 5194 (g)(2): To be consistent with the GHS, an SDS must also include the headings in section 5194 (g)(2)(L) through (g)(2)(P) in order.
(3) If no relevant information is found for any ~~given category~~ sub-heading within a section on the ~~material~~ safety data sheet, the manufacturer, importer, or employer preparing the ~~material~~ safety data sheet shall mark it to indicate that no information was found. If the category is not applicable to the hazardous ~~substance~~ chemical involved, the space shall be marked to indicate that.
(4) Where complex mixtures have similar hazards and contents (i.e. the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture), the manufacturer, importer or employer may prepare one ~~material~~ safety data sheet to apply to all of these similar mixtures.
(5) The manufacturer, importer or employer preparing the ~~material~~ safety data sheet shall ensure that the information ~~recorded~~ provided accurately reflects the scientific evidence used in making the hazard determination. If the manufacturer, importer, or employer become aware of any significant information regarding the hazards of a ~~substance~~ chemical, or ways to protect against the hazards, this new information shall be added to the ~~material~~ safety data sheet within three months. If the ~~substance~~ chemical is not currently being produced or imported, the manufacturer or importer shall add the information to the ~~material~~ safety data sheet before the ~~substance~~ chemical is introduced into the workplace again.

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(6) Manufacturers or importers shall ensure that distributors and purchasers of hazardous chemicals ~~substances~~ are provided an appropriate ~~material~~ safety data sheet with their initial shipment, and with the first shipment after a ~~material~~ safety data sheet is updated. The manufacturer or importer shall either provide ~~material~~ safety data sheets with the shipped containers or send them to the purchaser prior to or at the time of the shipment. If the ~~material~~ safety data sheet is not provided with the shipment, the purchaser shall obtain one from the manufacturer, importer, or distributor as soon as possible. The manufacturer or importer shall also provide distributors or employers with a ~~material~~ safety data sheet upon request.
(7) Distributors shall ensure that ~~material~~ safety data sheets, and updated information, are provided to other distributors and purchasers of hazardous chemicals ~~substances~~.
(8) The employer shall maintain copies of the required ~~material~~ safety data sheets for each hazardous chemical ~~substance~~ in the workplace, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access~~, microfiche,~~ and other alternatives to maintaining paper copies of the ~~material~~ safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)
(9) Where employees must travel between workplaces during a workshift, i.e., their work is carried out at more than one geographical location, the ~~material~~ safety data sheets may be kept at a central location at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.
(10) ~~Material~~ S~~s~~afety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals ~~substances~~ in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals ~~substances~~. However, the employer shall ensure that in all cases the required information is provided for each hazardous chemical ~~substance,~~ and is readily accessible during each work shift to employees when they are in their work area(s).
(11) ~~Material~~ S~~s~~afety data sheets shall also be made readily available, upon request, to designated representatives, and to the Chief, in accordance with the requirements of section 3204(e). NIOSH and the employee's physician shall also be given access to ~~material~~ safety data sheets in the same manner.
(12) If the ~~material~~ safety data sheet, or any item of information required by section 5194(g)(2), is not provided by the manufacturer or importer, the employer shall:
(A) Within 7 working days of noting this missing information, either from a request or in attempting to comply with section 5194(g)(1), make written inquiry to the manufacturer or importer of a hazardous chemical ~~substance~~ responsible for the ~~material~~ safety data sheet, asking that the complete ~~material~~ safety data sheet be sent to the employer. If the employer has made written inquiry in the preceding 12 months as to whether the chemical ~~substance~~ or product is subject to the requirements of the Act or the employer has made written inquiry within the last 6 months requesting new, revised or later information on the ~~material~~ safety data sheet for the hazardous chemical, ~~substance,~~ the employer need not make additional written inquiry.

(B) Notify the requester in writing of the date that the inquiry was made, to whom it was made, and the response, if any, received. Providing the requestor with a copy of the inquiry sent to the manufacturer, producer or seller and a copy of the response will satisfy this requirement.
(C) Notify the requestor of the availability of the ~~material~~ safety data sheet within 15 days of the receipt of the ~~material~~ safety data sheet from the manufacturer, producer or seller or provide a copy of the ~~material~~ safety data sheet to the requestor within 15 days of the receipt of the ~~material~~ safety data sheet from the manufacturer, producer or seller.
(D) Send the Director a copy of the written inquiry if a response has not been received within 25 working days.
(13) The preparer of a ~~material~~ safety data sheet shall provide the Director with a copy of the ~~material~~ safety data sheet. Where a trade secret claim is made, the preparer shall submit the information specified in section 5194(i)(15).
(h) Employee Information and Training.
(1) Employers shall provide employees with effective information and training on hazardous chemicals ~~substances~~ in their work area at the time of their initial assignment, and whenever a new chemical hazard is introduced into their work area. Information and training may relate to general classes of hazardous ~~substances~~ chemicals to the extent appropriate and related to reasonably foreseeable exposures of the job. Chemical-specific information must always be available through labels and safety data sheets.
(2) Information and training shall consist of at least the following topics:
(A) Employees shall be informed of the requirements of this section.
(B) Employees shall be informed of any operations in their work area where hazardous chemicals ~~substances~~ are present.
(C) Employees shall be informed of the location and availability of the written hazard communication program, including the list(s) of hazardous ~~substances~~ chemicals and ~~material~~ safety data sheets required by this section.
(D) Employees shall be trained in the methods and observations that may be used to detect the presence or release of a hazardous ~~substance~~ chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous ~~substances~~ chemicals when being released, etc.).
(E) Employees shall be trained in the physical, ~~and~~ health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals ~~hazards of the substances~~ in the work area, and the measures they can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous ~~substances~~ chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
(F) Employees shall be trained in the details of the hazard communication program developed by the employer, including an explanation of the labels received on shipped containers and the workplace labeling system used by their employer and the ~~material~~ safety data sheet, and how employees can obtain and use the appropriate hazard information.

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(3) Whenever the employer receives a new or revised ~~material~~ safety data sheet, such information shall be provided to employees on a timely basis not to exceed 30 days after receipt, if the new information indicates significantly increased risks to, or measures necessary to protect, employee health as compared to those stated on a ~~material~~ safety data sheet previously provided.
(i) Trade Secrets.
(1) The manufacturer, importer or employer may withhold the specific chemical identity of a hazardous ~~substance~~ chemical, or the exact percentage (concentration) of the substance in a mixture, from the ~~material~~ safety data sheet, provided that:
(A) The claim that the information withheld is a trade secret can be supported;
(B) Information contained in the ~~material~~ safety data sheet concerning the properties and effects of the hazardous ~~substance~~ chemical is disclosed;
(C) The ~~material~~ safety data sheet indicates that the specific chemical identity and/or percentage of composition is being withheld as a trade secret; and,
(D) The specific chemical identity and percentage is made available to health or safety professionals,_employees, and designated representatives in accordance with the applicable provisions of this subsection.
(2) Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity and/or specific percentage of composition of a hazardous ~~substance~~ chemical is necessary for emergency or first-aid treatment, the manufacturer, importer, or employer shall immediately disclose the specific chemical identity or percentage composition of a trade secret ~~substance~~ chemical to that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The manufacturer, importer, or employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of sections 5194(i)(3) and (4), as soon as circumstances permit.
(3) In non-emergency situations, a manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity or percentage composition, otherwise permitted to be withheld under section 5194(i)(1), to a health or safety professional (i.e., physician, nurse, industrial hygienist, safety professional, toxicologist, or epidemiologist) providing medical or other occupational health services to exposed employee(s), and to employees and designated representatives, if:

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(C) The request explains in detail why the disclosure of the specific chemical identity or percentage composition is essential and that, in lieu thereof, the disclosure of the following information would not enable the health or safety professional,_employee or designated representative to provide the occupational health services described in section 5194(i)(3)(B):

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(7) If the manufacturer, importer, or employer denies a written request for disclosure of a specific chemical identity or percentage composition, the denial must:

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(C) Include evidence to support the claim that the specific chemical identity or percent of composition is a trade secret;

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(E) Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the ~~specific chemical identity~~ trade secret.

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(9) * * *
(A) The manufacturer, importer, or employer has supported the claim that the specific chemical identity or percentage composition is a trade secret;

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(10) If the Director determines that the specific chemical identity or percentage composition requested under section 5194(i)(3) is not a *bona fide* trade secret, or that it is a trade secret but the requesting health or safety professional,_employee, or designated representative has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means to protect the confidentiality of the information, the manufacturer, importer, or employer will be subject to citation by the Director. The Director shall so notify the manufacturer, importer, or employer by certified mail.
(11) The manufacturer, importer, or employer shall have 15 days after receipt of notification under section 5194(i)(10) to provide the Director with a complete justification and statement of the grounds on which the trade secret privilege is claimed. This justification and statement shall be submitted by certified mail.
(12) The Director shall determine whether such information is protected as a trade secret within 15 days after receipt of the justification and statement required by section 5194(i)(11), or if no justification and statement is filed, within 30 days of the original notice, and shall notify the employer or manufacturer and any party who has requested the information pursuant to the California Public Records Act of that determination by certified mail. If the Director determines that the information is not protected as a trade secret, the final notice shall also specify a date, not sooner than 15 days after the date of mailing of the final notice, when the information shall be available to the public.
(13) Prior to the date specified in the final notice provided pursuant to section 5194(i)(12), a manufacturer, importer, or employer may institute an action in an appropriate superior court for a declaratory judgment as to whether such information is subject to protection from disclosure.
(14) If a manufacturer, importer, or employer demonstrates to the Director that the execution of a confidentiality agreement as provided for by section 5194(i)(10) would not provide sufficient protection against the potential harm from the unauthorized disclosure of a trade secret specific chemical identity, the Director may issue such orders to impose such additional limitations or conditions upon the disclosure of the requested information as may be appropriate to assure that the occupational health services are provided without an undue risk of harm to the manufacturer, importer, or employer.

(15) Notwithstanding the existence of a trade secret claim, a manufacturer, importer, or employer shall disclose to the Director the specific chemical identity or percentage composition of any hazardous substance in a product for which trade secrecy is claimed. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Director so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

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(j) Effective dates.
(1) Employers shall train employees regarding the new label elements and safety data sheets format by December 1, 2013.
(2) Manufacturers, importers, distributors, and employers shall be in compliance with all modified provisions of this section no later than June 1, 2015, except:
(A) After December 1, 2015, the distributor shall not ship containers labeled by the manufacturer or importer unless the label has been modified to comply with section 5194(f)(1).
(B) All employers shall, as necessary, update any alternative workplace labeling used under section 5194 (f)(6), update the hazard communication program required by section 5194(h)(1), and provide any additional employee training in accordance with section 5194(h)(3) for newly identified physical or health hazards no later than June 1, 2016.
(3) Manufacturers, importers, distributors, and employers may comply with either section 5194 revised as of October 1, 2011, or the current version of this standard, or both during the transition period.
(k) Appendices.
(1) Appendices A~~, B, and D~~ to E of this section are incorporated as part of this section and the provisions are mandatory.
(2) Appendix F ~~C~~ contains information which is not intended to create any additional obligations not otherwise imposed or to detract from any existing obligation.
(3) Appendix G ~~E~~ contains the following 22 CCR Sections: 12201(a), 12201(b), 12201(c), 12201(d), 12201(f), 12201(k), 12502, 12601, 12701(a), 12701(b), 12701(d), 12703, 12705, 12707, 12709, 12711, 12721, 12801, 12803, 12805, 12821, and 12901 in effect on May 9, 1991 that are referred to in subsection (b)(6).
NOTE: Authority cited: Sections 50.7, 142.3 and 6398, Labor Code. Reference: Sections 50.7, 142.3 and 6361-6399.7, Labor Code; Sections 25249.6, 25249.7, 25249.8, 25249.10, 25249.11, 25249.12 and 25249.13, Health and Safety Code; *California Lab. Federation v. Occupational Safety and Health Stds. Bd.* (1990) 221 Cal.App.3d 1547 [271 Cal. Rptr. 310]; and *United Steelworkers of America v. Auchter* (3d Cir. 1985) 763 F.2d 728.

APPENDIX A TO SECTION 5194 - HEALTH HAZARD CRITERIA (MANDATORY)
See Title 29 Code of Federal Regulations section 1910.1200 Appendix A.
~~Appendix A to Section 5194~~
~~Health Hazard Definitions (Mandatory)~~

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~~Although safety hazards related to the physical characteristics of a substance can be objectively defined in terms of testing requirements (e.g. flammability), health hazard definitions are less precise and more subjective. Health hazards may cause measurable changes in the body--such as decreased pulmonary function. These changes are generally indicated by the occurrence of signs and symptoms in the exposed employees--such as shortness of breath, a non-measurable, subjective feeling. Employees exposed to such hazards must be apprised of both the change in body function and the signs and symptoms that may occur to signal that change.~~

~~The determination of occupational health hazards is complicated by the fact that many of the effects or signs and symptoms occur commonly in nonoccupationally exposed populations, so that effects of exposure are difficult to separate from normally occurring illnesses. Occasionally, a substance causes an effect that is rarely seen in the population at large, such as angiosarcomas caused by vinyl chloride exposure, thus making it easier to ascertain that the occupational exposure was the primary causative factor. More often, however, the effects are common, such as lung cancer. The situation is further complicated by the fact that most substances have not been adequately tested to determine their health hazard potential, and data do not exist to substantiate these effects.~~

~~There have been many attempts to categorize effects and to define them in various ways. Generally, the terms "acute" and "chronic" are used to delineate between effects on the basis of severity or duration. "Acute" effects usually occur rapidly as a result of short-term exposures, and are of short duration. "Chronic" effects generally occur as a result of long-term exposure, and are of long duration.~~

~~The acute effects referred to most frequently are those defined by the American National Standards Institute (ANSI) standard for Precautionary Labeling of Hazardous Industrial Chemicals (Z129.1-1982)--irritation, corrosivity, sensitization and lethal dose. Although these are important health effects, they do not adequately cover the considerable range of acute effects which may occur as a result of occupational exposure, such as, for example, narcosis.~~

~~Similarly, the term chronic effect is often used to cover only carcinogenicity, teratogenicity, and mutagenicity. These effects are obviously a concern in the workplace, but again, do not adequately cover the area of chronic effects, excluding, for example, blood dyscrasias (such as anemia), chronic bronchitis and liver atrophy.~~

~~The goal of defining precisely, in measurable terms, every possible health effect that may occur in the workplace as a result of substance exposures cannot realistically be accomplished. This does not negate the need for employees to be informed of such effects and protected from them. Appendix B, which is also mandatory, outlines the principles and procedures of hazard assessment.~~

~~For purposes of this section, any substances which meet any of the following definitions, as determined by the criteria set forth in Appendix B are health hazards:~~

~~1. Carcinogen: A substance is considered to be a carcinogen if:~~

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~~(a) It has been evaluated by the International Agency for Research on Cancer (IARC) Monographs, Vols 1-53 and Supplements 1-8, and found to be a carcinogen or potential carcinogen; or~~
~~(b) It is listed as a carcinogen or potential carcinogen in the Sixth Annual Report on Carcinogens published by the National Toxicology Program (NTP) or,~~
~~(c) It is regulated by OSHA as a carcinogen.~~
~~2. Corrosive: A substance that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a substance is considered to be corrosive if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in Appendix A to 49 CFR Part 173, it destroys or changes irreversibly the structure of the tissue of four hours. This term shall not refer to action on inanimate surfaces.~~
~~3. Highly toxic: A substance falling within any of the following categories:~~
~~(a) A substance that has a median lethal dose (LD50) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.~~
~~(b) A substance that has a median lethal dose (LD50) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.~~
~~(c) A substance that has a median lethal concentration (LC50) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.~~
~~4. Irritant: A substance, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A substance is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for 24 hours exposure or by other appropriate techniques, it results in an empirical score of five or more. A substance is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques.~~
~~5. Sensitizer: A substance that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the substance.~~
~~6. Toxic. A substance falling within any of the following categories:~~
~~(a) A substance that has a median lethal dose (LD50) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.~~
~~(b) A substance that has a median lethal dose (LD50) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.~~

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~~(c) A substance that has a median lethal concentration (LC50) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.~~

~~7. Target organ effects. The following is a target organ categorization of effects which may occur, including examples of signs and symptoms and substances which have been found to cause such effects. These examples are presented to illustrate the range and diversity of effects and hazards found in the workplace, and the broad scope employers must consider in this area, but are not intended to be all-inclusive.~~

~~a. Hepatotoxins: Substances which produce liver damage.~~
~~Signs and Symptoms: Jaundice; liver enlargement.~~
~~Substances: Carbon tetrachloride; nitrosamines.~~
~~b. Nephrotoxins: Substances which produce kidney damage.~~
~~Signs and Symptoms: Edema; proteinuria.~~
~~Substances: Halogenated hydrocarbons; uranium.~~
~~c. Neutrotoxins: Substances which produce their primary toxic effects on the nervous system.~~
~~Signs and Symptoms: Narcosis; behavioral changes; decrease in motor functions.~~
~~Substances: Mercury; carbon disulfide.~~
~~d. Agents which act on the blood or hematopoietic system: Decrease hemoglobin function; deprive the body tissues of oxygen.~~
~~Signs and Symptoms: Cyanosis; loss of consciousness.~~
~~Substances: Carbon monoxide; cyanides.~~
~~e. Agents which damage the lung: Substances which irritate or damage the pulmonary tissue.~~
~~Signs and Symptoms: Cough; tightness in chest; shortness of breath.~~
~~Substances: Silica; asbestos.~~
~~f. Reproductive toxins: Substances which affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis).~~
~~Signs and Symptoms: Birth defects; sterility.~~
~~Substances: Lead; DBCP.~~
~~g. Cutaneous hazards: Substances which affect the dermal layer of the body.~~
~~Signs and Symptoms: Defatting of the skin; rashes; irritation.~~
~~Substances: Ketones; chlorinated compounds.~~
~~h. Eye hazards: Substances which affect the eye or visual capacity.~~
~~Signs and Symptoms: Conjunctivitis; corneal damage.~~
~~Substances: Organic solvents; acids.~~

NOTE: Authority cited: Sections 142.3 and 6398, Labor Code. Reference: Sections 142.3 and 6361-6399.7, Labor Code; and United Steelworkers of America v. Auchter (3d Cir. 1985) 763 F.2d 728.

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APPENDIX B TO SECTION 5194 - PHYSICAL HAZARD CRITERIA (MANDATORY)
See Title 29 Code of Federal Regulations section 1910.1200 Appendix B.
~~Appendix B to Section 5194~~
~~Hazard Determination (Mandatory)~~
~~The quality of a hazard communication program is largely dependent upon the adequacy and accuracy of the hazard determination. The hazard determination requirement of this standard is performance-oriented. Manufacturers, importers, and employers evaluating substances are not required to follow any specific methods for determining hazards, but they must be able to demonstrate that they have adequately ascertained the hazards of the substances produced or imported in accordance with the criteria set forth in this Appendix.~~
~~Hazard evaluation is a process which relies heavily on the professional judgment of the evaluator, particularly in the area of chronic hazards. The performance orientation of the hazard determination does not diminish the duty of the manufacturer, importer or employer to conduct a thorough evaluation, examining all relevant data and producing a scientifically defensible evaluation. For purposes of this standard, the following criteria shall be used in making hazard determinations that meet the requirements of this standard.~~
~~1. Carcinogenicity: As described in subsection 5194(d)(4) and Appendix A, a determination by the National Toxicology Program, the International Agency for Research on Cancer, or OSHA that a substance is a carcinogen or potential carcinogen will be considered conclusive evidence for purposes of this section.~~
~~2. Human data: Where available, epidemiological studies and case reports of adverse health effects shall be considered in the evaluation.~~
~~3. Animal data: Human evidence of health effects in exposed populations is generally not available for the majority of substances produced or used in the workplace. Therefore, the available results of toxicological testing in animal populations shall be used to predict the health effects that may be experienced by exposed workers. In particular, the definitions of certain acute hazards refer to specific animal testing results (see Appendix A).~~
~~4. Adequacy and reporting of data: The results of any studies which are designed and conducted according to established scientific principles, and which report statistically significant conclusions regarding the health effects of a substance, shall be a sufficient basis for a hazard determination and reported on any material safety data sheet. The manufacturer, importer, or employer may also report the results of other scientifically valid studies which tend to refute the findings of hazard.~~
NOTE: Authority cited: Sections 142.3 and 6398, Labor Code. Reference: Sections 142.3 and 6361-6399.7, Labor Code; and United Steelworkers of America v. Auchter (3d Cir. 1985) 763 F.2d 728.

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APPENDIX C TO SECTION 5194 - ALLOCATION OF LABEL ELEMENTS (MANDATORY)

See Title 29 Code of Federal Regulations section 1910.1200 Appendix C.

~~Appendix C to Section 5194~~

~~Information Sources (Advisory)~~

~~The following is a list of available data sources which the manufacturer, importer, or employer may wish to consult to evaluate the hazards of substances they produce or import:~~

~~Any information in their own company files such as toxicity testing results or illness experience of company employees.~~

~~Any information obtained from the supplier of the substance, such as material safety data sheets or product safety bulletins.~~

~~Any pertinent information obtained from the following source list (latest editions should be used):~~

~~Condensed Chemical Dictionary, Van Nostrand Reinhold Co., 135 West 50th Street, New York, NY 10020~~

~~The Merck Index: An Encyclopedia of Chemicals and Drugs, Merck and Company, Inc., 126 East Lincoln Avenue, Rahway, NJ 07065~~

~~IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man and Supplements, Geneva: World Health Organization, International Agency for Research on Cancer, 1972-Present (multivolume work), 49 Sheridan Avenue, Albany, NY 12210~~

~~Industrial Hygiene and Toxicology, by F. A. Patty, John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158-0012 (multivolume work)~~

~~Clinical Toxicology of Commercial Products, Gleason, Gosselin and Hodge~~

~~Casarett and Doull's Toxicology: The Basic Science of Poisons, Doull, Klaassen, and Amdur, Macmillan Publishing Co., Inc., New York, NY~~

~~Industrial Toxicology, by Alice Hamilton and Harriet L. Hardy, Publishing Sciences Group, Inc., Acton, MA~~

~~Toxicology of the Eye, by W. Morton Grant, Charles C. Thomas, 301-327 East Lawrence Avenue, Springfield, IL~~

~~Recognition of Health Hazards in Industry, William A. Burgess, John Wiley and Sons, 605 Third Avenue, New York, NY 10158-0012~~

~~Chemical Hazards of the Workplace, Gloria J. Hathaway, Nick H. Proctor, James P. Hughes and Michael L. Fischman, J. P. Lipincott Company, East Washington Square, Philadelphia, PA 19105~~

~~CRC Handbook of Chemistry and Physics, CRC Press, Inc., Boca Raton, FL~~

~~Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, 6500 Glenway Avenue, Bldg. D-7, Cincinnati, OH 45211-4438~~

~~Information on the physical hazards of chemicals may be found in publications of the National Fire Protection Association, Boston, MA.~~

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~~NOTE: --The following documents are on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Out-of-print documents may be available from the National Technical Information Service (NTIS), Springfield, VA 22161.Occupational Health Guidelines (NIOSH Pub. No. 81-123).Occupational Health Guidelines, Supplement 1 (NIOSH Pub. No. 88-1188).Occupational Health Guidelines, Supplement 2 (NIOSH Pub. No. 89-104).NIOSH Pocket Guide to Chemical Hazards, NIOSH Pub. No. 90-117.Registry of Toxic Effects of Chemical Substances, U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health (latest edition).The Industrial Environment--Its Evaluation and Control, U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health (NIOSH Pub. No. 74-117).Miscellaneous Documents--National Institute for Occupational Safety and Health:~~
~~1. Criteria for a recommended standard * * * Occupational Exposure to "_____"~~
~~2. Special Hazard Reviews~~
~~3. Occupational Hazard Assessment~~
~~4. Current Intelligence Bulletins~~
~~OSHA's General Industry Standards (29 CFR Part 1910)~~
~~NTP Annual Report on Carcinogens and Summary of the Annual Report on Carcinogens.~~
~~BIBLIOGRAPHIC DATA BASES~~
~~Service Provider and File Name:~~
~~BRS Information Technologies, Inc., a division of Maxwell Online, Inc., 8000 Westpark Dr., McLean, VA 22102~~
~~AGRICOLA~~
~~BIOSIS PREVIEWS~~
~~CA SEARCH~~
~~DRUG INFORMATION FULL TEXT~~
~~MEDLINE~~
~~NTIS~~
~~POLLUTION ABSTRACTS~~
~~TOXLINE~~
~~DIALOG, Dialog Information Services, Inc., 3460 Hillview Avenue, Palo Alto, CA 94304~~
~~AGRICOLA~~
~~BIOSIS PREVIEWS, 1969-PRESENT~~
~~CAB ABSTRACTS 1972-PRESENT~~
~~CHEMICAL EXPOSURE 1974-PRESENT~~
~~CA SEARCH 1967-PRESENT~~
~~CHEMNAME 1967-PRESENT~~
~~CHEMSEARCH 1957-PRESENT~~
~~CONFERENCE PAPERS INDEX~~
~~EMBASE 1974-PRESENT~~

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~~ENVIRONMENTAL BIBLIOGRAPHY 1973-PRESENT~~
~~ENVIROLINE 1971-PRESENT~~
~~FEDERAL RESEARCH IN PROGRESS~~
~~FOOD SCIENCE & TECHNOLOGY ABSTRACTS~~
~~FOODS ADLIBRA~~
~~INTL. PHARMACEUTICAL ABSTRACTS~~
~~LIFE SCIENCES COLLECTION 1978-PRESENT~~
~~NTIS~~
~~OCCUPATIONAL SAFETY AND HEALTH (NIOSH) 1973-PRESENT~~
~~PAPERCHEM 1967-PRESENT~~
~~POLLUTION ABSTRACTS~~
~~SCISEARCH 1974-PRESENT~~
~~Orbit Search Service, a division of Maxwell Online, Inc., 8000 Westpark Dr., McLean, VA 22102~~
~~CHEMICAL ABSTRACTS~~
~~CHEMDEX~~
~~ENVIROLINE~~
~~LABORDOC~~
~~NTIS~~
~~Fein-Marquart Associates (FMA), Chemical Information Systems, Inc. (CIS), 7215 Yorke Road, Baltimore, MD 21212~~
~~Structure & Nomenclature Search System (SANSS)~~
~~RTECS~~
~~Clinical Toxicology of Commercial Products (CTCP)~~
~~Oil and Hazardous Materials Technical Assistance Data System~~
~~MEDLARS Management Section, National Library of Medicine, Department of Health and Human Services, Public Health Service, National Institutes of Health, 8600 Rockville Pike, Bethesda, MD 20894~~
~~BACKFILES~~
~~CANCERLIT~~
~~CHEMLINE~~
~~HAZARDOUS SUBSTANCES DATABANK~~
~~MEDLINE~~
~~RTECS~~
~~SDILINE~~
~~TOXLINE~~
~~TOXLINE65~~
~~TOXLIT~~
~~TOXLIT65~~
~~TOXNET/TOXICOLOGIC DATA & TRI~~

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~~Questel, Inc., 2300 Clarendon Blvd., Suite 1111, Arlington, VA 22201~~
~~CIS/ILO~~
NOTE: Sections 142.3 and 6398, Labor Code. Reference: Sections 142.3 and 6361-6399.7, Labor Code; and *United Steelworkers of America v. Auchter* (3d Cir. 1985) 763 F.2d 728.

APPENDIX D TO SECTION 5194 - SAFETY DATA SHEETS (MANDATORY)
See Title 29 Code of Federal Regulations section 1910.1200 Appendix D.
~~Appendix D to Section 5194~~
~~Definition of "Trade Secret" (Mandatory)~~
~~The following is a reprint of the Restatement of Torts Section 757, comment b (1939):~~
~~b. Definition of trade secret. A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device, or a list of customers. It differs from other secret information in a business (see Section 759 of the Restatement of Torts which is not included in this Appendix) in that it is not simply information as to single or ephemeral events in the conduct of the business, as, for example, the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like. A trade secret is a process or device for continuous use in the operations of the business. Generally it relates to the production of goods, as, for example, a machine or formula for the production of an article. It may, however, relate to the sale of goods or to other operations in the business, such as a code for determining discounts, rebates or other concessions in the price list or catalogue, or a list if specialized customers, or a method of bookkeeping or other office management.~~
~~Secrecy. The subject matter of a trade secret must be secret. Matters of public knowledge or of general knowledge in an industry cannot be appropriated by one as his secret. Matters which are completely disclosed by the goods which one markets cannot be his secret. Substantially, a trade secret is know only in the particular business in which it is used. It is not requisite that only the proprietor of the business know it. He may, without losing his protection, communicate it to employees involved in its use. He may likewise communicate it to others pledged to secrecy. Others may also know of it independently, as, for example, when they have discovered the process or formula by independent invention and are keeping it secret. Nevertheless, a substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring the information. An exact definition of a trade secret is not possible. Some factors to be considered in determining whether given information is one's trade secret are: (1) The extent to which the information is known outside of his business; (2) the extent to which it is known by employees and others involved in his business; (3) the extent of measures taken by him to guard the secrecy of the information; (4) the value of the information to him and his competitors; (5) the amount of effort or money expended by him in developing~~

~~the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.~~
~~Novelty and prior art. A trade secret may be a device or process which is patentable; but it need not be that. It may be device or process which is clearly anticipated in the prior art or one which is merely a mechanical improvement that a good mechanic can make. Novelty and invention are not requisite for a trade secret as they are for patentability. These requirements are essential to patentability. These requirements are essential to patentability because a patent protects against unlicensed use of the patented device or process even by one who discovers it properly through independent research. The patent monopoly is a reward to the inventor. But such is not the case with a trade secret. Its protection is not based on a policy of rewording or otherwise encouraging the development of secret processes or devices. The protection is merely against a breach of faith and reprehensible means of learning another's secret. For this limited protection it is not appropriate to require also the kind of novelty and invention which is a requisite of patentability. The nature of the secret is, however, an important factor in determining the kind of relief that is appropriate against one who acquires the secret wrongfully is ordinarily enjoined from further use of it and is required to account for the profits derived from his past use. If, on the other hand, the secret consists of mechanical improvements that a good mechanic can make without resort to the secret, the wrongdoer's liability may be limited to damages, and an injunction against future use of the improvements made with the aid of the secret may be inappropriate.~~
NOTE: Authority cited: Sections 142.3 and 6398, Labor Code. Reference: Sections 142.3 and 6361-6399.7, Labor Code; and *United Steelworkers of America v. Auchter* (3d Cir. 1985) 763 F.2d 728.

APPENDIX E TO SECTION 5194 – DEFINITION OF "TRADE SECRET" (MANDATORY)
See Title 29 Code of Federal Regulations section 1910.1200 Appendix E.

APPENDIX F TO SECTION 5194 – GUIDANCE FOR HAZARD CLASSIFICATIONS RE: CARCINOGENICITY (NON-MANDATORY)
See Title 29 Code of Federal Regulations section 1910.1200 Appendix F.

APPENDIX ~~E~~G TO SECTION 5194 - Terms and Provisions for subsection (b)(6)
The following Sections from Title 22 of the California Code of Regulations (22 CCR) in effect on May 9, 1991 are printed in this Appendix because they provide terms and provisions referred to in subsection (b)(6):

*****

NOTE: Authority cited: Sections 50.7 and 142.3, Labor Code. Reference: Sections 50.7 and 142.3, Labor Code; Sections 25249.6, 25249.7, 25249.8, 25249.10, 25249.11, 25249.12 and 25249.13, Health and Safety Code; and California Lab. Federation v. Occupational Safety and Health Stds. Bd. (1990) 221 Cal.App.3d 1547 [271 Cal. Rptr. 310].

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Amend Section 5198 as follows:
§ 5198. Lead.

*****

(g) * * *
(2) * * *
(G) Labeling of contaminated protective clothing and equipment.
1. The employer shall ensure that labels of bags or containers of contaminated protective clothing and equipment include the following information:
DANGER: CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.
2. Prior to June 1, 2015, employers may include the following information on bags or containers of contaminated protective clothing and equipment in lieu of the labeling requirements in subsections (g)(2)(G)1. of this section:
~~The employer shall assure that the containers of contaminated protective clothing and equipment required by subsection (g)(2)(E) are labeled as follows:~~
CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL REGULATIONS.

*****

(m) Communication of Hazards.
(1) Hazard Communication--General.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for lead.
(B) In classifying the hazards of lead at least the following hazards are to be addressed: Reproductive/developmental toxicity; central nervous system effects; kidney effects; blood effects; and acute toxicity effects.
(C) Employers shall include lead in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of lead and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (*l*) of this section.
~~Signs.~~
~~(1) General.~~
~~(A) The employer may use signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs required by this section.~~
~~(B) The employer shall assure that no statement appears on or near any sign required by this section which contradicts or detracts fro the meaning of the required sign.~~

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(2) Signs.
(A) The employer shall post the following warning signs in each work area where the PEL is exceeded:
DANGER
LEAD
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA
(B) The employer shall ensure that no statement appears on or near any sign required by this subsection (m)(2) which contradicts or detracts from the meaning of the required sign.
(C) The employer shall ensure that signs required by this subsection (m)(2) are illuminated and cleaned as necessary so that the legend is readily visible.
(D) The employer may use signs required by other statutes, regulations, or ordinances in addition to, or in combination with, signs required by this subsection (m)(2).
(E) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (m)(2)(B) of this section:
WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING
~~(B) The employer shall assure that signs required by this section are illuminated and cleaned as necessary so that the legend is readily visible.~~

*****

Appendix B
Section 5198 Summary

*****

XI. Signs
The standard requires that the following warning sign must be posted in work areas where the exposure to lead exceeds the PEL:
DANGER
LEAD
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA
However, prior to June 1, 2016, employers may use the following legend in lieu of that specified above:
WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

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*****

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Subchapter 4. Construction Safety Orders
Group 16. Control of Hazardous Substances
Article 110. Regulated Carcinogens

Amend Section 5200 as follows:
§ 5200. Methylenedianiline.

*****

(k) Communication of hazards ~~to employees~~.
(1) Hazard communication--general.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for MDA.
(B) In classifying the hazards of MDA at least the following hazards are to be addressed: Cancer; liver effects; and skin sensitization.
(C) Employers shall include MDA in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of MDA and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (k)(4) of this section.
(2) Signs and labels.
(A) Signs.
1. The employer shall post and maintain legible signs demarcating regulated areas and entrances or access_ways to regulated areas that bear the following legend:
DANGER
MDA
MAY CAUSE CANCER
CAUSES DAMAGE TO THE LIVER
RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE REQUIRED IN THIS AREA
AUTHORIZED PERSONNEL ONLY
2. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (k)(2)(A)1. of this section:
DANGER
MDA
MAY CAUSE CANCER
LIVER TOXIN
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING MAY BE REQUIRED TO BE WORN IN THIS AREA
(B) ~~The employer shall ensure that labels or other appropriate forms of warning are provided for containers of MDA within the workplace. The labels shall comply with the requirements of section 5194(f) and shall include the following legend~~ Labels. Prior to June 1, 2015, employers

may include the following information workplace labels in lieu of the labeling requirements in subsection (k)(1) of this section:
1. For Pure MDA:
DANGER
CONTAINS MDA
MAY CAUSE CANCER
LIVER TOXIN
2. For mixtures containing MDA:
DANGER
CONTAINS MDA
CONTAINS MATERIALS WHICH MAY CAUSE CANCER
LIVER TOXIN
(3~~2~~) ~~Material s~~Safety data sheets (~~M~~SDS).
~~(A) Employers shall obtain or develop, and shall provide access to their employees, to a material safety data sheet (MSDS) for MDA.~~ In meeting th~~is~~e obligation to provide safety data sheets, employers shall make appropriate use of the information found in Appendices A and B to Section 5200.
~~(B) Employers who are manufacturers or importers shall:~~
~~1. Comply with subsection (k)(1)(B) appropriate, and~~
~~2. Comply with the requirement in the Hazard Communication standard, section 5194, that they deliver to downstream employers an MSDS for MDA.~~
(4~~3~~) Information and training.

*****

(5~~4~~) Access to training materials.

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5201 as follows:
§ 5201. 1,3-Butadiene.

*****

(*l*) * * *
(1) Hazard communication - general. ~~The employer shall communicate the hazards associated with BD exposure in accordance with the requirements of section 5194, Hazard Communication.~~
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for BD.
(B) In classifying the hazards of BD at least the following hazards are to be addressed: Cancer; eye and respiratory tract irritation; center nervous system effects; and flammability.

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(C) Employers shall include BD in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of BD and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (*l*)(2) of this section.

*****

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 5202 as follows:
§ 5202. Methylene Chloride.

*****

(k) Hazard communication. ~~The employer shall communicate the following hazards associated with MC on labels and in material safety data sheets in accordance with § 5194: cancer, cardiac effects (including elevation of carboxyhemoglobin), central nervous system effects, liver effects, and skin and eye irritation.~~
(1) Hazard communication--general.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for MC.
(B) In classifying the hazards of MC at least the following hazards are to be addressed: Cancer, cardiac effects (including elevation of carboxyhemoglobin), central nervous system effects, liver effects, and skin and eye irritation.
(C) Employers shall include MC in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of MC and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (*l*) of this section.
(2) [Reserved]

*****

Appendix A to Section 5202
Substance Safety Data Sheet and Technical guidelines for Methylene chloride.

*****

X. Access To Information

*****

E. Your employer is required to provide labels and ~~material~~ safety data sheets (~~M~~SDS) for all materials, mixtures or solutions composed of greater than 0.1 percent MC. An example of a label that would satisfy these requirements would be:

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9031 and 9040, Labor Code.

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Amend Section 5206 as follows:
§ 5206. Chromium (VI).

*****

(h) * * *
(2) * * *
(D) The employer shall ensure that b~~B~~ags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal shall be labeled in accordance with the requirements of the Hazard Communication standard, Section 5194.

*****

(*l*) * * *
(1) ~~General. In addition to the requirements of the Hazard Communication standard, Section 5194, employers shall comply with the following requirements.~~
Hazard communication—general.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for chromium (VI).
(B) In classifying the hazards of chromium (VI) at least the following hazards are to be addressed: Cancer, eye irritation, and skin sensitization.
(C) Employers shall include chromium (VI) in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of chromium (VI) and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (*l*)(2) of this section.

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5207 as follows:
§ 5207. Cadmium.

*****

(k) * * *
(7) Waste, scrap, debris, bags, containers, personal protective equipment, and clothing contaminated with cadmium and consigned for disposal shall be collected and disposed of in sealed impermeable bags or other closed, impermeable containers. These bags and containers shall be labeled in accordance with subsection (m)~~(3)~~ of this section.

*****

(m) * * *
(1) ~~General.~~
~~In communications concerning cadmium hazards, employers shall comply with the requirements of the Hazard Communication Standard, section 5194, including but not limited to the~~

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~~requirements concerning warning signs and labels, material safety data sheets (MSDS), and employee information and training. In addition, employers shall comply with the following requirements:~~

Hazard Communication.--General.

(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for cadmium.

(B) In classifying the hazards of cadmium at least the following hazards are to be addressed: Cancer; lung effects; kidney effects; and acute toxicity effects.

(C) Employers shall include cadmium in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of cadmium and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (m)(4) of this section.

(2) Warning Signs.

(A) Warning signs shall be provided and displayed in regulated areas. In addition, warning signs shall be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area.

(B) Warning signs required by subsection (m)(2)(A) ~~shall bear the following information:~~ of this section shall bear the following legend:

DANGER
CADMIUM
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS AND KIDNEYS
WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY

(C) The employer shall ensure that signs required by this subsection (m)(2) are illuminated, cleaned, and maintained as necessary so that the legend is readily visible.

(D) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (m)(2)(B) of this section:

DANGER
CADMIUM
CANCER HAZARD
CAN CAUSE LUNG AND KIDNEY DISEASE
AUTHORIZED PERSONNEL ONLY
RESPIRATORS REQUIRED IN THIS AREA

~~(C) The employer shall assure that signs required by this subsection are illuminated, cleaned, and maintained as necessary so that the legend is readily visible.~~

(3) Warning Labels.

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(A) Shipping and storage containers containing cadmium, cadmium compounds, or cadmium contaminated clothing, equipment, waste, scrap, or debris shall bear appropriate warning labels, as specified in subsection (m)~~(3)(B)~~ (1) of this section.
(B) The warning labels for containers of contaminated protective clothing, equipment, waste, scrap, or debris shall include at least the following information:
DANGER
CONTAINS CADMIUM
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS AND KIDNEYS
AVOID CREATING DUST
(C) Prior to June 1, 2015, employers may include the following information on shipping and storage containers containing cadmium, cadmium compounds, or cadmium contaminated clothing, equipment, waste, scrap, or debris in lieu of the labeling requirements specified in subsections (m)(1)(A) and (m)(3)(B) of this section:

DANGER
CONTAINS CADMIUM
CANCER HAZARD
AVOID CREATING DUST
CAN CAUSE LUNG AND KIDNEY DISEASE

(~~C~~D) Where feasible, installed cadmium products shall have a visible label or other indication that cadmium is present.

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5208 as follows:
§ 5208. Asbestos.

*****

(h) * * *
(2) * * *
(D) The employer shall ensure that c~~C~~ontainers of contaminated protective devices or work clothing which are to be taken out of change rooms or the workplace for cleaning, maintenance or disposal, shall bear labels in accordance with subsection (j)~~(4)~~ of this section.
(3) * * *
(F) The employer shall inform any person who launders or cleans protective clothing or equipment contaminated with asbestos of the potentially harmful effects of exposure to asbestos.

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(G) The employer shall ensure that c~~C~~ontaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers, and labeled in accordance with subsection (j) of this section.

*****

(j) * * *
(1) Hazard communication--general.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for asbestos.
(B) In classifying the hazards of asbestos at least the following hazards are to be addressed: Cancer and lung effects.
(C) Employers shall include asbestos in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of asbestos and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (j)(7) of this section.
(2) Installed Asbestos Containing Material: Employers and building owners are required to treat installed TSI and sprayed on and troweled-on surfacing materials as ACM in buildings constructed no later than 1980 for purposes of this standard. These materials are designated "presumed ACM" or "PACM", and are defined in subsection (b) of this section. Asphalt and vinyl flooring material installed no later than 1980 also must be treated as asbestos-containing. The employer or building owner may demonstrate that PACM and flooring material do not contain asbestos by complying with subsection (j)(8)(C) of this section.
(3~~2~~) Duties of employers and building and facility owners.

*****

(4~~3~~) Warning signs.
(A) Posting.
1. Warning signs shall be provided and displayed at each regulated area.
2. In addition, warning signs shall be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area.
(B) Sign specifications:
1. The warning signs required by subsection (j)(4~~3~~)(A) of this section shall bear the following legend ~~information~~:
DANGER ASBESTOS
MAY CAUSE CANCER ~~AND LUNG DISEASE HAZARD~~
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
2. In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:
WEAR RESPIRATORS AND PROTECTIVE CLOTHING ~~ARE REQUIRED~~ IN THIS AREA
3. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (j)(4)(B)1. of this section:

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DANGER ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
4. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (j)(4)(B)2. of this section:
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA
(C) ~~Where minerals in the regulated area are only tremolite, anthophyllite or actinolite, the employer may replace the term "asbestos" with the appropriate mineral name.~~
~~(D)~~ The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by subsection (j)(4~~3~~)(A) of this section. Means to ensure employee comprehension may include the use of foreign languages, pictographs and graphics.
(D~~E~~) At the entrance to mechanical rooms/areas in which employees reasonably can be expected to enter and which contain ACM and/or PACM, the building owner shall post signs which identify the material which is present, its location, and appropriate work practices which, if followed, will ensure that ACM and/or PACM will not be disturbed. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.
(5~~4~~) Warning labels.
(A) Labeling: ~~Warning l~~Labels shall be affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers. When a building owner or employer identifies previously installed ACM and/or PACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain ACM and/or PACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical rooms/areas. Signs required by subsection (j)~~(3)~~ of this section may be posted in lieu of labels so long as they contain information required for labeling.
(B) Label specifications: In addition to the requirements of subsection (j)(1), the employer shall ensure that labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers ~~The labels shall comply with the requirements of Section 5194 (f) of the Hazard Communication standard, and shall~~ include the following information:
DANGER CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST
(C) Prior to June 1, 2015, employers may include the following information on raw materials, mixtures or labels of bags or containers of protective clothing and equipment, scrap, waste, and

debris containing asbestos fibers in lieu of the labeling requirements in subsections (j)(1)(A) and (j)(5)(B) of this section:
DANGER CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
~~(5) Material safety data sheets: Employers who are manufacturers or importers of asbestos or asbestos products shall comply with the requirements regarding development of material safety data sheets as specified in Section 5194(g) of the Hazard Communication standard, except as provided by subsection (j)(6) of this section.~~
(6) The provisions for labels and for ~~required by subsection (j)(4) of this section or for material~~ safety data sheets required by subsection (j)~~(5)~~ of this section do not apply where:

*****

NOTE: Authority cited: Sections 142.3, 6501.5, 9020, 9021.5, 9030, and 9040, Labor Code. Reference: Sections 142.3, 6501.5, 6501.7, 6501.8, 6501.9, 6502, 9003, 9004(b), 9005, 9006, 9009, 9020, 9021.5, 9030, and 9040, Labor Code; and Section 25910, Health and Safety Code.

Amend Section 5209 as follows:
§ 5209. Carcinogens.

*****

(e) Communication of hazards ~~Signs, Information and Training~~.
(1) Hazard communication.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for each carcinogen listed in paragraph (e)(1)(D) of this section.
(B) In classifying the hazards of carcinogens listed in paragraph (e)(1)(D) of this section, at least the hazards listed in paragraph (e)(1)(D) are to be addressed.
(C) Employers shall include the carcinogens listed in paragraph (e)(1)(D) of this section in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of the carcinogens listed in paragraph (e)(1)(D) and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (e)(4) of this section.
(D) List of Carcinogens:
1. 4-Nitrobiphenyl: Cancer.
2. alpha-Naphthylamine: Cancer; skin irritation; and acute toxicity effects.
3. Methyl chloromethyl ether: Cancer; skin, eye and respiratory effects; acute toxicity effects; and flammability.
4. 3,3'-Dichlorobenzidine (and its salts): Cancer and skin sensitization.
5. bis-Chloromethyl ether: Cancer; skin, eye, and respiratory tract effects; acute toxicity effects; and flammability.

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6. beta-Naphthylamine: Cancer and acute toxicity effects.
7. Benzidine: Cancer and acute toxicity effects.
8. 4-Aminodiphenyl: Cancer.
9. Ethyleneimine: Cancer; mutagenicity; skin and eye effects; liver effects; kidney effects; acute toxicity effects; and flammability.
10. beta-Propiolactone: Cancer; skin irritation; eye effects; and acute toxicity effects.
11. 2-Acetylaminofluorene: Cancer.
12. 4-Dimethylaminoazo-benzene: Cancer; skin effects; and respiratory tract irritation.
13. N-Nitrosodimethylamine: Cancer; liver effects; and acute toxicity effects.

(2) Signs.

(A) The employer shall post e~~E~~ntrances to regulated areas ~~shall be posted~~ with signs bearing the legend:

DANGER
(CHEMICAL IDENTIFICATION)
MAY CAUSE CANCER
AUTHORIZED PERSONNEL ONLY

(B) The employer shall post signs at entrances to regulated areas containing operations covered in paragraph (c)(5) of this section. The signs shall bear the legend:

DANGER
(CHEMICAL IDENTIFICATION)
MAY CAUSE CANCER
WEAR AIR-SUPPLIED HOODS, IMPERVIOUS SUITS, AND PROTECTIVE EQUIPMENT IN THIS AREA
AUTHORIZED PERSONNEL ONLY

(C) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (e)(2)(A) of this section:

CANCER-SUSPECT AGENT
AUTHORIZED PERSONNEL ONLY

~~(B) Entrances to regulated areas containing operations covered in paragraph (c)(5) of this section shall be posted with signs bearing the legend:~~

(D) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (e)(2)(B) of this section:

CANCER-SUSPECT AGENT EXPOSED IN THIS AREA
IMPERVIOUS SUIT INCLUDING GLOVES, BOOTS AND AIR-SUPPLIED HOOD REQUIRED AT ALL TIMES
AUTHORIZED PERSONNEL ONLY

(E~~C~~) Appropriate signs and instructions shall be posted at the entrance to, and exit from, regulated areas informing employees of the procedures that must be followed in entering and leaving a regulated area.

(F~~D~~) Prescribed emergency procedures shall be posted in an appropriate location.

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~~(2) Container Contents Identification.~~
~~(A) Containers of a carcinogen and containers required under subparagraphs (c)(4)(E), (c)(6)(H) and (c)(7)(C) of this section which are accessible only to, and handled only by, authorized employees or other employees trained in accordance with paragraph (e)(5) may have the identification of their contents limited to a generic or proprietary name, or other proprietary identification, of the carcinogen and percent.~~
~~(B) Containers of a carcinogen and containers required under subparagraphs (c)(4)(E), (c)(6)(H) and (c)(7)(C) of this section which are accessible to, or handled by, employees other than authorized employees or employees trained in accordance with paragraph (e)(5), shall have contents identification which includes the full chemical name and Chemical Abstracts Service Registry number as listed in subsection (a) of this section.~~
~~(C) Containers shall display the following warning immediately under, or adjacent to, the contents identification:~~
~~CANCER-SUSPECT AGENT~~
~~(D) Containers which have carcinogen contents with corrosive or irritating properties shall have label statements warning of such hazards, noting, if appropriate, particularly sensitive or affected portions of the body.~~
(3) ~~Lettering. Lettering on signs required by subparagraphs (e)(1)(A), (B) and (C)of this section shall be a minimum height of 2 inches. Instructions required by subparagraphs (e)(1)(C) and (D) shall be legible and no smaller than standard pica type. The letter height of labels required on containers under this section shall be not less than one-half the size of the largest other lettering on the package, and not less than 8-point type in any instance, but no such required lettering need be more than 1 inch in height.~~
~~(4)~~ Prohibited Statements. No statement shall appear on or near any required sign, label or instruction which contradicts or detracts from the effect of any required warning, information or instruction.
(4~~5~~) Training and Indoctrination.

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5210 as follows:
§ 5210. Vinyl Chloride.

*****

(*l*) Communication of Hazards.
(1) Hazard communication--general.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for vinyl chloride and polyvinyl chloride.

(B) In classifying the hazards of vinyl chloride at least the following hazards are to be addressed: Cancer; central nervous system effects; liver effects; blood effects; and flammability.
(C) Employers shall include vinyl chloride in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of vinyl chloride and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (j) of this section.
(2) Signs ~~and Labels~~.
(A~~1~~) The employer shall post e~~E~~ntrances to regulated areas ~~shall be posted~~ with legible signs bearing the legend:
DANGER
VINYL CHLORIDE
MAY CAUSE CANCER
AUTHORIZED PERSONNEL ONLY
(B) The employer shall post signs at areas containing hazardous operations or where emergencies currently exist. The signs shall be legible and bear the legend:
DANGER
VINYL CHLORIDE
MAY CAUSE CANCER
WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA
AUTHORIZED PERSONNEL ONLY
(C) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (*l*)(2)(A) of this section:
CANCER-SUSPECT AGENT AREA
AUTHORIZED PERSONNEL ONLY
~~(2) Areas containing hazardous operations or where an emergency currently exists shall be posted with legible signs bearing the legend:~~
(D) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (*l*)(2)(B) of this section:
CANCER-SUSPECT AGENT IN THIS AREA PROTECTIVE EQUIPMENT REQUIRED
AUTHORIZED PERSONNEL ONLY
(3) Labels.
(A) In addition to the other requirements in this paragraph (*l*), the employer shall ensure that labels for containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride are legible and include the following information:
CONTAMINATED WITH VINYL CHLORIDE
MAY CAUSE CANCER
(B) Prior to June 1, 2015, employers may include the following information on labels of containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride in lieu of the labeling requirements in paragraphs (*l*)(3)(A) of this section:

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~~Containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride shall be legibly labeled:~~
CONTAMINATED WITH VINYL CHLORIDE CANCER-SUSPECT AGENT
(4) Prior to June 1, 2015, employers may include the following information for containers of polyvinyl chloride in lieu of the labeling requirements in paragraph (*l*)(1)(A) of this section:
~~Containers of polyvinyl chloride shall be legibly labeled:~~
POLYVINYL CHLORIDE (OR TRADE NAME) Contains VINYL CHLORIDE
VINYL CHLORIDE IS A CANCER-SUSPECT AGENT
(5) (A) Prior to June 1, 2015, employers may include either the following information in either paragraph (*l*)(5)(A) or (*l*)(5)(B) of this section on containers of vinyl chloride in lieu of the labeling requirements in paragraph (*l*)(1)(A) of this section:
~~Containers of vinyl chloride shall be legibly labeled either:~~
~~(A)~~
VINYL CHLORIDE
EXTREMELY FLAMMABLE GAS UNDER PRESSURE
CANCER-SUSPECT AGENT
(B) ~~or, i~~In accordance with 49 CFR Parts 170-189, with the additional legend applied near the label or placard:
CANCER-SUSPECT AGENT
~~applied near the label or placard.~~
(6) No statement shall appear on or near any required sign, label or instruction which contradicts or detracts from the effect of, any required warning, information or instruction.

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5211 as follows:
§ 5211. Coke Oven Emissions.

*****

(u) Communication of Hazards.
(1) Hazard Communication--General.
The employer shall include coke oven emissions in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of chemicals and substances associated with coke oven processes and to safety data sheets, and is trained in accordance with the provisions of HCS and subsection (t) of this section. The employer shall ensure that at least the following hazard is addressed: Cancer.
~~Precautionary Signs and Labels.~~
~~(1) General.~~

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~~(A) The employer may use labels or signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs and labels required by paragraphs (2) and (3) of this subsection.~~
~~(B) The employer shall assure that no statement appears on or near any required sign which contradicts or detracts from the effects of the sign.~~
~~(C) The employer shall assure that required signs are illuminated and cleaned as necessary so that the legend is readily visible.~~
(2) Signs.
(A) The employer shall post signs in the regulated area bearing the legends:
DANGER
COKE OVEN EMISSIONS
MAY CAUSE CANCER
DO NOT EAT, DRINK OR SMOKE
WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY
(B) In addition, the employer shall post signs in the areas where the permissible exposure limit is exceeded bearing the legend:
WEAR RESPIRATORY PROTECTION IN THIS AREA
(C) The employer shall ensure that no statement appears on or near any sign required by this subsection (u) which contradicts or detracts from the effects of the required sign.
(D) The employer shall ensure that signs required by this subsection (u)(2) are illuminated and cleaned as necessary so that the legend is readily visible.
(E) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (u)(2)(A) of this section:
DANGER
CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
NO SMOKING OR EATING
(F) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (u)(2)(B) of this section:
~~(B) In addition, not later than January 20, 1978, the employer shall post signs in the areas where the permissible exposure limit is exceeded bearing the legend:~~
DANGER
RESPIRATOR REQUIRED
(3) Labels. ~~The employer shall apply precautionary labels to all containers of protective clothing contaminated with coke oven emissions bearing the legend:~~
(A) The employer shall ensure that labels of containers of contaminated protective clothing and equipment include the following information:
CONTAMINATED WITH COKE EMISSIONS
MAY CAUSE CANCER

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DO NOT REMOVE DUST BY BLOWING OR SHAKING
(B) Prior to June 1, 2015, employers may include the following information on contaminated protective clothing and equipment in lieu of the labeling requirements in subsection (u)(3)(A) of this section:
CAUTION
CLOTHING CONTAMINATED WITH COKE EMISSIONS
DO NOT REMOVE DUST BY BLOWING OR SHAKING

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5212 as follows:
§ 5212. 1,2-Dibromo-3-Chloropropane (DBCP).

*****

(j) * * *
(2) * * *
(E) Containers of DBCP-contaminated protective devices or work clothing which are to be taken out of change rooms or the workplace for cleaning, maintenance or disposal, shall bear labels ~~in accordance with paragraph (o)(3).~~
with the following information: CONTAMINATED WITH 1,2-Dibromo-3-chloropropane (DBCP), MAY CAUSE CANCER. MAY CAUSE STERILITY.

*****

(k) * * *
(1) * * *
(C) * * *
2. Portable vacuum units used to collect DBCP may not be used for other cleaning purposes and shall be labeled as prescribed by paragraph (j)(2)(E) ~~(o)(3)~~ of this section.

*****

(o) Communication of hazards.
(1) Hazard Communication--General.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for DBCP.
(B) In classifying the hazards of DBCP at least the following hazards are to be addressed: Cancer; reproductive effects; liver effects; kidney effects; central nervous system effects; skin, eye and respiratory tract irritation; and acute toxicity effects.
(C) Employers shall include DBCP in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of DBCP and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (n) of this section.

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(D) The employer shall ensure that no statement appears on or near any sign or label required by this paragraph (o) which contradicts or detracts from the meaning of the required sign or label.
~~Signs and Labels.~~
~~(1) General.~~
~~(A) The employer may use labels or signs required by other statutes, regulations or ordinances in addition to or in combination with, signs and labels required by this subsection.~~
~~(B) The employer shall assure that no statement appears on or near any sign or label required by this subsection which contradicts or detracts from the required sign or label.~~
(2) Signs.
(A) The employer shall post signs to clearly indicate all regulated areas. These signs shall bear the legend:
DANGER
1,2-Dibromo-3-chloropropane
MAY CAUSE CANCER
MAY CAUSE STERILITY
WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY
(B) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (o)(2) of this section:
DANGER
1,2-DIBROMO-3-CHLOROPROPANE
(Insert Appropriate Trade or Common Names)
CANCER HAZARD
MAY CAUSE STERILITY
AUTHORIZED PERSONNEL ONLY
RESPIRATOR REQUIRED
(3) Labels.
(A) ~~The employer shall assure that precautionary labels are affixed to all containers of DBCP and of products containing DBCP in the workplace, and that the labels remain affixed when the DBCP or products containing DBCP are sold, distributed, or otherwise leave the employer's workplace.~~ Where DBCP or products containing DBCP are sold, distributed, or otherwise leave the employer's workplace bearing appropriate labels required by the Environmental Protection Agency (EPA) under the regulations in 40 CFR Part 162, the labels required by this paragraph (o)(3) need not be affixed.
(B) The employer shall assure that the precautionary labels required by this paragraph (o)(3) are readily visible and legible. ~~The labels shall bear the following legend:~~
(C) Prior to June 1, 2015, employers may include the following information on containers of DBCP or products containing DBCP, DBCP-contaminated protective devices or work clothing or DBCP-contaminated portable vacuums in lieu of the labeling requirements in paragraphs (j)(2)(E), (k)(l)(C)2. and (o)(1)(A) of this section:

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DANGER
1,2-DIBROMO-3-CHLOROPROPANE
CANCER HAZARD
MAY CAUSE STERILITY

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5213 as follows:
§ 5213. Acrylonitrile.

*****

(p) Communication of hazards ~~Signs and Labels~~.
(1) Hazard communication - g~~G~~eneral.
(A) ~~The employer may use labels or signs required by other statutes, regulations, or ordinances in addition to, or in combination with, signs and labels required by this subsection.~~ Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for AN and AN-based materials not exempted under paragraph (a)(2) of this section.
(B) In classifying the hazards of AN and AN-based materials at least the following hazards are to be addressed: Cancer; central nervous system effects; liver effects; skin sensitization; skin, respiratory, and eye irritation; acute toxicity effects; and flammability.
(C) Employers shall include AN and AN-based materials in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of AN and AN-based materials and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (o) of this section.
(D~~B~~) The employer shall assure that no statement appears on or near any sign or label required by this paragraph (p) which contradicts or detracts from the required sign or label.
(2) Signs.
(A) The employer shall post signs to clearly indicate all workplaces where AN concentrations exceed the permissible exposure limits. The signs shall bear the following legend:
DANGER
ACRYLONITRILE (AN)
MAY CAUSE CANCER
RESPIRATORY PROTECTION MAY BE REQURED IN THIS AREA
AUTHORIZED PERSONNEL ONLY
(B) The employer shall ensure that signs required by this paragraph (p)(2) are illuminated and cleaned as necessary so that the legend is readily visible.
(C) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (p)(2)(A) of this section:

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DANGER
ACRYLONITRILE (AN)
CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATOR REQUIRED
~~(B) The employer shall assure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.~~
(3) Labels.
(A) The employer shall assure that precautionary labels are in compliance with paragraph (p)(1)(A) of this section and are affixed to all containers of liquid AN and AN-based materials not exempted under Section 5213(a)(2). The employer shall assure that the labels remain affixed when the materials are sold, distributed, or otherwise leave the employer's workplace.
(B) ~~The employer shall assure that the precautionary labels required by this paragraph are readily visible and legible. The labels shall bear the following legend:~~ Prior to June 1, 2015, employers may include the following information on precautionary labels required by this paragraph (p)(3) in lieu of the labeling requirements in paragraph (p)(1) of this section:
DANGER
CONTAINS ACRYLONITRILE (AN)
CANCER HAZARD
(C) The employer shall ensure that the precautionary labels required by this paragraph (p)(3) are readily visible and legible.

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5214 as follows:
§ 5214. Inorganic Arsenic.

*****

(i) * * *
(2) * * *
(F) Labels on contaminated protective clothing and equipment.
1. The employer shall ensure that the containers of contaminated protective clothing and equipment in the workplace or which are to be removed from the workplace are labeled and that the labels include the following information:
DANGER: CONTAMINATED WITH INORGANIC ARSENIC. MAY CAUSE CANCER. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF INORGANIC ARSENIC CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL REGULATIONS.

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2. Prior to June 1, 2015, employers may include the following information on containers of protective clothing and equipment in lieu of the labeling requirements in subsection (i)(2)(F) of this section:
CAUTION: Clothing contaminated with inorganic arsenic; do not remove dust by blowing or shaking. Dispose of inorganic arsenic contaminated wash water in accordance with applicable local, State or Federal regulations.
~~The employer shall require that inorganic arsenic-contaminated clothing and equipment or such items of clothing and equipment which are to be replaced in accordance with Section 5214(i)(2)(C) be immediately placed, upon removal, in impermeable bags or containers which shall be securely sealed or closed, and labeled in accordance with Section 5214(*l*)(3) before removal from the change room.~~

*****

(*l*) Communication of Hazards.
(1) Hazard Communication--General.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for inorganic arsenic.
(B) In classifying the hazards of inorganic arsenic at least the following hazards are to be addressed: Cancer; liver effects; skin effects; respiratory irritation; nervous system effects; and acute toxicity effects.
(C) Employers shall include inorganic arsenic in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of inorganic arsenic and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (m) of this section.
(D) The employer shall ensure that no statement appears on or near any sign or label required by this subsection (*l*) which contradicts or detracts from the meaning of the required sign or label.
~~Signs and Labels.~~
~~(1) General.~~
~~(A) Labels or signs required by other regulations or statutes may be used in addition to, or in combination with, signs or labels required by this subsection.~~
~~(B) No statement shall appear on or near any sign, label, or instruction required by this subsection which contradicts or detracts from the effect of any required warning, information, or instruction.~~
(2) Signs.
(A) The employer shall post signs demarcating regulated areas bearing the legend:
DANGER
INORGANIC ARSENIC
MAY CAUSE CANCER
DO NOT EAT, DRINK OR SMOKE
WEAR RESPIRATORY PROTECTION IN THIS AREA

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AUTHORIZED PERSONNEL ONLY
(B) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (p)(2)(A) of this section:
~~All entrances or approaches to a regulated area shall be posted with a sign bearing the following legend:~~
DANGER
~~(INSERT APPLICABLE CHEMICAL NAME)~~
INORGANIC ARSENIC
CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
NO SMOKING OR EATING
RESPIRATOR REQUIRED
~~(B) The applicable provisions of Section 3340 shall govern the design of caution and danger signs required by this section.~~
(C) The employer shall assure that signs required by this section are illuminated and cleaned as necessary so that the legend is readily visible.
(3) ~~Labels.~~
(A) ~~Precautionary labels shall be prominently affixed to containers of raw materials, intermediates, products, byproducts, mixtures, scrap, waste, debris, contaminated clothing and any other material containing inorganic arsenic and the labels shall remain affixed whenever any such products or materials are sold, consigned, or distributed or otherwise leave a place of employment.~~
~~Exception: When the inorganic arsenic is encapsulated or bound within the product in such a manner as to make unlikely the possibility of exposure to airborne inorganic arsenic. Examples include semiconductors, light emitting diodes, and glass.~~
~~(B) Labels required by this paragraph shall be legible and understandable and shall bear the following legend:~~
Prior to June 1, 2015, in lieu of the labeling requirements in subsection (*l*)(1)(A) of this section, employers may apply precautionary labels to all shipping and storage containers of inorganic arsenic, and to all products containing inorganic arsenic, bearing the following legend:
DANGER
CONTAINS INORGANIC ARSENIC
CANCER HAZARD
HARMFUL IF INHALED OR SWALLOWED
USE ONLY WITH ADEQUATE VENTILATION OR RESPIRATORY PROTECTION
(B) Labels are not required when the inorganic arsenic in the product is bound in such a manner so as to make unlikely the possibility of airborne exposure to inorganic arsenic. (Possible examples of products not requiring labels are semiconductors, light emitting diodes and glass.)

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~~(C) The label warning, CANCER HAZARD, required by Subsection 5214(1)(3)(B) shall be at least one-half the height of the largest other lettering on the container or product and not less than 8-point type in any instance.~~
~~Note: Authority cited: Labor Code Section 142.3. Reference: Health and Safety Code 24230.~~

*****

NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5217 as follows:
§ 5217. Formaldehyde.

*****

(e) * * *
(1) Signs.
(A) The employer shall establish regulated areas where the concentration of airborne formaldehyde exceeds either the TWA or the STEL, and post all entrances and access_ways with signs bearing the following ~~information~~ legend:
DANGER
FORMALDEHYDE
MAY CAUSE CANCER
CAUSES SKIN, EYE, AND RESPIRATORY IRRITATION
AUTHORIZED PERSONNEL ONLY
(B) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (e)(1)(A) of this section:
DANGER
FORMALDEHYDE
IRRITANT AND POTENTIAL CANCER HAZARD AUTHORIZED PERSONNEL ONLY

*****

(h) * * *
(2) * * *
(B) When ventilating formaldehyde contaminated clothing and equipment, the employer shall establish a storage area so that employee exposure is minimized. ~~Containers for contaminated clothing, equipment, and storage areas shall have labels and signs containing the following information:~~
1. Signs. Storage areas for contaminated clothing and equipment shall have signs bearing the following legend:
DANGER
FORMALDEHYDE-CONTAMINATED (CLOTHING) EQUIPMENT
MAY CAUSE CANCER
CAUSES SKIN, EYE AND RESPIRATORY IRRITATION

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DO NOT BREATHE VAPOR
DO NOT GET ON SKIN
2. Labels. The employer shall ensure containers for contaminated clothing and equipment are labeled consistent with the Hazard Communication Standard, Section 5194, and shall, as a minimum, include the following:
DANGER
FORMALDEHYDE-CONTAMINATED (CLOTHING) EQUIPMENT
MAY CAUSE CANCER
CAUSES SKIN, EYE, AND RESPIRATORY IRRITATION
DO NOT BREATHE VAPOR
DO NOT GET ON SKIN
3. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (h)(2)(B)1. of this section:
DANGER
FORMALDEHYDE-CONTAMINATED
(CLOTHING) EQUIPMENT
AVOID INHALATION AND SKIN CONTACT
4. Prior to June 1, 2015, employers may include the following information on containers of protective clothing and equipment in lieu of the labeling requirements in subsection (h)(2)(B)2. of this section:
DANGER
FORMALDEHYDE-CONTAMINATED (CLOTHING) EQUIPMENT
AVOID INHALATION AND SKIN CONTACT

*****

(j) * * *
(4) Formaldehyde contaminated waste and debris resulting from leaks or spills shall be placed for disposal in sealed containers bearing a label warning of formaldehyde's presence and of the hazards associated with formaldehyde. The employer shall ensure that the labels are in accordance with subsection (m) of this section.

*****

(m) ~~Hazard c~~Communication of hazards.
(1) Hazard communication - General.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for formaldehyde.
(B) In classifying the hazards of formaldehyde at least the following hazards are to be addressed: Cancer; skin and respiratory sensitization; eye, skin and respiratory tract irritation; acute toxicity effects; and flammability.
(C) Employers shall include formaldehyde in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to

labels on containers of formaldehyde and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (n) of this section.
(D) Subsections (m)(1)(A), (m)(1)(B), and (m)(1)(C) of this section apply to chemicals associated with formaldehyde gas, all mixtures or solutions composed of greater than 0.1 percent formaldehyde, and materials capable of releasing formaldehyde into the air at concentrations reaching or exceeding 0.1 ppm.
(E) In making the determinations of anticipated levels of formaldehyde release, the employer may rely on objective data indicating the extent of potential formaldehyde release under reasonably foreseeable conditions of use.
(2)(A) In addition to the requirements in subsections (m)(1) through (m)(1)(D) of this section, for materials listed in subsection (m)(1)(D) capable of releasing formaldehyde at levels above 0.5 ppm, labels shall appropriately address all hazards as defined in subsection (d) of Section 5194 and Appendices A and B to Section 5194, including cancer and respiratory sensitization, and shall contain the hazard statement "May Cause Cancer."
(B) As a minimum, for all materials listed in subsection (m)(1)(A) and (D) of this section capable of releasing formaldehyde at levels of 0.1 ppm to 0.5 ppm, labels shall identify that the product contains formaldehyde; list the name and address of the responsible party; and state that physical and health hazard information is readily available from the employer and from safety data sheets.
(C) Prior to June 1, 2015, employers may include the phrase "Potential Cancer Hazard" in lieu of "May Cause Cancer" as specified in subsection (m)(2)(A) of this section.
~~Communication of the hazards associated with formaldehyde in the workplace shall be governed by the requirements of this subsection. The definitions of Section 5194(c) shall apply under this subsection.~~
~~(A) The following shall be subject to the hazard communication requirements of this subsection: formaldehyde gas, all mixtures or solutions composed of greater than 0.1 percent formaldehyde, and materials capable of releasing formaldehyde into the air, under reasonably foreseeable conditions of use, at concentrations reaching or exceeding 0.1 ppm.~~
~~(B) As a minimum, specific health hazards that the employer shall address are: cancer, irritation and sensitization of the skin and respiratory system, eye and throat irritation, and acute toxicity.~~
~~(2) Manufacturers and importers who produce or import formaldehyde or formaldehyde-containing products shall provide downstream employers using or handling these products with an objective determination through the required labels and MSDSs if these items may constitute a health hazard within the meaning of Section 5194(d) under normal conditions of use.~~
~~(3) Labels.~~
~~(A) The employer shall assure that hazard warning labels complying with the requirements of Section 5194(f) are affixed to all containers of materials listed in subsection (m)(1)(A), except to the extent that Section 5194(f) is inconsistent with this subsection.~~
~~(B) Information on labels. As a minimum, for all materials listed in subsection (m)(1)(A) capable of releasing formaldehyde at levels of 0.1 ppm to 0.5 ppm, labels shall identify that the product~~

~~contains formaldehyde; list the name and address of the responsible party; and state that physical and health hazard information is readily available from the employer and from material safety data sheets.~~
~~(C) For materials listed in subsection (m)(1)(A) capable of releasing formaldehyde at levels above 0.5 ppm, labels shall appropriately address all hazards as defined in Section 5194(d) and Section 5194 Appendices A and B, including respiratory sensitization, and shall contain the words "Potential Cancer Hazard."~~
~~(D) In making the determinations of anticipated levels of formaldehyde release, the employer may rely on objective data indicating the extent of potential formaldehyde release under reasonably foreseeable conditions of use.~~
~~(E) Substitute warning labels. The employer may use warning labels required by other statutes, regulations, or ordinances which impart the same information as the warning statements required by this subsection.~~
~~(4) Material safety data sheets.~~
~~(A) Any employer who uses formaldehyde-containing materials listed in subsection (m)(1)(A) shall comply with the requirements in Section 5194(g) with regard to the development and updating of material safety data sheets~~
~~(B) Manufacturers, importers, and distributors of formaldehyde-containing materials listed in subsection (m)(1)(A) shall assure that material safety data sheets and updated information are provided to all employers purchasing such materials at the time of the initial shipment and at the time of the first shipment after a material safety data sheet is updated.~~
~~(5) Written hazard communication program. The employer shall develop, implement, and maintain at the workplace, a written hazard communication program for formaldehyde exposures in the workplace, which at a minimum describes how the requirements specified in this subsection for labels and other forms of warning and material safety data sheets, and subsection (n) for employee information and training, will be met. Employers in multi-employer workplaces shall comply with the requirements of Section 5194(e)(2).~~

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NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5218 as follows:
§ 5218. Benzene.

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(j) Communication of ~~Benzene~~ Hazards ~~to Employees~~.
(l) Hazard Communication--General.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for benzene.

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(B) In classifying the hazards of benzene at least the following hazards are to be addressed: Cancer; central nervous system effects; blood effects; aspiration; skin, eye, and respiratory tract irritation; and flammability.
(C) Employers shall include benzene in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of benzene and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (j)(3) of this section.
(2) Warning Signs and Labels.
(A) The employer shall post signs at entrances to regulated areas. The signs shall bear the following legend:
DANGER
BENZENE
MAY CAUSE CANCER
HIGHLY FLAMMABLE LIQUID AND VAPOR
DO NOT SMOKE
WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY
(B) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (j)(2)(A) of this section:
DANGER
BENZENE
CANCER HAZARD
EXTREMELY FLAMMABLE - NO SMOKING AUTHORIZED PERSONNEL ONLY
RESPIRATOR REQUIRED
(C~~B~~) The employer shall ensure that labels or other appropriate forms of warning are provided for containers of benzene within the workplace. There is no requirement to label pipes. The labels shall comply with the requirements of subsection (j)(1) of this section and section 5194(f).
(D) Prior to June 1, 2015, employers ~~and in addition~~ shall include the following legend or similar language on the labels or other appropriate forms of warning:
DANGER
CONTAINS BENZENE
CANCER HAZARD
~~(2) Material Safety Data Sheets.~~
~~(A) Employers shall obtain or develop, and shall provide access to their employees, to a material safety data sheet (MSDS) which addresses benzene and complies with section 5194.~~
~~(B) Employers who are manufacturers or importers shall:~~
~~1. Comply with subsection (a) of this section; and~~
~~2. Comply with the requirement in section 5194 (g)(6) that they deliver to downstream employers an MSDS which addresses benzene.~~

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NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

Amend Section 5220 as follows:
§ 5220. Ethylene Oxide.

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(j) Communication of ~~EtO~~ Hazards ~~to Employees:~~
(1) Hazard communication--general.
(A) Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Section 5194) for EtO.
(B) In classifying the hazards of EtO at least the following hazards are to be addressed: Cancer; reproductive effects; mutagenicity; central nervous system; skin sensitization; skin, eye and respiratory tract irritation; acute toxicity effects; and flammability.
(C) Employers shall include EtO in the hazard communication program established to comply with the HCS (Section 5194). Employers shall ensure that each employee has access to labels on containers of EtO and to safety data sheets, and is trained in accordance with the requirements of HCS and subsection (j)(3) of this section.
(2) Signs and Labels.
(A) Signs.
1. The employer shall post and maintain legible signs demarcating regulated areas and entrances or access_ways to regulated areas that bear the following legend:
DANGER
ETHYLENE OXIDE
MAY CAUSE CANCER
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE REQUIRED IN THIS AREA
AUTHORIZED PERSONNEL ONLY
2. Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (j)(2)(A)1. of this section:
DANGER
ETHYLENE OXIDE
CANCER HAZARD AND REPRODUCTIVE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING MAY BE REQUIRED TO BE WORN IN THIS AREA
(B) Labels.
1. The employer shall ensure that precautionary labels are affixed to all containers the contents of which are capable of causing employee exposure at or above the action level, or the contents of

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which may reasonably be foreseen to cause employee exposure above the excursion limit ~~STEL,~~ and that the labels remain affixed when the containers leave the workplace. ~~The labels shall comply with Section 5194 (f) and shall include the following legend:~~
~~1.~~
~~DANGER CONTAINS ETHYLENE OXIDE CANCER HAZARD AND REPRODUCTIVE HAZARD; and~~
~~2. An appropriate statement warning against the breathing of EtO such as:~~
~~USE ONLY WITH ADEQUATE VENTILATION OR RESPIRATORY PROTECTION.~~
~~(C) In lieu of affixing the label prescribed by subsection (j)(1)(B) on individual stationary process containers such as~~ For the purposes of this subsection (j)(2)(B), reaction vessels, storage tanks and pipes or piping systems~~, the employer may use signs, placards, process sheets, batch tickets, operating procedures or other such written materials to convey the prescribed labeling information. The written materials shall be readily accessible to the employees in their work area throughout each work shift.~~ are not considered to be containers.
2. Prior to June 1, 2015, employers may include the following information on containers of EtO in lieu of the labeling requirements in subsection (j)(1)(A) of this section:
a. DANGER
CONTAINS ETHYLENE OXIDE
CANCER HAZARD AND REPRODUCTIVE HAZARD;
b. A warning statement against breathing airborne concentrations of EtO.
(C~~D~~) The labeling requirements under this section do not apply where EtO is used as a pesticide, as such term is defined in the Federal Insecticide, Fungicide and Rodenticide Act (~~&~~ 7 U.S.C.136 et seq.), when it is labeled pursuant to that Act and regulations issued under that Act by the Environmental Protection Agency.
~~(2) Material Safety Data Sheets.~~
~~(A) Employers who are manufacturers of EtO or mixtures containing EtO, or any person other than a manufacturer who sells EtO or mixtures containing EtO, shall comply with requirements for the preparation and provision of material safety data sheets specified by the Hazardous Substances Information and Training Act (Labor Code Section 6360, et seq.).~~
~~(B) Employers who are users of EtO or mixtures containing EtO shall obtain material safety data sheets and provide for their availability in accordance with Section 5194.~~

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NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.

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Subchapter 18. Ship Building, Ship Repairing and Ship Breaking Safety Orders
Article 4. Control of Hazardous Work

Amend Section 8358 as follows:
§ 8358. Asbestos.

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(i) * * *
(3) ~~Contaminated clothing. C~~ The employer shall ensure that contaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers, and be labeled in accordance with subsection (k) of this section.

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(k) * * *
(7) Hazard communication.
(A) Labels shall be affixed to all products containing asbestos and to all containers containing such products, including waste containers. Where feasible, installed asbestos products shall contain a visible label.
(B) General. The employer shall include asbestos in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of asbestos and safety data sheets, and is trained in accordance with the provisions of the HCS and subsection (k)(9) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer and lung effects.
(C) Labels.
1. The employer shall ensure that labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers bear the following information:
DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST
2.a. Prior to June 1, 2015, employers may include the following information on raw materials, mixtures or labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers in lieu of the labeling requirements in subsections (k)(7)(B) and (k)(7)(C)1. of this section:
DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
b. Labels shall also contain a warning statement against breathing asbestos fibers.

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(D) The provisions for labels required in subsection (k)(7) of this section do not apply where:
1. Asbestos fibers have been modified by a bonding agent, coating, binder, or other material, provided that the manufacturer can demonstrate that, during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the permissible exposure limit and/or excursion limit will be released, or
2. Asbestos is present in a product in concentrations less than 1.0 percent.
(8) Signs.
(A) Warning signs that demarcate the regulated area shall be provided and displayed at each location where a regulated area is required to be established by subsection (e) of this section. Signs shall be posted at such a distance from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.
(B) ~~1.~~ The warning signs required by subsection (k)(8~~7~~) of this section shall bear the following ~~information~~legend.
DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD AUTHORIZED PERSONNEL ONLY
(C)~~2.~~ In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:
WEAR RESPIRATORY PROTECTION
AND PROTECTIVE CLOTHING IN THIS AREA
(D) The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by subsection (k)(8) of this section. Means to ensure employee comprehension may include the use of foreign languages, pictographs, and graphics.
(E) When a building/vessel owner or employer identifies previously installed PACM and/or ACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain PACM and/or ACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. Signs required by subsection (k)(6) of this section may be posted in lieu of labels, so long as they contain information required for labeling. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs or labels can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.
(F) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (k)(8)(B) of this section:
DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

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(G) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in subsection (k)(8)(C) of this section:
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA
~~(C) The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by Subsection (k)(7)(A) of this section. Means to ensure employee comprehension may include the use of foreign languages, pictographs and graphics.~~
~~(8) Labels.~~
~~(A) Labels shall be affixed to all products containing asbestos and to all containers containing such products, including waste containers. Where feasible, installed asbestos products shall contain a visible label.~~
~~(B) Labels shall be printed in large, bold letters on a contrasting background.~~
~~(C) Labels shall be used in accordance with the requirements of Section 5194(f) of the General Industry Safety Orders, and shall contain the following information:~~
~~DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD~~
~~(D) Labels shall contain a warning statement against breathing asbestos fibers.~~
~~(E) The provisions for labels required by subsections (k)(8)(A) through (k)(8)(C) of this section do not apply where:~~
~~1. Asbestos fibers have been modified by a bonding agent, coating, binder, or other material, provided that the manufacturer can demonstrate that, during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the permissible exposure limit and/or excursion limit will be released, or~~
~~2. Asbestos is present in a waste product in concentrations less than 1.0 percent.~~
~~Note: Section 5194 of the General Industry Safety Orders requires that manufactured and imported products containing more than 0.1% asbestos by weight be labeled with an appropriate warning. The exemption specified in subsection (k)(7)(E) only applies to waste products or waste containers.~~
~~(F) When a building/vessel owner/or employer identifies previously installed PACM and/or ACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain PACM and/or ACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical rooms/areas. Signs required by subsection (k)(7) of this section may be posted in lieu of labels so long as long as they contain information required for labelling. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs or labels can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.~~

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NOTE: Authority cited: Sections 142.3, 6501.5, 9020, 9021.5, 9030 and 9040, Labor Code. Reference: Sections 142.3, 6501.5, 6501.7, 6501.8, 6501.9, 6502, 9003, 9004(b), 9005, 9006, 9009, 9020, 9021.5, 9030, and 9040, Labor Code; and Section 25910, Health and Safety Code.

Amend Section 8359 as follows:
§ 8359. Chromium (VI).

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(g) * * *
(2) * * *
(D) The employer shall ensure that b~~B~~ags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal shall be labeled in accordance with the requirements of the Hazard Communication Standard, Section 5194.

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(j) * * *
(1) ~~General. In addition to the requirements of the Hazard Communication Standard, Section 5194, employers shall comply with the following requirements.~~
Hazard communication. The employer shall include chromium (VI) in the program established to comply with the Hazard Communication Standard (HCS) (Section 5194). The employer shall ensure that each employee has access to labels on containers of chromium (VI) and safety data sheets, and is trained in accordance with the provisions of HCS and subsection (j)(2) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; skin sensitization; and eye irritation.

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NOTE: Authority cited: Sections 142.3, 9020, 9030 and 9040, Labor Code. Reference: Sections 142.3, 9004(d), 9009, 9020, 9030, 9031 and 9040, Labor Code.