

## **ATTACHMENT F**

### **TITLE 8 SAFETY ORDERS ASSOCIATED WITH A SUBSTANTIAL PROBABILITY OF DEATH OR SERIOUS PHYSICAL HARM**

A violation of any of the following Title 8 sections is associated with a substantial probability of death or serious physical harm. If a violation of a section listed below is not classified as Serious, compliance personnel shall document in Item 26(c) of the Cal/OSHA 1B the reason(s) why the violation has not been classified as Serious. See Notes to Attachment F for health standards violations.

<b>TITLE 8 SECTION</b>	<b>SUBJECT</b>
1516(a)	Eye and Face Protection
1521	Ear Protection -- Note 1
1524	Water Supply -- Note 2
1526	Toilets at Construction Jobsites -- Note 2
1527	Washing Facilities, Food Handling & Temporary Sleeping Quarters -- Note 2
1528	General (Dust, Fumes, Mists, Vapors and Gases) -- Note 3
1529	Asbestos -- Notes 4, 5 and 10
1530	General Requirements of Mechanical Ventilation -- Note 3
1531	Respiratory Protective Equipment -- See 5144
1532	Cadmium -- Notes 4, 5 and 10
1532.1	Lead -- Notes 6, 8 and 10
1533	Internal Combustion Engines -- Note 1534 Flammable Vapors -- Note 11
1535	Methylenedianiline -- Notes 4, 5 and 10
1536	Ventilation Requirements for Welding, Brazing & Cutting -- Note 3
1537	Welding, Cutting and Heating of Coated Metals -- Note 3
1541(d)	Exposure to Vehicular Traffic, see also 1598(c)
1541(e)	Exposure to Falling Loads, see also 5002
1541 (i)(1), (2) & (3)	Stability Endangered by Excavation
1541 (j)(2)	Protection from Excavated Materials

- 1541 (k)(2) Cave-in Condition (when it can be documented that condition had previously existed)
- 1541(l)(1) Fall Protection
- 1541.1(d)(2) Materials and Equipment for Protective Systems
- 1541.1(e)(1)(B) Support System, Install/Remove
- 1541.1(g)(1)(C) Shield Systems, Exit/Enter
- 1542(a)(1) Protective Systems for Shafts
- 1592(a) & (b) Back-up Alarm
- 1596(a)(1) ROPS/Seat Belts
- 1598(a) & (c) Traffic Control/Streets and Highways
- 1621(a) Guardrails (if fall is from 10 feet or higher)
- 1626(b) Stairwells and Stairs (if fall is from 10 feet or higher)
- 1626(e) Stair Railings (if fall is from 10 feet or higher)
- 1632(b) Floor Openings
- 1632(c) Ladderway Floor Openings/Platforms
- 1632(i) Floor Holes
- 1632(k)(1) Wall Openings
- 1640(b)(1) Pole Scaffolds, Uprights
- 1640(b)(2) Pole Scaffolds, Ledgers and Ribbons
- 1640(b)(3) Pole Scaffolds, Ties and Braces
- 1640(b)(4) Pole Scaffolds, Railings (if fall is from 10 feet or higher)
- 1640(b)(5) Pole Scaffolds, Platforms
- 1640(c\*)(1) Pole Scaffolds, Loading
- 1640(c\*)(2) Pole Scaffolds, Uprights
- 1640(c\*)(3) Pole Scaffolds, Ledgers and Ribbons
- 1640 (c\*)(4) Pole Scaffolds, Diagonal Braces
- 1640(c\*)(5) Pole Scaffolds, Railings (if fall is from 10 feet or higher)
- \*The (C) in Section 1640 (b)(5)(C) is most likely a misprint--it should read 1640 (c).
- 1644(a)(2) Metal Scaffolds, Structurally Weakened
- 1644(a)(3) Metal Scaffolds, Base Plates
- 1644(a)(4) Metal Scaffolds, Planks on Rails
- 1644(a)(5) Metal Scaffolds, Ties
- 1644(a)(6) Metal Scaffolds, Railings (if fall is from 10 feet or higher)
- 1644(a)(7) Metal Scaffolds, Platforms
- 1670(a) Safety Belts and Lanyards
- 1670(c) Secure Lanyard, see also 3210(a)
- 1675(j) Ladders in Use
- 1712(c)(1) & (2) Impalement

1740(b)	Cylinders, Storage and Use (serious if acetylene cylinder is lying down)
1740(c)	Cylinders, Storage and Use (serious if valve is unprotected and cylinder is not restrained)
2340.17(a)	Guarding of Energized Parts (if 220 volts or greater)
2340.17(a)(1)	Vaults/Enclosures (if unlocked enclosures 220 volts or greater)
2340.22(a)	&#Identify Disconnecting Means
2340.26	Mechanical Protection (if 220 volts or greater)
2395.51(a)(1)	Effective Grounding (if 220 volts or greater)
2510.56(a)	Receptacles, Cord Connectors, and Attachment Plugs (if 220 volts or greater)
2510.58(a)	Grounding Poles (if 220 volts or greater)
2510.58(b)	Grounding Pole Connection (if 220 volts or greater)
3210(a)	Guardrails (if fall is from 10 feet or higher)
3212(a)(1)	Floor Openings, Floor Holes and Roofs
3214(a)	Stair Rails and Hand Rails (if fall is from 10 feet or higher)
3314(a), (b) & (c)	Lockout Blockout
3326(d)	Tire Changing Restraining Device
3362	Sanitation, General Requirements (all subsections, but not serious if sanitation conditions do not contribute to an employee exposure to a substance or agent which can result in a serious adverse health effect)
3363	Water Supply (all subsections, but not serious if water supply conditions do not contribute to an employee exposure to a substance or agent which can result in a serious adverse health effect)
3366	Washing Facilities (all subsections, but not serious if washing facilities conditions do not contribute to an employee exposure to a substance or agent which can result in a serious adverse health effect)
3382(a)	Eye and Face Protection, see also 1516(a)
3384(a) & (b)	Foot Protection
3385(a), (b) & (c)	Foot Protection
3577(b)	Protection Hoods
3657(a)(2) & (3)	Elevating Employees with Lift Trucks (if fall is from 10 feet or higher)
3999(a)	Screw Conveyors
3999(b)	Belt Conveyers
4050(a)	Shafts, Collars, Clutches, Couplings

4070(a)	Belt and Pulley Drives
4075(a)	Gears and Sprockets
4185	Foot-Operated Devices
4307(b), (b)(1) & (c)	Portable Circular Saws
4309(b) and (d)	Radial Arm Saw
4310(a)(1)	Band Knives and Band Saw
4650(f) and (h)	Storage Handling and Use of Cylinders
4845(b)	Back Flow Prevention
4853	Inert-Gas Metal-Arc Welding -- Note 3
5002	Overhead Loads
5031(a) and (c)	Crane/Derrick Inspection
5096	Exposure Limits for Noise -- Notes 1 and 10
5097	Hearing Conservation Program -- Notes 10, 12 and 13
5098	Hearing Protectors -- Notes 7 and 12
5099	Training Program -- Note 12
5110	See P&P C-13
5141	Control of Harmful Exposures -- Notes 1 and 3
5143	Mechanical Ventilation Systems -- Notes 1 and 3
5144	Respiratory Protective Equipment -- Notes 3, 6 and 7
5145	Media/Allaying Dusts, Fumes, Mists, Vapors and Gases--Note 3
5146	Internal Combustion Engine Exhaust Emission Control
5149	Oxygen Deficiency -- Always serious
5150	Vent/PPE Req/Welding, Brazing and Cutting--Note 3
5151	Vent/PPE Req/Abrasive Blast Oper/Enclosures--Notes 3, 11 and 14
5152	Vent/PPE Req/Grinding, Polishing and Buffing Operations--Note 3
5153	Vent/PPE Req/Spray-Coating Operations -- Note 3
5154	Vent/PPE Req/Open-Surface Tank Operations -- Note 3
5154.1	Ventilation Req/Lab-Type Hood Operations -- Notes 3, 14 and 15
5155	Airborne Contaminants (c)(d) & (e) -- Notes 3 and 16
5157	Permit-Required Confined Space -- Notes 6, 16 and 17
5158	Other Confined Space Operations -- Notes 6, 16 and 17
5162	Emerg Eyewash and Shower Equipment -- Notes 18, 19 and 20
5164	Storage of Hazardous Substances -- Note 21
5185(l)	Changing and Charging Storage Batteries
5189 (d)(2)	Process Safety Information - Note 23

5189 (e)(1)	Process Hazard Analysis - Note 23
5189 (e)(2)(A), (B), (C), (E)	Process Hazard Analysis - Note 23
5189 (e)(2)(F)	Process Hazard Analysis - Note 24
5189 (f)(1)	Operating Procedures - Notes 23 and 25
5189 (j)(2)(A), (B)	Mechanical Integrity, Inspection and Testing - Note 26
5189 (j)(3)	Mechanical Integrity, Equipment Deficiencies - Note 26
5189 (j)(4)(C)	Mechanical Integrity, Quality Assurance - Note 27
5189 (l)(1)	Management of Change - Note 28
5192	Hazardous Waste Operations/Emergency Resp -- Notes 3 and 6
5193	Bloodborne Pathogens -- Notes 6 and 10
5194	Hazard Communication-Notes 3, 6 and 9
5196	Sulfur -- Note 1
5200	Methylenedianiline -- Notes 4, 5 and 10
5207	Cadmium -- Notes 4, 5 and 10
5208	Asbestos -- Notes 4, 5 and 10
5209	Carcinogens (various) -- Notes 4, 5 and 10
5210	Vinyl Chloride -- Notes 4, 5 and 10
5211	Coke oven emissions -- Notes 4, 5 and 10
5212	1,2 dibromo-3 chloropropane (DBCP) -- Notes 4, 5 and 10
5213	Acrylonitrile -- Notes 4, 5 and 10
5214	Inorganic arsenic -- Notes 4/5&10;note exemption for "utilization"
5215	4,4'- Methylene bis (2-chloroaniline) -- Notes 4, 5 and 10
5216	Lead -- Notes 6, 8 and 10
5217	Formaldehyde -- Notes 4, 5 and 10
5218	Benzene -- Notes 4, 5 and 10
5219	Ethylene Dibromide (EDB) -- Notes 4 and 5
5220	Ethylene Oxide -- Notes 4, 5 and 10
5221	Fumigation -- Note 1
5222	Fumigation/Vaults and Chambers -- Note 1
5223	Fumigation/build/rooms other than vault & chambers -- Note 1
5416	Flammable vapors -- Note 11

## NOTES

The following notes describe circumstances or situations in which the specified Title 8 sections in Attachment F may not be associated with a substantial probability of death or serious physical harm.

Note 1:

Not Serious, if exposure exceeds the PEL, provided effective personal protective equipment and all feasible engineering or administrative controls are being used.

Note 2:

Not serious, if the conditions do not contribute to an employee exposure to a substance or agent which can result in a serious adverse health effect.

Note 3:

Not serious, if the exposure exceeds the PEL, STEL or Ceiling values, provided the substance involved does not have a Health Effects Code (HEC) of 14 or less or an HEC of 17 or 18 as listed in Note 22.

Note 4:

All violations related to the "Use" of a carcinogen, regardless of the exposure level, shall be classified as serious, unless it is determined that the violation was minor and would not result in a substantial health hazard.

Note 5:

"Other than use" violations of a carcinogen regulation shall be classified as serious when the PEL, Excursion, and Action Level or Ceiling value is exceeded, or if it is determined that the violation could contribute to an exposure above the PEL, Excursion, and Action Level or Ceiling value.

Note 6:

Not serious, if the employer does not have a written program or plan available at the time of the inspection and there is substantial evidence the employer has implemented an effective program or plan and that the lack of such a written program or plan does not directly contribute to a serious exposure risk.

Note 7:

Not serious, if equipment is improperly stored, provided that the equipment is not contaminated by a substance which has a Health Effects Code (HEC) of 14 or less as listed in Note 22.

Note 8:

Not serious, if the exposure is equal to or greater than the Action Level, but less than the PEL provided there are no high blood levels.

Note 9:

For mixtures of diluted substances, the MSDS toxicity information may be used to establish a serious health violation.

Note 10:

Violations related to access to exposure and medical records, observation of monitoring, recordkeeping, notification of work or registration posting requirements shall be classified as "Regulatory" violations.

Note 11:

Not serious, if the measured airborne concentration does not exceed 25 percent of the lower explosive limits (LEL).

Note 12:

Not Serious, if exposure is at or Above Action Level, but less than the PEL.

Note 13:

Not serious, if the violations are directly attributable to a contracted audiometric service.

Note 14:

Not Serious, if concentration within the duct system does not exceed 20 percent of the lower explosive limits (LEL).

Note 15:

Violations related to the use of perchloric acid shall always be cited as serious.

Note 16:

8 CCR Section 5155(e)(1) shall not be cited unless documentation exists to support the citation, e.g., sampling results. The employer's sampling data shall not be acceptable, unless the data is representative of actual working conditions and was obtained using a validated method by a person qualified, pursuant to the requirements of 8 CCR Section 5155(e)(3), to obtain and evaluate the data.

Note 17:

Not serious, but only if (1) side or bottom openings are used to enter a confined space; (2) all required air monitoring, personal protective and rescue equipment are available and in use; (3) only trained personnel are engaged in the entry activity, and (4) the only hazard within the space is related to airborne chemical contamination.

Note 18:

Not serious, if there is a substantial probability that a serious exposure does not exist because of the small quantities handled and the lack of a splash hazard, irrespective of the use of PPE.

Note 19:

Violations of the monthly testing of equipment requirements should be classified as "General," unless such testing could have detected an existing non-functional equipment.

Note 20:

No citation shall be issued, unless there is adequate evidence to document that the hazardous substance for which the device is being required meets the criteria for causing the injuries, and/or causes toxic effects by absorption as specified in the regulation.

Note 21:

Not serious, if the reaction of incompatible materials would not lead to serious exposure, including fire and explosion, because of the quantities stored, properties of the substances or the location of the storage.

Note 22: HEALTH EFFECTS CODES



<u>CODE</u>	<u>HEALTH EFFECTS</u>
<u>HE1</u>	<u>Cancer---Currently regulated by OSHA as carcinogen</u>
<u>HE2</u>	<u>Chronic (Cumulative) Toxicity---Known or Suspected animal or human carcinogen, mutagen (except Code HE1 chemicals)</u>
<u>HE3</u>	<u>Chronic (Cumulative) Toxicity---Long-term organ toxicity other than nervous, respiratory, hematologic or reproductive</u>
<u>HE4</u>	<u>Acute Toxicity---Short-term high risk effects</u>
<u>HE5</u>	<u>Reproductive Hazards---Teratogenesis or other reproductive impairment</u>
<u>HE6</u>	<u>Nervous System Disturbances---Cholinesterase inhibition</u>
<u>HE7</u>	<u>Nervous System Disturbances---Nervous system effects other than narcosis</u>
<u>HE8</u>	<u>Nervous System Disturbances---Narcosis</u>
<u>HE9</u>	<u>Respiratory Effects Other Than Irritation---Respiratory sensitization (asthma or other)</u>
<u>HE10</u>	<u>Respiratory Effects Other Than Irritation---Cumulative lung damage</u>
<u>HE11</u>	<u>Respiratory Effects---Acute lung damage/edema or other</u>
<u>HE12</u>	<u>Hematologic (Blood) Disturbances---Anemias</u>
<u>HE13</u>	<u>Hematologic (Blood) Disturbances---Methemoglobinemia</u>
<u>HE14</u>	<u>Irritation-Eyes, Nose, Throat, Skin---Marked</u>
<u>HE15</u>	<u>Irritation-Eyes, Nose, Throat, Skin---Moderate</u>
<u>HE16</u>	<u>Irritation-Eyes, Nose, Throat, Skin---Mild</u>
<u>HE17</u>	<u>Asphyxiants, Anoxiants</u>
<u>HE18</u>	<u>Explosive, Flammable, Safety (No adverse effects encountered when good housekeeping practices are followed)</u>
<u>HE19</u>	<u>Generally Low Risk Health Effects---Nuisance particulates, vapors or gases</u>
<u>HE20</u>	<u>Generally Low Risk Health Effects---Odor</u>

Note 23:

Serious violation if information not provided to employees or the program is not implemented.

Note 24:

Not serious if addressed in subsections (d) or (j).

Note: 25:

Serious if not referenced anywhere in employer's PSM program.

Note 26:

Serious if inspection would identify failed or faulty equipment whose failure would lead to a serious exposure, serious injury or death.

Note 27:

Serious if maintenance materials, spare parts or equipment do not meet manufacturer's specifications or applicable codes such as: ANSI, ASME, API, etc.

Note 28:

Serious violation if changes actually made and Management of Change program not implemented. Failure to address a change to equipment, process, chemicals, etc. did not inform and train employees involved with the process of the impact of the change, prior to start-up.