Chapter 15

SPECIAL INSPECTIONS

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Chapter 15-A

INDOOR AIR QUALITY

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to investigate all complaints or referrals alleging that workplace indoor air quality (IAQ) is injurious to the health of building occupant-employees, or a report of a fatality, serious injury or illness, or serious exposure involving workplace IAQ.

Purpose: This policy is intended to set forth procedures for DOSH team members to understand the scope of DOSH's authority and to ensure workers' health and safety within those defined boundaries. This policy helps team members to determine whether DOSH has jurisdiction over a particular workplace, and how to make appropriate referrals when it is not within its jurisdiction.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code, §§6300 et seq., and Title 8 California Code of Regulations §§332.2, 332.3, 336, 3203, 3362, 5141 through 5143, 5155, and 14301.

PROCEDURES:

I. COMPLAINT AND REFERRAL PROCESSING PROCEDURES

A. Non-Industrial Work Environments

1. Most complaints about the quality of indoor air arise from employees who work in non-industrial environments. However, hazardous exposures in these work environments are often difficult to evaluate. Approaches using traditional industrial hygiene sampling techniques usually demonstrate compliance with 8 CCR §5155 permissible exposure limits (PELs) despite the persistence of IAQ complaints from the building occupants.
2. The procedures found in this Chapter are primarily designed to address the investigation of IAQ complaints from non-industrial work environments, such as offices, educational facilities, retail and other commercial establishments, healthcare facilities, as well as enclosed spaces that are a part of industrial work environments, e.g., administrative or front office

areas, employee cafeterias, and employee lounges or break rooms.

B. IAQ Complaints and Referrals

1. Initial Complaint Evaluation by District Manager

a. Intake Evaluation

All IAQ complaints received by the District shall be carefully evaluated by the District Manager to determine whether the complaint is valid.

NOTE: IAQ complaints can be taken by District Office Support Staff, but only after they have been trained by the District Manager in the Complaint Processing Procedures found in this Chapter 15-A and Chapter 2.

b. Validity

A valid IAQ complaint is a complaint which alleges that indoor air in an industrial or in a non-industrial work environment is hazardous to the health of a building occupant-employee(s).

c. Intake Guidelines

1. Many IAQ complaints from non-industrial work environments allege that the indoor air is "uncomfortable," but fail to allege a condition that amounts to a health hazard.

For instance, if a complainant alleges that the indoor air temperature is uncomfortable but the District Manager judges that the indoor air temperature is not in a range known to produce thermal stress, then the complaint should not be categorized as a valid Cal/OSHA complaint.

NOTE: Complaints about the temperature of a place of employment can be referred to the Division of Labor Standards Enforcement. See 8 CCR §11040 (Wages, Hours and Working Conditions), Item 15, Temperature, found in Appendix B to the California Labor Code.

However, care shall be taken by the District Manager to properly evaluate the validity of all IAQ complaints since even comfort complaints may indicate a serious IAQ problem.

2. The following questions may be of assistance in determining the nature and degree of seriousness of an IAQ complaint:

a. What is the nature of the IAQ problem? Can you

describe the exposure or unhealthful condition?

b. How long has the condition been present and is it a regular occurrence in your workplace?
c. Have you noticed that the IAQ problem occurs in association with anything else in the workplace?
d. What are the symptoms, if any, of the affected employees? Has anyone been out of work because of the IAQ problem and how long have they been out? Has any affected employee sought medical attention, and, if so, did the health care provider identify the problem?
e. What specific areas of the workplace are affected by the IAQ problem, and what type of work is performed there?
f. How many employees are there in the affected work area and how many of them have been affected by the IAQ problem? What are the shifts of the affected employees and when do the shifts begin?
g. Has the IAQ problem been brought to the employer's attention? If so, has the employer identified the condition and has the employer made any attempts to correct the IAQ problem?
h. Do you know whether other government agencies besides Cal/OSHA have been contacted?
i. Is there an employee representative in the affected workplace that Cal/OSHA can contact?

d. When the District Manager categorizes an IAQ complaint as not valid, the District Manager shall direct the complainant to one or more of the following sources of assistance:
    1. The person with the authority and responsibility for the Injury and Illness Prevention (IIP) Program in the complainant's particular workplace;
    2. The complainant's employer or supervisor; or
    3. The manager or owner of the building which the complainant occupies.

    In addition, the District may provide these sources of assistance with any appropriate IAQ resource materials available from the Cal/OSHA Consultation Service.

2. Complaint Referrals
    a. Referral To Another State or Local Government Agency or Private Sector Entity

    After initial evaluation by the District, the following types of IAQ

complaints shall be referred to another state or local government agency, or private sector entity, for investigation:

1. Environmental Tobacco Smoke (ETS)
    a. Places of Employment Covered by State or Local Anti-Smoking Law or Ordinance
        i. Complaints alleging ETS exposure in places of employment covered by a state or local anti-smoking law or ordinance shall be telephonically referred by the District to the appropriate local government entity which has the responsibility for enforcement of the state or local anti-smoking law or ordinance.
        ii. A telephone number for local agencies which enforce state and local anti-smoking laws or ordinances shall be provided to the complainant by the District.

            NOTE: Each District Office shall maintain a current list of telephone numbers of local agencies with the responsibility for enforcing state or local anti-smoking laws or ordinances.

    b. Places of Employment Not Covered by State or Local Anti-Smoking Law or Ordinance

        Complaints alleging ETS exposure in places of employment not covered by a state or local anti-smoking law or ordinance shall be investigated by utilizing a letter to the employer with notification to the complainant.

2. Pesticide Exposure

    Complaints alleging pesticide exposure in an indoor workplace environment shall be referred to the local County Agricultural Commissioner for investigation.

3. Radiation Exposure Complaints
    a. Ionizing Radiation

        Complaints alleging exposure to any type of ionizing radiation, including radon exposure in the home environment, shall be referred to the Radiologic Branch of the California Department of Health Services

(CDHS).

NOTE: In Northern California, notify CDHS at (510) 540-2014, and in Southern California, notify CDHS at (213) 620-2860.

b. Nonionizing Radiation

For complaints alleging low frequency electromagnetic field (EMF) radiation exposure, a referral shall be made to the appropriate electric energy supplier's customer service department.

NOTE: 8 CCR §5085 regulates exposure to radiofrequency and microwave radiation.

4. Air Quality Management District (AQMD)

Complaints alleging a violation of a local AQMD regulation, e.g., odors from an adjacent automobile paint shop, shall be referred to the appropriate AQMD office.

5. Natural Gas/LPG/CNG Complaints

Complaints alleging an uncontrolled release of natural gas, liquified petroleum gas (LPG) or compressed natural gas (CNG) shall be immediately referred to the appropriate local fire department.

b. Referral To Medical Unit

1. Mandatory

The District shall make a referral to the Medical Unit requesting assistance prior to initiating an investigation of any serious IAQ complaint. See Section I.B.3.b. for definition of serious IAQ complaint.

2. Discretionary

The District may make a referral to the Medical Unit requesting assistance prior to an investigation of any nonserious IAQ health complaint. See Section I.B.3.a. for definition of nonserious IAQ complaint.

NOTE: When investigating a nonserious IAQ health

complaint involving a large number of symptomatic occupant-employees, i.e., greater than 20% of the building occupant-employees, or health complaints which are recurring and/or worsening in severity, the District should consider requesting Medical Unit assistance.

c. Referral Procedures
    1. When a referral is made to another state or local government agency, compliance personnel shall complete a Cal/OSHA Form 90.
    2. When a referral is made to the Cal/OSHA Medical Unit or Epidemiology Unit, compliance personnel shall complete a Medical Unit Services Request Form (Cal/OSHA Form 90M). See Chapter 4.

        NOTE: When completing a Cal/OSHA Form 90M to request Medical Unit or Epidemiology Unit Services, compliance personnel shall indicate the number of employees who are ill, the number of potentially affected employees, suspected exposures, characteristics symptoms, cases diagnosed by health care professionals and the specific type of medical services requested.

3. IAQ Complaint Classification
    a. Nonserious

        The following types of IAQ complaints shall generally be considered nonserious:

        1. HVAC System Complaints

            A complaint alleging malfunction of a building's heating, ventilation and air- conditioning (HVAC) system shall generally be considered nonserious.

        2. Particulate Complaints

            A complaint alleging that IAQ is hazardous because of large quantities of non-specific airborne particulates, dust or debris shall generally be considered nonserious.

        3. Thermal Stress Complaints

            A complaint alleging that the indoor air temperature is in a

range which is uncomfortable, but which will not result in thermal stress, shall generally be considered nonserious.

4. Nonserious Health Complaints

   Complaints alleging IAQ health hazards are often characterized by a number of nonspecific symptoms, including fatigue, headache, dizziness, odor annoyance, skin problems, and eye, nose, throat and chest irritation. The occurrence of these symptoms among many workers in a particular office building has been labeled "Sick Building Syndrome."

   A complaint alleging that indoor air is producing nonspecific health effects, such as those mentioned above, or those health effects attributed by the complainant to ETS exposure, shall be considered nonserious when the symptoms:

   a. Occur intermittently;
   b. Are not strongly associated temporally with building occupancy;
   c. Affect less than five (5) building- occupants; and
   d. Have not resulted in the complainant or those affected seeking medical attention or incurring any lost workdays.

b. Serious

   The following types of IAQ complaints shall generally be considered serious:

   NOTE: The District may request Medical Unit assistance in making a determination whether a IAQ complaint is serious. If it is determined that the IAQ complaint is serious, the District shall request prior Medical Unit assistance prior to initiating the investigation of the complaint.

   1. Building-Related Illness
      a. A complaint alleging that a building occupant-employee is suspected of, or has been diagnosed by a physician as having, a specific building-related illness shall be considered serious.
      b. Common building-related illnesses include the following:
         i. Infections, such as Legionnaire's disease and Pontiac fever; and

            NOTE: A complaint alleging

tuberculosis exposure shall be addressed according to the procedures found in Chapter 15-H.

ii. Hypersensitivity diseases, such as hypersensitivity pneumonitis, including humidifier fever, building- related asthma and rhinitis.

c. Where appropriate, investigation of a complaint of building-related illness should be coordinated with the local health department.

2. Clusters of Cancer Cases, Difficulty in Conceiving or Adverse Birth Outcome Cases

A complaint alleging that a building occupant-employee is suspected, or has been diagnosed by a physician, as having IAQ-related cancer, difficulty in conceiving or an adverse birth outcome shall be considered serious. A complaint of cancer or adverse birth outcome cases shall be coordinated by the Medical Unit with the Epidemiology Unit, the local health department and with the California Department of Health Services.

3. Serious Health Complaints

A complaint alleging that the indoor air is producing nonspecific health effects, including Sick Building Syndrome, or those health effects attributed by the complainant to ETS exposure, shall be considered serious when the symptoms:

a. Occur on a regular basis;
b. Are strongly associated temporally with building occupancy;
c. Affect more than five building- occupants; and
d. Have resulted in the complainant(s) seeking medical attention and/or incurring lost workdays.

4. Coordinated IAQ Investigations

After the opening conference, compliance personnel shall determine whether it is necessary to evaluate the HVAC system. If HVAC system evaluation is determined to be necessary, effective evaluation may require coordination with appropriate personnel representing HVAC system management.

a. State of California Buildings

For buildings owned and/or managed by the State of California, HVAC system evaluation may be coordinated with appropriate personnel from the State of California Department of General Services (DGS).

b. Other Than State of California Buildings

For other buildings, HVAC system evaluation may be coordinated with appropriate personnel representing building HVAC system management.

C. II. IAQ INVESTIGATION PROCEDURES

A. Interviews

1. Employers, Building Managers or Owners
   a. Appropriate employers whose employees have been exposed to the IAQ hazard under investigation shall be interviewed in addition to the manager and/or owner of the building in which the exposed employees work.
   b. During the interview, the following issues shall be addressed with employers, building managers or owners:

      Availability of blueprints of the building, including blueprints of the HVAC system;
      1. Date building permit was issued and date building was built;
      2. Number and distribution of building occupants, and number and distribution of complaining or ill building-occupants;
      3. Identification of the person responsible for the HVAC system's operation and maintenance:
      4. Information about past or present building-related IAQ problems;
      5. Opinion about what is causing the building-occupants' complaints; and
      6. For employers only, awareness of employees' complaints about building- related IAQ problems, actions taken to investigate IAQ complaints, and IIP Program provisions pertaining to investigation of workplace hazards.
2. Occupant-Employees
   . Number of Interviews To Be Conducted

   Interviews with large numbers of building occupant-employees is not an efficient use of compliance resources. Rather, compliance personnel shall conduct interviews with a representative number of occupant-employees who have

been exposed to the IAQ hazard under investigation and who are either symptomatic or non-symptomatic.

a. Scope of Occupant-Employee Interviews

The scope of occupant-employee interviews shall be limited to screening for the following and shall not include other types of symptom surveys:

0. Relevant symptom history;
1. Relationship of symptoms to building occupancy;
2. History of lost workdays and/or medical treatment; and
3. What the occupant-employee believes to be the cause of the IAQ problem.

b. Occupant-Employee IAQ Interview Form
   0. An Occupant-Employee IAQ Interview Form for use by compliance personnel.
   1. If additional medical information pertaining to a particular occupant- employee's medical history is needed, consider a referral to the Medical Unit.

3. On-Site Maintenance Personnel

Any on-site personnel who are responsible for maintaining the quality of the indoor air environment, including maintenance of the HVAC system, shall be interviewed. Use the HVAC System Maintenance Personnel Interview Form.

B. HVAC System Evaluation

0. HVAC Maintenance Personnel Interview

Person(s) who are responsible for inspection, operation, and maintenance of the building's HVAC system, shall be identified and interviewed to determine if the building's HVAC system is being inspected, operated and maintained properly. Use the HVAC System Maintenance Personnel Interview Form.

1. HVAC Maintenance Records Review
Examination of HVAC system's inspection, operation and maintenance records shall be conducted in conjunction with an interview of HVAC system maintenance personnel.
During the evaluation, if the maintenance records are not kept on-site, a copy of the records shall be requested by compliance personnel.

2. HVAC System Inspection

. When appropriate, compliance personnel shall conduct a physical inspection of the HVAC system to determine if the HVAC system is being inspected, operated and maintained properly.

NOTE: Prior to initiating a physical inspection of a building's HVAC system, compliance personnel shall take appropriate protective precautions to minimize exposure to themselves and to building occupants. If any questions arise about what personal protective precautions are appropriate, compliance personnel shall consult with the District Manager and, if necessary, the Regional Senior Industrial Hygienist.

a. Physical inspection of a building's HVAC system shall include, but shall not be limited to, the following steps:
    0. Observe any air pressure differences in the building. The interior of most buildings with a central HVAC system are maintained at a slight positive pressure relative to the outside air pressure. Gross pressure differences may indicate an imbalance in the HVAC system.
    1. Assess the condition and location of the outside air intake (OAI) louvers, air filters and protective screens.
    2. If appropriate, measure the outside air (OA) flow and exhaust air flow rates;

NOTE: Minimum ventilation rates found in the California Energy Code (24 CCR Part 6 Section 121) range from 0.15 cfm/ft2 to 1.50 cfm/ft2. These rates apply to new construction only, but can be used as a general guideline for existing facilities.

    3. Measure carbon dioxide (CO2) concentration in areas of the indoor air environment, as appropriate, if such areas have been identified through occupant-employee interviews as "stuffy," "close," or "stifling."
    4. Assess drip pans, accessible air ducts, and duct wrapping for signs of water condensation problems. Look for signs of biologic contaminant growth and verify the appropriate use of biocides;
    5. Assess HVAC system fan controls or records reflecting fan control operations. Make sure the date and time of the time clock is accurate and that two to three outside air changes are being supplied prior to the building

being occupied in the morning; and

6. Assess the condition of supply diffusers, return air vents, and the building's outside air intakes and exhausts.

C. Air and Bulk Sampling

0. General Policy Guidelines

Indoor air measurements can be classified generally into two categories: measurement of ventilation efficiency and measurement of the concentration of specific indoor air contaminants.

. Air Flow Rate

Ventilation efficiency is commonly assessed by measuring air flow rates at various places in the indoor air environment. See Section II.B.3.b.

a. Air Contaminant Sampling

Most complaints about the quality of indoor air arise from employees who work in non- industrial environments. Hazardous exposures in these work environments are often difficult to evaluate.
Approaches using traditional industrial hygiene sampling techniques often demonstrate compliance with 8 CCR §5155 permissible exposure limits (PELs) despite the persistence of IAQ complaints from the building occupants.

Measurement of the concentration of specific indoor air contaminants can be classified into substance sampling for gases, vapors, and airborne particulates, and sampling for biological aerosols, or bioaerosols.

0. Gases, Vapors and Airborne Particulates

Measurement methods for gases, vapors, and particulates have been developed and validated for use in assessing compliance with permissible exposure limits (PELs). However, the concentrations of air contaminants found in non-industrial indoor air environments are typically significantly less than the PEL for the substance, sometimes by several orders of magnitude. Therefore, establishing exposures in excess of the PEL is not a reasonable goal of indoor air quality sampling. When considering measurement methods, the sensitivity of the method is often more

important than other concerns due to the very low concentrations encountered in indoor air environments.

1. Bioaerosols

   Sampling for and analysis of bioaerosols, is a comparatively recent development in industrial hygiene. While the sampling techniques for bioaerosols are similar to those used for air contaminants, the analytical methods and conclusions which may be derived from these measurements are significantly different.

   For one thing, ability of a biologic agent to multiply complicates consideration of the effect of concentration on health outcomes. Also, there are no biologic concentration standards or PELs against which to compare a particular bioaerosol sampling result. As a result, measurements of bioaerosols "inside" the building are usually compared to those "outside" the building or to a control building.
   All of these factors make supporting an association between exposure and effect more difficult than with air contaminants.

1. Air Sampling Criteria
   . Air Contaminants
      0. The decision to sample for a specific air contaminant, e.g., particulates, including man-made fibrous materials and asbestos, volatile organic compounds or VOCs, including formaldehyde, or inorganic gases, such as CO, SO2, or NO2, can only be made after an initial investigation of the indoor air conditions present in the subject workplace. The air contaminant to be sampled should be considered a highly probable cause of the adverse health effects experienced by the building occupant-employees and have an apparent source within the building before actual sampling is performed.
      1. Potential sources for air contaminants in problem indoor air environments may include:
         a. Building materials or furnishings, e.g., pressed wood furniture products, plastic piping, construction adhesives, insulating materials, and fabric, vinyl or plastic wall coverings;
         b. Acoustic and thermal insulating material, ceiling tiles, and office partition panels;

c. HVAC system heating components, such as furnaces;
d. Garages which emit vehicular exhaust and contain stored chemicals like solvents and gasoline;
e. Combustion appliances such as unvented heaters, woodburning stoves and fireplaces;
f. Storage and application of cleaning solvents and consumer products;
g. Business machines, e.g., printers, copiers and computers; and
h. Outdoor air sources, such as emissions from nearby industrial activities, pesticide spraying, and vehicular exhaust.

NOTE: If further guidance is needed, consult the Regional Senior Industrial Hygienist.

a. Bioaerosols

Bioaerosols are usually introduced into the indoor air environment from the outdoor air. They lodge in areas of a building where moisture is present, such as in drip pans of the ventilation system, in wet walls, or in wet carpets. The bioaerosols then multiply in these areas and spread by air currents to other areas of the building.

The decision to sample the air for a particular biologic air contaminant, such as yeast, fungi, bacteria or viruses, can only be made after an initial investigation of the indoor air conditions present in the subject workplace and then shall only be undertaken under limited circumstances.

Bioaerosol air sampling shall be performed only when there is evidence that a source for bioaerosol exposure exists in the particular workplace or building occupant-employees have a medical condition which strongly suggests a building source. Without information indicating a source of biologic exposure, bioaerosol sampling is wasteful.

2. Air Sampling Procedures

. Air Contaminants

The Cal/OSHA IH Technical Manual can serve as a reference for air contaminant procedures and analytical methods. Some modification to the methods found in the Manual may be necessary due to the low concentrations expected in most

indoor air environments. These modifications will normally consist of increasing the sampling period to increase the likelihood of sampling intermittent excursions.
Increasing the air flow sampling rate to achieve a larger total air volume per sample can also be done to obtain a sufficient sample, but increasing the air flow rate can affect the air contaminant concentrations.

NOTE: If further guidance is needed, consult with the Regional Senior Industrial Hygienist or appropriate personnel at the Analytical Laboratory under to contract to the Division.

a. Bioaerosols

Site specific sampling for bioaerosols shall be developed with the assistance and concurrence of the Regional Senior Industrial Hygienist.

3. Bulk Sampling For Biologic Building Contaminants In contrast

to air sampling, bulk sampling for biologic
material can be very useful and should be performed when indicated. Appropriate respiratory precautions shall be taken by compliance personnel when performing bulk sampling for biologic building contaminants.

D. Medical Assessment

0. Occupant-Employee Interview

. Triggers

Medical interviews with building occupant- employees shall be conducted by Medical Unit personnel during the course of an investigation of a serious IAQ complaint, or when asked by the District to assist in the investigation of a nonserious IAQ complaint.

NOTE: Medical Unit personnel shall work closely with compliance personnel when participating in IAQ investigations.

a. Scope

The scope of occupant-employee interviews performed by the Medical Unit shall be determined by Medical Unit personnel, and shall include, but not be limited to, the following items:

0. Nature, frequency, duration and severity of symptoms;
1. Non-building associated medical history;
2. Relationship of symptoms to building occupancy and other environmental factors, such as recent construction, renovation, pesticide spraying, painting, and HVAC system problems;
3. History of lost workdays and/or medical treatment;
4. History of affected co-occupant- employees; and
5. What the occupant-employee believes to be the cause of his/her IAQ associated problems.

1. Symptom Survey Questionnaire

   Symptom survey questionnaires may be utilized by Medical Unit personnel under limited circumstances to assess the health status of building occupant- employees who are at the same risk of exposure to the IAQ hazard as the complainant.

2. Release of Medical Information
   When necessary, Medical Unit personnel shall assist compliance personnel to obtain the release of medical information to the Division.

3. Medical Unit-Compliance Personnel Review
   All findings generated during the course of an IAQ investigation involving Medical Unit personnel shall be summarized by the Medical Unit personnel and reviewed with district compliance personnel in a timely fashion.

D. III. CITATION PROCEDURES

A. Violation Determination

0. Guidelines

. Whenever an employer is found to have inadequate procedures to maintain indoor air quality, 8 CCR §§3203, 3362, 5141, 5142, 5143, 5155, and/or 14301 shall be cited where appropriate according to the criteria below.

a. Each alleged violation shall identify the specific conditions which constitute the violation and the type and location of the exposure source, if any, shall also be described.
b. Special Orders and Orders to Take Special Action shall be utilized where appropriate, i.e., where a hazard cannot be adequately addressed by issuance of a citation.
c. Care must be taken to determine the extent to which the employer can control any IAQ problem which is to form the

basis of a regulatory action by the Division. This determination should govern the manner in which an employer is directed to address an IAQ problem. For example, it may not be appropriate to cite an employer for problems related to the HVAC system if the employer is merely a tenant without control over the system, unless the violation is related to failure to notify the entity with control over the system of an IAQ problem, or failure to take other reasonable measures to address the problem. If an entity cannot be cited for problems related to the HVAC system, other appropriate action will be determined by the District Manager, in conjunction with the Regional Senior Industrial Hygienist.

1. Multiple Violations Pertaining to the Same Hazard

   A particular IAQ hazard may in some cases violate provisions of more than one section of Title 8. If so, the citation shall allege each violation separately, and a penalty shall be proposed separately for each violation.
   Consideration should be given to reducing penalties as provided by 8 CCR §336(k) where they arise from multiple violations based on the same specific hazard or violative condition.

B. Specific Title 8 Violations
   0. §3362 -- General Sanitation Requirements

      §3362 provides a basis for issuance of citations pertaining to general sanitation requirements. The following subsections are applicable to IAQ investigations:

      . Subsection (a)

        Cleaning and maintenance of work environments, including building exteriors and environs, such that "harmful exposures" will be avoided.

      a. Subsection (b)

         Performance of cleaning and sweeping in such a manner as to minimize contamination of the air;

      b. Subsection (c)

         This subsection is not applicable to IAQ.

      c. Subsection (d)

Proper storage of putrescible waste and refuse;

d. Subsection (e)

Removal of all sweepings, putrescible wastes, refuse, and garbage in such a manner as to avoid creating a menace to health due to unsanitary conditions;

e. Subsection (f) Effective

pest control.

NOTE: §5140 defines harmful exposure as an exposure to dusts, fumes, mists, vapors or gases: (a) in excess of any permissible limit prescribed by §5155; or (b) of such a nature by inhalation as to result in, or have the probability to result in injury, illness, disease, impairment, or loss of function.

1. §5142 -- Mechanically Driven HVAC Systems to Provide Minimum Building Ventilation

§5142 provides a limited basis for issuance of citations pertaining to HVAC system operation, inspection, and maintenance.

. Subsection (a)

0. Subsection (a)(1)

This subsection requires building HVAC systems to provide at least the quantity of outdoor air required by provisions of Title 24, California Administrative Code, which were in effect at the time the building permit was issued. This requirement is generally unenforceable because, in most cases, this information is unavailable to the employer.
Thus, a special order will usually be the appropriate mechanism to require increases in the fresh air delivered by HVAC systems to eliminate an IAQ hazard.

1. Subsection (a)(2)

This subsection requires continuous operation of HVAC systems subject to enumerated exceptions.

a. Subsection (b)

This subsection provides for inspection and maintenance of HVAC systems, correction of problems found, documentation, and retention of records.

2. §5143 -- General Requirements of Mechanical Ventilation Systems

   §5143 provides additional requirements applicable to mechanical ventilation systems. This section applies to both dilution and local exhaust ventilation.

   . Subsection (a)

   Subsection (a) provides general requirements applicable to the function of ventilation systems. Of particular relevance to IAQ problems is subsection (a)(1), which requires that harmful substances be exhausted out of the workplace in such a way as to avoid contaminating areas within the workplace.

   a. Subsection (b)

   Subsection (b) requires continuous operation of exhaust systems during all operations for which they are designed.

   b. Subsection (c)

   Subsection (c) is closely related to subsection (a)(1), and requires that exhaust systems discharge to outside air in such a manner as to avoid contamination of accessible work area. Recirculation of exhaust air is specifically permitted, provided that it does not result in harmful exposures. This provision can be used to cite for hazardous recirculation of exhausted air, which may arise from internal system design factors or external design factors, e.g., positioning exhaust air ducts too close to intake air ducts.

   c. Subsection (d)

   Subsection (d) includes several requirements. The first is the requirement to ensure that intake air is not contaminated by any outside source, whether created by the employer or not.

   Subsection (d)(1) requires that delivery of outside air not diminish the effectiveness of local exhaust ventilation systems.

   The remaining subsections deal with specific requirements

related to ensuring the provision of adequate uncontaminated intake air, such as sealed duct joints where necessary; monitoring, cleaning, and replacement of filters; and measures to prevent combustion heating systems from contaminating indoor air.

3. §3203 -- Injury and Illness Prevention Program

   §3203 requires an employer to establish, implement, and maintain an effective Injury and Illness Prevention (IIP) Program. The employer's IIP Program is not effective with respect to IAQ hazards if any of the following circumstances exist:

   . Employees have complaints relating to IAQ which are not communicated to the employer because of a flaw in the employer's system for communicating with employees on matters relating to occupational safety and health (3203(a)(3));
   a. The employer fails to investigate ventilation system failures or IAQ-related health complaints (3203(a)(4) and/or (a)(5)); or
   b. The employer fails to take action to correct or otherwise appropriately resolve ventilation system failures or IAQ-related health problems (3203(a)(6).

   In most cases, these will be the only IAQ-related situations citeable as violations of §3203.

4. §5141 -- Control of Harmful Exposure to Employees

   §5141 requires employers to prevent harmful exposures by means of appropriate engineering controls, administrative controls, and/or personal protection. This section has two basic applications. The first is to situations in which a PEL has been met without proper observance of the hierarchy of control measures listed in subsections (a), (b) and (c). The second, which is more relevant to IAQ problems, is to situations involving harmful exposure which is not chemical in nature.

   For IAQ investigations, 5141 can be cited when no PEL exists for the hazard in question, but the employer has failed to prevent a non-chemical harmful exposure, e.g., exposure to airborne bacteria from improper HVAC system maintenance.

5. §5155 -- Airborne Contaminants

   IAQ problems in non-industrial settings rarely involve exposures in

excess of a PEL. Where they do, the contaminant is usually carbon monoxide or a solvent. If a PEL has been exceeded, cite §§5155(c) and (e) as appropriate.

§5155(f) provides that a medical surveillance program approved by the Division may be required to ensure satisfactory maintenance of employee health and to ascertain the effectiveness of control methods used by employers. Thus, 5155(f) can be used to address IAQ problems where medical surveillance is appropriate. This is done by issuing an Order to Take Special Action pursuant to 8 CCR §332.3.

6. §14301 -- Cal/OSHA 200 Log

   §14301 provides a basis for issuance of citations for failure to record work-related injuries and illnesses.

7. §332.2 -- Special Order

   Issuance of a Special Order pursuant to §332.2 should be used to address recognized IAQ hazards requiring enforcement action which do not constitute violations of Title 8. All Special Orders shall be developed with the involvement of the Medical Unit and approved by the Chief or designee prior to issuance.

8. §332.3 -- Order to Take Special Action

   Issuance of an Order to Take Special Action pursuant to 8 CCR §§332.3 and 5155(f) should be used in cases where medical surveillance is necessary to address recognized IAQ hazards requiring enforcement action. All Orders to Take Special Action shall be developed with the involvement of the Medical Unit and approved by the Chief or designee prior to issuance.

C. Violation Classification

IAQ violations shall be classified according to the provisions in 8 CCR §334. Generally, exposure to a substance above the applicable PEL and to a bioaerosol capable of causing death or serious physical harm will be classified as serious. See Labor Code §6432.

Chapter 15-B

HAZARD COMMUNICATION

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to ensure that enforcement personnel evaluate the provisions of the Hazard Communication Standard (HCS) during the course of every workplace inspection.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code, Sections 6360 through 6399.7 and Title 8 California Code of Regulations Sections 5191 and 5194.

PROCEDURES:

A. FIELD OPERATIONS RESPONSIBILITIES

1. During the course of every inspection of establishments where hazardous substances are present, enforcement personnel shall evaluate a manufacturer, importer, employer or distributor's compliance with the provisions of the Hazard Communication Standard (8 CCR §5194).

2. If enforcement personnel require any assistance in evaluating compliance with §5194, enforcement personnel shall consult with the District Manager or the Regional Senior Safety Engineer, or shall make a referral to the Research and Standards Unit in Division Headquarters. See Chapter 4.

B. HEADQUARTERS RESPONSIBILITIES

The Research and Standards Occupational Health Unit shall evaluate applications for trade secret status with the assistance of the Legal Unit, and assist enforcement personnel with informational requests about Material Safety Data Sheets or Safety Data Sheets (MSDS or SDS) from out-of-state manufacturers, importers, employers or distributors.

C. GENERAL GUIDANCE FOR HCS INSPECTIONS AND CITATIONS

1. Follow P&P C-1B and C-1B Forms Completion instructions for documenting the classification of serious or general violations. Consistent with those polices, careful consideration should be given towards assigning a Serious classification to training and labeling violations and to violations for lack of availability of SDS in emergencies. Assignment of Serious classifications to violations of other HCS sections should be considered on a case-by-case basis in accordance with P&P C-1B.

2. Employers must comply with the hazard communication requirements of substance-specific standards, which may differ from and supersede the more generic requirements of HCS-2013.

D. EMPLOYER, MANUFACTURER, IMPORTER AND DISTRIBUTOR RESPONSIBILITIES

1. Proposition 65 Requirements for Employers, §5194(b)(6)

   a. Proposition 65 Warning

      §5194(b)(6) requires all covered employers to provide a warning about the hazards of any substance included in Title 22 California Code of Regulations §12000 (Safe Drinking Water and Toxic Enforcement Act of 1986) which is present in the employer's establishment. See the current Proposition 65 list of chemicals at http://www.oehha.ca.gov/prop65/prop65_list/Newlist.html.

      NOTE: A covered employer may comply with §5194(b)(6) by including the Proposition 65 substance in the employer's Hazard Communication Program (HCP).

   b. Citation

      A covered employer who knowingly and intentionally fails to provide a required Proposition 65 warning shall be cited for a violation of §5194(b)(6)(C).

      EXCEPTION: The following employers are not covered by the Proposition 65 warning requirement found in §5194(b)(6): (1) an employer employing fewer than ten (10) employees; (2) any city, county or district or any department or agency thereof, or the state or any department or agency thereof, or the federal government or any department or agency thereof; or (3) any entity in operation of a public water system as defined in Health & Safety Code §4010.1.

2. Hazard Classification, §5194(d)

a. Manufacturers and Importers

(1) Evaluation

When inspecting a manufacturer or importer, enforcement personnel shall determine if the manufacturer or importer has complied with all the requirements of §5194(d)(1) through (6) when evaluating and classifying substances produced in their workplaces or imported by them to determine if they are hazardous.

All chemicals manufactured or imported on or after June 1, 2015 must have been evaluated in accordance with specific guidance outlined in Appendices A and B of the standard. The hazard classification will result in the specification of pictograms, signal word, hazard statements, and precautionary statements which must be included on the labels. Specifications for these label elements are provided in Appendix C of the standard. The SDSs will have a standardized 16-section format (see Appendix D of the standard) and includes the information from the hazard classification (e.g., hazard class, pictogram). Appendices to section 5194 refer to their counterpart appendices in 29 CFR 1910.1200 and are found on the federal OSHA website:

https://www.osha.gov/law-regs.html

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10100 Appendix A

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10101 Appendix B

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10102 Appendix C

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10103 Appendix D

(2) Citation

(a) If the manufacturer or importer has not performed a required hazard classification, enforcement personnel shall cite §5194(d)(1).

(b) If the manufacturer or importer has not complied with all the requirements of §5194(d)(2) through (6), enforcement personnel shall cite the appropriate subsection.

(c) If required hazard classification is deficient in terms of health or physical hazards, enforcement personnel shall cite §5194(d)(2).

(d) If required hazard classification procedures are not in writing, enforcement personnel shall cite §5194(d)(6).

b. Employers

(1) Evaluation

(a) Unless an employer chooses not to rely on the evaluation of a hazardous substance made by the manufacturer or importer, employers are not required to evaluate hazardous substances which are used in their workplace.

(b) If an employer chooses to evaluate a hazardous substance, enforcement personnel shall determine if the employer has complied with the requirements of §5194(d)(1) through (6).

(2) Citation

See Section D.2.a.(2)(b), (c) and (d)

c. In addition, the manufacturer, importer, or employer classifying chemicals may have to take additional steps beyond those required by Appendix A when the decision process of the Appendix leads for any reason to a determination that the health effects of a chemical should be designated as not classifiable. The classifying entity shall ensure for every such chemical that the identity and health effect of the chemical is nonetheless noted on the safety data sheet if both of the below conditions are met:

(1) There is statistically significant evidence of a hazardous effect; and,

(2) The evidence is based on at least one positive study conducted in accordance with established scientific principles.

Generally this factual information on chemical identity and health effects would be placed in Section 11 (toxicological information) or Section 16 (other information), not Section 2, which is reserved for hazards which have been determined by the classifier to meet the Appendix A classification criteria.

3. Written Hazard Communication Program (HCP), §5194(e)
   a. Evaluation of Program Effectiveness

(1) Enforcement personnel shall evaluate the employer's HCP to determine if the employer has developed, implemented and maintained a written hazard communication program describing how the criteria in §5194(f)(for labels and other forms of warning), in (g)(for material safety data sheets), and in (h)(for employee information and training) will be met including:

(a) A list of hazardous substances known to be present in the workplace; and

(b) Methods to inform employees of the hazards of non-routine tasks.

(2) Enforcement personnel shall determine if the employer has made the written hazard communication program available according to the requirements of §5194(e)(3) and §3204(e).

b. Citation

(1) If the employer has no written HCP, enforcement personnel shall cite §5194(e)(1).

(2) If the employer has a written HCP, but it does not adequately describe labels and other forms of warning, material safety data sheets and employee information and training, enforcement personnel shall cite §5194(e)(1) with a reference to the appropriate subsection(s) of §5194(f), (g) or (h).

(3) If the employer has failed to develop a hazardous substance list, or the list is inadequate, enforcement personnel shall cite §5194(e)(1)(A).

(4) If the employer has failed to describe methods to inform employees of the hazards of non-routine tasks, e.g., the cleaning of reactor vessels, and the hazards associated with substances contained in unlabeled pipes in their work areas, enforcement personnel shall cite §5194(e)(1)(B).

(5) If the employer has failed to address the hazard communication needs of other employers and their employees at multi-employer worksites, enforcement personnel shall cite any relevant subsection of §5194(e)(2) while remaining consistent with DOSH multi-employer policy and procedure in Chapter 14.

4. Labels and Other Forms of Warning, §5194(f) is divided between requirements for manufacturers, importers and distributors [(f)(1)through (f)(5)] and duties of employers [(f)(6) through (f)(10)]. §5194(f)(11) may

apply to all HCS workplace categories.

a. Labeling Containers Leaving the Workplace of a Manufacturer, Importer or Distributor (All the label elements for each hazard class are found in Appendix C.)

(1) Enforcement personnel shall determine if a representative number of containers of hazardous substances leaving a manufacturer's, importer's or distributor's workplace is legible, in English and labeled, tagged or marked with:

(a) Product identifier;

(b) Signal word (Danger or Warning);

(c) Hazard statement(s);

(d) Pictograms (see Appendix F);

(e) Precautionary statement; and

(f) Name and address of the manufacturer, importer or other responsible party.

NOTE: Labeling shall not conflict with the requirements of the Hazardous Materials Transportation Act and regulations issued under that Act by the U.S. Department of Transportation, §5194(f)(5).

(2) If deficiencies are noted in the labeling of containers leaving a manufacturer's, importer's or distributor's workplace, enforcement personnel shall cite appropriate subsections of §5194(f)(1)) through (f)(5).

EXCEPTION: Enforcement personnel shall be aware of the exception to the requirement to label every container covering solid metals, e.g., a steel beam or a metal casting not exempted as an article. See (f)(4).

b. Substance-Specific Health Standard Compliance

If a particular hazardous substance is regulated by a substance-specific health standard, enforcement personnel shall determine if the manufacturer, importer, distributor or employer has complied with any labeling or warnings requirements specified in the substance-specific health standard.

c. Employer's Labeling Requirements

(1) Enforcement personnel shall evaluate a representative number of containers of hazardous substances to ensure that the employer has properly labeled, tagged or marked containers with the identity of the hazardous substance in the container and the appropriate hazard warnings, §5194(f)(1).

NOTE: If enforcement personnel note a deficient label on an in-house container of a hazardous substance, enforcement personnel shall cite §5194(f)(6) .

(2) Enforcement personnel shall also evaluate a representative number of containers of hazardous substances to determine if 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 shift, §5194(f)(7).

(3) Enforcement personnel shall also assess if the product identity and hazard warning information are consistent with the SDS and employer's inventory list for that hazardous substance.

NOTE: Employers are not responsible for inaccurate labels accepted in good faith from the manufacturer.

d. Label Removal or Defacement, §5194(f)(9)

If enforcement personnel acquire evidence from employee interviews that the employer has removed or intentionally defaced existing labels on incoming containers of hazardous substances and has not immediately relabeled the container with the required information, enforcement personnel shall cite the employer for a violation of §5194(f)(6).

e. Employer Labeling Exceptions

(1) Written Materials in Lieu of Labels, §5194(f)(7)

Employers can use written materials such as signs, placards, process sheets, batch tickets, operating procedures or other written materials in lieu of affixing labels as long as the alternative method identifies the containers to which it is applicable and conveys the information required by §5194(f)(6) and (7)).

(2) Immediate Use/Portable Containers, §5194(f)(8)

(a) Employer is not required to label portable containers into which hazardous substances are transferred from labeled containers and which are intended for the immediate use of the employee who performed the transfer.

(b) On construction sites, employers are not required to label portable containers into which hazardous substances are transferred from labeled containers so long as the containers stays on the job site or the employer uses written materials in compliance with §5194(f)(7).

f. Carcinogens

Enforcement personnel shall consult the sources found in §5194(d)(4) for identification of carcinogens and potential carcinogens when determining whether a hazardous substance requires a warning on the label as a carcinogen or potential carcinogen.

5. Safety Data Sheets, §5194(g) The effective date for manufacturers and importers to develop SDS in accordance with HCS 2013 was June 1, 2015.

a. General Requirements

(1) Enforcement personnel shall determine if manufacturers and importers have obtained or developed a Safety Data Sheet (SDS) for each hazardous substance they produce or import, §5194(g)(1).

(2) Enforcement personnel shall determine if employers have a SDS for each hazardous substance which they use, §5194(g)(1).

(3) Enforcement personnel shall determine if distributors have ensured that SDSs, and updated information, is provided to other distributors and purchasers, §5194(g)(7).

NOTE: If a SDS is missing or inadequate, enforcement personnel shall cite §5194(g)(1), unless evidence exists that the employer has not received an adequate SDS.

b. Maintenance and Workplace Access

Enforcement personnel shall review a representative sample of the employer's SDSs to determine:

(1) If the manufacturer or importer has obtained or developed, or if an employer has obtained, a SDS for each hazardous substance used in the employer's workplace, §5194(g)(1);

(2) If the employer has maintained a copy of the required SDSs in the workplace and that the employer has made the SDSs readily accessible to employees during each work shift when they are in their work areas, §5194(g)(8); and

NOTE: When employees must travel between workplaces during a work shift, the employer can keep SDSs at a central location at the primary work facility but shall ensure emergency access to the SDS. If an employer chooses to keep SDSs at a central location, enforcement personnel shall determine if the employer has procedures to ensure immediate access to the required information in an emergency.

(3) If the employer has made SDSs readily available to employees and designated representatives, upon request, §5194(g)(11).

NOTE: If an employer has not responded to an employee's request to review an SDS, enforcement personnel shall cite the employer for a violation of §5194(g)(11).

c. Language and Content

Enforcement personnel shall review a representative sample of the manufacturer's, importer's or employer's SDSs to determine:

(1) If the SDS is in English, §5194(g)(2); and

(2) If the SDS contains the required information specified in §5194(g)(2)(A) through (P), and in subsections (3) through (5).

NOTE: Enforcement personnel should be aware that the control measures listed on many SDSs are designed to protect the manufacturer against liability. However, enforcement personnel should evaluate the adequacy of each SDS based on actual employee exposure.

d. Providing SDSs

(1) Manufacturers/Importers' Duties

(a) Enforcement personnel shall evaluate if manufacturers and importers have procedures in place to ensure that distributors and purchasers of hazardous substances are provided an appropriate SDS with their initial shipment and with the first shipment after the SDS is updated, §5194(g)(6).

NOTE: Pesticide manufacturers are required to prepare and provide an SDS for pesticides labeled pursuant to the Federal Insecticide, Fungicide, Rodenticide Act (7 U.S.C. §136 et seq.).

(b) Enforcement personnel shall determine if any evidence exists that a

manufacturer or importer failed to provide an SDS to an employer when requested to do so by the employer. If so, enforcement personnel shall refer an employer's failure to provide an SDS to the Regional Manager in which the manufacturer/importer is located or to request through the District and Regional Managers and the Deputy Chief for Field Operations that the Chief seek the assistance of the Assistant Secretary for OSHA or another State Plan Program Administrator to provide the SDS if the manufacturer or importer was located outside of California.

(2) Employer Duty to Obtain SDS Required by (g)(1), or Information Required by (g)(2)

(a) Enforcement personnel shall evaluate whether the employer has complied with the requirements of §5194(g)(12)(A) through (D) if a SDS, or any item or information required by subsection (g)(2), has not been provided by the manufacturer or importer.

(b) If the employer has not received an adequate SDS for any substance which they use, enforcement personnel shall cite §5194(g)(1), unless the employer has made a good faith attempt to obtain the missing SDS.

NOTE: Good faith can be demonstrated by the employer by showing enforcement personnel a written inquiry from the employer to the manufacturer requesting an SDS sent within seven days of receiving the hazardous substance, §5194(g)(12)(A). If no response was received within 25 days of sending the inquiry, the employer must give notice to the Director. See §5194(g)(12)(D).

6. Employee Information and Training §5194(h)

a. Evaluation

Enforcement personnel shall evaluate the effectiveness of an employer's training program by reviewing the employer's training records and by interviewing employees and employee representatives.

b. Employee Interviews

(1) Are employees provided with information and training on hazardous substances in their work areas at the time of initial assignment and whenever a new hazard is introduced into their work area, §5194(h)(1)?

(2) Are employees informed of the requirements of the Hazard Communication Standard, §5194(h)(2)(A)?

(3) Are employees informed of any operations in their work area where hazardous substances are present, §5194(h)(2)(B)?

(4) Are employees informed of the location and availability of the employer's written Hazard Communication Program, including the list of hazardous substances and SDSs, §5194(h)(2)(C)?

(5) Are employees trained in the methods and observations that may be used to detect the presence or release of a hazardous substance in the work area, e.g., monitoring conducted by the employer, monitoring devices, visual appearance or odor of hazardous substances, §5194(h)(2)(D)?

(6) Are employees trained in the physical and health 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, e.g., appropriate work practices, emergency procedures including personal protective equipment, §5194(h)(2)(E)?

(7) Are employees trained in the details of the HCP, including an explanation of the labeling system and the SDSs and how employees can obtain the appropriate hazard information, §5194(h)(2)(F)?

(8) Are employees informed of their right:

(a) To personally receive information regarding hazardous substances to which they may be exposed, §5194(h)(2)(G)1.

(b) To have their physician or collective bargaining agent received information regarding hazardous substances to which they may be exposed, §5194(h)(2)(G)2.?

(c) Not to be discharged or be discriminated against due to their exercise of the rights provided by Labor Code §§6360 through 6399.7 [California Hazardous Substances Information and Training Act.].

c. Updated Information, §5194(h)(3)

Enforcement personnel shall evaluate if the employer provided employees

with new information the employer acquired which indicates significantly increased risks to, or measures necessary to protect, employee health as compared to those risks and measures stated on a previously provided SDS within 30 days of receipt.

7. Trade Secrets §5194(i)

   a. Confidentiality

      Enforcement personnel shall keep confidential any legitimate trade secret information acquired during the course of an investigation or inspection, §5194(i)(1)(D) and (i)(3).

   b. Trade Secret Claim, §5194(i)(1)

      (1) A manufacturer, importer or employer may withhold the specific chemical identity of a hazardous substance from the SDS, but must satisfy the following four requirements:

         (a) The trade secret claim can be supported;

         (b) Information contained in the SDS about the properties and effects of the hazardous substance be disclosed;

         (c) The SDS indicates that the specific chemical identity is being withheld as a trade secret ["trade secret" is the only compliant terminology]; and

         (d) The specific chemical identity is made available to health or safety professionals, employees, and designated representatives.

      (2) If the chemical manufacturer or importer withholds the identity or exact composition of any constituent, the SDS must indicate in Section 3 that the constituent(s) and/or exact percentage(s) are being withheld as trade secrets. Despite the claim that a hazardous chemical, or a constituent thereof, is a trade secret, the PEL, TLV, or other designated exposure limit must be included on the SDS. Otherwise the SDS is out of compliance.

      (3) When an employer claims during the course of an investigation or inspection that certain information is a trade secret, enforcement personnel shall contact the Research and Standards Occupational Health Unit in Division Headquarters to verify that the SDS purportedly containing trade secret information has been sent to the Director for approval.

c. Medical Emergency, §5194(i)(2)

(1) When a physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous substance is necessary for emergency or first-aid treatment, the manufacturer, importer or employer shall immediately disclose the specific chemical identity of a trade secret substance to the physician or nurse, regardless of confidentiality considerations.

(2) If enforcement personnel are involved in securing trade secret information based on the medical emergency exception, the following provisions shall be followed:

(a) Contact the SDS preparer by telephone, explain the duty of an SDS preparer to disclose chemical identify information in a medical emergency and make a demand that the information be provided to the physician or nurse immediately;

(b) If the SDS preparer refuses to disclose the chemical identify information and:

i. The SDS preparer is located in California, enforcement personnel shall contact the District Manager and the appropriate Legal Unit office to obtain a court order requiring immediate disclosure;

ii. The SDS preparer is located in outside of California, enforcement personnel shall request through the District and Regional Managers and the Deputy Chief for Field Operations that the Chief seek the assistance of the Assistant Secretary for OSHA or another State Plan Program Administrator to compel disclosure of the information.

NOTE: For medical emergencies, failure to disclose the information shall result in the issuance of a willful citation to the manufacturer or importer, provided that the elements of a willful citation can be established.

d. Non-emergency, §5194(i)(3)

(1) In non-emergency situations, manufacturers, importers or employers are required to disclose, upon request, a specific chemical identity to a physician, nurse, industrial hygienist, safety professional, toxicologist, or epidemiologist who is providing medical or other occupational health services to exposed employees if the request is in writing and complies with §5194(i)(3)(B), (C), (D) and (E).

(2) Refusals by SDS preparers to disclose trade secret information in non-emergency situations shall be investigated by enforcement personnel from the appropriate District Office.

8. Effective Dates and Related Citation Guidance §5194(j).

The 2016 amendments to this instruction outline changes in enforcement due to revisions to §5194 that became effective beginning on November 6, 2013 with subsequent staged effective dates for some parts of the regulation. The changes align the HCS with the United Nations (UN) Globally Harmonized System of Classification and Labeling of Chemicals (GHS Revision 3, 2009). The transition or implementation period is from the adoption of HCS in 2013 to June 1, 2016.

a. The major aspects of these GHS related revisions include:

(1) Hazard classification: Specifies criteria for classification of health and physical hazards, including mixtures and. Replaces the former performance-oriented hazard determination requirement for evaluation of these hazards.

(2) Labels: Requires chemical manufacturers and importers to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.

(3) Safety Data Sheets: Will now have a specified 16-section format.

b. Specific Guidance

(1) Depending upon date of shipment of chemicals, employers are required to comply with HCS 2004, HCS 2013, or both during the transition (or implementation) period.

(2) If a manufacturer or importer has issued, prior to June 2015, a HCS 2004 MSDS or label for a chemical shipped prior to that date, the HCS 2013 hazard classification criteria cannot be utilized; instead HCS 2004 hazard determination criteria must be utilized.

(3) A hazard determination made under HCS 2004 cannot be utilized as the basis of an SDS or HCS 2013 compliant label.

(4) The manufacturer may not avoid fully classifying the hazards of the product by claiming it is complying with both standards (e.g., classifying toluene as a flammable liquid and putting this information on the SDS and label but not including the target organ information on the label and SDS).

(5) Manufacturers and importers may not partially implement the revised standard for a label or SDS (for example, not including all required precautionary statements on a label or all information on the SDS). Labels and MSDS/SDS must fully comply with HCS 2004 or 2013, as appropriate or violations shall be issued under both 2004 and 2013 regulations.

(6) If enforcement personnel find that content of a label or data sheet violates either HCS 2004 or 2013, citations shall be issued for both HCS 2004 and HCS 2013.

(7) Distributors shall not be cited for providing downstream customers with MSDS during the implementation period unless the manufacturer or importer has already provided the distributor with SDS.

(8) Paragraph (j) is not a citable paragraph.

(9) After December 1, 2013, all training violations shall be issued under HCS 2013.

(10) After June 1, 2015:

(a) Manufacturers and importers must be using the hazard classifications outlined in Appendices A and B of the standard.

(b) Manufacturers, importers and distributors must ship HCS 2013-compliant SDS.

(c) Manufacturers and importers are required to ship only containers with labels compliant with HCS 2013.

(11) On or After December 1, 2015, distributors must ship containers that are labeled compliant with HCS 2013.

(12) On or After June 1, 2016, employers must update any alternative workplace labeling for changes related to HCS 2013, their HCS program required by (h)(1), and provide any additional employee training in accordance with (h)(3) for newly identified physical or health hazards. For workplace labeling, in most cases, if the workplace labeling is HCS 2004-compliant, no changes will be necessary.

(13) The employer may maintain shipped containers with HCS 2004-

compliant labels. However, the employer must ensure that employees understand the differences between the HCS 2004-compliant labels and HCS 2013-compliant labels, and the lack of pictograms, signal words, etc., does not mean the chemical may not present the same hazards.

E. LABORATORY EMPLOYER RESPONSIBILITIES

1. §5194(b)(3) and Labor Code §6386 provide that a laboratory which provides quality control analysis for a manufacturing process or produces hazardous substances for commercial purposes are covered by section 5194.

2. Certain laboratories may be exempt from §5194 if the laboratory comes within the scope of 8 CCR section 5191, Occupational Exposure to Hazardous Chemicals in Laboratories.

F. EXEMPTIONS

1. Substances Exempted From Labeling Requirements, §5194(b)(4)

   a. Pesticides labeled in accordance with regulations under the Federal Insecticide, Fungicide, Rodenticide Act are exempt from §5154(f) labeling requirements, §5194(b)(4)(A).

   b. Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device, including ingredients in such products, e.g., flavors and fragrances, labeled in accordance with regulations under the Food, Drug and Cosmetic Act, §5194(b)(4)(B).

   c. Any distilled spirits, wine, or malt beverage intended for nonindustrial use as such terms are defined under regulations issued under the Federal Alcohol Administration Act, §5194(b)(4)(C).

   d. An consumer product or hazardous substance, as those terms are defined under regulations issued under the Consumer Product Safety Act and Federal Hazardous Substances Act, §5194(b)(4)(D).

2. Coverage Exemptions, §5194(b)(5)

   Enforcement personnel shall be aware that §5194 does not apply to:

   a. Any hazardous waste as defined by regulations of the U.S. Environmental Protections Agency, §5194(b)(5)(A).

   b. Tobacco or tobacco products, §5194(b)(5)(B).

c. Wood or wood products, §5194(b)(5)(C).

d. Articles, §5194(b)(5)(D).

   NOTE: An article is a manufactured item which (1) is formed to a specific shape or design during manufacturer; (2) has end use function(s) dependent in whole or in part upon its shape or design during end use; and (3) does not release, or otherwise result in exposure to, a hazardous substance under normal conditions of use or in a reasonably foreseeable emergency resulting from workplace operations.

e. Foods, drugs, or cosmetics intended for personal consumption by employees while in the workplace, §5194(b)(5)(E).

f. Retail food establishments and all other retail trade establishments, exclusive of processing and repair work areas, §5194(b)(5)(F).

g. Consumer products packaged for distribution to, and use by, the general public are exempt from the Hazard Communication Standard, provided that employee exposure to the product is not significantly greater than the consumer exposure occurring during the principal consumer use of the product, §5194(b)(5)(G).

   NOTE: When consumer products are used in the workplace, enforcement personnel shall determine if the employee uses the product in the same form, amount, concentration and manner as it would be used by the general public. If not, enforcement personnel shall evaluate use of the product according to the provisions of §5194.

h. Agricultural pesticide applicators and farmworkers who are subject to, and comply with, the Department of Pesticide Regulation's safety and health regulations are exempt from the Hazard Communication Standard as applied to pesticides, but not to non-pesticide hazardous substances, §5194(b)(5)(H).

   NOTE: Pesticide manufacturers are not exempt from the requirements of §5194.

i. Work process where employees only handle substances in sealed containers which are not opened during normal conditions of use, except as provided in §5194(b)(5)(I)1 through 3.

G. REFERENCES

1. Additional specific inspection and citation guidance for the enforceable

subsections of the HCS can be found in federal OSHA CPL 02-02-079 https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=6111 .

Chapter 15-C

ENFORCEMENT OF 8 CCR SECTION 5193

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to conduct all programmed and unprogrammed inspections involving enforcement of 8 CCR 5193 in a manner that is consistent with the provisions of 8 CCR 5193.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code Section 144.7 and Title 8, California Code of Regulations (CCR), 5193.

PROCEDURES:

A. ENFORCEMENT ASSISTANCE

1. "Frequently Asked Questions About Bloodborne Pathogens Standard"

a. For enforcement assistance, compliance personnel shall utilize the information contained in "Frequently Asked Questions About the Bloodborne Pathogens Standard," as an adjunct to this Chapter 15-C.

b. Access to this document can be obtained through the Division's Internet Home Page as follows: www.dir.ca.gov/DOSH

c. The FAQs are structured so that each issue is addressed according to the specific subsection of 8 CCR 5193 that gives rise to that issue.

2. District Manager and Regional Senior Industrial Hygienist

Where reference to the "Frequently Asked Questions About the Bloodborne Pathogens Standard is not sufficient to resolve a specific enforcement issue, compliance personnel shall consult with their District Manager and/or their Regional Senior Industrial Hygienist.

3. Research and Standards Unit Industrial Hygienists

If additional guidance is needed, the Senior Industrial Hygienists in the Division's Research and Standards Unit are also available to provide consultative assistance.

4. Medical Unit

Throughout the course of an investigation or inspection, compliance personnel are encouraged to contact the Medical Unit for assistance in collecting evidence to sustain alleged violations of 8 CCR 5193, especially violations of 8 CCR 5193(f), pertaining to Hepatitis B Vaccination and Post-Exposure and Follow-Up.

EXAMPLE: There are several ways that the Medical Unit can assist compliance personnel when they conduct an investigation involving 8 CCR 5193, e.g., assistance through telephonic contact, review of medical records, on-site assistance (when appropriate) to conduct interviews with evaluating healthcare professionals.

B. SCOPE AND APPLICATION

1. General Scope

a. The scope and application of the Bloodborne Pathogens Standard is purposefully broad. 8 CCR 5193 applies to "all occupational exposure to blood or other potentially infectious materials (OPIM)." See 8 CCR 5193(a).

b. Occupational exposure means "reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or OPIM that may result from the performance of an employee's duties." See 8 CCR 5193(b).

c. Compliance personnel shall apply 8 CCR 5193 to all covered industries when there is evidence that reasonably anticipated occupational exposure may occur or has occurred.

2. Exemptions

Construction (Standard Industrial Classification (SIC) Codes 152-179) is specifically exempted from coverage pursuant to 8 CCR 5193(a). See Section A.4.

3. General Approaches to Determining the Applicability of 8 CCR 5193

Compliance personnel can utilize a "facility" approach or an "operation or employee category" approach to determine if 8 CCR 5193 applies to a particular enforcement situation.

a. Facility Approach

The facility approach can take one of two forms:

(1) Intrinsic Nature of the Facility

The easiest facilities to identify as subject to 8 CCR 5193 are those in which the intrinsic nature of the facility, e.g., a hospital, medical outpatient facility, physician or dentist office or coroner's office, identifies it as one in which at least one employee has occupational exposure.

(2) Specific Circumstances of the Facility

Facilities that do not intrinsically involve occupational exposure may still, because of their specific circumstances or operations, pose an exposure hazard.

EXAMPLE: Commercial laundry facilities that process laundry from hospitals are likely to involve occupational exposure by virtue of the occasional contamination of the laundry with used, improperly discarded sharps.

b. Operation or Employee Category Approach

In some cases, it is more appropriate to approach occupational exposure by considering a specific employee category, or a specific operation performed by an employee. These are usually cases in which there is one particular employee category that raises a question about coverage for an employer to whom 8 CCR 5193 may not otherwise appear to apply.

EXAMPLE: Short-term or long-term lodging establishments where housekeepers' risk of contact with items such as contaminated hypodermic syringes in bed sheets or in trash receptacles is high enough to be "reasonably anticipated."

4. Construction

Where an issue arises regarding exposure of construction employees to bloodborne pathogens, e.g., where construction employees are designated to provide first aid, compliance personnel shall determine the extent to which appropriate precautions against exposure are required pursuant to 8 CCR 3203 (IIP Program).

5. Less than "Reasonably Anticipated" Occupational Exposure

Even in those situations where the risk to employees of contact with blood or OPIM is not so high as to be "reasonably anticipated," the specific nature of the work may still require basic protective measures under the provisions of 8 CCR 3203 (IIP Program) to prevent events that could lead to an exposure incident.

EXAMPLE: There may be situations in which compliance personnel determine that evidence exists that workers (such as sanitation workers) are at risk of receiving cuts, abrasions, and punctures in the course of their work. In these cases, compliance personnel shall determine if the employer's IIP Program is "effective," as required by 8 CCR Section 3203(a), in preventing exposure

incidents by utilization of procedures for handling possibly contaminated materials safely (e.g., in the case of sanitation workers, use of gloves and protective clothing).

C. GENERAL PRECAUTIONARY MEASURES DURING AN INSPECTION

1. Contaminated Evidence

a. Compliance personnel shall take all necessary precautions to minimize the likelihood of their own exposure to blood and OPIM, as defined by 8 CCR 5193(b), when conducting any inspection or investigation.

b. Compliance personnel shall avoid situations during an inspection or investigation that may increase the risk of an exposure incident.

c. If a concern arises at any time about how to gather necessary evidence without risking an exposure incident, compliance personnel shall consult with their District Manager and/or Regional Senior Industrial Hygienist before proceeding to gather the evidence.

2. Photographic Documentation

Compliance personnel shall avoid obtaining digital, photographic or video images of patients during an inspection or investigation of a healthcare establishment, unless it is determined to be absolutely necessary to support the existence of a violative condition. If it is absolutely necessary to photograph a patient, this should be done in a way that minimizes the potential for the identity of the patient to be ascertainable by looking at the photograph.

D. GENERAL INSPECTION PROCEDURES

1. Inspection Scope

a. Unprogrammed Inspection

(1) SIC Major Group 80 (Health care establishments)

In FY 2002 DOSH established the Bloodborne Safety and Health Inspection Program (BSHIP). This program has been continued for FY 2003 as a local emphasis program. All bloodborne pathogens complaints or accidents within SIC Codes 8011 through 8099 shall be assigned to a BSHIP-trained industrial hygienist, in accordance with the attached BSHIP Protocol. Industrial hygienists will evaluate the facility's compliance with 5193, and, in addition to any other

compliance activity, will complete the Outcome Measures Report that is part of the attached protocol.

When an accident or complaint that does not include bloodborne pathogens issues is received relative to a facility in SIC codes 8011 through 8099, the district manager shall determine whether to investigate compliance with 5193 in the course of the inspection. If a 5193 investigation is to be conducted, the district manager shall assign a BSHIP-trained industrial hygienist to conduct that portion of the investigation, and to complete the required Outcome Measures Report.

The district manager shall notify the BSHIP coordinator when a BSHIP inspection has been assigned.

(2) Bloodborne Pathogen Complaint -- other than SIC codes 8011-8099

When conducting an inspection in response to a bloodborne pathogens complaint or accident, compliance personnel shall, in addition to addressing the complaint item or accident circumstances, also conduct a documentation review to determine if the employer's compliance with 8 CCR 5193 needs to be further evaluated. See Section D.2. below.

(a) If a Documentation Review does not reveal exposure incidents, then compliance personnel may limit the scope of the complaint inspection or accident investigation at their discretion.

(b) If the Documentation Review reveals exposure incidents, then compliance personnel shall conduct a thorough review of the employer's compliance with 8 CCR 5193.

(3) Non-Bloodborne Pathogen Complaint or Accident -- other than SIC codes 8011-8099

Whenever compliance personnel conduct a complaint inspection or accident investigation of a facility that is not in SIC codes 8011-8099 and where employees may have occupational exposure, compliance personnel shall, in addition to inspecting the complaint item(s) or investigating the cause(s) of the accident, also review the employer's compliance with 8 CCR 5193 by conducting a Documentation Review. See Section C.2. below.

b. Programmed Inspections

When conducting a programmed inspection of a facility where employees may have occupational exposure to blood or OPIM, compliance personnel shall conduct a comprehensive review of the employer's compliance with 8 CCR 5193. If the facility is in SIC codes 8011-8099, a BSHIP-trained industrial hygienist shall conduct the investigation in accordance with the BSHIP protocol and complete the required Outcome Measures Report. The district manager shall notify the BSHIP coordinator when a BSHIP inspection has been assigned.

2. Inspection Starting Point -- Documentation Review

a. Log 300, Injury & Illness Prevention Program and Exposure Control Plan

(1) All inspections in which compliance with 8 CCR 5193 is investigated shall include at the outset a detailed review of the employer's Log 300, Injury and Illness Prevention (IIP) Program, Exposure Control Plan (ECP) and Sharps Injury Log (SIL).

(2) Unless unusual circumstances indicate a need to begin elsewhere, this documentation review shall generally be the starting point of the investigation once the Opening Conference has been completed.

(3) Review of these documentation items is performed to:

(a) Determine whether the employer is in compliance with these documentation requirements;

(b) Identify problem areas that should be addressed by the inspection; and

(c) Gain an understanding of the employer's procedures for addressing compliance issues, which will facilitate conducting an effective inspection and determining the extent to which the employer's procedures have been implemented and are actually being followed by employees.

b. Review of Log 300

Compliance personnel shall review the employer's Log 300 to determine if there are entries for "exposure incidents," i.e., specific eye, mouth or other mucous membrane, non-intact skin or parenteral contact with blood or OPIM that results from the performance of an employee's duties, that have been recorded.

NOTE: Compliance personnel shall not rely solely on the absence of Log 300 entries of exposure incidents to determine the scope of any investigation, but also shall interview a representative number of frontline healthcare workers--those

employees directly exposed to the hazard of blood or OPIM--from the establishment to determine whether exposure incidents have occurred.

c. Injury & Illness Prevention Program

Compliance personnel shall evaluate every employer's IIP Program, but especially when the risk to an employer's employees of contact with blood or OPIM is not so high as to be "reasonably anticipated." See Section B.5. EXAMPLE.

d. Exposure Control Plan

(1) Every employer having employees with occupational exposure is required to establish, implement and maintain an effective Exposure Control Plan. 8 CCR 5193(c)(1)(A).

(2) Compliance personnel shall evaluate the effectiveness of the employer Exposure Control Plan by determining the effectiveness of each of the eight procedural elements of the Exposure Control Plan. 8 CCR 5193(c)(1)(B)1.through 8.

(3) Evaluation of the elements of the employer's Exposure Control Plan requires that compliance personnel conduct interviews not only with the employer and the employer's representatives but also with frontline healthcare workers.

EXAMPLE: Every employer is required to establish, implement and maintain an effective procedure for obtaining the active involvement of employees in reviewing and updating the exposure control plan with respect to the procedures performed by employees in their respective work areas or departments. To be effective, then, the employer's procedures for complying with this requirement must include mechanisms to involve, and receive feedback from, all employees in each unit of the employer's establishment.

e. Sharps Injury Log

(1) Careful review of the information contained in the employer's Sharps Injury Log is crucial in any bloodborne pathogens investigation and serves to focus the investigation on the employer's Exposure Control Plan, the employer's compliance with engineering control requirements, training requirements and post-exposure follow-up requirements.

(2) If compliance personnel have any difficulty in gaining information from the employer about the identity of a specific employee whose exposure incident is recorded on the Sharps Injury Log and with whom an interview needs to be conducted, compliance personnel shall inform the employer that the name of the employee is not confidential and that legal means will be pursued by the Division to obtain the identity of the employee so that an interview can be

conducted.

E. INSPECTIONS OF EMPLOYERS IN THE HEALTHCARE AND ALLIED INDUSTRIES WITH RESPECT TO PREVENTION OF CONTAMINATED SHARPS INJURIES

1. General Considerations in addition to those outlined in the BSHIP Protocol

a. What primarily sets inspections in this category apart from other bloodborne pathogens inspections is that exposure to blood or OPIM are intrinsic to these facilities. Evaluation of the employer's use of medical sharps devices, compliance with the requirements to keep a Sharps Injury Log and to utilize needleless systems and sharps with engineered sharps injury protection (ESIP), is central to any investigation of these types of facilities.

b. These employers have specifically enumerated obligations related to medical sharps and their usage under the ECP requirements of 8 CCR 5193(c)(1)(B), (c)(1)(D), and (c)(2), the engineering and work practice control requirements of 8 CCR 5193(d)(3)(A) through (d)(3)(E), and the recordkeeping requirements of 8 CCR 5193(h)(3).

c. Medical sharps usage issues must also be fully addressed by the employer's procedures for complying with more general 8 CCR 5193 requirements, e.g., the information and training requirements of 8 CCR 5193(g), which may not mention sharps specifically, but necessarily require their full consideration.

2. Evaluation of Engineering Controls

a. Use of Engineering Controls Compliance personnel shall determine whether the employer has implemented the use of engineering controls under 8 CCR 5193(d)(3)(A) according to the following criteria:

(1) Needleless Systems

The employer must select and use a needleless system, when one exists in the marketplace, for a given medical procedure, unless one of the Exceptions to 8 CCR 5193(d)(3)(A) applies.

(2) Needle Devices and Other Sharps with ESIP

(a) Where needleless systems are not used, employers are required to select and use needle devices with ESIP.

NOTE: Employers are also generally required to use non-needle sharps with ESIP.

(b) What constitutes a qualifying sharp with ESIP is governed by the definition of ESIP, which requires that the anti-stick properties be "built into" the device, and that the device be "effective" in reducing sharps related exposure incidents arising from use of the device.

(c) If a citation is to be issued pursuant to 8 CCR 5193(d)(3)(A), it is the Division's burden to show that the employer is not using a qualifying sharp. The non-mandatory Device Checklist in Appendix 1 can be used by the compliance officer to help determine if ESIP is required for each type sharp being used. Special care in gathering and evaluating evidence must be exercised in the following situations:

i. The employer is using a device that purports to have ESIP, but the effectiveness of the device appears to be questionable, either because other currently available devices clearly provide superior protection or because of flaws inherent in the design or physical properties of the device chosen by the employer.

ii. The employer is using a device equipped with an "add-on" anti-stick protection feature, which was installed at some time after the original manufacture of the device.

iii. The employer claims in good faith that there are no devices in existence that meet the effectiveness test of the definition.

In situations such as these, the evidentiary issues presented shall be evaluated by consultation with their District Manager and/or Regional Senior Industrial Hygienist.

b. Exceptions to the Use of Engineering Controls

Where an employer is not using qualifying devices under circumstances that justify issuance of a citation if the exceptions to 8 CCR 5193(d)(3)(A) do not apply, compliance personnel shall request that the employer provide information about, and demonstrate how, at least one of the exceptions applies:

(1) Exception One -- Market Availability

This exception applies if a required 8 CCR 5193(d)(3)(A) engineering control is not available for purchase by the employer in the marketplace.

NOTE ONE: Where a particular device is not available through an employer's group buying program, but is otherwise available in the market, the market availability exception does not apply.

NOTE TWO: Where the employer can demonstrate that a device is temporarily

unavailable due to factors beyond the employer's control, the market availability exception will apply while the device and acceptable substitutes are not available. However, the employer must demonstrate through credible documentation that a good-faith effort has been made to obtain the device and whatever suitable substitutes are available in the market.

(2) Exception Two -- Patient Safety

This exception applies if a licensed healthcare professional directly involved in a patient's care determines, in the reasonable exercise of clinical judgment, that use of the device with ESIP will jeopardize the patient's safety or the success of a medical, dental or nursing procedure involving the patient.

NOTE ONE: An employer may establish criteria for classes of patients that will not be treated using a specific type of device. However, as required by 8 CCR 5193(c)(1)(B)7., there must be documentation that application of the criteria to any particular patient is decided upon by a licensed healthcare professional directly involved in providing the patient's care.

NOTE TWO: The fact that use of a device may require modification of a medical procedure does not necessarily mean that patient care or safety will be compromised.

(3) Exception 3 -- Safety Performance

This exception applies if the employer can demonstrate by means of objective product evaluation criteria that the device with ESIP is not more effective in preventing exposure incidents than the alternative used by the employer.

NOTE ONE: The basis for the employer's determination may include, but is not limited to, studies providing data on the device's performance and evaluations made by research entities that have no economic relationship with manufacturers. Data from credible efficacy studies about needle devices are available from sources such as the U.S. Public Health Service (Centers for Disease Control) or private entities, such as Exposure Prevention Information Network (EPINET) (contact: (804) 982-0702) or ECRI (contact: http://www.ecri.org).

NOTE TWO: If a study is carried out by the employer, compliance personnel should review the study and its validity with the assistance of the Division's Research and Standards Unit.

(4) Exception 4 -- Availability of Safety Performance Information

This exception applies if an employer can demonstrate that reasonably specific and reliable information is not available on the safety performance of the engineering control for the employer's procedures, and that the employer is

actively determining, by objective product evaluation criteria, whether use of the device will reduce the risk of exposure incidents in the employer's workplace.

NOTE: The effort required by the employer to keep abreast of new information will depend on the employer's size and sophistication. For small healthcare and dental offices, it will generally be sufficient if they rely on peer organizations, academic studies, and professional journals to track currently available information on devices. Larger, more sophisticated employers will be required to make more direct efforts to evaluate devices. The employer's approach to this issue must be reflected in the ECP pursuant to 8 CCR 5193(c)(1)(B)5. and 6.

3. Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-Up

a. Compliance personnel shall closely evaluate exposure incidents to determine if the employer has complied with 5193 requirements pertaining to post-exposure evaluation and follow-up:

(1) Did the employer make immediately available a confidential medical evaluation consisting of the required elements (see 8 CCR 5193(f)(3)(A) through (E))?

(2) Did the employer provide the evaluating health professional the required information (see 8 CCR 5193(f)(4))?

(3) Did the employer provide the employee with a copy of the healthcare professional's written opinion within 15 days of the completion of the evaluation (see 8 CCR 5193(f)(5))?

b. When conducting an investigation of an employer's compliance with the requirements of 8 CCR 5193(f)(3) through (6), compliance personnel should consult with the Medical Unit to determine the best approach to obtaining the necessary medical information.

F. CITATION POLICY

1. Issuance

Compliance personnel shall issue a citation for each violation of section 8 CCR 5193 found during an investigation.

2. Serious Classification

a. Violations shall be classified as serious when the evidence reveals that an exposure to blood or OPIM may be reasonably anticipated, and such exposure has a substantial probability of causing death or serious physical harm

NOTE: The Division believes that it does not have to prove (e.g., by laboratory testing) that the blood or OPIM to which an employee was exposed was actually contaminated with a specific bloodborne pathogen to prove a serious violation of 8 CCR 5193.

b. Serious violations generally include any substantial failure to utilize engineering controls, work practice controls, or personal protective equipment. Violations based on failure to provide training or information or failure to provide adequate training or information to employees shall be classified as general or serious depending on how directly the violation is related to the potential for serious exposure.

EXAMPLE: Failure to train an employee on the proper use of a sharp with ESIP that depends on training for its safe operation shall be classified as serious.

c. When a citation that alleges a serious violation of 8 CCR 5193 subsections (d)(3), (e) and (f) are contested by the employer, the district manger shall consult with the Legal Unit to determine if legal representation is necessary

NOTE: In some cases involving citations alleging a serious violation of subsections (d)(3), Engineering and Work Practice Controls; (e), HIV, HBV and HCV Research Laboratories and Production Facilities; and (f), Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, Legal Unit representation is required.

3. Non-Serious Classification

Other violations shall generally be classified as general or regulatory, unless the specific circumstances of the violation indicate a direct linkage between the violation and a resulting serious exposure hazard.

G. Forms Distribution for BSHIP inspections

Following the issuance of citations or form 1AX, the district manager shall ensure that copies of citations or form 1AX, and the Outcome Measures Report are sent to the BSHIP coordinator. A copy of the Outcome Measures Report shall also be sent to the Deputy Chief for Enforcement.

Chapter 15-D

ENFORCEMENT OF 8 CCR SECTION 5110

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to investigate every complaint alleging the existence of a repetitive motion injury (RMI) to at least one employee in a manner consistent with 8 CCR Section 5110.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code, Sections 6400, 6401, 6402 through 6404, 6405 through 6507, and Title 8, California Code of Regulations (CCR), Section 5110.

PROCEDURES:

A. COMPLAINT EVALUATION AND EVIDENCE DOCUMENTATION

1. Complaint Validity

   A complaint alleging the existence of a repetitive motion injury (RMI) to at least one employee at a place of employment shall be considered a valid complaint by the District Manager for purposes of assignment to compliance personnel for a 5110 investigation. A second (or "triggering" RMI) does not have to exist at the time a complaint investigation is initiated.

2. Evidentiary Documentation

   To assist compliance personnel in documenting a 5110 enforcement action, an "Evidentiary Checklist of Questions" is available in the Appendix of this Chapter 15-D.

B. DETERMINING COVERAGE

When conducting any 5110 investigation, compliance personnel shall first ascertain if the employer is subject to Section 5110 by documenting evidence in the inspection case file to answer each of the four (4) coverage questions found in Section B.

1. Existence of One or More RMIs

Is there evidence that a licensed physician has objectively identified and diagnosed one or more RMIs using information that is customarily relied upon by other licensed physicians in the same field of practice, so that the information, taken as a whole, is sufficiently sound to support the RMI diagnosis?

NOTE ONE: "RMI" refers to an injury caused by a repetitive job, process or operation to the human body's musculoskeletal system, which is composed of bones, cartilage, joints, muscles, tendons, ligaments, spinal discs, nerves and blood vessels.

NOTE TWO: The phrase "objectively identified" is to reinforce that a diagnosis of an RMI is done on measurable and observable signs and symptoms, not on just a subjective identification based on an employee's description of symptoms. Objective criteria are not limited to just clinical laboratory findings. The standard is not triggered on just the description of symptoms. The term does not limit or make reference to the actual person performing the diagnosis as being objective or an impartial third party. The medical professional can be employed by the employer or the employee.

NOTE THREE: Compliance personnel shall consult with the Medical Unit when information is needed from medical professionals regarding the diagnosis and cause of the RMI, or if assistance is required in obtaining confidential medical records. When differing medical conclusions by licensed physicians exist regarding the diagnosis of an RMI, compliance personnel shall consult with the Medical Unit.

a. If there is no evidence of any diagnosed RMIs, then proceed no further with the 5110 investigation.
b. If there is evidence of at least one diagnosed RMI, then proceed to answer coverage question 2.

2. Predominantly Caused by Repetitive Work

Is there evidence that one or more RMIs have been predominantly caused, i.e., 50% or more, by repetitive work?

NOTE: Compliance personnel should be able to obtain evidence of RMI causation by repetitive work from several different sources of information, e.g., the employee's medical records, an Employers' First Report of Injury, a Doctor's First Report of Injury, documentation generated as part of the employee's workers' compensation claim, verbal discussions with the employee or with the diagnosing licensed physician, or other similar sources that addresses the issue of causation.

a. If no, then proceed no further with the 5110 investigation.
b. If there is evidence that only one RMI has been predominantly

caused by repetitive work, then prepare an Information Memorandum in accordance with Section D.2. of this Chapter 15-D.

c. If there is evidence that two or more RMIs have been predominantly caused by repetitive work, then document in the inspection file the specifics of how the work-related factors have caused the RMIs and proceed to answer coverage question 3.

3. Last Twelve (12) Months

   Is there evidence that any two diagnosed RMIs were reported to the employer within 365 days of each other?

   NOTE ONE: In general, compliance personnel shall calculate the period of time between any two RMIs based on the date that the RMI report was received by the employer, not the date on which the RMI was diagnosed by a licensed physician. In the event there is a difference between the date of diagnosis and the date a report of injury was received by the employer, and difference has an impact on whether the 365-day rule applies, compliance personnel shall consult with the Legal Unit.

   NOTE TWO: If the most recent RMI was reported to the employer more than 365 days before the inspection was begun, compliance personnel shall consult with the Legal Unit to determine whether there is a statute of limitations issue.

   a. If no, then prepare an Information Memorandum in accordance with Section D.2. of this Chapter 15-D.
   b. If yes, then proceed to determine evidence to answer coverage question 4.

4. Identical Work Activity

   Is there evidence that any two employees incurring the RMIs were performing a job, process, or operation of identical work activity?

   NOTE ONE: "Identical" work activity means that the employees were performing the same repetitive motion task, such as, but not limited to, word processing, assembly or loading.

   NOTE TWO: In 8 CCR Section 5110, the occurrence of exposures at one workplace would make an employer subject to the requirements of the standard at that workplace only. This is consistent with the application of any other Title 8 standard. If the exposure occurred outside of work, at another employer's workplace, or at a geographically separate workplace of the employer, these exposures would not trigger application of 5110.

   a. If no, then prepare an Information Memorandum in accordance

with Section D.2. of this Chapter 15-D.

b. If yes, then proceed to conduct an evaluation of the employer's RMI Program. See Section C. of this Chapter 15-D.

C. RMI PROGRAM EVALUATION

1. Worksite Evaluation

Is there evidence that the employer has evaluated each job, process, or operation of identical work activity (or a representative number of such jobs, processes or operations of identical work activities) for exposures which have caused RMIs?

a. If no, the employer shall be cited for violating Section 5110(b)(1). Proceed to evaluate the employer's program for exposure control measures.
b. If yes, then determine whether the employer's evaluation meets the requirements of Section 5110(b)(1) by examining the burden of proof requirements of 5110(c). See Section C.4. of this Chapter 15-D.

NOTE: Gathering appropriate evidence of the employer's compliance with the requirement for worksite evaluation begins with gaining a sound understanding of the actual measures implemented by the employer. In evaluating the adequacy of the employer's measures, compliance personnel may consider whether the employer has addressed employee exposures such as (1) frequency, i.e., the rate of repetitive motions or exertions; (2) force, i.e., physical exertion by or pressure applied to any part of the body during a repetitive motion; (3) duration, i.e., the length of any period of repetitive work activity which represent an exposure risk; (4) posture, i.e., the position of a body part during repetitive work activity; (5) localized or whole-body vibration; (6) repetitive motion of hands and feet under conditions of extreme cold temperature; and/or (7) any other exposures which are reasonably likely to have caused the RMIs requiring evaluation in the employer's workplace.

1. If the employer's evaluation was sufficient, then proceed to evaluate the employer's program for exposure control (correction or minimization).
2. If the employer's evaluation was insufficient under Section 5110(c), then the employer shall be cited for violating Section 5110(b)(1). Proceed to evaluate the employer's program for exposure control.

2. Exposure Control Measures
   a. Actual Correction of Exposures

Has the employer corrected, in a timely manner, those exposures which have caused RMIs?

1. If yes, then proceed to evaluate the employer's program for training. See Section C.3.
2. If no, then proceed to determine whether the exposures are capable of being corrected.

b. Potential for Exposures to be Corrected

Are the exposures that have caused RMIs capable of being corrected?

NOTE: The phrase "capable of being corrected" means capable of being changed through engineering or administrative controls, as defined in Section 5110(b)(2), so that they do not cause RMIs.

1. If yes, the employer shall be cited for violating Section 5110(b)(2). Document all evidence supporting that conclusion and document all evidence of the employer's failure to correct the exposure in a timely manner and proceed to evaluate the employer's training program.
2. If no, then proceed to determine whether the employer has minimized RMIs to the extent feasible.

c. Minimizing Exposure

Has the employer minimized RMIs to the extent feasible?

NOTE: A "feasible" corrective measure is one that is reasonable and is capable of being implemented. See Labor Code Sections 6401 and 6403.

1. If yes, then proceed to evaluate the employer's program for training. See Section C.3.
2. If no, then determine whether the employer's exposure control measures meet the requirements of Section 5110(b)(2) by examining the burden of proof requirements of 5110(c). See Section C.4. of this Chapter 15-D.
    a. If the employer's exposure control measures were sufficient, then proceed to evaluate the employer's program for training.
    b. If the employer's exposure control measures were insufficient under Section 5110(c), then the employer shall be cited for violating Section 5110(b)(2). Proceed to evaluate the employer's program for training.

3. Training

   Has the employer provided training to all employees who work at, and who supervise employees who work at, the jobs, processes or operations of identical work activity that have been identified as causing RMIs?

   a. If no, the employer shall be cited for violating Section 5110(b)(3).
   b. If yes, proceed to document whether the employer's program for training includes explanations for each of the five required components of training.

      NOTE: The five components of 5110 training include explanations for each of the following: (1) the employer's RMI program; (2) the exposures which have been associated with RMIs; (3) the symptoms and consequences of injuries caused by repetitive motion; (4) the importance of reporting symptoms and injuries to the employer; and (5) methods used by the employer to minimize RMIs.

      1. If no, then the employer shall be cited for violating subsections 5110(b)(3)(A), (b)(3)(B), (b)(3)(C), (b)(3)(D) and/or (b)(3)(E) as applicable.
      2. If yes, then determine whether the employer's training meets the requirements of each subsection of 5110(b)(3) by examining the burden of proof requirements of 5110(c). See Section C.4. of this Chapter 15-D.
         a. If the employer's training was sufficient, then close the 5110 investigation.
         b. If the employer's training was insufficient under Section 5110(c), then the employer shall be cited for violating the applicable subsection(s) of 5110(b)(3). Proceed to close the investigation.

4. Division's Burden of Proof Regarding the Adequacy of an Employer's Compliance with Section 5110(b)(1), (b)(2) and (b)(3)
   a. Applicability

   Section 5110(c) has special requirements regarding the burden of proof the Division must meet in order to substantiate certain violations of section 5110(b)(1), (b)(2), or (b)(3). It is important to have an understanding of when these burden of proof provisions apply and when they do not. Generally, the burden of proof provisions apply when it is alleged that an employer has initiated activity as required by 5110(b)(1), (b)(2) or (b)(3) but the initiated activity has failed to fully meet the requirements of the applicable subsection. However, there are three specific situations in which the burden of proof provisions do not apply as follows:

      1. Failure to Initiate Activity

The employer has failed to initiate any activity required by the standard.

EXAMPLE: An employer has not taken any action to train employees as required by section 5110(b)(3).

2. Lack of Good Faith

   The employer has initiated activity but the action does not constitute a good faith attempt to comply with the standard.

   EXAMPLE: The employer passes out a booklet which purportedly contains the information on which employees are to be trained, but does not give them time to read it or ask questions about it, or the material clearly does not meet the subject matter requirements of the standard.

3. Failure to Meet a Definite Requirement

   The employer has failed to meet a definite, as opposed to an indefinite requirement of the standard.

   EXAMPLE: The Division alleges that the employer has failed to meet the definite requirement of correcting an exposure that is "capable of being corrected." In this case, Section 5110(c) does not apply. However, if the Division alleges that the employer has failed to comply with the indefinite requirement of minimizing to the extent feasible an exposure that is not capable of being corrected, then a good faith effort to comply will be governed by Section 5110(c).

   NOTE: Compliance personnel are encouraged to consult with the Legal Unit whenever they have questions about the applicability of 5110(c), or if they have questions about gathering evidence related to the Division's burden of proof under 5110(c).

b. Burden of Proof Requirements
   1. Existence of More Effective Measures Than Those Taken by the Employer

      Is there evidence that any measure not taken by the employer to comply with subsections 5110(b)(1), (b)(2) or (b)(3) is substantially certain to cause a greater reduction in RMIs than the measure(s) chosen by the employer?

NOTE: For any such measure, compliance personnel shall support their determination by documenting in the inspection file the basis for their conclusion that the measure is substantially certain to cause a greater reduction in RMIs in the employer's workplace.

a. If yes, then proceed to determine whether the identified compliance measure was known to the employer.
b. If no, then the employer shall not be cited for a failure to implement more effective measures.

2. Known to the Employer

Was the identified compliance measure known to the employer?

NOTE: To determine whether the identified compliance measure was "known" to the employer, compliance personnel shall document evidence of the extent to which the employer had actual knowledge of the existence of the identified compliance measure.

a. If yes, then proceed to determine whether the identified compliance measure would impose additional unreasonable costs.
b. If no, then the employer shall not be cited for a failure to implement more effective measures.

3. Additional Unreasonable Costs

Is there evidence that the identified compliance measure would impose additional unreasonable costs?

NOTE: To determine whether the identified compliance measure would impose additional unreasonable costs on the employer, compliance personnel shall document in the inspection file the following information: (1) the estimated cost of the identified compliance measure; (2) the expected results of implementing the identified compliance measure, including the likely reduction of risk of injury; (3) the employer's size (number of employees); and (4) overall impact on the employer's business of implementing the measure.

a. If yes, then the employer shall not be cited for a failure to implement more effective measures.
b. If no, the employer shall be cited for failure to implement the identified compliance measure. See

Section D.

D. ISSUANCE AND REVIEW OF CITATIONS AND INFORMATION MEMORANDA

1. Citation Issuance

a. Maximum Number of Alleged Violations

Section 5110 contains three independent requirements: worksite evaluation ((b)(1)), control measures ((b)(2)), and training ((b)(3)).

NOTE: Since the five subsections of Section 5110(b)(3) all deal with training, they are not independent requirements, and therefore, only one item or citation shall be issued for any failure to comply with (b)(3) or its subsections. For example, if an employer has failed to comply with subsection (b)(3)(D) and (b)(3)(E), and the violation is classified as "general", the violation shall be alleged as one item listing both subsections.

Therefore, if an employer completely fails to comply with Section 5110, the maximum number of violations that shall be alleged in a citation is three.

b. Classification

1. Violations of Section 5110(b)(1), (b)(2) or (b)(3) shall be alleged in all cases as separate items or citations, depending on whether the violations are alleged as general (violations to be alleged as separate items in a single citation) or serious, willful, failure-to-abate, or repeat (violations to be alleged as separate citations).
2. See P&P C-1B, Section D.1., 2. through 5. for information on classification of general and serious violations.

NOTE: To date, ergonomic injuries like RMIs have been addressed by only one California Occupational Safety and Health Appeals Board Decision After Reconsideration, i.e., Abatti Farms Produce, OSHAB 81-0256 (1985). In Abatti Farms, "serious physical harm" includes "an injury or illness, immediate or cumulative... which reasonably could lead to impairment of part of the body by substantially reducing its efficiency on or off the job for more than 24 hours." Therefore, pursuant to Labor Code Section 6432, if there is a "substantial probability" that such an injury "could result" from the 5110 violation, then the violation shall be classified as serious.

In most cases, the injuries upon which the existence of the

violation is based will constitute the best evidence of what harm is substantially probable to arise from the violation. The following rules generally apply to evaluating RMIs for the purposes of classifying 5110 violations: (1) mild tendon strains and similar medical outcomes that are not permanent and have resulted in little or no lost or restricted work time are to be considered non-serious physical harm for purposes of classifying 5110 violations; and (2) other, more severe medical outcomes are to be considered serious physical harm.

In situations in which both types of harm have resulted, compliance personnel shall determine which outcome is most probable to result and classify the violation accordingly. If the employer has an effective medical management program, it is reasonable to conclude that RMIs are likely to be identified when they first appear and thus are not likely to lead to serious physical harm. However, the conclusion shall ultimately be made based on what the evidence, taken as a whole, indicates is the most likely outcome.

2. Information Memorandum Issuance
    a. Evidentiary Situations for Information Memorandum Issuance
        1. Solitary RMI

            There is evidence for a single RMI which has been objectively identified and diagnosed by a licensed physician and found to be predominantly caused by repetitive work. See Section B.2.b.

        2. Multiple RMIs Not Reported Within 365 Days

            There is evidence of two or more RMIs, which have been objectively identified and diagnosed by a licensed physician, found to be predominantly caused by repetitive work, but no two of the RMIs were reported to the employer within 365 days of each other. See Section B.3.a.

        3. No Two Employees Performing Identical Work Activity

            There is evidence of two or more RMIs, which have been objectively identified and diagnosed by a licensed physician, found to be predominantly caused by repetitive work, and any two of the RMIs were reported to the employer within 365 days of each other, but no two employees incurring the RMIs were performing identical work activity. See Section B.4.a.

b. Format
    1. RMI Description
        a. Describe generally the RMI(s) which is the subject of the Information Memorandum and the repetitive job, process or operation that appears to be causal.

           NOTE: Do not reveal the name of the injured employee in the Information Memorandum.

        b. Describe how the employer's situation does not meet the jurisdictional requirements for coverage by Section 5110 using sufficient detail for the employer to determine whether its situation fits into category 1, 2 or 3 in Section D.2.a.
    2. Language for Information Memorandum

       "On [date] the Division conducted an investigation of your workplace to determine compliance with 8 CCR Section 5110.

       It was determined that you are not currently subject to the requirements of Section 5110 because [compliance personnel select which of the following three descriptions applies]:

        1. There is evidence that only one RMI has been objectively identified and diagnosed by a licensed physician and predominantly caused by repetitive work; or
        2. There is evidence that two or more RMIs have been objectively identified and diagnosed by a licensed physician, found to be predominantly caused by repetitive work, but no two of the RMIs were reported to you within 365 days of each other; or
        3. There is evidence that two or more RMIs have been objectively identified and diagnosed by a licensed physician, found to be predominantly caused by repetitive work and two of the RMIs were reported to you within 365 days of each other, but no two employees incurring the RMIs were performing identical work activity.

           If another RMI is reported to you which makes you become subject to Section 5110, Repetitive Motion Injuries, you will be required to establish and implement a program designed to minimize RMIs, that shall include a worksite evaluation, control of exposures which have caused RMIs and training of

employees."

3. District and Regional Review of Citations and Information Memoranda

All proposed citations and information memoranda referencing 8 CCR Section 5110 shall be reviewed by the Regional Manager, and or his or her designee, prior to issuance by the District Manager.

NOTE: To ensure that all citations referencing Section 5110 can be sustained when contested by the employer, District compliance Cal/OSHA Engineers and Industrial Hygienists, District Managers, Regional Senior Industrial Hygienists, and/or Regional Managers are encouraged at any stage of a 5110 investigation to seek management and/or legal review of a proposed citation which will be subject to Section 5110(c).

APPENDIX

Evidentiary Checklist of Questions

5110(a) – Coverage

1. What is the name of the injured employee(s)?

2. What is the date the employer received a report of the injured employee's musculoskeletal injury?

3. How did the employer receive the report, e.g., oral report, return-to-work slip, workers' compensation claim report or other means?

4. What is the exact medical diagnosis made by the licensed physician for each injured employee?

5. What is the name and address of the licensed physician who made each RMI diagnosis?

6. What is the severity of the musculoskeletal injury the injured employee developed, e.g., the number of days away from work (LWD), the number of days of restricted work activity (RWD), or the number of days the employee says that he or she worked "injured?"

7. What type of medical treatment did the injured employee receive, e.g., medications (prescribed or over-the-counter), physical therapy, surgical treatment, or other types of treatment?

8. How did you conclude that the injury is a repetitive motion injury, i.e., arose from repetitive work?

9. How did you conclude that the injury is predominantly caused by repetitive work activity?

10. How did you conclude that the work activity implicated in the two injuries which were reported to the employer within 12 months of each other is "identical?"

5110(b) and (c) -- Proposed Violations

11. What 51109(b) subsections, (b)(1), (b)(2) and/or (b)(3), have been violated?

12. For each proposed 5110(b) subsection violation, has the employer failed to initiate an activity, or has the employer failed to fully meet the requirements under subsections (b)(1), (b)(2) or (b)(3)?

13. For each violation proposed for the employer's failure to initiate activity, answer the following three questions:

a. What is the explanation offered by the employer for its failure to initiate the activity required under the subsection in question?
b. If the employer claims that it has initiated the activity, what specifically does the employer claim has been done, and why have you rejected the employer's objections?
c. What is the name(s) and title(s) of the management representatives who provided the information for questions 13.a. and 13.b.?

14. For each proposed violation for the employer's failure to fully comply with the subsection in question, answer the following four questions:

d. .What has the employer specifically done to comply?
e. What measures known to, but not used by the employer, are substantially certain to reduce the musculoskeletal injuries at issue more than the measures the employer is currently using? What information did you rely on to arrive at this conclusion?
f. What is the employer's explanation as to why it has not implemented the measures on which the proposed violation is based? What is the name(s) and title(s) of the management representatives who provided you with this information?
g. Will implementing the measures you are requiring the employer to take to reduce the musculoskeletal injuries result in unreasonable costs to the employer? What information did you rely on to come to this conclusion, e.g., the estimated cost of the measure; the likelihood of a reduction in employee injuries utilizing this measure; the employer's size (number of employees); and the impact on the employer's business of implementing the measure?

Chapter 15-E

GUIDANCE ON FEASIBILITY OF ENGINEERING CONTROLS FOR THE REINFORCED PLASTICS INDUSTRY

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to allow manufacturers in the reinforced plastics industry to utilize a combination of protective measures to meet the permissible exposure limit (PEL) for styrene.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Code of Regulations, Title 8, Section 5155

PROCEDURES:

A. AIR SAMPLING

1. When conducting air sampling for styrene in hand layup and sprayup operations at a workplace in the reinforced plastics industry, compliance personnel shall note whether the measurement exceeds the PEL for styrene of 50 ppm (250 mg/M^3).
2. If the air sampling level result exceeds the PEL, compliance personnel shall determine if the item involved in the hand layup or sprayup operation is:
    a. More than 250 ft^2 in surface area;
    b. More than 150 ft^3 in volume; or
    c. More than 30 feet in length.

B. CITATION

If one or more of the conditions referenced in Section A.2a. through c. exists, and the employer is utilizing a mix of engineering controls, work practice and personal respiratory protection to achieve compliance with the PEL, compliance personnel shall not cite the employer for a violation of 8 CCR §5155, §5141(a) or (b), unless compliance personnel can document that compliance is feasible solely with engineering and work practice controls.

Chapter 15-F

CRYSTALLINE SILICA INSPECTION GUIDELINES WITH EMPHASIS ON EXPOSURE TO CONCRETE AND MASONRY DUST IN CONSTRUCTION PER 8 CCR SECTION 1530.1

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to assert jurisdiction over every place of employment in the State of California to enforce and administer all laws and lawful standards and orders or special orders requiring the protection of the life, safety and health of every employee in such a place of employment, unless DOSH does not have subject matter or territorial jurisdiction over the employment or place of employment.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code, Sections 6300 et seq and Title 8, California Code of Regulations (CCR) Sections 1513,1530, 1530.1, 1538, 5141, 5143, 5144, 5155, and 5194

Purpose

The purpose of this document is to implement in California procedures for DOSH personnel to focus attention on potentially hazardous exposures to crystalline silica in the course of enforcement activities. Particular emphasis will be given to enforcement of the standard for control of dust exposures from work on concrete and masonry materials in construction (Title 8, section 1530.1).

The procedures below are intended to serve as the California response to and incorporation of the Federal OSHA National Emphasis Program for Crystalline Silica detailed in CPL 03-00-007 http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=3790

As noted in the OSHA CPL (pg A-4) excessive exposure to crystalline silica is recognized to be the cause of pulmonary silicosis. In addition, there is evidence that it may be associated with the following serious diseases: lung cancer, tuberculosis, chronic obstructive pulmonary disease (COPD), immunologic disorders, renal disease, and

stomach and other cancers. Because of the seriousness of these conditions, and the potential for excessive exposures in a wide range of industries, it is important that workplace operations which can cause exposure be recognized and evaluated by the Division in the course of enforcement inspections, and appropriate steps taken to develop evidence to sustain citations for violative conditions observed and obtain abatement of violations and hazardous levels of exposure.

Inspection Procedures for the Title 8 1530.1 Emphasis Program

The particular operations within these industries which would generally be subject to the provisions of section 1530.1 for use of dust control systems, and which are the focus of this emphasis program include:

- Cutting and grinding of concrete and masonry materials, including interior and exterior ceramic wall and floor tile and asphaltic concrete ("asphalt")
- Abrasive blasting of concrete and masonry materials
- Jack-hammering on concrete and masonry materials except as noted below
- Tuck pointing of masonry and caulk removal from stone-like building systems
- Drywall sanding with powered equipment
- Demolition of concrete structures or components involving cutting with powered equipment
- Dust generating operations on roofing tile and similar cementitious roofing materials are covered by all requirement of section 1530.1 only when not conducted on roof surfaces. For rooftop operations, only the training elements of section 1530.1 apply. (See Inspection of roofing operations below for additional important information.)

Note: as specified in section 1530.1, the following operations are exempted and should be covered under the other part of the SEP:

1. Stucco, plastering material, or other similar products.
2. Wall cladding, siding, or other similar products.
3. Downward drilling.
4. Jack-hammering or chipping when that work is incidental to the scope of work or planned operations of a plumbing or landscaping activity.
5. Work with powder-actuated tools.
6. Work incidental to the installation of concrete and masonry materials such as the drilling of holes for plumbing fixtures.
7. Tile backer board when cut with powered shears or a dust reduction blade having a dust containment device.

Also, dust reduction systems are not required by section 1530.1 for the following:

Exception No. 1:	A dust-reduction system is not required if the operation, without considering any protection provided by personal protective equipment, does not result in employee exposure exceeding the Permissible Exposure Limits for applicable particulates listed in Section 5155 including, but not limited to, crystalline silica, as demonstrated reliably by air sampling data applicable to the specific operation being performed.
Exception No. 2:	A dust reduction system is not required for rooftop operations with roofing tile, roofing pavers, or similar materials.
Exception No. 3:	During the first 24 hours of an operation undertaken in response to an emergency, a dust reduction system is not required where it can reasonably be demonstrated or foreseen that use of a dust reduction system will materially impair the timely progress of the operation. For the purposes of this exception, "emergency" means an unexpected occurrence requiring immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes, but is not limited to, a fire, flood, earthquake or other soil or geologic movement, structural collapse, damage to a subsurface installation, terrorist act, or sabotage.

Section 1530.1 and Directly Related Inspection Elements

Title 8 Section 1530.1 is a new regulation requiring, with certain stated exceptions, use of dust control systems employing water or local exhaust ventilation whenever cutting, grinding, coring or drilling is performed on concrete or masonry materials. The requirement is not limited to only those operations which have been shown to exceed an applicable particulate PEL. Rather the requirement applies to all such operations, subject to a number of specific exceptions including where the employer can show by reliable air sampling data that the operation will not result in exceedance of an applicable particulate PEL.

The emphasis program will focus on enforcing this new requirement, and directly related requirements for control of exposures to airborne contaminants through the following:

1. In the course of complaint and programmed inspections, CSHOs shall actively seek out through observation and inquiry the potential for operations covered by the new standard.
2. The CSHO will work to observe and document dust generating operations using photographs, interviews, and other applicable investigative techniques.
3. Where an operation covered by section 1530.1 is being conducted without use of a dust control system, the CSHO shall cite for a violation of the standard.
4. Where an operation covered by section 1530.1 is being conducted with a dust control system but it does not appear to be effectively controlling dust exposures, the CSHO shall, evaluate that the system is being used in accordance with manufacturer recommendations as required by section 1530.1(d)(2), If the system is clearly not being used effectively, for example air hoses for ventilation are blocked or kinked, or clearly inadequate quantities of water are being applied to the operation, then citation should be issued for violation of section 1530.1(c) for ineffective use of a dust control system.
5. Where dust controls are considered ineffective and the employer has air sampling results suggesting an operation is under the PEL, the CSHO may conduct air sampling to document the extent of exposure. While 1530.1 does not require air sampling for enforcement, CSHOs may conduct air sampling if possible in situations where the effectiveness of controls and/or employer sampling results are in dispute.
6. The CSHO shall evaluate the workplace for compliance with all of the requirements of section 1530.1 including required employee and supervisor annual training per subsection (e), and the safety and effectiveness of dust control systems that are used per subsection (d).

Inspection of Roofing Operations

In section 1530.1, there is an exception to the requirement for use of dust control systems during rooftop operations, i.e. cutting, grinding, coring and drilling of concrete or masonry material actually conducted on rooftops (not just on the ground for an adjacent roofing operation). This exception was made not because it was believed there is no risk, for example, from exposure to dust from cutting of roofing tiles and similar material, but rather because of concern with safety issues from falls in use of local exhaust ventilation or water in rooftop operations.

It is important to note that rooftop operations covered by 1530.1 are still covered by the training requirements of the new standard.

CSHO's shall evaluate roofing operations for conduct of work of the type covered by section 1530.1. Where such work is conducted on the rooftop it is to be evaluated under the previously existing requirements for control of dust exposure in sections 5141, 5145, and 5155 and will generally require a showing of PEL exceedance to sustain a citation other than for section 5155(e) for failure to monitor the operation.

In roofing operations, CSHOs shall be mindful of use of dry sweeping and compressed

air to clean cuttings dust off of roofs and to include these elements of the work in air sampling.

Inspection of Workplaces and Operations Not Covered by Section 1530.1

When an inspection is conducted in a situation not covered by section 1530.1 but believed to have potential for significant dust exposure, Division staff shall be mindful of, and where appropriate inquire of the employer as to, work activities which could give rise to harmful exposures to crystalline silica. Control of silica exposure would be covered like other hazardous substances in sections 5141, 5144, 5145, and 5155 and will require air sampling and a showing of PEL exceedance.

Examples of specific operations that may not be covered by section 1530.1 but with potential for exposure to crystalline silica which, because of their sometime seasonal or intermittent nature, may not be immediately apparent in the course of inspection walk-throughs include:

- Construction operations other than cutting and grinding of concrete and masonry materials covered by section 1530.1
- Rock drilling and crushing
- Other than in construction, sand blasting for surface cleaning, paint removal etc.
- Abrasive blasting of silica-containing materials
- Cleaning of drums on ready-mix concrete trucks
- Agriculture (e.g. work near operating field equipment, or operating such equipment, esp. without a filtered air cab)
- Food processing (esp. root crop processing)

Air Sampling Procedures

Air sampling for crystalline silica will be consistent with Chapter 1 of the DOSH Technical Manual. Collection of a bulk sample of settled dust for silica analysis will be consistent with Chapter 3 of the DOSH Technical Manual.

Title 8 section 5155 includes PELs for both total and respirable crystalline silica. It is important to collect a large enough air sample especially for respirable dust to enable determination of a result that is relevant to the PEL. When doing short term sampling or possibly collecting minimal concentrations of silica, contact the analytical lab for advice on using total, respirable or both sampling methods for silica dust. When possible collect two samples, one for total silica and one for respirable silica, to compare with both PELs.

Generally, analysis should always be requested for both quartz and cristobalite, and for additional specific crystalline silica species where they are known or suspected to be present. Check with our contract analytical lab for current recommendations.
When using cyclones for respirable samples, check with Calico staff for current recommendations on types of cyclones, calibration and leak testing methods.

Referral Procedures for Air Sampling

CSHOs whose primary expertise is not industrial hygiene shall discuss with their district manager workplaces where they have identified potential for hazardous exposure to crystalline silica, based for example on first-hand observation of dusty operations involving mineral materials, or based upon information obtained from the employer, employees, or other credible sources of information. In such situations the district manager shall make appropriate assignments of staff with industrial hygiene expertise for further assessment.

Other Related Inspection Elements for All Industries Covered and Not Covered by Section 1530.1

Consistent with the OSHA National Emphasis Program document, in the course of inspections related to both section 1530.1 and other silica inspections, CSHO's shall:

- Evaluate and cite appropriately for non-compliance with hazard communication requirements for concrete and masonry materials subject to disturbance.
- Evaluate and cite appropriately for housekeeping/hygiene violations such as lunch areas free of contaminants, and not using compressed air or other compressed gasses at pressures in excess of 10 pounds per square inch to clean clothes while being worn
- Evaluate and cite appropriately for failure of employees to understand their rights to access to information under section 3204, and the confidentiality of employer handling of medical records if any.

Title 8 Sections to keep in mind, including but not limited to:

- 5141, 5143, 5144, 5155, 5194 for other hazardous substances used besides the section 1530.1 dust exposure.
- 5145. Media for Allaying Dusts, Fumes, Mists, Vapors, and Gases
- 5152. Ventilation and Personal Protective Equipment Requirements for Grinding, Polishing, and Buffing Operations
- 1513 Housekeeping construction
- 1522. Body Protection.
- 1530 Construction – General Requirements of Mechanical Ventilation Systems (including handling of collected material)
- 1538 Rock Drilling Operations
- 3204 Access to Employee Exposure and Medical Records.
- 3301 Use of Compressed Air or Gases.
- 3367 Change Rooms
- 3368 Consumption of Food and Beverages.

Consideration should also be given to other possible violations related to operations

inspected where applicable e.g. Noise, flying object protection, electrical safety (especially where water is used for dust reduction), machine guarding etc.

CSHO Protection

CSHO's shall consider and provide for their personal safety and silica exposure minimization during air sampling and other inspection activities. CSHO's should avoid entry into areas of dusty operations when possible, and when not possible to avoid they are expected to provide for their safety and set a proper example by wearing appropriate respirators, protective clothing, and other PPE (e.g. hearing protection). CSHOs whose primary expertise is not industrial hygiene shall consult with their district manager on appropriate protective equipment and its use.

IMIS Coding - Forms 1 and 1B

Form 1 - Inspection Report - Optional Information

Inspections conducted where we sample for crystalline silica, code S 06 CRYS SILICA

Form 1B - Violation Documentation - Substance Codes

If a citation is a result of sampling please enter the applicable substance code. Some examples of crys silica include:

(Note: There is a search feature (F7) on the substance code line 25 of the 1B data entry screen)

- 9010 SILICA CRYSTALLINE QUARTZ (RESPIRABLE FRACTION)
- 9015 SILICA, CRYSTALLINE CRISTOBALITE RES. DUST
- 9017 SILICA, CRYSTALLINE TRIDYMITE, RESP. DUST
- S103 SILICA (QUARTZ, NON-RESPIRABLE)/(QUARTZ, TOTAL)
- S114 SILICA, CRYSTALLINE TRIPOLI (AS QUARTZ), RESP. DUST
- S122 SILICA, AMORPHOUS, DIATOMACEOUS EARTH (>1% CRST.SIL)

DOSH Resources

Cyclone maintenance and leak testing: Contact CALICO staff for parts, calibration, repair and assistance.

Air sampling and analysis: Contact analytical lab or senior health staff in your region or in the Research & Standards Health Unit.

Engineering controls for cutting and grinding of concrete or masonry material: Contact senior health staff in your region or in the Research & Standards Health Unit. Also see:

- The NIOSH publications page for silica including control measures and

- The DOSH Silica Hazard Alert for Construction (document under development).

Engineering controls for Granite countertop fabrication: Contact senior health staff in your region or in the Research & Standards Health Unit. Also see DOSH Hazard Alert: http://www.dir.ca.gov/dosh/dosh_publications/GraniteHazardAlert.pdf

Chapter 15-G

HEXAVALENT CHROMIUM INSPECTION GUIDELINES

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to ensure that the Division effectively and uniformly enforces regulations covering all occupational exposures to airborne hexavalent chromium (when the substance is a carcinogen and a respiratory irritant and sensitizer) and to skin and eye exposures (when the substance is a skin sensitizer and eye irritant). Applicable provisions of Title 8 include hexavalent chromium regulations for general industry, construction and shipbuilding and also include regulations providing for proper use of personal protective equipment, training and others.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code, Sections 142.3, 144.6, 6400, 6402 through 6404 and 9000 through 9009 and Title 8, California Code of Regulations (CCR) Sections 1527, 3203, 3204, 3360 through 3385, 5141, 5155, 5194, 5206, 1532.2 and 8559.

Overview:

In 2006, three regulations were adopted (first by Federal OSHA and then by Cal/OSHA) for exposures to Hexavalent Chromium (Chrome VI) in the workplace: 8CCR 5206, 1532.2 and 8559 respectively in the General Industry, Construction and Shipbuilding Safety Orders. The primary intent of these standards is to prevent occupational lung cancer but Chrome VI can also cause asthma, nasal ulcerations and perforations, skin sensitization (both allergic contact and irritant contact dermatitis), skin ulcerations and eye irritations. Typical industries with Chrome VI exposures: electroplating, pigments, dyes, welding, spray painting and paint removal, primer paints in aerospace and auto refinishing. Welders make up half the employees exposed. Stainless steels contain 12 to 30% chromium; Chrome VI associated with stainless steel is created by the welding process.

Federal OSHA has adopted very detailed, specific Chrome VI inspection procedures, Inspection Procedures for the Chromium (VI) Standards [CPL 02-02-074]; **as a state plan state Cal/OSHA must have inspection procedures that are at least as effective.** Cal/OSHA Chrome VI inspections should be as comprehensive in scope as required by

the Federal instructions but should be implemented by following the Cal/OSHA Policy and Procedure Manual.

This document primarily focuses on differences between Federal OSHA and Cal/OSHA Chrome VI regulations and procedures. This guideline will only lightly touch upon the main elements of Chrome VI inspection procedures that are common to Federal OSHA and Cal/OSHA; readers may refer to the Federal OSHA document for more detail: http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-074.pdf

Differences between Federal OSHA and Cal/OSHA Guidelines

1. Federal OSHA entered into an agreement with the electroplating industry for states with Federal OSHA jurisdiction that permits deviation from the General Industry Chrome standard's respirator requirements in exchange for earlier engineering control implementation; this agreement does NOT apply in California. So Cal/OSHA inspectors must not follow the Federal instructions regarding the Federal agreement with the Surface Finishing Industry Council (SFIC) [although the agreement is a good reference on good engineering controls and work practices in the electroplating industry, see http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-074.pdf].

2. Cal/OSHA has a more stringent PEL for Chrome VI than does Federal OSHA when the hexavalent chromium is in the substance strontium chromate: 0.05 µ/m3.

3. Cal/OSHA has a ceiling limit for Chrome VI while Federal OSHA does not: Cal/OSHA Ceiling Limit: 0.1mg/m3 Sampling Time to sample for ceiling: 15 to 30 minutes Flow rate: For expected low concentrations it is advisable to increase the flow rate from 2L/min up to 4 L/min; do not exceed 4 L/min. OSHA Salt Lake City lab will validate this flow increase although it is not in the published method. Submit a blank from each batch of cassettes. Take a bulk sample for each process sampled.

Special Agreements Affecting Chrome VI Inspections in California

1. The National Association of Manufacturers settled its suit on the Chrome VI standards with the issuance of a Federal OSHA letter of interpretation regarding feasibility of engineering controls in welding environments. This letter can be found at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=25716 and its implications for inspections are discussed in CPL 02-02-074. This letter also interprets the meaning of the Chrome VI standards' objective/historical monitoring data provisions. Both of these interpretations are identical to the Cal/OSHA understandings on these

issues.

2. **Portland cement**, although it can contain up to 40 µg of Chrome VI per gram, was excluded from the scope of the Chrome VI standard because there is little inhalation risk when the cement is wet. Sued by building trades and other unions over this exclusion, Federal OSHA agreed to the following settlement:

    A. **To determine at every inspection involving construction work** whether work involving Portland cement exposure is being performed.

    B. If so, then the inspector must determine if the relevant employers are in compliance with the appropriate standards covering sanitation, personal protective equipment, Hazard Communication, training and record keeping.

    This means that employers' control measures for the dermatological hazards (burns from alkalinity of cement, irritant contact dermatitis from wet cement skin exposure and allergic contact dermatitis from the Chrome VI content) of wet Portland cement will be evaluated in such inspections. Additionally, for Federal OSHA construction inspections, if dry Portland cement use poses a hazard at a work site, airborne exposures will be assessed for total and respirable dust and silica PELs.

    Cal/OSHA's inspection procedures regarding Portland cement must be at least as effective as Federal inspection procedures, so possible Portland cement exposure should be evaluated whenever Portland cement is found during Cal/OSHA construction inspections. More detail about the Federal OSHA inspection protocol can be found in Appendix C-1 of the compliance directive at http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-074.pdf although Cal/OSHA inspectors are to reference the California regulations such as, but not limited to: 8CCR 1527, 3362, 3380, 5155 (for Chrome VI ceiling exposures where there is a risk from dry cement, in addition to total and respirable dust and silica exposures), 5174 (allaying media) and 5194.

    Portland cement is an ingredient in concrete, mortar, plaster, grout, stucco, and terrazzo. Portland cement is estimated to account for 25 percent or more of all work-related skin problems. Additional information about the dermatological hazards of Portland cement and workplace methods of control can be found at: http://www.osha.gov/dsg/guidance/cement-guidance.html ;
    and, http://www.cdc.gov/eLCOSH/docs/d0400/d000457/d000457.ht ml ;
    and, http://www.cdc.gov/eLCOSH/docs/d0400/d000458/d000458.ht ml.
    For all Cal/OSHA inspections where compliance inspectors find employee exposures to Portland cement, the Inspection Report (OSHA-1) Form shall be marked with the following IMIS coding for future tracking purposes:
    For inspections conducted where there is employee exposure to Portand cement, please use the optional information code of **N 11 PORTLAND**.

Inspections conducted where we sample for hexavalent chromium, please use the optional information code of **S 06 HEX CHROM**E.

If a citation is the result of sampling, please enter the applicable substance code in the Violation Document (OSHA 1B) Form.

(Note: there is a search feature (F7) on the substance code line 25 of the 1B data entry screen)

0577 PORTLAND CEMENT (LESS THAN 1% QUARTZ)(TOTAL DUST) P104 PORTLAND CEMENT (RESPIRABLE FRACTION)
0685 CHROMIUM, METAL & INSOLUBLE SALTS (AS CR)
0689 CHROMIUM (VI) (HEXAVALENT CHROMIUM) TWA
0690 CHROMIUM, SOLUBLE CHROMIC, CHROMOUS SALTS (AS CR)
0691 CHROMIUM (VI) (HEXAVALENT CHROMIUM) ACTION LEVEL
0694 CHROMIUM (VI) (HEXAVALENT CHROMIUM)AEROSPACE PAINT
C111 CHROMIUM, UNIDENTIFIED CHROMIUM SUBSTANCE (AS CR)
C113 CHROMIUM III COMPOUNDS (AS CR) C121
CHROMIUM II COMPOUNDS (AS CR)

Chrome VI Sampling and Analysis in California

Chrome VI in California will almost always be analyzed utilizing OSHA Method ID215; alternative analytical methods should not be requested unless approved by Regional Senior Industrial Hygienists. Because Chrome VI is a very reactive species, welding and electroplating samples will suffer sample loss unless either the sample is field stabilized (generally this is not the sampling media to be utilized by Cal/OSHA) or the sample collected on a PVC filter is analyzed within the OSHA ID 215 prescribed time limits. For electroplating this is six days, for welding the period is eight days. Welding samples suffer loss proportional to the time since the sample was taken. (Ten percent of a welding sample is lost in eight days, 5% in four days.) Therefore, Chrome VI samples will be shipped via overnight mail.

Cal/OSHA Consultation and Enforcement Units will send samples to the appropriate laboratory under contract and send the appropriate e-mail notifications. Cal/OSHA staff should refer to the complete guidelines found on the DOSH intranet site, which is accessible to all in-house staff, to obtain specific procedural information.

Note: To avoid unnecessary delays in analysis, Cal/OSHA compliance inspectors should either request expedited analysis in block 9 of the Laboratory Sample Analysis Request Form (Cal/OSHA Form IH) unless verified arrangements exist with the contracted laboratory for analysis to be performed as soon as possible after the lab receives the samples.

See also sampling for Chrome VI Ceiling level in the section above on differences

between California and Federal OSHA. For more information about the Federal OSHA sampling method, please see:
http://www.osha.gov/dts/sltc/methods/inorganic/id215_v2/id215_v2.ht ml

Additional Chrome VI Issues

The Chrome VI regulations allow the use of historic monitoring data as substitutes for monitoring since the new regulations took effect. The Federal Chrome VI guidance document makes it clear that this historic data must be well documented to represent conditions nearly the same as today's exposures. The specificity on this data extends even to the detail and the accuracy of the sampling and analysis that was done in the past; this is necessary given what is now known about the possibility for sample loss under some of the older sampling and analytical procedures. See the Federal OSHA directive for further detail on the subject of historical data:
http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-074.pdf

Finally, Cal/OSHA inspectors should pay careful attention to the implementation dates for engineering controls that are embedded in the Chrome VI regulations. In some cases in which exposures over the PEL have been documented, citations would not be issued if proper respiratory protection has been utilized—that is, until the 2010 engineering control deadline. For more information on this topic, see
http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-074.pdf.

Chapter 15-H

AEROSOL TRANSMISSIBLE DISEASES INCLUDING TUBERCULOSIS

Chapter 15-H: *Aerosol Transmissible Diseases Including Tuberculosis* is under development.

Chapter 15-I

FIELD SANITATION AND AGRICULTURAL SAFETY AND HEALTH

Policy Statement: It is the policy of the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA or the Division, to enforce Title 8, California Code of Regulations, Section 3457, pertaining to field sanitation, in accordance with the provisions contained in the Field Sanitation Standard and with applicable sections of the Labor Code. Applicable provisions of Title 8, pertaining to agricultural safety and health, shall also be enforced in agricultural workplaces subject to the Field Sanitation Standard.

Authority: DOSH will administer this policy in compliance with all applicable laws, rules, and guidance:

- California Labor Code, Section 6712, and Title 8, California Code of Regulations, Section 3457.

PROCEDURES:

A. INSPECTIONS

1. Unprogrammed Inspections

a. Compliance personnel shall determine whether agricultural employers are in compliance with Section 3457 as part of every unprogrammed inspection in the following Standard Industrial Classification Codes (SIC Codes):

0111 - 0119	Cash Grains
0131 - 0139	Field Crops, except Cash Grains
0161	Vegetables and Melons
0171 - 0179	Fruit and Tree Nuts
0181 - 0182	Horticultural Specialties
0191	General Farms, Primarily Crop
0711	Soil Preparation Services
0721 - 0724	Crop Services
0761 - 0762	Farm Labor and Management Services

b. In addition, compliance personnel shall utilize Special Emphasis Programmed Inspections in Field Sanitation to ensure compliance with Section 3457. Programmed inspections will be performed as a part of the Agricultural Safety and Health Inspection Project (ASHIP) and shall include an evaluation of all aspects of farm sanitation. See Attachment A for Farm Sanitation Checklist.

2. Programmed Inspections

a. All programmed inspections in field sanitation will include an evaluation of safety and health hazards associated with agricultural operations.

b. Checklists have been provided in this Chapter to assist compliance personnel in performing a programmed inspection. See Attachment B for Agricultural Safety Checklist and Attachment C for Agricultural Health Checklist.

3. IMIS Coding

a. The Agricultural Safety and Health Inspection Project (ASHIP) has been designated as an Annual Performance Goal in the Division's Strategic Plan.

b. The code SP-ASHIP shall be written in the IMIS Item Optional Information on the Cal/OSHA 1, 7 and 36, but data entered as a Strategic Activity. ASHIP coding is applicable for all enforcement activities, including letter responses, no inspections, and on-site inspections (both programmed and unprogrammed) at establishments within the SIC Major Groups 01, 02 and 07 (SIC Codes 0111 through 0783).

c. In addition to the above coding requirements, if the employer is found to be in compliance with Section 3457, compliance personnel shall so indicate on the Cal/OSHA Form 1A, Item 16 -- "Additional Comments".

4. Coordination

a. The Division shall work cooperatively with all federal, state and local agencies which have jurisdiction over the agricultural industry. Each District Manager will be responsible for contacting his or her counterpart within the Division of Labor Standards Enforcement of the Department of Industrial Relations to coordinate interdivisional field sanitation referrals.

b. In addition, each District Manager will be responsible for making appropriate referrals to the following California state agencies when necessary:

1. Agricultural Commissioner;

2. Department of Health Services;

3. Department of Fair Employment and Housing;

4. Department of Housing and Community Development;

   NOTE: See Chapter 4 for Labor Camp Housing Referral Form (Cal/ OSHA 90L).

5. Department of Food and Agriculture; and

6. The Environmental Protection Agency.

   NOTE: See Attachment D for the Farm Labor Referral Form (Cal/OSHA 46A) and Attachment E for the Pesticide Use Referral Form (Cal/OSHA 46B), which can be used for all referrals not related to pesticide exposure.

B. CITATIONS

1. Potable Drinking Water

   An employer's failure to provide potable drinking water to agricultural employees shall be cited under Section 3457(c)(1)(A). If an employer provides potable drinking water, but fails to comply with one or more of the requirements specified in (c)(1)(A) through (D), the appropriate subsection(s) shall be cited.

2. Toilet and Handwashing Facilities

   An employer's failure to provide agricultural employees with a toilet and/or a handwashing facility shall be cited under Section 3457(c)(2)(A). If an employer provides a toilet or a handwashing facility, but fails to comply with one or more of the requirements specified in (c)(2)(B) through (E), the appropriate subsection(s) shall be cited.

3. Dual Employer Situations

   The entity who directs and controls the employees exposed to the hazard is the appropriate employer to cite. At worksites where both a landowner/operator and a farm labor contractor are present, compliance personnel shall determine which employer directs and controls the exposed employee(s). If both of them do, then both are to be cited by following Chapter 14 on Dual Employer Inspections. See Chapter 14.

4. Multiple Worksites

   Individual worksites shall be considered a single location for citation purposes if (1) the employer(s) is/are the same in each worksite, and (2) the individual worksites are geographically contiguous to each other.

5. Required Reports by Cited Employers -- Section 3457(d)

a. An employer cited for any Section 3457 violation, regardless of the violation classification or the amount of the proposed, or assessed, civil penalty, and whose violation has become a Final Order of the Appeals Board, is required to provide the Division annually (as measured in twelve month periods of time commencing on the date the Final Order is filed by the Appeals Board), and for a period of five (5) twelve month (or "annual") periods, a written statement (in whatever format the employer desires), under the penalty of perjury, anytime during the twelve month period, stating the:

(1) The estimated peak number of employees;

(2) The toilet, washing and drinking facilities to be provided by the employer; and

(3) Any rental and maintenance agreements related to the requirements of Section 3457.

b. When issuing any citation based on Section 3457, compliance personnel shall remind the cited employer of the requirements of subsection (d) if the violation does become a Final Order of the Appeals Board. Compliance personnel may attach to the citation the Field Sanitation Compliance Form (Cal/OSHA 46C), as a example of the written statement required by subsection (d) of Section 3457. See Attachment F, Cal/OSHA 46.

c. Any citations for violations of subsection (d) shall only be issued after an inspection of the cited employer is conducted at his or her fixed business location of record.

d. Employers who fail to comply with the annual requirement of Section 3457(d) to complete and return the Field Sanitation Compliance Form during each of the five (5) twelve month periods of time following the date the original violation became a Final Order shall be cited for violating Section 3457(d) and the violation classified as Regulatory.

6. Retention of Field Sanitation Files (See Labor Code Section 6429(c))

The District shall maintain all hard copy records of every inspection, investigation and citation for at least seven (7) years.

7. Labor Camp Permits

An employer, who is required to have a labor camp permit according to the provisions of the California Employee Housing Act, but who does not have posted, or available, a valid and current permit will be cited for a regulatory

violation of Section 3350. See Chapter 1 and Chapter 4.

8. Classification of Violations

a. Regulatory, General and Serious

Failure to comply with the requirements of subsection (d) shall be classified as Regulatory, and failure to comply with any of the requirements of subsections (a), (b) or (c) shall be classified as General or Serious, according to the requirements found in P&P C-1B, Section D. pertaining to General and Serious violations.

(1) Medical Unit Assistance in Evaluating the Probability of Death or Serious Physical Harm

When considering a citation alleging a Serious violation of Section 3457(c) for an employer's failure to provide potable drinking water, a toilet, or a handwashing facility (or the employer's provision of potable water, toilet or handwashing facility that is completely unusable by [e.g., in a grossly unsanitary condition], or inaccessible to employees [e.g., locked]), compliance personnel should confer with the Medical Unit about the existence of a substantial probability that death or serious physical harm (e.g., infections of the gastrointestinal or urinary tracts, dehydration, heat-related illnesses, and other medical conditions and disorders) could result from the employer's failure to provide potable drinking water, a toilet or a handwashing facility given the specific evidentiary conditions existing at the time of the violations, especially if it is expected that the Medical Unit will be called upon at a later time to provide expert medical testimony to support the classification of the Serious violation.

(2) Evidentiary Elements to Prove a Serious Violation

Prior to issuing a Citation alleging a Serious violation of Section 3457, compliance personnel shall evaluate the evidentiary issues related to the Serious classification of a violation: (a) substantial probability of death and serious physical harm; and (2) employer knowledge.

(a) Substantial Probability of Death or Serious Physical Harm

i. Duration of Non-Provision

Compliance personnel shall consider the time interval that potable drinking water, a toilet and/or a handwashing facility (and the required supplies, e.g., toilet paper, cups, soap and others) were not provided to employees. The longer the duration of non-provision of potable drinking water, a toilet or a handwashing facility -- and their required supplies -- the more probable it is that serious physical harm can occur.

ii. Environmental Conditions

In the case of an employer's failure to provide potable drinking water, compliance personnel shall consider the ambient air temperature to which employees were exposed during the time that water was not provided. The greater the ambient air temperature, and longer the employee's exposure to it, the greater is the probability that serious physical harm can occur from dehydration and heat illnesses.

iii. Workload Demands

In the case of an employer's failure to provide potable drinking water, compliance personnel shall describe, as quantitatively as possible, the workload demands that exposed workers are required to meet during the time that the water was not provided, e.g., moving heavy irrigation equipment by hand and other similar types of heavy demand work. The greater the workload demands, and the longer work at a high demand level is performed, the greater is the probability that serious physical harm can occur from dehydration and heat illness.

iv. Adverse Health Effects

In the case of an employer's failure to provide potable drinking water, a toilet and/or a handwashing facility (and the required supplies, e.g., toilet paper, cups, soap and others), compliance personnel, with the assistance of the Medical Unit, when necessary, shall determine if any exposed workers have suffered any adverse health effects as a result of exposure to the violative conditions, e.g., symptoms associated with dehydration, heat illness, skin or systemic symptoms (from exposure to chemicals in the workplace), or gastrointestinal or urinary tract infections.

(b) Employer Knowledge or Reasonable Diligence

i. Temporary Lapse -- Procedures for Resupplying

As stated in P&P C-1B, Section D., Labor Code Section 6432(b) states that a Serious violation shall be deemed not to exist if the employer can demonstrate that it could not, with the exercise of reasonable diligence, know of the presence of the violation. Compliance personnel shall determine, based on evidence of employer knowledge gathered during the inspection, whether the employer can meet this burden. If the employer can, then the violation cannot be classified as Serious. See P&P C-1B, Section D.3.c.(4)(c)ii. on Constructive Knowledge.

The evidentiary issue of reasonable diligence is particularly important when the employer has provided drinking water, a toilet or a handwashing facility, together with their required supplies, but in the course of time, the required water and supplies have not been replenished or the facility has become unusable.

Therefore, when compliance personnel observe that the supplies required by

Section 3457(a), (b) and (c) have been exhausted, they shall collect evidence of the employer's procedures or program for maintaining constant supplies and being promptly informed in the event of replenishment failures. Collecting such evidence will facilitate evaluating the potential for serious physical harm, as well as making a determination as to whether the employer exercised reasonable diligence in discovering and preventing violations of Section 3457.

(3) General vs. Serious

If the evidence shows that there is a substantial probability that death or serious physical harm could result from the employer's failure to provide potable drinking water, a toilet or a handwashing facility, as outlined above, compliance personnel shall classify the violation as Serious and compute the proposed penalty in accordance with the appendix of Chapter 18. If insufficient evidence exists to prove a substantial probability that death or serious physical harm will occur, then compliance personnel shall classify the violation as General and propose, at the least, the minimum statutory $750 civil penalty for those specific violations set forth in the Table.

b. Willful

(1) Past Violations as Evidence of Willfulness

Labor Code Section 6712(c) requires that "past violations of field sanitation requirements established pursuant to Chapter 6.5 (commencing with Section 5474.20) of Part 3 of the Division 5 of the Health and Safety Code, Chapter 1 (commencing with Section 3700) of Part 1 of Division 5 of the Health and Safety Code, and Section 2441 of the Labor Code occurring within the previous five years, shall constitute evidence of willfulness pursuant to Section 6429."

(2) Actual Knowledge

Evidence of actual knowledge shall be considered in determining whether a Repeat violation, or a violation which has not been abated, should be classified as Willful.

NOTE: The term "actual knowledge" refers to whether the employer was conscious of violating a health or safety requirement or, even though the employer was not conscious of such a violation, whether the employer was aware that an unsafe or unhealthy condition existed and made no reasonable effort to eliminate the condition.

(3) History of Past Violations

(a) Violations which have become a Final Order of the Appeals Board within the previous five (5) year period are subject to this special statutory rule for field

sanitation violations.

(b) A history of past field sanitation violations should be determined by accessing information on previous field sanitation violations issued by the Division.

(4) Citation

Information pertaining to an employer's past violations shall be accessed by compliance personnel before issuance of any citation referencing any Section 3457 violation. See Chapter 18.

c. Repeat or Failure-to-Abate Violation

When a violation does not meet the requirements to be classified as Willful, refer to 8 CCR Section 334 to determine whether a violation should be classified as Repeat or Failure-to-Abate.

NOTE: Whenever a violation of Section 3457 is issued, compliance personnel shall first access the IMIS database to determine if the employer has a history of previous Section 3457 violations.

9. Multiple Violations

a. Situations in which employers fail to provide potable drinking water, a toilet or handwashing facility are to be distinguished from situations in which these items are provided, but the water, toilet or handwashing facility fail to meet each and every requirement of Section 3457(c).

b. For example, if an employer provides no toilets, a violation of Section 3457(c)(2)(A) will be alleged. An employer who does provide toilets, but one or more of the toilets do not meet the detailed requirements of Section 3457(c)(2)(A) through (E), shall be cited separately for each requirement violated.

c. However, if the violations are general or regulatory, penalties not subject to the minimum $750 civil penalty shall be reduced pursuant to Section 336(k) so that employers are not assessed greater penalties for providing inadequate facilities than for providing no facilities at all. Penalty reductions are not permissible when the employer lacks an operative Injury and Illness Prevention (IIP) Program according to 8 CCR Section 3203.

10. Special Statutory Abatement Period for Section 3457

The abatement period for all violations of Section 3457 shall be limited to one working day, as required by Labor Code Section 6712(d)(2). Compliance personnel may modify the statutory abatement period and allow additional

abatement time only when an employer is able to demonstrate a good faith effort to comply with the abatement requirements. The filing of an appeal with the Appeals Board, pursuant to Labor Code Sections 6319 and 6600, does not stay the abatement period. See Labor Code Section 6712(d)(2).

C. PENALTIES

Civil penalties for violations of Section 3457 shall be assessed in accordance with Section 336. For failure to meet the requirements of Section 3457 listed in the Table below, a minimum penalty of $750, regardless of the classification of the violation, will be assessed against the employer, pursuant to Labor Code Section 6712(d)(1).

NOTE: The violations listed in the Table are subject to a minimum civil penalty of $750. Higher penalty amounts for these violations are possible. Adherence to penalty calculation procedures outlined in the appendix of Chapter 18 is required.

TABLE

3457 VIOLATIONS SUBJECT TO THE MINIMUM $750 STATUTORY CIVIL PENALTY

No Potable Drinking Water	(c)(1)(A)
Not Suitably Cool	(c)(1)(B)
No Single-Use Drinking Cup or Fountain	(c)(1)(C)
No Toilet or Inadequate Toilet	(c)(2)(A)
Not Sufficient Number of Toilet Facilities	(c)(2)(A)
Unusable Toilet Facility	(c)(3)(B)*
No Toilet Paper	(c)(3)(C)
No Handwashing Facility	(c)(2)(B)
No Potable Handwashing Water	(c)(3)(G)(1)
Inadequate Supply of Potable Handwashing Water	(c)(3)(G)(2)
No Soap or Hand Towels	(c)(3)(G)(3)

*The minimum penalty would not apply to the failure to maintain written service and maintenance records.