

CHAPTER 33. TOXIC AND HAZARDOUS SUBSTANCES EXPOSURE CONTROL PROGRAM

3300. GENERAL. This chapter covers the establishment of a Federal Aviation Administration (FAA) program to control employee occupational exposures to toxic and hazardous substances that may occur through inhalation, by absorption through the skin, by ingestion, or through surface contact with the skin. Toxic and hazardous substances applicable to this chapter may be found in a variety of forms including liquid, solid, gaseous, etc. These exposures may arise from work tasks and processes that involve the handling or use of toxic and hazardous substances.

3301. GOALS AND OBJECTIVES. The goal of the FAA Toxic and Hazardous Substances Exposure Control Program is to provide programs and procedures that will ensure the protection of FAA employees from excessive exposure to these substances.

3302. SCOPE. This chapter applies to all personnel in FAA-owned or leased buildings and/or facilities and all FAA personnel in GSA-controlled buildings and/or facilities. This includes, but is not limited to, employees involved in purchasing, receiving, handling, and using toxic and hazardous substances in the workplace. In addition, FAA contractors and sub-contractors who use or transport toxic or hazardous substances must have their own hazard communication program and comply with paragraph 1905d, Requirements for Contractors or Other Outside Personnel, of Chapter 19, Hazard Communication Program.

3303. STANDARDS AND GUIDELINES. Federal, state, and local governments have promulgated regulations concerning exposure to toxic and hazardous substances. OSHA standards and other guidelines that apply to FAA workplaces include, but are not limited to, the following:

- a. 29 CFR 1910, Subpart Z, Toxic and Hazardous Substances
- b. 29 CFR 1926, Subpart Z, Toxic and Hazardous Substances
- c. The American Conference of Governmental Industrial Hygienists (ACGIH) 2001 *TLVs and BEIs - Threshold Limit Values for Chemical Substances and Physical Agents*. A current edition may be purchased from ACGIH, Kemper Woods Center, 1330 Kemper Meadow Drive, Cincinnati, OH 45240-1634. See also <http://www.acgih.org> for ordering information.

3304. PROGRAM REQUIREMENTS.

a. General. The following process is to be utilized for establishing a program to evaluate employee exposure to toxic and hazardous substances in FAA workplaces:

(1) Evaluate the workplace to identify the presence or potential for toxic and hazardous substances. If the presence of a toxic or hazardous substance(s) is identified, appropriate testing should be conducted by technically qualified safety personnel (see 3900.19B, Chapter 1, General, Definitions, paragraph 11h) for exposure determination.

(2) If the exposure determination reveals that acceptable levels are exceeded, a hazard control program should be established to remove or reduce the hazard, or substitute the substance with a less hazardous material.

(3) Chapter 15, Asbestos Control Program, addresses asbestos control programs and is to be followed if potential asbestos exposures exist.

b. Exposure Limits. FAA shall comply with all applicable standards and this chapter to reduce or minimize toxic or hazardous substance exposures.

(1) No FAA employee working on FAA premises shall be exposed to any toxic or hazardous substance in excess of the permissible exposure limits (PELs) specified in 29 CFR 1910, Subpart Z, or in excess of the threshold limit values (TLVs) as recommended in the current edition of the American Conference of Governmental Industrial Hygienists (ACGIH) *Threshold Limit Values (TLVs) and Biological Exposure Indices - Values for Chemical Substances and Physical Agents*, unless controls, as described in paragraph 3304e, are in place.

(2) In case of conflicts between the OSHA PELs and the TLVs, the more stringent shall prevail.

c. Hazard Identification. Technically qualified safety personnel shall evaluate FAA operations, materials, and equipment for potential to expose workers to toxic and hazardous substances above acceptable limits. (See Chapter 23, Job hazard Analysis, for guidance.) Where such exposures have been identified, a hazard control program must be developed in accordance with Chapter 19, Hazard Communication, and OSHA 29 CFR 1200, Hazard Communication Standard.

d. Testing and Monitoring.

(1) Technically qualified safety personnel shall determine the concentrations of, and related hazards of (i.e., skin contact, physical hazards, etc.), toxic and hazardous substances in accordance with acceptable industry practice to ensure the full evaluation of all hazards. Only laboratories accredited by the American Industrial Hygiene Association (AIHA) or other similar accrediting body shall be used for sample analysis.

(2) When the potential for airborne toxic or hazardous substances exists, employee exposures shall be determined by taking a personal breathing zone air sample. In addition, at the discretion of technically qualified safety personnel, area air samples may be taken.

(3) Employees for whom sampling is conducted shall be notified in writing of the results of any monitoring within 15 working days of receipt of the laboratory report.

e. Exposure Control.

(1) To achieve compliance with exposure limits specified in paragraph 3304b, engineering controls must be evaluated and implemented whenever feasible. Please see the "Hierarchy of Control Measures" in paragraph 2305e(2) of Chapter 23, Job Hazard Analysis.

(2) When engineering controls are not feasible, nor sufficient to reduce exposure to within acceptable limits, administrative controls (such as, rotation of workers, employee training, etc.) shall be evaluated and implemented. Administrative controls shall also be implemented during initiation of engineering controls.

(3) When engineering or administrative controls are not feasible, or are not sufficient, personal protective equipment (PPE) (such as respirators or gloves) shall be instituted, provided the use of PPE reduces the exposure to within acceptable limits. For further information, please see Chapter 25, FAA Personal Protective Equipment.

f. Information and Training. All employees using, storing, or handling toxic and hazardous substances shall receive training on the information contained in the manufacturer's Material Safety Data Sheet (MSDS) for the substance, and any additional safety and health instructions required to understand this information, per Chapter 19, Hazard Communication Program. If applicable, training shall include the proper selection, use and maintenance of PPE.

g. Recordkeeping.

(1) Employee exposure records shall be maintained by the appropriate safety office and made available to employees in accordance with applicable substance-specific OSHA standards, 29 CFR 1910.1020, Access to Employee Exposure and Medical Records, and Chapter 12, Occupational Medical Surveillance Program.

(2) Medical records shall be maintained by Aerospace Medicine in a secure location and made accessible to employees in accordance with applicable substance-specific OSHA standards, 29 CFR 1910.1020, Access to Employee Exposure and Medical Records, and Chapter 12, Occupational Medical Surveillance Program.