

**OCCUPATIONAL SAFETY  
AND HEALTH STANDARDS BOARD**

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**TITLE 8. CALIFORNIA CODE OF REGULATIONS****General Industry Safety Orders  
Section 5155  
(Published on July 28, 2017)****[Airborne Contaminants - Benzyl Chloride](#)**

NOTICE IS HEREBY GIVEN that the Occupational Safety and Health Standards Board (Board) proposes to adopt, amend or repeal the foregoing provisions of Title 8 of the California Code of Regulations in the manner described in the Informative Digest, below.

**PUBLIC HEARING**

The Board will hold a public hearing starting at 10:00 a.m. on **September 14, 2017** in the **Council Chambers** of the **Walnut Creek City Hall, 1666 N. Main Street, Walnut Creek, California**. At this public hearing, any person may present statements or arguments orally or in writing relevant to the proposed action described in the Informative Digest.

**WRITTEN COMMENT PERIOD**

In addition to written or oral comments submitted at the public hearing, written comments may also be submitted to the Board's office. The written comment period commences on **July 28, 2017** and closes at 5:00 p.m. on **September 14, 2017**. Comments received after that deadline will not be considered by the Board unless the Board announces an extension of time in which to submit written comments. Written comments can be submitted as follows:

By mail to Sarah Money, Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833; or

By e-mail sent to [oshsb@dir.ca.gov](mailto:oshsb@dir.ca.gov).

**AUTHORITY AND REFERENCE**

Labor Code Section 142.3 establishes the Board as the only agency in the State authorized to adopt occupational safety and health standards. In addition, Labor Code Section 142.3 requires the adoption of occupational and health standards that are at least as effective as federal occupational safety and health standards.

The proposed regulations implement, interpret, and make specific Labor Code Section 144.6. Labor Code Section 144.6 requires that the Occupational Safety and Health Standards Board (Standards Board), when dealing with standards for toxic materials and harmful physical agents,

adopt standards which most adequately assure, to the extent feasible, that no employee suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard for the period of their working lifetime. This section also requires that the Standards Board base standards on research, demonstrations, experiments and other information as may be appropriate. Labor Code Section 144.6 also lists other considerations such as the latest scientific literature, the reasonableness of the standards, and experience gained under this and other health and safety laws.

## **INFORMATIVE DIGEST OF PROPOSED ACTION/POLICY STATEMENT** **OVERVIEW**

Section 5155, Airborne Contaminants, establishes minimum requirements for controlling employee exposure to specific airborne contaminants. California periodically amends the airborne contaminants table (Table AC-1) in this standard to keep it consistent with current information regarding harmful effects of exposure to these substances.

The substance benzyl chloride with the amended Permissible Exposure Limit (PEL), in this proposal, was considered by the Division of Occupational Safety and Health's (Division) Health Expert Advisory Committee (HEAC) in meetings held in March and June 2010. The HEAC considered the health basis of possible changes to the PEL based on a range of scientific information. As in the last round of work on PELs, technical assistance was provided to the Division by the Hazard Evaluation System and Information Service in the California Department of Public Health. In addition, informal public comments were received on the range for possible PELs, including benzyl chloride, recommended by the HEAC, including benzyl chloride, for potential feasibility and cost issues at a meeting of the Division's Feasibility Advisory Committee (FAC) on October 6, 2010. The meetings of both the HEAC and the FAC were open to the public.

The effect of this amendment is to reduce the risk of cancer and material impairment of health or functional capacity of employees exposed to benzyl chloride. Benzyl chloride is used in the manufacture of benzyl compounds, perfumes, pharmaceutical products, dyes, synthetic tannins, artificial resins, photographic developer, gasoline gum inhibitors, penicillin precursors, and quaternary ammonium compounds.

The proposed changes to Section 5155 are considered to be at least as effective as, or more stringent than, the federal OSHA requirements for these substances found at 29 CFR 1910.1000 for Air Contaminants.

The Board evaluated the proposed regulations pursuant to Government Code section 11346.5(a)(3)(D) and has determined that the regulations are not inconsistent or incompatible with existing state regulations. This proposal is part of a system of occupational safety and health regulations. The consistency and compatibility of that system's component regulations is provided by such things as: (1) the requirement of the federal government and the Labor Code to the effect that the State regulations be at least as effective as their federal counterparts, and (2) the requirement that all state occupational safety and health rulemaking be channeled through a single entity (the Standards Board).

This proposal differs from existing federal standards in that the PEL value proposed for benzyl chloride is lower than that found in the federal air contaminants standard at 29 CFR 1910.1000. Labor Code Section 147.1(c) mandates with respect to occupational health issues not covered by federal standards that the Division maintain surveillance, determine the necessity for standards, and develop and present proposed standards to the Board. For a variety of reasons, the federal standards for air contaminants have remained largely unrevised since their promulgation in the early 1970s, with the exception of substances for which individual comprehensive chemical hazard control standards have been promulgated, primarily for carcinogens. Since the federal standards were promulgated over 40 years ago, considerable scientific evidence has shown that benzyl chloride has the potential to adversely affect human health. The Division appropriately carried out its mandate under Labor Code Section 147.1 to present to the Board the PEL proposed for benzyl chloride in this rulemaking, including a determination of necessity for the proposed amendments. In addition, the Board is carrying out its mandate under Labor Code Section 144.6 to adopt standards dealing with toxic materials which most adequately assure, to the extent feasible, that no employee will suffer material impairment of health or functional capacity, taking into account the latest available scientific data in the field and the reasonableness of the standard.

### **Anticipated Benefits**

Adoption of the proposed change to the PEL for benzyl chloride will result in lowered risk of eye and respiratory tract irritation as well as reduce workers' potential for the development of cancer as a result of exposure to benzyl chloride for workers in the chemical industry.

The specific changes are as follows:

- Lowers the existing PEL in Section 5155 Table AC-1 for benzyl chloride from an 8-hour TWA of 1ppm (5 mg/M<sup>3</sup>) to 0.03 ppm (0.16 mg/M<sup>3</sup>).

The effect of this revision will be to lower the risk that workers exposed to this chemical will develop lung disease, including cancer and respiratory irritation. These changes will assure, to the extent feasible, that no employee will suffer material impairment of health or functional capacity from exposure to these materials over a working life.

### **DISCLOSURES REGARDING THE PROPOSED ACTION**

**Mandate on Local Agencies and School Districts:** None.

**Cost or Savings to State Agencies:** None.

**Cost to any Local Government or School District which must be Reimbursed in Accordance with Government Code Sections 17500 through 17630:** None.

**Other Nondiscretionary Cost or Savings Imposed on Local Agencies:** None.

**Cost or Savings in Federal Funding to the State:** None.

**Cost Impacts on a Representative Private Person Or Business:**

The PEL proposed is consistent with recent scientific findings, of which professional health and safety staff and consultants of these employers and others with significantly exposed employees should be aware. Many of these employers already seek to control employee exposures to chemicals to levels below existing PELs in the interest of business continuity and minimization of tort and workers compensation liability. In 1989, Federal OSHA estimated that approximately 11% of employers using the listed chemicals would incur a one-time cost of approximately \$60,000/employer as a result of the revision or addition of PEL's for 376 chemicals in their 1910.1000, Tables Z-1, Z-2, and Z-3. For these employers that may not be in compliance, and for which there may be a cost impact, the Board believes this cost impact will be nominal (less than \$60,000/affected employer not already in compliance) and offset by savings from health benefits to exposed workers. The Board believes that technological improvements in the efficiency of exhaust ventilation and spread of information in recent years, such as substitution of hazardous substances with less hazardous substances, has made complying with the proposed PEL easier and in many cases far cheaper than in the past.

**Statewide Adverse Economic Impact Directly Affecting Businesses and Individuals:  
Including the Ability of California Businesses To Compete:**

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses/individuals, including the ability of California businesses to compete with businesses in other states. The Board anticipates that any potential costs would be balanced by avoiding or minimizing the costs inherent in workers' compensation claims, lost work time, and productivity losses that would have been caused by cancer related illness of employees.

**Significant Affect on Housing Costs:** None.

**SMALL BUSINESS DETERMINATION**

The Board has determined that the proposed amendment may affect small businesses. However, minimal economic impact is anticipated because small businesses will be able to come into compliance through the use of improved administrative procedures such as better maintenance of existing mechanical exhaust ventilation. Small businesses are currently required to provide mechanical exhaust ventilation in order to maintain benzyl chloride levels below the current PELs.

**RESULTS OF THE ECONOMIC IMPACT  
ASSESSMENT/ANALYSIS**

There will be no significant adverse economic impact on businesses as a result of this proposal, because most affected businesses are already compliant with the proposed new PEL and those affected businesses not in compliance are also not in compliance with the existing PEL either due to poor maintenance of existing exhaust ventilation equipment or because of failure to install

exhaust ventilation required under existing regulations. For those enterprises that may not be in compliance, and for which there may be a cost impact, the Board believes this cost impact will be less than \$60,000/affected employer not already in compliance, and offset by savings from health benefits to exposed workers.

This proposal will neither create nor eliminate jobs within the State of California. This proposal will not create new businesses or eliminate existing businesses within the State of California or lead to the expansion of businesses currently doing business within the State of California.

### **BENEFITS OF THE PROPOSED ACTION**

The Board believes that employees in the chemical industries in California will benefit from improved respiratory health as a result of the adoption of this amended PEL. Employers will benefit from improved work attendance by employees and a lower risk of work related cancer.

The economic benefits from the proposed PEL will result primarily from reduced cancer risk among exposed workers. Under the existing regulation, the cancer risk is estimated at 32 cases per 1000 workers exposed over their working lifetime. The proposed PEL will reduce the cancer risk to 1 case per 1000 workers exposed over their working lifetime. The proposal potentially prevents 31 cancers per 1000 workers for an approximate total of a reduction of 220 cancer cases among the 7,100 exposed workers. Based on the benefit estimates in the federal OSHA final rule, the total benefit for the cancers prevented, although not quantifiable, would far exceed the \$60,000 cost per affected employer estimated for this proposal.

### **CONSIDERATION OF ALTERNATIVES**

In accordance with Government Code Section 11346.5(a)(13), the Board must determine that no reasonable alternative it considered to the regulation or that has otherwise been identified and brought to its attention would either be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law than the proposal described in this Notice.

The Board invites interested persons to present statements or arguments with respect to alternatives to the proposed regulation at the scheduled public hearing or during the written comment period.

### **CONTACT PERSONS**

Inquiries regarding this proposed regulatory action may be directed to Marley Hart (Executive Officer) and the back-up contact person is Michael Manieri (Principal Safety Engineer) at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833; (916) 274-5721.

**AVAILABILITY OF STATEMENT OF REASONS, TEXT OF THE PROPOSED REGULATIONS AND RULEMAKING FILE**

The Board will have the entire rulemaking file available for inspection and copying throughout the rulemaking process at its office at the above address. As of the date this notice is published in the Notice Register, the rulemaking file consists of this notice, the proposed text of the regulations, the initial statement of reasons and supporting documents, or other information upon which this rulemaking is based. Copies may be obtained by contacting Ms. Hart or Mr. Manieri at the address or telephone number listed above.

**AVAILABILITY OF CHANGED OR MODIFIED TEXT**

After holding the hearing and considering all timely and relevant comments received, the Board may adopt the proposed regulations substantially as described in this notice. If the Board makes modifications which are sufficiently related to the originally proposed text, it will make the modified text (with the changes clearly indicated) available to the public at least 15 days before the Board adopts the regulations as revised. Please request copies of any modified regulations by contacting Ms. Hart or Mr. Manieri at the address or telephone number listed above. The Board will accept written comments on the modified regulations for at least 15 days after the date on which they are made available.

**AVAILABILITY OF THE FINAL STATEMENT OF REASONS**

Upon its completion, copies of the Final Statement of Reasons may be obtained by contacting Ms. Hart or Mr. Manieri at the address or telephone number listed above or via the internet.

**AVAILABILITY OF DOCUMENTS ON THE INTERNET**

The Board will have rulemaking documents available for inspection throughout the rulemaking process on its web site. Copies of the text of the regulations in an underline/strikeout format, the Notice of Proposed action and the Initial Statement of Reasons can be accessed through the Standards Board's website at <http://www.dir.ca.gov/oshsb>.