

ARSENIC POLICY AND TRAINING

SUMMARY

Arsenic is a naturally occurring element that can be hazardous to human health, particularly in workplaces and areas with high levels of arsenic in the environment.

- **Sources and Effects of Arsenic Exposure:** Arsenic exposure occurs through inhalation, ingestion, and dermal or eye contact, primarily in workplaces, hazardous waste sites, and areas with naturally high levels of arsenic. High levels of exposure can cause death, while chronic exposure leads to skin diseases, lung distress, and various cancers.
- **Industries Using Inorganic Arsenic:** Industries such as wood preservation, glass production, nonferrous metal alloys, electronic semiconductor manufacturing, and smelting may require sampling for inorganic arsenic, which can exist in crystalline, powder, amorphous, or vitreous forms.
- **Arsenic Protection Policy:** The Company's policy mandates respiratory protection per 29 CFR 1910.134 and provides protective clothing and equipment at no cost to employees working in regulated areas to prevent skin or eye irritation from inorganic arsenic.
- **Training Requirements:** Employees potentially exposed to arsenic must undergo documented training at or before initial assignment and annually thereafter.

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POLICY

Arsenic occurs naturally in the environment as an element of the earth's crust. Arsenic is combined with other elements such as oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Exposure to higher-than-average levels of arsenic occurs mainly in workplaces, near or in hazardous waste sites, and areas with high levels naturally occurring in soil, rocks, and water. Exposure to high levels of arsenic can cause death. Exposure to arsenic at low levels for extended periods of time can cause a discoloration of the skin and the appearance of small corns or warts.

Arsenic exposure in the workplace occurs through inhalation, ingestion, dermal or eye contact. Chronic exposure to arsenic leads to distinct skin diseases, such as arsenical keratinosis, which is characterized by excessive formation of scaly skin on the palms and soles; darkened patches of skin; wart formation; skin lesions; acne; and increased risk of skin cancers. Chronic arsenic poisoning can also cause sudden constriction in arteries or veins, reducing blood flow; decreased nerve function; lung, liver, kidney and bladder, and other cancers. Acute exposures can cause lung distress and death.

Industries that use inorganic arsenic and its compounds, where sampling may be necessary, include wood preservation, glass production, nonferrous metal alloys, electronic semiconductor manufacturing, and smelter emissions. Arsenic and its compounds occur in crystalline, powder, amorphous, or vitreous forms.

Respiratory protection shall be provided in accordance with 29 CFR 1910.134.

Respiratory protection will be used during the following circumstances required while working with arsenic:

- Periods necessary to install or implement feasible engineering or work-practice controls.
- Work operations, such as maintenance and repair activities, for which the Company establishes that engineering and work-practice controls are not feasible.
- Work operations for which engineering and work-practice controls are not yet sufficient to reduce employee exposures to or below the permissible exposure limit
- Emergencies.

Where the possibility of skin or eye irritation from inorganic arsenic exists, and for all Company employees working in regulated areas, the Company shall provide at no cost to the employee and shall ensure that employees use appropriate and clean protective work clothing and equipment including, but not limited to, coveralls, gloves, shoes or coverlets, and face shields or vented goggles.

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TRAINING

Training shall be conducted at or before initial assignment and annually thereafter for all employees who are potentially exposed to arsenic. All training shall be documented.

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DISCLAIMERS

Even OSHA's own website has a disclaimer:

- These regulations and related materials are ... continually under development. The user should be aware that, while we try to keep the information on our Web site timely and accurate, there will often be a delay between official publication of the materials and their appearance or modification on these pages. The Company will make every effort to correct errors brought to our attention.

Company Disclaimer:

- The following has been developed to reduce hazards likely to cause injuries to our employees.
- Some of the following policies may not be applicable to our operations. This manual serves as a guideline and is subject to change or modification as particular circumstances warrant.
- Employees should contact their immediate supervisor or senior management with questions.
- **If there are conflicts with local, state or federal regulations or the Company's Employee Handbook or other Company documents, the local, state or federal regulations, the Company Employee Handbook or other Company documents will prevail.**

Agency Risk Management's Disclaimer:

- The information contained is not the complete OSHA standard.
- The information contained is for informational purposes only.
- Agency Risk Management makes no guarantee the information in this document is true, correct, precise or accurate.
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Reference OSHA Standards:

- **Refer to the OSHA standards and updates issued by OSHA for the most accurate information.**
- **This document is based on OSHA's [Training Requirements in OSHA Standards](#) document.**
- **When there is a conflict between the contents in this document and, as applicable, [OSHA 29 CFR Part 1926 Safety and Health Regulations for Construction](#) or [OSHA 29 CFR Part 1910 Safety and Health Regulations for General Industry](#), the OSHA standards and other regulatory updates will prevail.**