EOU Silica Exposure Control Program (Section 14 of the Chemical Hygiene Plan)

Purpose

Under the new Occupational Safety and Health Administration's (OSHA) Silica standard (29 CFR 1910.1053) [2], the University is required to have a Silica Exposure Control Program (SECP). The SECP describes the hazards associated with silica dust, outlines the steps to ensure employees who work with or around silica are not exposed to hazardous levels of silica dust, and provides procedures to minimize exposures for common silica related work duties.

Scope

This program covers University employees who work with silica, establishes the minimum requirements for working with silica, and applies to employees who are exposed over the action level.

Policy and Regulation

Eastern Oregon University Chemical Hygiene Plan
OSHA Regulation, 29 CFR 1910.1053, Respirable crystalline silica. [2]

Roles and Responsibilities

EHS is responsible for:

- Establishing University expectations to meet regulatory requirements.
- Developing training related to silica.
- Conducting a yearly audit of each department's program.
- Conducting qualitative assessments to determine the need for a SECP for the department.
- Ensuring exposure monitoring for silica exposure is conducted by a qualified Industrial Hygienist.
- Ensuring the SECP is available to all affected employees.
- Ensuring employees take required training.
- Conducting the annual review of the written exposure control plan.
- Ensuring needed PPE and exposure controls are available to employees.

Employees are responsible for:

• Complying with the requirements of this program and any further safety requirements set by supervisors.

Program Requirements Initial Exposure Assessment

Exposure monitoring will be conducted on any employee who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level. Some activities at EOU that might have an exposure risk are working with sandstone samples at a geological survey, sandblasting, art involving ceramics and associated tasks, grounds and landscaping, and cutting cement.

Exposure monitoring is not required if the task is listed in 29 CFR 1926.1153(c)(1) and the engineering controls, work practices, and PPE listed are used as listed.

Periodic Exposure Assessment

If the most recent results are at or above the action level but are below the PEL, monitoring shall be repeated every 6 months.

If the most recent results are at or above the PEL, monitoring shall be repeated every 3 months.

Periodic exposure monitoring may be discontinued if results from two consecutive sampling periods taken at least 7 days apart show that employee exposure is below the action level.

Reassessment of Exposures

Whenever a change in the production, process, control equipment, personnel, or work practices may reasonably be expected to result in new or additional exposures at or above the action level, monitoring shall be conducted.

Employee Notification

Within 15 workdays after the completion of the exposure assessment, employee(s) shall be notified in writing of the results of the assessment or the results will be posted in an appropriate location accessible to all affected employees.

If the result is above the PEL, the notification will include the means that are being taken to reduce the exposure to below the PEL.

Regulated Areas

Anywhere the exposure is above the PEL, a regulated area will be established. The regulated area must be separated from other areas in a way to minimize the number of employees exposed. At each entrance of a regulated area, appropriate signage must be posted.

Only employees who have work to perform in the area are allowed to enter the area. All employees entering the regulated area must wear a respirator, regardless of the amount time spent in the area.

Written Exposure Control Plan

For each area that has an exposure over the action level, a written exposure control plan must be developed. The exposure control plan includes a description of the task(s) being done that involve(s) silica and all of the controls that are in place to minimize potential employee exposures.

The plan must be reviewed at least annually.

Engineering and Work Practice Controls

Anywhere the exposure is above the PEL, engineering controls (i.e. wet work, ventilation) or work practice controls (i.e. housekeeping, inspections, scheduling) will be implemented to lower the exposure as much as possible.

Housekeeping

Cleaning of silica dust will be conducted with wet sweeping methods or HEPA-filtered vacuum cleaners. These methods will minimize the likelihood of exposure. Only if other methods are not feasible can compressed air and/or dry sweeping be used.

Medical Services

Any employee who is exposed above the action level for 30 or more days per year will be provided medical surveillance at no cost. The medical surveillance is performed initially and at least every 3 years, unless more frequently recommended by a PLHCP. The medical examination will include medical and work history, a physical exam, chest x-ray, pulmonary function, tuberculosis test, and any other test recommended by the PLHCP.

The department will provide the following information to the PLHCP: the employee's duties as they relate to silica exposure, results of air sampling, and the PPE that is used.

A written report on the results will be provided to the employee within 30 days.

Hazard Communication

Silica must be included in the department's hazard communication program. This includes proper labeling and having a Safety Data Sheet (SDS).

Training

Any employee who is exposed to silica above the action level is required to complete a silica safety training course on an annual basis.

Training records are maintained by the Director of Safety and Security.

Reviews and Audits

EHS Audits

EHS will review the SECP on a yearly basis. The review will cover all aspects of the written program to ensure they are up to date and complete. EH&S will also conduct an annual walkthrough of the area to check for appropriate labels, warning signs, and housekeeping.