



OSHA REGIONAL NOTICE

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

DIRECTIVE NUMBER: San Francisco Regional Instruction
CPL 04-00-09

EFFECTIVE DATE: October 1, 2015

SUBJECT: Local Emphasis Program for Silica and Portland Cement Exposures

REGIONAL IDENTIFIER: Region IX

ABSTRACT

Purpose:

This establishes a Local Emphasis Program (LEP) for programmed inspections of establishments in Region IX with known silica and Portland cement exposures as outlined in references 4 and 5 below. This instruction is limited to establishments under Federal OSHA jurisdiction throughout Region IX. The Region's goal is for 2 percent of our annual inspections to take place in businesses with silica related exposure.

References:

See Paragraph III.

Cancellation:

This instruction cancels Region IX Enforcement Programs Notice CPL 04-00-09, dated October 1, 2014.

Significant Changes:

None.

Action Offices:

Office of Enforcement Programs
All Area Offices
Office of Cooperative and State Programs

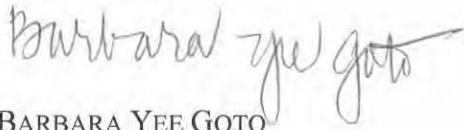
Originating Office:

Office of Enforcement Programs

Contact:

David Shiraishi
Assistant Regional Administrator, Enforcement Programs

By and Under the Authority of

A handwritten signature in cursive script that reads "Barbara yee goto". The signature is written in dark ink and is positioned above the printed name and title.

BARBARA YEE GOTO
Regional Administrator

Executive Summary

This instruction establishes a scheduling system for the cut stone and stone product manufacturing industry; the concrete block, concrete product and ready-mixed concrete industry; and auto top, body, upholstery repair and paint shops.

The cut stone and stone product manufacturing industry has experienced significant growth in recent years in part because of the growing popularity of granite counter tops in new construction and remodeling projects in the residential construction industry. This industry presents two significant hazards to employees from silica dust exposure and crushing hazards during material handling operations.

In addition to the silica and Portland cement hazards that potentially exist at concrete block, concrete products and ready-mixed concrete manufacturing establishments, they have significant hazards that can lead to permanent injury and death of workers.

Top, body, upholstery repair shops and paint shops are well known for using crystalline silica for abrasive blasting of metal parts.

This LEP will utilize outreach, compliance assistance and direct intervention to ensure focused attention on a health hazard specifically targeted in OSHA's Strategic Management Plan. Current national and local inspection systems do not provide an adequate mechanism for scheduling inspections of the above industries; this LEP will provide an objective inspection scheduling system to cover these high-hazard operations within the context of current law and OSHA policy.

Additionally, construction, marine terminals, longshoring activities and shipyards are well known for their changing working conditions and potential hazards. Effective scheduling systems for these industries currently exist within Region IX. This program will provide for an increased emphasis on silica and Portland cement exposures in these industries.

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I. Purpose.

This instruction establishes a local emphasis program targeting the hazards of exposure to silica and Portland cement pursuant to OSHA policy for programmed inspections in high-hazard sectors of employment. Silica has been identified as a targeted hazard in OSHA's Strategic Management Plan. Portland cement has been targeted by the Assistant Secretary in Reference III.E. below.

II. Scope.

This instruction applies to all areas of federal enforcement within Region IX.

III. References.

- A. OSHA Instruction CPL 04-00-001, Procedures for Approval of Local Emphasis Programs
- B. OSHA Field Operations Manual, CPL 02-00-159
- C. OSHA Instruction CPL 02-00-025, Scheduling System for Programmed Inspections, January 4, 1995
- D. OSHA Instruction CPL 03-00-007, National Emphasis Program – Crystalline Silica
- E. Assistant Secretary's memo, Inspection Procedures for Construction Sites Using Portland Cement, April 16, 2007
- F. Regional Instruction CPL 04-00-02, Local Emphasis Program for Programmed Construction Inspections
- G. Regional Instruction CPL 04-00-05, Local Emphasis Program for Ship and Boat Building and Repair
- H. Regional Instruction 04-00-13, Local Emphasis Program for Longshoring Activity

IV. Cancellation.

This instruction cancels Region IX Enforcement Programs Notice CPL 04-00-09, dated October 1, 2014.

V. Expiration.

This LEP will expire no later than one year from the date of implementation, unless renewed.

VI. Background.

Crystalline Silica:

Based on the widespread occurrence and use of crystalline silica across the major industrial groups (maritime, construction and general industry) and considering the number of silicosis related deaths, Region IX is implementing a regional targeting program based on the national program to assure worker protection from overexposure to crystalline silica dust.

Crystalline silica is a common substance and the basic component of sand, quartz and granite rock. Occupational exposure to crystalline silica dust has long been known to produce silicosis, pneumoconiosis or dust disease of the lung. Activities including sandblasting, rock drilling, roof bolting, foundry work, stonecutting, drilling, quarrying brick/block/concrete cutting, granite operations, lead-based paint encapsulate, and tunneling can create a hazardous airborne silica exposure.

NIOSH estimates that 1.7 million U.S. workers are exposed to respirable crystalline silica in a variety of industries. The health effects of crystalline silica dust exposure are irreversible but preventable.

Portland Cement:

Portland cement is one of the most widely-used formulations of cement in construction. The occupational health hazards are generally well known and include inhalation, dermal effects, and eye hazards; some of which result from trace constituents found in Portland cement, including hexavalent chromium (CrVI). CrVI is a trace constituent of Portland cement not because it is an added ingredient but because it is a contaminant that enters the mixture during manufacturing. Portland cement also has 0 to 5% crystalline silica by weight.

VII. Procedures.

The Area Directors will follow this instruction when conducting outreach activities and when conducting inspections at establishments where the potential for overexposures to silica and other hazards exist.

A. Program Responsibilities.

1. The ARA for Enforcement Programs will appoint a program coordinator for this LEP. The program coordinator will ensure that a copy of this LEP is on file with the National Office, and that the LEP is evaluated on an annual basis in accordance with OSHA Instruction CPL 04-00-001, Procedures for Approval of Local Emphasis Programs.
2. The Area Directors are responsible for developing lists of all employers with known potential silica hazards. After the list has

been developed the Area Director will create inspection cycles in accordance with the guidance in this directive. All master lists and scheduling cycles shall be filed electronically on the regional shared drive.

3. The Area Directors are responsible for ensuring team members have been briefed on this directive and all applicable national guidance documents.

B. Programmed Inspections for SICs 3281, 3271-3273, and 7532.

1. The Area Directors will develop individual lists of establishments in each of these industry groups (SIC 3281, stone shops; SIC 3271-3273, concrete block, concrete products and ready-mixed concrete; and SIC 7532, top, body, and upholstery repair shops and paint shops) which are likely to be involved in silica-related activities based on information including prior inspection history, business directories, industry advertisements and local knowledge.
2. Sites will be selected and scheduled using the procedures in Appendix G.
3. Targeted establishments also on the Site-Specific Targeting (SST) list will be inspected in accordance with Reference III.D (paragraph XI.A.5).
4. Programmed inspections initiated under the silica LEP will be conducted in accordance with the FOM. In SIC 3281, inspections will be limited to hazards associated with exposure to silica and stone handling operations. In SIC 3271-3273, inspections will be limited to hazards associated with silica, Portland cement, control of hazardous energy/lockout tagout, electrical hazards, confined space entry, guarding floor/wall openings, fall protection, and machine guarding. In SIC 7532, inspections will be limited to hazards associated with silica, including crystalline silica exposure created by abrasive blasting operations. However, if the compliance officer (CSHO) observes other serious hazards, the inspection may be expanded to address such hazards. Exposure to other hazards, such as noise, will be evaluated when the CSHO becomes aware of the exposure.

Note: NAICS Code 811121 is currently listed as exempt under the current OSHA Instruction CPL 02-00-051 (Enforcement Exemptions and Limitations under the appropriations Act); employers with 10 or fewer employees will be inspected in accordance with CPL 02-00-051, paragraph XI. If the compliance officer (CSHO) observes other serious hazards, the inspection may be expanded to address such hazards when the employer has more than 10 employees at the time of inspection or had more than 10 employees at any time during the last 12 months. For employers who have 10 or fewer employees currently or have had 10 or fewer employees at any time during the last 12 months, the inspection

will be limited to health related hazards. CSHOs addressing any safety related problems for an exempt employer must obtain approval from the Area Director.

5. Sampling will be conducted in accordance with Reference III.D (National Emphasis Program for Crystalline Silica, Appendix C – Guidelines for Air Sampling).
- C. Programmed Inspections for activities covered by 29 CFR 1926:
Construction inspections will be scheduled in accordance with Reference III.F (the Regional Local Emphasis Program for Construction). A special emphasis will be placed on potential silica and Portland cement exposure.
- D. Programmed Inspections for activities covered by 29 CFR 1915:
Shipyard inspections will be scheduled in accordance with existing regional policy outlined in Reference III.G (the Regional Local Emphasis Programs for Shipyards). A special emphasis will be placed on potential silica and Portland cement exposure.
- E. Programmed Inspections for activities covered by 29 CFR 1917 and 1918:
Marine terminal and longshoring inspections will be scheduled in accordance with Reference III.H (Regional Instruction CPL 04-00-13, Local Emphasis Program for Inspections of Longshoring Activity). A special emphasis will be placed on potential silica and Portland cement exposure.
- F. Inspection Procedures.
1. CSHOs will follow the inspection and citation procedures outlined in Reference III.D (NEP for Crystalline Silica, paragraph IX. B) for crystalline silica related inspections and the guidance in Reference III.E (Assistant Secretary's memo, Inspection Procedures for Construction Sites Using Portland Cement, Appendix C-1) for Portland Cement Inspections. Although Reference III.E only applies to construction Inspections, Region IX will apply the general guidance outlined in Reference III.E to all industries covered by this directive where potential Portland cement exposures exist.
 2. Sampling will be conducted by Industrial Hygienists in accordance with agency technical guidance. Sampling may also be done by Safety CSHOs who have been properly trained to do so.

Note: Portland cement has 0 to 5% crystalline silica by weight. Sampling for respiratory hazards in accordance with reference III.E will focus on the total dust hazard of Portland cement and will not require sampling for any silica in the Portland cement

mixture; however, if deemed necessary by the compliance officer, sampling for the respirable fraction of Portland cement may also apply. The compliance officer will use professional judgment as to which sampling method is most applicable to the circumstance.

- G. Inspection Documentation. The following documents will be attached to the OSHA 1A narrative when required:
1. Appendix A will be completed for all inspections involving Portland cement. NOTE: Reference III.E only requires this documentation for construction (29 CFR 1926) related inspections. However, Region IX will document this information for all inspections involving Portland cement.
 2. Appendix B will be completed for all inspections involving crystalline silica.
 3. Appendix C will be completed for each employee interviewed to evaluate their potential crystalline silica exposure. NOTE: This page is FOIA restricted material.
- H. Self-Referrals. When a CSHO makes a self-referral based on apparent hazards at a non-targeted site, and later determines that employees are not exposed to hazards, the CSHO shall provide the employer's on-site representatives with appropriate training and outreach materials which address silica and other related hazards. This action shall be entered in OIS as a Compliance Assistance activity.

VIII. Personal Protective Equipment (PPE).

CSHOs are required to wear appropriate PPE, including respirators when appropriate. The Area Director will ensure CSHOs know how to properly handle contaminated clothing and PPE. Coveralls and other contaminated clothing should be laundered commercially at the government's expense, NOT at home. When possible, disposable PPE will be used. Respirator face pieces will be cleaned by the CSHO according to the Regional Respiratory Protection Program and the manufacturer's instructions.

IX. Program Evaluation.

- A. The LEP will be evaluated in accordance with the guidelines in Appendix A of CPL 04-00-001, November 10, 1999, Procedures for Approval of Local Emphasis Programs and Experimental Programs.
- B. For LEPs renewed from a previous year, the evaluation will use data from the beginning of the 4th quarter of the previous fiscal year through the end

of the 3rd quarter of the current fiscal year (i.e., the FY 15 evaluation will include data from July 1, 2014 – June 30, 2015). The narrative sections of the evaluation should cover the same time frame; although significant issues arising in the 4th quarter affecting a decision on renewal of the LEP may also be discussed.

- C. This evaluation will be submitted to the Regional Administrator for review by November 1, and a decision made to renew or discontinue the LEP. On approval of the Regional Administrator, the evaluation report will be submitted to the Directorate of Enforcement Programs no later than November 30.

X. OIS Coding.

Inspections conducted under this LEP will be identified in OIS as follows:

- A. NEP code = SILICA, shall be entered as the primary emphasis code
- B. LEP code = SILICA9, shall be entered as a non-primary emphasis code for inspections scheduled under this LEP, and for any programmed or unprogrammed inspections which address the industries and hazards targeted in this LEP
- C. Additional LEP or NEP codes may be entered as non-primary emphasis codes
- D. Strategic Plan code = SILICA, and any other applicable code
- E. Additional Codes = N-02-ABRASIVE, where crystalline silica is used as the abrasive media when abrasive blasting
- F. Additional Codes = N-11-PORTLAND (for construction inspections involving the use of Portland cement)
- G. Additional Codes = R-20-PORTLAND (for non-construction inspections involving the use of Portland cement)

XI. Outreach

The Assistant Regional Administrator for Cooperative and State Programs and the Assistant Regional Administrator for Enforcement Programs will ensure the Area Directors and all Outreach staff are familiar with this directive and actively promote the LEP when conducting outreach sessions and meetings. Hazards, work practices, and machinery associated with silica and portland cement and covered by this LEP will be pointed out and discussed during outreach sessions and meetings. Handouts and publications that address these hazards, which are already developed and available, will be provided at outreach sessions and meetings. A copy of this LEP will be provided to interested parties upon request.

Appendix A

Inspection Checklist for Worksites with Portland Cement

Evaluate Appropriate PPE Standards		
	YES	NO
Appropriate PPE, such as boots & gloves are provided whenever necessary and appropriate for the job?		
Employees can clean or exchange PPE if it becomes ineffective or contaminated on the inside with Portland cement while in use?		
Equipment is maintained in a sanitary and reliable condition when not in use?		

Evaluate Appropriate Sanitation Standards		
	YES	NO
Washing facilities provided with clean water, non-alkaline soap, and clean towels?		
Washing facilities are in near proximity to the worksite & adequate for the number of exposed employees and the size of the job?		

Evaluate Appropriate Airborne Exposure Standards		
	YES	NO
8-hour TWA exposures to Portland cement or particulates not otherwise regulated (PNOR) do not exceed 15mg/m ³ PEL as total dust or 5mg/m ³ PEL respirable fraction?		
Where exposures exceed the PEL, employees are provided respirators?		

Evaluate Appropriate HAZCOM & Training Standards		
	YES	NO
MSDSs and labels for Portland cement are maintained and made available to employees?		
MSDSs indicate the hazards of Portland cement, including hazards associated with the cement's hexavalent chromium content?		
Employees are trained on hazards associated with exposure to Portland cement including hazards associated with the cement's hexavalent chromium content?		
Employees are trained on preventive measures, including proper use and care of PPE and the importance of proper hygiene practice?		
Employees are trained on access to hygiene facilities, PPE and information including MSDSs?		

Evaluate Appropriate Recordkeeping Regulations		
	YES	NO
Employer records each case of occupational dermatitis that meets the record-ability criteria in 1904.4 in illness and injury logs?		
Employer informs employees of how to report their work-related illnesses and injuries?		

Attach to OSHA 1A for Inspection # _____:

Appendix B

Inspection Checklist for Conducting Silica-Related Inspections

This checklist will be reviewed by the CSHO before and during any silica related inspections. The appropriate box shall be checked to document which items were applicable to the Silica inspection.

✓	Employee Exposure Monitoring	✓	Medical Surveillance
	Sample for Respirable Dust/Silica		Employer Aware of Silicosis Risk
	Leak Test Filters/Cyclones		Employer Identifying Possible Cases
	Bulk Samples of Settled Dust		Employer Referring Cases to Physician
	Employer's Monitoring Records		Other:
	Other:	✓	Housekeeping and Hygiene Practices
✓	Engineering and Work Practice Controls		Facility Cleanliness
	Location of Employees		Clean-up Methods (compressed air/dry sweeping
	Ventilation		Change Rooms/PPE Storage
	Wet Methods		Separate Break Areas
	Other:		Other:
✓	Respiratory Protection	✓	Employee Exposure and Medical Records
	Written Program		Employer Monitoring and Medical Records
	Cartridge Selection and Change-out Schedule		Employee Access and Confidentiality
	Medical and Fit Test Records		Other:
	Breathing Air Quality and Use	✓	Abrasive Blasting (on-site or off-site)
	Other:		Sample for Silica and Metals (including bystanders)
✓	Symptoms of Silicosis in Workplace		Sample for Noise
	Survey/Interview Employees		Ventilation and Dust Containment
	Employee obtaining Medical Evaluations		PPE and Respirators
	Other:		Carbon Monoxide Alarm on Respirator
			Manual Control of Blast Nozzle Operating Valve
			Pressure Range (90-120 psi)
			Heat Stress
			Other:

Attach to OSHA 1A for Inspection # _____:

Appendix C

Employee Questionnaire for Silica-Related Inspections

This questionnaire will be completed for employees potentially exposed to crystalline silica. If the employee refuses an interview, the OSHA 1A narrative will document this condition for the respective employee. If the employee requests a copy of this document one will be provided. This record will be considered a medical record and must be used in accordance with 29 CFR 1913.10 – Rules concerning OSHA Access to Employee Medical Records. The questionnaire is intended to provide CSHOs with a form to evaluate the employer's medical monitoring program. CSHOs will consult with their Area Directors regarding any finding of potential silicosis. The Area Directors, after briefing the Assistant Regional Administrator for Enforcement Programs, will consult with the OSHA Office of Occupational Medicine regarding any findings of potential silicosis.

Date: _____ Company Name: _____ Location: _____

A. Personal Information

Employee's Name: _____ Gender: ☐ Male ☐ Female

Employee's address: _____ Phone #: (____) _____

Current Job Title: _____ Age: _____

B. Job-Related Information

Number of hours worked in silica-related task: 10-20 | 20-30 | 30-40 | >40 hours (____ hours)
(circle appropriate entry)

List previous jobs and duration of each job:

Employer: _____ Job Title: _____ Years: _____

Employer: _____ Job Title: _____ Years: _____

Employer: _____ Job Title: _____ Years: _____

Employer: _____ Job Title: _____ Years: _____

C. Brief Medical History

Are you being treated by a physician for breathing problems? ☐ Yes ☐ No

Have you ever had a chest X-ray? ☐ Yes ☐ No

Why was the chest X-ray taken: _____

Did the doctor tell you everything was normal? ☐ Yes ☐ No

Have you discussed your medical history with your employer? ☐ Yes ☐ No

Are you a cigarette or cigar smoker? ☐ Yes ☐ No

Attach to OSHA 1A for Inspection # _____:

FOIA RESTRICTED MATERIAL – DO NOT RELEASE THIS DOCUMENT

Procedures for Scheduling Inspections

1. The Area Office will maintain a master list of sites eligible for inspection under this LEP. The master list, all additions and deletions, the randomized list, and scheduling cycles created for this LEP, shall be filed electronically on the regional shared drive and retained for three years.
 - a. Additions may be made to the master list based on local knowledge or other factors, including OSHA inspection history.
 - i. This should include annual OIS searches for establishments which have been coded with a secondary code, or under a related program. For example, a site that was inspected under the FORKLIFT LEP may have led to citations for silica hazards. This inspection could be coded with SILICA9 as a secondary code, and should be added to the SILICA9 list for the following year.
 - ii. ADs should cross-reference these lists, and CSHOs should check establishment history on OIS, to make sure that sites which are placed on multiple lists are not subject to multiple inspections within a 12-month period.
 - b. Establishments shall be deleted from the master list if, during the course of an inspection, it is determined that the site no longer falls within the parameters of the LEP. This would primarily apply to sites which no longer perform the process or use the equipment targeted by the LEP.
 - c. All additions and deletions must be documented.
2. At the beginning of each fiscal year (or on the LEP's effective date), the Area Office shall create a randomly numbered list of all sites on the master list. Sites shall be randomly ordered using the RANDBETWEEN function in Excel. AOs may also send their master list to EP for randomization.
3. If all sites on the master list are to be inspected during the fiscal year, the sites may be inspected in any order. If an Area Office is not able to complete all inspections on the master list within a fiscal year, the Area Office will complete the list as soon as possible in the first quarter of the next fiscal year, and shall develop and follow scheduling cycles for the remainder of that year and in subsequent years.
4. The Area Office will create scheduling cycles by selecting a number of establishments from the randomized master list. All scheduling cycles shall be filed electronically on the regional shared drive.

- a. Establishments selected in a cycle can be inspected in any order, but the Area Office should take into account that all establishments in a cycle must be completed before another cycle is created. Area Offices should take into account programming goals and available resources when setting the size of a cycle.
- b. To the extent possible, new cycles should be selected at least once per quarter. Cycles may be run more often if necessary. An uncompleted cycle may be carried over into the next quarter, but the Area Office should take this into account and adjust the number selected for subsequent cycles accordingly.
- c. Selected establishments may be deferred to the next cycle if the site has been subject to a comprehensive programmed inspection (under this or any LEP) within the previous 12 months, or if the process to be inspected is not active. All deferrals must be documented. Additional criteria for deferral include:
 - i. Necessary equipment or personnel with necessary experience are not available to perform the inspection.
 - ii. The establishment is the last remaining establishment in a cycle, the inspection would require travel in excess of 50 miles, and it cannot be combined with other inspection activity.
 - iii. The establishment was cited as the result of a previous comprehensive inspection, and the final abatement date has not yet passed.
 - iv. The establishment has contested a previous citation and it is still pending before the Review Commission.

Approval for deferrals based on reasons other than those listed must be discussed with and approved by the ARA for EP.