

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

**SUBJECT:** Local Emphasis Program for Silica

**REGIONAL IDENTIFIER:** Region V

#### **ABSTRACT**

**Purpose:** The purpose of this Local Emphasis Program is to reduce occupational

exposures to silica in General Industry and Construction.

**Scope:** All Region V Area Offices

**References:** A) OSHA Instruction CPL 03-00-007, National Emphasis Program –

Silica, January 24, 2008.

B) OSHA Instruction CPL 02-00-160, Field Operations Manual (FOM),

August 2, 2016.

C) Region V Safety and Health Program.

D) OSHA Instruction CPL 04-00-001, Procedures for Approval of Local

Emphasis Programs, November 10, 1999.

E) OSHA Instruction CPL 02-00-025, Scheduling Systems for

Programmed Inspections.

**Action Offices:** All Region V Area Offices

**Contact:** Assistant Regional Administrator

**Enforcement Programs** 

U. S. Department of Labor – OSHA

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By and Under the Authority of

Ken Nishiyama Atha Regional Administrator

- I. <u>Purpose.</u> This Notice describes Region V's policies and procedures for implementing the National Emphasis Program (NEP) to reduce occupational exposures to silica.
- II. <u>Scope.</u> This Notice applies to all Region V Federal enforcement offices.
- III. <u>Expiration.</u> This Notice expires on September 30, 2017.
- IV. <u>Action.</u> The Area Offices will implement the procedures described in paragraphs VI and X of this Notice.
- V. <u>Background.</u> On January 24, 2008, OSHA established the National Emphasis Program (NEP) for crystalline silica. The NEP instructed each Area Office or Regional Office to develop a Local Emphasis Program (LEP) for silica based on one or more industries listed in Appendix A for the NEP. Construction and General Industry complaints and referrals will be handled in accordance with the current crystalline silica NEP.
  - The term "silica" refers broadly to the mineral compound silicon dioxide (SiO2). A. Silica can be crystalline or amorphous. Crystalline silica is significantly more hazardous to employees than amorphous silica. In addition to causing the disabling and irreversible lung disease silicosis, crystalline silica has been classified as a Group I carcinogen - Carcinogenic to Humans by the International Agency for Research on Cancer (IARC) [IARC, 1997]. The term "silica" as it is used in this directive refers specifically to crystalline silica. Crystalline silica is an important industrial material, and occupational exposure occurs in a variety of workplace settings, including mining, manufacturing, construction, maritime, and agriculture. Processes associated historically with high rates of silicosis include sandblasting, sand-casting foundry operations, mining, tunneling, cement cutting and demolition, masonry work, and granite cutting. Appendix A provides a list of North American Industrial Classification System (NAICS) and Standard Industrial Classification (SIC) codes for industries in which silica exposure occurs frequently, based on a review of OSHA inspection data for the period 1996 to 2007.
  - B. Reducing and ultimately eliminating the workplace incidence of silicosis has been a primary goal of the Agency since its inception. In 1972, OSHA issued guidelines for conducting inspections in workplaces with significant crystalline silica exposure. In the early 1980s, the Agency placed a special emphasis on the prevention of silicosis in foundry personnel, and in 1996 OSHA implemented a Special Emphasis Program (SEP) to reduce the workplace incidence of silicosis. This LEP is being implemented to direct OSHA's field staff inspection efforts to address elevated silica exposures in the workplace, including General Industry (1910) and Construction (1926). These efforts meet the Strategic Plan goal of reducing silicosis, set forth by the Agency.

### VI. Program Procedure.

## A. Industry Selection.

- 1. Rational for Industry Selection. Inspections conducted under this Notice will focus on General Industry and Construction worksites where silica exposures occur. The list in Appendix A of this LEP was derived from Appendix B of the NEP. The industry classifications for this LEP were based on:
  - a. A history of silica overexposures based on regional inspection data from the OSHA Information System for dates between April 1, 2011 to January 17, 2014, and
  - b. Industries with limited to no regional inspection history.
- 2. Appendix A of this LEP will be used by the Area Offices for the master list generation for site selection in their jurisdiction.
- 3. Area Offices may add establishments that are not included in Appendix A of this LEP based on local knowledge (i.e., a documented history of referrals from local agencies or healthcare providers, or previous inspection histories, etc.) to have demonstrated a pattern of silica overexposures or cases of silicosis.
- B. <u>Site Selection</u>. Site selection shall be conducted according to the instructions contained in the NEP for crystalline silica as follows:
  - 1. <u>Master List Generation</u>. Each Area Office will obtain a list of establishments from the National Office. The National Office will prepare a master inspection list for the Area Office in accordance with the LEP. The National Office will assign a random number to each establishment on the list and provide the list to the Area Office, sorted in random number order.
  - 2. The Area Office may add establishments to the National Office generated master list. If establishments are added to the master list, the list must be re-randomized prior to use. The Area Office may return the modified list to the National Office for assignment of new random numbers or the Area Office may assign new random numbers to the list using the RANDBETWEEN function in Microsoft Excel.
  - 3. <u>Deletions</u>. Establishments inspected within the past 36 months shall be deleted from the master list.

- 4. <u>Cycle Generation.</u> Cycles will be prepared in accordance with CPL 02-00-025 Scheduling System for Programmed Inspections. Once the cycle is started, all establishments within the cycle must be inspected. The establishments within the cycle may be inspected in any order.
- VII. <u>Inspection Procedure.</u> In addition to the instructions contained in the NEP for crystalline silica, the following instructions apply.
  - A. Opening Conference. During the opening conference, the CSHO will communicate the purpose of the LEP and scope of the inspection. The CSHO will confirm that the employer's SIC/NAICS code is included under this program. During the preliminary investigation, if the CSHO determines that silica is not present at the listed establishment, the inspection should be discontinued.
  - B. All referrals that allege that an employer had an employee exposed to silica shall require the Area Office to inspect that employee's employer.
  - C. Based upon the information provided, all potential silica work sites/establishments brought to the attention of the Area Office must be handled in accordance with the procedures outlined in Chapter 9 of the Field Operations Manual, CPL 02-00-160. http://www.osha.gov/OshDoc/Directive\_pdf/CPL\_02-00-160.pdf
  - D. All inspections under this LEP must address all aspects of any potential silica work or exposure; include a review of all related written documentation (recordkeeping, monitoring, compliance program including engineering and administrative controls, training, as well as respiratory protection, hazard communication, and personal protective equipment); and interface with other applicable OSHA standards.
- VIII. <u>Recording and Tracking.</u> Inspections conducted under this Notice will be coded in OIS.
  - A. National Emphasis Code: Silica (Insps Presence of Crystalline Silica/Silicates)
  - B. Local Emphasis Code: Silica

# IX. <u>Program Evaluation.</u>

A. The Chicago North Area Office will prepare a written evaluation of this LEP in the format specified by OSHA Instruction CPL 04-00-001. Evaluations will be submitted annually for the previous Fiscal Year.

- B. The Area Directors will be asked to provide input concerning the effectiveness of the LEP; recommendations to improve the LEP; and recommendations to renew or not renew the LEP.
- C. The Chicago North Area Office shall review the input and prepare an evaluation to be submitted to the Regional Administrator for review by September 8<sup>th</sup> of each year.
- X. <u>Safety and Health Considerations for CSHOs.</u> Field work in industries where silica exposure is likely to occur shall be conducted in accordance with the National and Regional Safety and Health Management System.
  - A. <u>Air Monitoring Data and PPE Selection.</u> CSHOs shall request and review air monitoring data from the employer at the opening conference to determine the expected silica exposure levels for operations involving silica. CSHOs must evaluate all relevant safety and health hazards present at the establishment when selecting and using PPE to ensure CSHO protection.
    - 1. If the employer's records appear adequate, appropriate respiratory protection and personal protective clothing and equipment for CSHOs should, at a minimum, be based on the anticipated silica exposure based on the employer's records.
    - 2. In cases where the employer does not have any air monitoring data and there is evidence that airborne silica can be expected during the walk around and other portions of the inspection, the CSHO shall select and utilize respiratory protection and personal protective clothing and equipment for the inspection assuming the airborne exposure is 10 times the permissible exposure limit. If a CSHO determines a higher level of respiratory protection is necessary, the CSHO shall contact the Area Office for guidance.
  - B. <u>CSHO Self-sampling</u>. CSHO self-sampling shall be conducted in accordance with the requirements and provisions of the current Region V Safety and Health Program, Chapter 27 for Policy & Procedures for Field Staff Exposure Monitoring.
  - C. <u>CSHO Exposure</u>. CSHOs must minimize time spent in work areas where silica dust is generated. When possible, check sampling equipment when silica dust generation is completed. Interviews should be conducted away from operations generating silica dust.
  - D. <u>Decontamination.</u> Decontamination of personnel and equipment shall be conducted in accordance with the requirements and provisions of the current Region V Safety and Health Program, Chapter 26 for Decontamination.

- XI. <u>Training</u>. Each Area Office shall provide CSHOs with the appropriate training for conducting silica inspections under this LEP.
- XII. Outreach. Each Area Office is encouraged to develop outreach programs that will support the efforts of the Agency in meeting the Strategic Plan goals. Such programs could include letters to employers, professional associations, local safety councils, apprenticeship programs, local hospitals and occupational health clinics, and/or other industry employer organizations that work with or potentially generate silica exposures. Speeches, training sessions, and/or news releases through the local newspapers, safety councils and/or industrial hygiene organizations can provide another avenue for dissemination of information. Regional/Area Office Alliances developed with industries may also be an effective way to reach out to affected employers and employees.

# Appendix A – Region V SIC Targeting Table

Industries with Crystalline Silica Exposure, 1996–2007		
1987 SIC	1987 SIC Industry Title	2002 NAICS Code
Code	·	
3251	Brick and Structural Clay Tile	327121, 327331
3253	Ceramic Wall and Floor Tile	327122
3255	Clay Refractories	327124
3261	Vitreous China Plumbing Fixtures and China and	327111
	Earthenware Fittings and Bathroom Accessories	
3262	Vitreous China Table and Kitchen Articles	327112
3264	Porcelain Electrical Supplies	327113
3269	Pottery Products, n.e.c.	327112
3271	Concrete Block and Brick	327331
3272	Concrete Products, Except Block and Bricks	327332, 327390,
		32799
3273	Ready-Mixed Concrete	327320
3281	Cut Stone and Stone Products	327991
3291	Abrasive Products	327910, 332999
3299	Nonmetallic Mineral Products, n.e.c.	327112, 327420,
		327999
3431	Enameled Iron and Metal Sanitary Ware	332998
3441	Fabricated and Structural Metal	332312
3443	Fabricated Plate Work (Boiler Shops)	332313, 332410,
		332420
3444	Sheet Metal Work	332321, 332322,
		332439, 333415
3471	Electroplating, Polishing, Anodizing, and Coloring	332813
3479	Coating, Engraving, and Allied Services, n.e.c.	332812, 339911,
		339912, 339914
3531	Construction Machinery and Equipment	333120, 333923,
		336510
3599	Industrial and Commercial Machinery and Equipment	332710, 332813,
		332999, 333319,
		333999, 334519,
		336399
3715	Truck Trailers	336212
5032	Brick, Stone, and Related Construction Materials	423320, 425110,
		425120, 444190
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	811121