



OSHA

REGIONAL NOTICE

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-11-07E

EFFECTIVE DATE: October 1, 2016

SUBJECT: Local Implementation of National Emphasis Program – Crystalline Silica

REGIONAL IDENTIFIER: Region VII

ABSTRACT

- Purpose:** This Notice continues policies and procedures for the Local implementation of a National Emphasis Program (NEP) to identify and reduce or eliminate the health hazards associated with occupational exposure to crystalline silica.
- Scope:** This Notice applies to all Region VII Federal Enforcement Area Offices.
- References:** OSHA Instructions: CPL 03-00-07, CPL 04-00-001, IARC 1997, CPL 02-00-051, CPL 02-00-025, CPL 02-00-160, CPL 02-00-155, TED 01-00-015, CPL 02-00-120, and CPL 02-02-038.
- Expiration Date:** September 30, 2017
- Action Offices:** Region VII Regional Office and Area Offices.
- Originating Office:** Kansas City Regional Office
- Contact:** Kansas City Regional Office, Enforcement Programs (816) 283-8745.

By and Under the Authority of:

Kimberly A. Stille
Regional Administrator

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- I. Purpose. This Notice continues the Region VII policies and procedures for implementing OSHA Instruction CPL 03-00-007, National Emphasis Program – Crystalline Silica, January 24, 2008 to identify and reduce or eliminate the health hazards associated with occupational exposures to crystalline silica. This program affects worksites where employee exposures to crystalline silica are likely due to the work tasks performed.
- II. Scope. This notice applies to all Region VII Federal Enforcement Area Offices.
- III. Action.
 - A. This Silica Local Emphasis Program (LEP) was developed in accordance with OSHA Instruction CPL 04-00-001 (CPL 2-0.102A), Procedures for Approval of Local Emphasis Programs (LEPs) to implement the Silica NEP in Region VII.
 - B. The Regional Administrator and the Area Directors will ensure that the procedures established in this notice are adhered to in the scheduling of programmed inspections.
 - C. The Assistant Regional Administrators (ARAs) for Enforcement Programs and for Compliance Assistance Programs will ensure that the State Consultation Program Managers and the State Plan State Designee in Region VII are apprised of the contents of this LEP.
- IV. Expiration. This Notice will expire on September 30, 2017, and may be renewed based on an evaluation of the program at that time.
- V. References.
 - A. OSHA Instruction CPL 03-00-007, National Emphasis Program – Crystalline Silica, January 24, 2008.
 - B. OSHA Instruction CPL 04-00-001 (CPL 2-0.102A), Procedures for Approval of Local Emphasis Programs (LEP), November 10, 1999.
 - C. International Agency for Research on Cancer (IARC), Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, Silica, Some Silicate, Coal Dust and para-Aramid Fibrils (IARC, 1997)
 - D. OSHA Instruction CPL 02-00-051 (CPL 2.51J), Exemptions and Limitations under the Current Appropriations Act, May 28, 1998 and Change dated January 29, 2016, (Appendix A) or current version.
 - E. OSHA Instruction CPL 02-00-025 (CPL 2.25I), Scheduling System for Programmed Inspections, January 4, 1995.
 - F. OSHA Instruction CPL 02-00-160, Field Operations Manual (FOM), August 2, 2016.

- G. OSHA Instruction CPL 02-00-155 Inspection Scheduling for Construction, September 6, 2013.
- H. OSHA Instruction TED 01-00-015 (TED 1-0.15A) - OSHA Technical Manual, April 28, 2015.
- I. Memorandum from Thomas Galassi to Regional Administrators, Procedures for Local and Regional Emphasis Programs, December 3, 2014.
- J. Memorandum from Francis Yebesi to Regional Administrators, Establishment-Targeting Lists for Emphasis Programs, November 12, 2014.

VI. Background. The term "silica" refers broadly to the mineral compound silicon dioxide (SiO₂). 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), Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, Silica, Some Silicate, Coal Dust and para-Aramid Fibrils (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 operations, cement cutting and demolition, masonry work, and granite cutting.

Reducing and ultimately eliminating the workplace incidence of silicosis has been a primary goal of the Agency since its inception. Since 1998 and yet again in its 2014-2018 Strategic Plan, OSHA identified crystalline silica as one of the focused hazards. In accordance with the Department of Labor Strategic Plan 2014-2018, this LEP addresses OSHA Performance Goal 2.1: "Improve workplace safety and health through the enforcement of occupational safety and health regulations and standards."

VII. Program Procedures. This Silica LEP includes two major activities: targeting/selection and inspection.

A. Industry Selection. Inspections conducted under this LEP will focus on worksites where employees may be occupationally exposed to crystalline silica. CPL 03-00-007, National Emphasis Program – Crystalline Silica, provides a list of North American Industry Classification System (NAICS) codes and/or Standard Industrial Classification (SIC) codes with Potential Overexposure to Crystalline Silica.

1. The Des Moines, Kansas City, Omaha, St. Louis, and Wichita Area Offices selected the SIC/NAICS codes listed in Appendix A from CPL 03-00-007, National Emphasis Program – Crystalline Silica, for targeted,

programmed inspections of General Industry employers within their jurisdiction. The SIC/NAICS codes were chosen because they contain processes and activities where employees may be occupationally exposed to crystalline silica, yet the industries were not included in other Region VII region wide local emphasis programs.

2. The Des Moines, Kansas City, Omaha, St. Louis, and Wichita Area Offices selected the SIC/NAICS codes listed in Appendix B from CPL 03-00-007, National Emphasis Program – Crystalline Silica, for Construction inspections within their jurisdiction. The SIC/NAICS codes were chosen because they contain processes and activities where employees may be occupationally exposed to crystalline silica during construction activities.

B. General Industry Site Selection. Programmed inspections of sites to be conducted under this Silica LEP and that are within SIC/NAICS codes listed in Appendix A will be scheduled and conducted pursuant to the following procedures.

1. Master List. Each Area Office prepared a master list of General Industry establishments within the SIC/NAICS codes listed in Appendix A to be inspected using one or more of the sources listed below:
 - a. Dun & Bradstreet Employer List (available from the OSHA Directorate of Evaluation and Analysis, Office of Statistics).
 - b. Commercial directories, such as, but not limited to www.smartpages.com (a web-based version of the Yellow Pages).
 - c. Telephone listings.
 - d. Local knowledge of establishments, such as OSHA's Integrated Management Information System (IMIS) or the OSHA Information System (OIS).
2. Additions. If, during this Silica LEP, a Compliance Safety and Health Officer (CSHO) is made aware of a general industry business whose NAICS code or SIC code is one of those listed in the Silica LEP Appendix A and is not on their current inspection cycle, the CSHO will inform the Area Office. If that business was not included in the general pool of identified establishments within the targeted NAICS/SIC codes, the site will be added to the master list.
3. Deletions. The Area Office shall delete any worksite that falls within the following parameters:
 - a. Establishments that are determined to be out of business after generation of the list.
 - b. Establishments that are exempt within the scope of OSHA Instruction CPL 02-00-051 (CPL 2.51J), May 28, 1998, Exemptions

and Limitations under the Current Appropriations Act and Change dated January 30, 2015 (Appendix A) or current version.

- c. Establishments that have received a comprehensive health inspection with an opening conference date less than 2 years ago will be deleted from the inspection list.
 - d. Establishments that have had an inspection where employee exposures to silica have been evaluated within the previous 3 years, provided either that no serious violations related to silica exposures were cited, or that serious violations were cited but a follow-up inspection documented effective abatement of the cited conditions.
 - e. Additional deletions will be made from each list by applying criteria set forth in OSHA Instruction CPL 02-00-025 (CPL 2.25I), Scheduling System for Programmed Inspections, paragraph B.1.b (1) (b).6.d., except H# and S#.
4. **Inspection Cycle Creation.** Each establishment on the establishment list after additions and deletions are applied will be assigned a sequential number, starting at the top of the list with number one. A random number will then be assigned using the most current version of Microsoft Excel's Random Sample Function, i.e., RANDBETWEEN function in Microsoft Excel to create the first inspection cycle of five to fifteen establishments. To prevent duplicate random numbers from being generated for multiple records each time the file is opened, the entire worksheet is highlighted, copied, and pasted into a blank worksheet as "Values (V)". The new worksheet will have each random number saved as a value not a formula, which will allow the worksheet to be opened without the possibility of changing the already assigned random numbers. Subsequent cycles will be created in the same way until the expiration of the Silica LEP, or until all establishments on the list have been assigned to a cycle.

All establishments in a cycle must be inspected before any establishments in a new cycle may be inspected. Carry-overs will be allowed, as provided for in the FOM, paragraph B.1.b.(1)(e).

5. Inspection Scheduling. Inspection scheduling shall be in accordance with the following instructions.
- a. OSHA Instruction CPL 02-00-160, Field Operations Manual (FOM), Ch. 2.VI.F.
 - b. OSHA Instruction CPL 02-00-025 (CPL 2.25I), Scheduling System for Programmed Inspections.
 - c. OSHA Instruction CPL 02-00-155 Inspection Scheduling for Construction.

6. Unprogrammed Inspections. Any referral or complaint which alleges crystalline silica exposure at a worksite within SIC/NAICS codes listed in Appendix A will be scheduled for inspection if the condition is observed by the complainant within eight weeks of notification of an Area Office.
- C. Construction Industry Site Selection. All construction inspections conducted in accordance with this emphasis program and that are within SIC/NAICS codes listed in Appendix B will be conducted in accordance with the procedures below.
1. Referral and Complaints. Any referral or complaint which alleges crystalline silica exposure at a construction site that is within SIC/NAICS codes listed in Appendix B will be scheduled for inspection if the condition is observed by the complainant or referring party within two weeks of notification of an Area Office.
 2. Construction Inspections. If during the course of any construction inspection where a CSHO encounters a company that falls within the SIC/NAICS codes listed in Appendix B, the inspection will include a focus on any activity that potentially exposes workers to crystalline silica. The CSHO shall continue the inspection as per the FOM and either expand the scope in accordance with this LEP or submit a health referral to the Area Office.
- D. Inspection Procedures. All inspections (general industry and construction) conducted in accordance with this emphasis program will be limited in scope and conducted in accordance with the procedures described in the Silica NEP and specified below.
1. Limited Scope Inspection. Programmed inspections under this Silica LEP will be conducted as a partial health inspection. The inspection will be limited in scope to employee exposure to crystalline silica, and plain view safety and health hazards including a review of all safety and health programs and OSHA 300 logs. A CSHO to CSHO referral may be initiated for the plain view safety hazards at the Area Director's discretion.
 2. Inspection Determination. At the opening conference, the CSHO will verify the NAICS/SIC code and determine whether or not there are potential exposures to crystalline silica. After verifying the employer's NAICS/SIC code:
 - a. If the establishment NAICS or SIC code is listed in Appendix A or B, and the employer indicates employees are engaged in activities that may result in exposure to crystalline silica, the CSHO will continue with a health inspection as outlined in this LEP.
 - b. If the establishment NAICS or SIC code is listed in Appendix A or B, but employees are not engaged in activities that may result in exposure to crystalline silica, the CSHO may conduct limited

employee interviews for verification and then code their activity on an OSHA-1 as a No Inspection.

- c. If the establishment NAICS or SIC code is not listed in Appendix A or B, but employees are engaged in activities that may result in exposure to crystalline silica, the CSHO will continue with a health inspection as outlined in this LEP.
- d. If the establishment NAICS or SIC code is not listed in Appendix A or B, and employees are not engaged in activities that may result in exposure to crystalline silica, the CSHO may conduct limited employee interviews for verification and then code their activity on an OSHA-1 as a No Inspection.

E. Follow-up and Monitoring Procedures. Follow-up inspection and monitoring activity shall be conducted pursuant to the following procedures.

1. Overexposure to Crystalline Silica. Where citations are issued for overexposure to crystalline silica, follow-up site visits must be conducted to determine whether the company is eliminating crystalline silica exposures or reducing exposures below the Permissible Exposure Limit (PEL). Where exposures can not feasibly be reduced below the PEL, engineering and administrative controls must be used to reduce exposures to the extent feasible and employees protected with the use of Personal Protective Equipment (PPE).
2. Temporary Sites or Processes. For those employers where follow-ups cannot be done, (i.e., construction sites or temporary abrasive blasting operations) the Area Office should request that the employer provide written updates documenting the progress of their abatement efforts in accordance with 29 CFR 1903.19.

VIII. Outreach. Area Offices are encouraged to develop outreach programs using crystalline silica related information and training materials developed by the OSHA Office of Training and Education, in conjunction with the Directorate of Enforcement Programs and the Office of Communications.

IX. OIS Coding.

A. During this Silica LEP, enforcement OIS forms shall be coded "SILICA" in accordance with the Silica NEP and this LEP. All consultation activities (requests, visits and compliance assistance) conducted at establishments in the SIC/NAICS codes included in this LEP will be coded "SILICA" in the Local Emphasis Program fields on the appropriate forms.

X. Program Evaluation. The effectiveness of this program will be evaluated by the Area Offices each year the program is in effect, using the "Program Evaluation Items" for Local Emphasis Programs (LEPs), as specified in CPL 04-00-00, Appendix A. The evaluation will be submitted to the Regional Office by October 30. The Area Offices shall collect data relevant to the effectiveness of this program, such as the number of employees covered, the number of

workers removed from hazards, the reductions in employee exposures, LWDII rates, the number of serious violations related to employee exposure to crystalline silica, and the number of inspections without violations.

Kimberly A. Stille
Regional Administrator

(Date)

Office of the Solicitor Concurrence

(Date)

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Appendix A: General Industries Selected for Inspection by Des Moines, Kansas City, Omaha, St. Louis, and Wichita Area Offices

This appendix contains a list of Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes which have been selected for General Industry inspections.

Industries with Crystalline Silica Exposure, 1996-2007		
1987 SIC Code¹	1987 SIC Industry Title	2012 NAICS Code²
3251	Brick and Structural Clay Tile	327120, 327331
3253	Ceramic Wall and Floor Tile	327120
3255	Clay Refractories	327120
3261	Vitreous China Plumbing Fixtures and China and Earthenware Fittings and Bathroom Accessories	327110
3262	Vitreous China Table and Kitchen Articles	327110
3264	Porcelain Electrical Supplies	327110
3269	Pottery Products, n.e.c.	327110
3271	Concrete Block and Brick	327331
3272	Concrete Products, Nec	327332, 327390, 327999
3273	Ready-mixed Concrete	327320
3281	Lime	327410
3291	Abrasive Products	327910, 332999
3299	Nonmetallic Mineral Products, n.e.c.	327110, 327999
3312	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	324199, 331110, 331221
3321	Gray and Ductile Iron Foundries	331511
3322	Malleable Iron Foundries	331511
3325	Steel Foundries, Nec	331513
3334	Primary Production of Aluminum	331313
3431	Enameled Iron and Metal Sanitary Ware	332999
3441	Fabricated Structural Metal	332312
3443	Fabricated Plate Work (Boiler Shop)	332313, 332410, 332420, 333415
3444	Sheet Metalwork	332321, 332322, 332439, 333415
3471	Plating and Polishing	332813
3479	Metal Coating and Allied Services	332812, 339910
3531	Construction Machinery and Equipment*	333120, 333923, 336510
3599	Industrial and Commercial Machinery and Equipment*	332710, 332813, 332999, 333318, 333999, 336390
3715	Truck Trailers	336212
5032	Brick, Stone, and Related Construction Materials ³	423320, 425110, 425120, 444190
7532		
*Crystalline silica exposure primarily from abrasive blasting operations		

¹ *Standard Industrial Classification Manual*, 1987. Executive Office of the President, Office of Management and Budget.

² *North American Industry Classification System*, United States, 2012. Executive Office of the President, Office of Management and Budget.

3 This industry may be subject to OSHA Instruction CPL 02-00-051 - Enforcement Exemptions and Limitations under the Appropriations Act (or a subsequent version).

Source: Federal OSHA Inspection Data for Silica (Code 9010-Quartz) compiled in the OSHA Integrated Management Information System (IMIS), from 01/01/1996 through 03/31/2007.

Appendix B: Construction Industries Selected for Inspection by Des Moines, Kansas City, Omaha, St. Louis, and Wichita Area Offices

This appendix contains a list of Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes which have been selected for Construction Industry inspections.

Industries with Crystalline Silica Exposure, 1996-2007		
1987 SIC Code¹	1987 SIC Industry Title	2012 NAICS Code²
1521	General Contractors-Single Family Houses	236115, 236118
1522	General Contractors-Residential Buildings Other Than Single-Family	236115, 236118
1611	Highway and Street Construction, Except Elevated Highways	237310
1622	Bridge, Tunnel, and Elevated Highway Construction	237310
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction	237110, 237130
1629	Heavy Construction, n.e.c.	237110, 237130
1721	Painting and Paper Hanging*	237310, 238320
1741	Masonry, Stone Setting, and Other Stone Work	238140
1742	Plastering, Drywall, Acoustical, and Insulation Work	238310
1761	Roofing, Siding, and Sheet Metal Work	238160, 238170, 238390
1771	Concrete Work	238110, 238140, 238990
1794	Excavation Work	238910
1795	Wrecking and Demolition Work	238910
1799	Special Trade Contractors, n.e.c.	237990, 238150, 238190, 238290
*Crystalline silica exposure primarily from abrasive blasting operations		
¹ <i>Standard Industrial Classification Manual</i> , 1987. Executive Office of the President, Office of Management and Budget.		
² <i>North American Industry Classification System</i> , United States, 2012. Executive Office of the President, Office of Management and Budget.		
Source: Federal OSHA Inspection Data for Silica (Code 9010-Quartz) compiled in the OSHA Integrated Management Information System (IMIS), from 01/01/1996 through 03/31/2007.		