



# OSHA REGIONAL NOTICE

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

**DIRECTIVE NUMBER: 03-00-007**

**EFFECTIVE DATE: October 1, 2014**

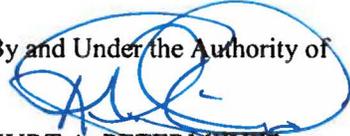
**SUBJECT: Regional Emphasis Program - Silica**

**REGIONAL IDENTIFIER: Atlanta Regional Office (Region IV)**

## ABSTRACT

- Purpose:** This instruction implements in Region IV the National Emphasis Program (NEP) to reduce occupational exposures to Crystalline Silica.
- Scope:** This REP applies to all area offices in Region IV.
- References:** OSHA Instruction CPL 02-00-150, Field Operations Manual (FOM)  
OSHA Instruction CPL 02-00-025, Scheduling Systems for Programmed Inspections  
  
OSHA Instruction CPL 04-00-001, Procedures for Approval of Local Emphasis Programs (LEP's) and Appendix A, Program Evaluation Items for Local Emphasis Programs  
  
OSHA Instruction CPL 03-00-007, National Emphasis Program – Crystalline Silica
- Cancellations:** This Notice replaces earlier versions.
- State Impact:** None
- Action Offices:** Area Offices
- Originating Office:** Atlanta Regional Office
- Contact:** Benjamin Ross, Assistant Regional Administrator for Enforcement Programs, 678-237-0400

By and Under the Authority of



KURT A. PETERMEYER  
Regional Administrator

## Executive Summary

This instruction establishes a Regional Emphasis Program to reduce occupational exposures to crystalline silica. The REP also ensures effective targeting, enforcement and outreach for crystalline silica hazards in response to the National Emphasis Program for Crystalline Silica.

## Significant Changes

None

## TABLE OF CONTENTS

I. <u>Purpose</u> .....	3
II. <u>Scope</u> .....	3
III. <u>References</u> .....	3
IV. <u>Expiration</u> .....	3
V. <u>Action</u> .....	3
VI. <u>Background</u> .....	3
VII. <u>Program Procedures</u> .....	4
VIII. <u>Scheduling of Inspections</u> .....	4
IX. <u>Inspection Procedures</u> .....	5
X. <u>Outreach</u> .....	5
XI. <u>Recording in OIS</u> .....	5
XII. <u>Evaluation</u> .....	5
Appendix A: Industries with Documented Silica Overexposures in Region IV.....	7
Appendix B (NEP): Industries with Potential Overexposure to Crystalline Silica.....	9
Appendix C: Links to Reference Documents.....	11
Appendix D: CSHO Checklist for Conducting Silica-Related Inspections.....	12

I. PURPOSE. Regional Emphasis Program for the implementation of the National Emphasis Program for Crystalline Silica.

II. SCOPE. This REP applies to all area offices in Region IV.

III. REFERENCES.

OSHA Instruction CPL 03-00-007, NEP for Crystalline Silica

OSHA Instruction CPL 02-00-150, Field Operations Manual (FOM)

OSHA Instruction CPL 04-00-001, Procedures for Approval of Local Emphasis Program and Appendix A, Program Evaluation Items for Local Emphasis Programs

OSHA Instruction CPL 02-00-025, Scheduling System for Programmed Inspections

Other references in Directive Number: CPL 03-00-007

IV. EXPIRATION. This instruction expires within one year of the effective date, unless extended.

V. ACTION. OSHA compliance personnel shall follow the procedures contained in this instruction when conducting outreach and enforcement activities.

VI. BACKGROUND. 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.

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.

The 1994 Government Performance and Results Act (GPRA) mandates that federal agencies improve performance and devise a system for measuring results. To comply with the provisions of GPRA, OSHA developed a Strategic Plan for improving the safety and health of all employees. In 1998 and again in 2003, under the Strategic Plan, OSHA identified crystalline silica as one of the focused hazards.

This REP is being implemented to direct OSHA's Region IV'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.

VII. PROGRAM PROCEDURES.

- A. As required by the Crystalline Silica NEP, all inspections (SSTs, complaints, etc.) conducted in the industries listed in Appendix B, where the compliance officer determines that there is a potential employee overexposure to silica, the inspection shall be counted under the NEP, and coded as a strategic plan silica inspection.
- B. All inspections covered by this REP shall be conducted according to instructions contained in the NEP.
- C. Other inspections, where the potential for exposures above the permissible exposure limit to Crystalline Silica exist in the industries listed in Appendix A, shall be conducted in accordance with the Paragraph XI.A.4 – XI.A.7 of the NEP.

VIII. SCHEDULING OF INSPECTIONS.

- A. The Area Director shall compile a master list of establishments utilizing local information, as described in the NEP, paragraph XI.A.4.a. – XI.A.4.d; historical inspection data; and the list of industries in Appendix A (Industries where overexposures to crystalline silica have been documented in Region IV). Adjustments to the list for additions and deletions will follow guidelines in CPL 02-00-025, paragraph B.1.b.(1)(b)(6) and CPL 03-00-007, paragraph XI.A.2.c..
  - 1. Each establishment on the corrected list will be assigned a sequential number, starting at the top of the list with number one. A random number table will then be applied to create the first inspection cycle of five or more establishments. Subsequent cycles will be created in the same way until the expiration of the REP or until all establishments on the list have been assigned to a cycle. Cycles may be created all at once or as needed, and need not be of the same size. Whenever an office becomes aware of a previously unknown establishment in one of the identified SICs/NAICSs, that establishment shall be added to the master list for inclusion in the next inspection cycle.
  - 2. Establishments may be selected from the specified cycle for inspection in any order that makes efficient use of available resources. Each inspection cycle must be completed before another cycle is started except as allowed by CPL 02-00-025, paragraph B.1.b.(1)(d). It is anticipated that safety hazards will be identified during the course of these inspections and referrals will be made as appropriate to address the safety hazards noted.

IX. INSPECTION PROCEDURES.

- A. All inspections **shall** be conducted in accordance with **Paragraph XI.B. of the NEP.** If exposure monitoring for crystalline silica is not conducted, the rationale must be

included in the case file. Appendix D (Appendix H in NEP) contains a checklist that summarizes the information to be documented during a silica-related inspection. The checklist may be used by the CSHO to ensure proper coverage of the essential elements of a silica-related inspection. A detailed account of all findings shall be documented in the case file.

- B. Where citations are issued for overexposure to crystalline silica, follow-up site visits must be conducted to determine whether the company is eliminating silica exposures or reducing exposures below the PEL.
  - C. 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 per 1903.19.
  - D. Once the necessary abatement verification is received, a copy of the relevant information in the case file (OSHA Inspection Forms) for overexposures to silica; and all Engineering Controls used to control silica exposure) will be sent to the National Office - Directorate of Enforcement Programs. Information in the case file will be distributed to the Office of Statistics for use as the Goal Indicator for silica.
- X. OUTREACH. Each Area Director is encouraged to develop outreach programs that will support their enforcement efforts. Suggested outreach materials and targeted audiences are referenced in Paragraph XI.C. of the NEP.
- XI. RECORDING IN OIS. Instructions contained in the NEP shall be followed in coding NEP silica inspections. In addition, the Inspection Forms for all inspections conducted in establishments that are covered by this REP shall be coded as local emphasis program inspections and marked "SILICA."
- XII. EVALUATION:
- A. Area Director's Responsibility: The area director affected by this regional emphasis program shall submit via the Performance Planning System by October 31, of each year an evaluation report that shall include the following elements:
    - 1. The goal of the program
    - 2. The area director's opinion of how effective the program was in meeting its goal.
    - 3. Data and information to support the conclusions stated in (2) above including:
      - a. enforcement statistics;
      - b. serious hazards related to crystalline silica exposure eliminated;

- c. number of times engineering controls cited; and
  - d. number of violations cited relating to overexposures to crystalline silica.
4. Statement of whether the program should be continued, accompanied by a brief rationale.
  5. Description of any legal issues that arose which would necessitate a review by the Solicitor before renewal of the program could be approved.
  6. Any other comments or recommendations, including findings that might have an impact on how OSHA or the industry does business.
- B. Regional Office Responsibility: Based on the area director's evaluation and any other pertinent information, Enforcement Programs will prepare an evaluation of this program for the Regional Administrator's submission to the national office as required by current instructions.

DISTRIBUTION: All Area Offices  
Enforcement Programs  
Regional Solicitor  
Cooperative and State Programs  
Administrative Programs

## APPENDIX A

### Industries with Documented Overexposures to Crystalline Silica in Region IV

This appendix contains a list of industries in which employees may be exposed to elevated levels of crystalline silica. The list is based on a review of the Region IV Sampling Database for the last five fiscal years. This table is intended to show the range of industries in which overexposures to crystalline silica have been documented in Region IV, but should not be considered to be an exhaustive listing.

<b>Industries in Region IV with Crystalline Silica Overexposures</b>		
<b>1987 SIC Code<sup>1</sup></b>	<b>1987 SIC Industry Title</b>	<b>2002 NAICS Code<sup>2</sup></b>
1522	General Contractors-Residential Buildings Other Than Single-Family	236115, 236118
1541	General Contractors-Industrial Buildings and Warehouses	236210, 236220
1542	General Contractor-Nonresidential Buildings, Other than Industrial Buildings and Warehouses	236220
1611	Highway and Street Construction, Except Elevated Highways	237310
1629	Heavy Construction, n.e.c.	236210, 237110, 237120, 237130, 237990
1711	Plumbing, Heating and Air-Conditioning	238210, 238220, 238910
1721	Painting and Paper Hanging*	237310, 238320
1741	Masonry, Stone Setting, and Other Stone Work	238140
1743	Terrazzo, Tile, Marble and Mosaic Work	238310, 238340
1752	Floor Laying and Other Floor Work, NEC	238330
1771	Concrete Work	238110, 238140, 238990
1794	Excavation Work	238910
1799	Special Trade Contractors, n.e.c.	236220, 237990, 238150, 238190, 238290
2434	Wood Kitchen Cabinets	337110
3088	Plastics Plumbing Fixtures	326191
3211	Flat Glass	327211
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
3296	Mineral Wool	327993
3321	Gray and Ductile Iron Foundries	331511
3325	Steel Foundries, n.e.c.	331513
3365	Aluminum Foundries	331524

3369	Nonferrous Foundries, Except Aluminum and Copper	331528
3443	Fabricated Plate Work (Boiler Shops)*	332313, 332410, 332420
3471	Electroplating, Polishing, Anodizing, and Coloring*	332813
3496	Coating, Engraving, and Allied Services, n.e.c.*	332812, 339911, 339912, 339914
3537	Industrial Trucks, Tractors, Trailers, and Stackers	332439, 332999, 333924
3599	Industrial and Commercial Machinery and Equipment*	332710, 332813, 332999, 333319, 333999, 334519, 336399
3711	Motor Vehicles and Passenger Car Bodies	336111, 336112, 336120, 336211, 336992
3728	Aircraft Parts and Auxiliary Equipment, NEC	332912, 336411, 336413
3731	Ship Building and Repairing	336611
3999	Manufacturing Industries, NEC <sup>3</sup>	316110, 321999, 325998, 326199, 332211, 332212, 332812, 332999, 333319, 335121, 335211, 337127, 339932, 339999
5032	Brick, Stone, and Related Construction Materials <sup>3</sup>	423320, 425110, 425120, 444190
5211	Lumber and Other Building Materials Dealers	444110, 444190
5713	Floor Coverings Store <sup>3</sup>	442210

\*Crystalline silica exposure primarily from abrasive blasting operations

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

<sup>2</sup> *North American Industry Classification System*, United States, 2002. Executive Office of the President, Office of Management and Budget.

<sup>3</sup> 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: Region IV Sampling Database.

## Appendix B (NEP)

### Industries with Potential Overexposure to Crystalline Silica

This appendix contains a list of industries in which employees may be exposed to elevated levels of crystalline silica. The list is based on a review of inspection data from OSHA's Integrated Management Information System (IMIS) for crystalline silica (quartz), for the period January 1996 through March 2007. This table is intended to show the range of industries in which crystalline silica exposure may occur, but should not be considered to be an exhaustive listing. Employee exposure to crystalline silica may occur in industries not listed here. Likewise, crystalline silica exposure does not occur in all establishments encompassed within these North American Industry Classification System (NAICS) or Standard Industrial Classification (SIC) codes.

<b>Industries with Crystalline Silica Exposure, 1996-2007</b>		
<b>1987 SIC Code<sup>1</sup></b>	<b>1987 SIC Industry Title</b>	<b>2002 NAICS Code<sup>2</sup></b>
1521	General Contractors-Single Family Houses	236115, 236118
1522	General Contractors-Residential Buildings Other Than Single-Family	236115, 236118
1541	General Contractors-Industrial Buildings and Warehouses	236210, 236220
1611	Highway and Street Construction, Except Elevated Highways	237310
1622	Bridge, Tunnel, and Elevated Highway Construction	237310, 237990
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction	237110, 237120, 237130
1629	Heavy Construction, n.e.c.	236210, 237110, 237120, 237130, 237990
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.	236220, 237990, 238150, 238190, 238290
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 Earthenware Fittings and Bathroom Accessories	327111
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
3312	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	324199, 331111, 331221
3321	Gray and Ductile Iron Foundries	331511
3322	Malleable Iron Foundries	331511
3325	Steel Foundries, n.e.c.	331513
3334	Primary Production of Aluminum	331312
3365	Aluminum Foundries	331524
3366	Copper Foundries	331525
3369	Nonferrous Foundries, Except Aluminum and Copper	331528
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 <sup>3</sup>	423320, 425110, 425120, 444190
7532	Top, Body, and Upholstery Repair Shops and Paint Shops*	811121

\*Crystalline silica exposure primarily from abrasive blasting operations

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

<sup>2</sup> *North American Industry Classification System*, United States, 2002. Executive Office of the President, Office of Management and Budget.

<sup>3</sup> 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 C**

### **Links to Reference Documents**

CPL 02-00-150

OSHA Instruction: Field Operations Manual (FOM)

[https://www.osha.gov/OshDoc/Directive\\_pdf/CPL\\_02-00-148.pdf](https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-00-148.pdf)

CPL 03-00-007

OSHA Instruction: National Emphasis Program-Crystalline Silica

[http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=DIRECTIVES&p\\_id=3790](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=3790)

TED 01-00-015

OSHA Technical Manual (OTM)

[https://www.osha.gov/dts/osta/otm/otm\\_toc.html](https://www.osha.gov/dts/osta/otm/otm_toc.html)

## APPENDIX D

### CSHO Checklist for Conducting Silica-Related Inspections

This non-mandatory checklist is intended as a quick reference tool for Compliance Safety and Health Officers (CSHOs) conducting silica-related inspections. The CSHO may wish to review the checklist before completing the inspection to make sure that none of the essential elements have been overlooked. The checklist addresses all of the topics discussed in Section XI(B), Inspection Procedures, of the NEP.

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