



# OSHA REGIONAL INSTRUCTION

U.S. DEPARTMENT OF LABOR Occupational Safety and Health Administration

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**DIRECTIVE NUMBER:** 2019-14 (CPL 04) | **EFFECTIVE DATE:** October 1, 2018

**SUBJECT** Local Emphasis Program for Health Hazards in Metal Fabrication (Except Structural)

**REGIONAL IDENTIFIER:** Philadelphia Region III

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## ABSTRACT

**Purpose:** This Instruction continues a local emphasis program (LEP) for programmed, comprehensive health inspections of facilities engaged in the fabrication of metal products, with the exception of structural metal fabrication.

**References:** [CPL 02-00-160, Field Operations Manual \(FOM\) \(August 8, 2016\)](#); [CPL 04-00-002, Procedures for the Approval of Local Emphasis Programs \(LEPs\) \(11/13/2018\)](#); [CPL 02-00-025, Scheduling System for Programmed Inspections \(January 4, 1995\)](#); [CPL 02-02-074, Inspection Procedures for the Chromium \(VI\) Standards \(January 24, 2008\)](#); [CPL 02-00-158, Inspection Procedures for the Respiratory Protection Standard \(June 26, 2014\)](#); [CPL 02-00-051, Enforcement Exemptions and Limitations under the Appropriations Act \(May 28, 1998\)](#)

**Cancellations:** Philadelphia Regional Notice: CPL 2018-14 (CPL 04), dated October 1, 2017. This Instruction replaces and updates an earlier version.

**Action Offices:** Pittsburgh, Pennsylvania Area Office

**Originating Office:** Pittsburgh, Pennsylvania Area Office

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By and Under the Authority of

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## HEALTH HAZARDS IN THE FABRICATION OF METAL PRODUCTS LEP

### I. Purpose

This Instruction continues a LEP for Health Hazards in the Fabricated Metal Product Manufacturing, NAICS Subsector 332, with the exception of Fabricated Structural Metal Manufacturing, NAICS 332312, within the jurisdiction of the Pittsburgh Area Office.

### II. Scope

This Instruction applies to the Pittsburgh Area Office.

### III. References

[CPL 02-00-160, Field Operations Manual \(FOM\) \(August 8, 2016\)](#); [CPL 04-00-002, Procedures for the Approval of Local Emphasis Programs \(LEPs\) \(11/13/2018\)](#); [CPL 02-00-025, Scheduling System for Programmed Inspections \(January 4, 1995\)](#); [CPL 02-02-074, Inspection Procedures for the Chromium \(VI\) Standards \(January 24, 2008\)](#); [CPL 02-00-158, Inspection Procedures for the Respiratory Protection Standard \(June 26, 2014\)](#) ; [CPL 02-00-051, Enforcement Exemptions and Limitations under the Appropriations Act \(May 28, 1998\)](#).

### IV. Expiration

This Instruction expires on September 30, 2023.

### V. Action Information

- A. Responsible Office: Pittsburgh Area Office
- B. Action Office: Pittsburgh Area Office
- C. Information Office: Philadelphia Regional Office

### VI. Action

OSHA compliance personnel shall ensure that the procedures contained in this directive are followed when conducting this LEP for compliance with health standards in the metal fabrication industry.

### VII. Background

A review of local and national inspection history revealed that several health hazards are prevalent at facilities engaged in the fabrication of metal products. These include, but are not limited to:

- A. Noise: Employee exposure to noise resulted in NAICS Subsector 332, which includes the industries covered by this LEP, receiving the second highest number of citations issued for violations of the OSHA noise standard (1910.95) as compared to all other industries in Federal OSHA states during fiscal year 2017. Sources of noise exposure include grinding, mechanical cutting, work in confined

spaces, some forms of welding, and abrasive blasting. On the local level, OSHA inspections conducted in this industry have removed employees from exposure to noise each year over the past ten years.

- B. Hexavalent Chromium: Employee exposure to hexavalent chromium resulted in these industries receiving the highest number of citations issued for violations of the OSHA Hexavalent Chromium Standard (1910.1026) as compared to all other industries in Federal OSHA during fiscal year 2017. Sources of hexavalent chromium exposures include welding, work in confined spaces, chrome plating, and spraying operations utilizing paints containing chromium.
- C. Respiratory Protection: Hazards related to the use and/or lack of respiratory protection resulted in these industries receiving the second highest number of citations issued for violations of the OSHA respiratory protection standard (1910.134) as compared to all other industries in Federal OSHA during fiscal year 2017. The Pittsburgh Area Office has found hazards to exist from the lack of a written respiratory protection program; a failure to determine if employees are medically capable of utilizing respirators; a failure to estimate employee exposure to air contaminants; failure to use respiratory protection when overexposed to air contaminants, and a failure to ensure that employees are adequately fitted for respirators in this industry.
- D. Spray Finishing: Inadequate ventilation may result in employee overexposure to organic vapors and isocyanates, as well as fire and explosion hazards. Hazards involving spray finishing resulted in these industries receiving the highest number of citations issued for violations of the OSHA standard for spray finishing using flammable and combustible materials (1910.107) as compared to all other industries in Federal OSHA during fiscal year 2017.
- E. Other Air Contaminants: Employee overexposures to substances listed in Tables Z-1, Z-2 and Z-3 of 29 CFR 1910.1000 resulted in this industry receiving the highest number of citations issued for violations of the OSHA air contaminant standard (1910.1000) as compared to all other industries in Federal OSHA states during fiscal year 2017. The Pittsburgh Area Office has found overexposures to substances such as zinc oxide and crystalline silica.
- F. Other health hazards encountered by the Pittsburgh Area Office during inspections within this industry include inadequate personal protective equipment, exposure to methylene chloride, inadequate hazard communication programs, and exposures to lead and cadmium.
- G. The U.S. Bureau of Labor Statistics (BLS) compiles worker safety and health data, including the Days Away, Restricted or Transferred (DART) incidence rates for metal fabrication activities. Its five recent years of available data, calendar years 2012 through 2017, are presented below in Table 1 for (NAICS) code 332 (Fabricated Metal Product Manufacturing).

\*The Fabricated Metal Product Manufacturing DART incident rate exceeds both the Private and Construction Industry averages for each calendar year.

Table 1

Calendar Year	Private Industry Average	Construction Industry Average	Fabricated Metal Product Manufacturing
2012	1.8	2.1	2.9
2013	1.8	2.1	2.6
2014	1.7	2.2	2.4
2015	1.6	2.0	2.3
2016	1.6	1.9	2.2
2017	1.5	1.8	2.2

VIII. Procedures

This Local Emphasis Program includes three major field activities: outreach, site selection and inspection.

- a. Outreach: The Pittsburgh Area Office developed outreach programs that support the purpose of this initiative – the reduction and elimination of health hazards within the metal fabrication industry. The programs included letters to the employer explaining the purpose of the initiative and the selection criteria for the targeted participants. Employers were provided with a list of relevant compliance assistance materials, directions on how to access these materials, and a reference to other sources of assistance such as the OSHA funded State Consultation Program. Phone calls were made to all establishments confirming receipt of these materials.
- b. Site Selection: The following procedures will be used to develop a roster from which inspections will be conducted:
  - i. A list of establishments located in the jurisdiction of the Pittsburgh Area Office falling under NAICS Subsector 332 (Fabricated Metal Products, Except Machinery and Transportation Equipment) will be obtained from the OSHA Office of Statistics. Establishments falling under NAICS 332312 (Fabricated Structural Metal Manufacturing) will be removed from the list. Most of the establishments in 332312 were previously inspected under a separate LEP that was in effect from 2009 through 2012.
  - ii. Outreach materials will be mailed to all establishments on the list.
  - iii. Outreach materials returned by the U.S. Post Office as ‘undeliverable’ will result in those establishments being deleted from the list.
  - iv. Phone calls will be made to all recipients of outreach materials to confirm receipt. During these phone calls, an attempt will be made to ascertain that the establishment is within NAICS 332. All establishments determined not to be within NAICS 332 will be deleted from the list.

- v. All establishments that are no longer in business will be deleted from the list.
- vi. Establishments that had received a comprehensive Health inspection within the previous three years will be deleted from the list.
- vii. All reasons for deletion will be kept on a spreadsheet. This spreadsheet will be saved electronically, with the file name of *metalfabFY13del*, for a period of five years.
- viii. A column will be made on the spreadsheet for random numbers. Random numbers will be generated by a table or electronic random number generator. Random numbers will be applied to the list. The list will be re-sorted in the order of the Random Numbers to develop the inspection register.
- ix. The registers will be developed in cycles of twenty establishments. All establishments from one cycle must be inspected or deleted before generating the next cycle.
- x. All unprogrammed inspection activity in NAICS 332 (except 332312) will be expanded to a comprehensive health inspection. All non-formal complaints received in NAICS 332 (except 332312) will be treated as formal complaints.

c. Inspection Procedures

Establishments within each cycle can be inspected in any order that makes efficient use of resources. Inspections conducted under this Local Emphasis Program will be conducted pursuant to the following procedures:

- i. Upon entering the facility, the CSHO will verify the NAICS code of the establishment. If the NAICS code is not within NAICS Subsector 332, or is with NAICS 332312, the CSHO will exit the facility and code the OIS Inspection Report (formerly OSHA-1) as a 'No Inspection.'
- ii. If the establishment has no employees, such as a sole proprietorship with no workers, the CSHO will exit the facility and code the OIS Inspection Report as a 'No Inspection.' Although establishments with 10 or fewer employees will be inspected, the CSHO shall be familiar with the restrictions contained in CPL 02-00-051, *Enforcement Exemptions and Limitations under the Appropriations Act*, concerning safety hazards at establishments with less than ten employees in specific NAICS codes.
- iii. If the establishment is within NAICS Subsector 332, not in NAICS 332312, and the establishment has employees, the CSHO will proceed with a Comprehensive Health inspection.
- iv. The CSHO will request the OSHA 300 Logs and OSHA 300A Forms for

the three last calendar years; review the employer's PPE hazard assessment to ensure CSHO is equipped with the appropriate PPE; follow the procedures outlined in the FOM for conducting an opening conference; then proceed as quickly as possible to the walk around. Unusual circumstances shall be handled in accordance with the FOM.

- v. During the walk around, the CSHO shall identify all processes, both major and minor, that have potential to expose employees to health hazards, most notably air contaminants and noise. Such identification may consist of observation, screening samples, review of the chemical inventory list and material safety data sheets, and brief interviews with employees.
- vi. All observed safety hazards will either be addressed by the CSHO or subject to a referral to the safety supervisor, unless exempted by CPL 02-00-051, *Enforcement Exemptions and Limitations under the Appropriations Act*.
- vii. Once the health hazards are identified, the CSHO shall evaluate the employer's industrial hygiene programs to determine the extent to which the employer has evaluated, addressed, and controlled these hazards. The CSHO shall also evaluate the employer's overall safety and health management system, in accordance with the FOM.

#### IX. Recording in OIS

- viii. The identifier code for the LEP on the inspection form under 'Local Emphasis Program' will be '**METALFAB.**' All inspections conducted shall be recorded as being 'Comprehensive.'
- ix. Some establishments selected for inspection under this instruction may also be covered by another OSHA National Emphasis Program (NEP) or Regional Emphasis Program (REP) targeting specific health hazards. In these cases, since this LEP covers all health hazards at the facility, the inspection shall also be coded with the appropriate NEP/REP identifiers in OIS under 'Type of Inspection.'
- x. All applicable Optional Information and Strategic Plan codes shall be selected in OIS.
- xi. For all LEP inspections initiated by unprogrammed inspection activity, the Inspection Forms shall be marked as 'unprogrammed,' with the appropriate unprogrammed activity identified. All other inspections will be marked as 'programmed.'

#### X. Outreach

During the course of this LEP the Area Director will ensure an outreach program will continue during the enforcement phase of the program. Outreach activities will be directed to reach as many stake holders in the Area Office's jurisdiction as is practicable. The purpose of the outreach will be to inform interested parties of the

existence, purpose and objectives of this local emphasis program as well as promote employer knowledge and employee awareness of the hazards and acceptable methods of abatement to prevent illness and injuries. The method of outreach is at the Area Director's discretion and can consist of one or more of the following components:

1. Broadcast mail-outs or program information.
2. Stakeholder meetings.
3. Targeted training sessions.
4. Presentations to the affected group(s).
5. Media press release or e-blast

#### XI. Evaluation

The Area Office will submit to the Regional Administrator a written evaluation at the midpoint (30 months) and completion (60 months) of this LEP in the format specified by OSHA Instruction [CPL 04-00-002 Procedures for the Approval of Local Emphasis Programs \(LEPs\) \(11/13/18\)](#).

Distribution: Regional and Area Offices  
Regional Solicitor  
Directorate of Enforcement Programs