ABSTRACT

Purpose: The purpose of this Local Emphasis Program is to reduce occupational exposures to lead in General Industry and Construction.

Scope: All Region V Area Offices

References:
A) OSHA Instruction CPL 03-00-009, National Emphasis Program - Lead, August 14, 2008.

B) Memoranda dated November 25, 2013 to Regional Administrators from Thomas Galassi, Director, Directorate of Enforcement Programs regarding expanded targeting of establishments under the lead NEP.

C) CPL 02-00-025, Scheduling System for Programmed Inspections.

D) OSHA Instruction CPL 02-00-150, Field Operations Manual (FOM), April 22, 2011.

E) Memoranda dated April 21, 2014 to Regional Administrators from Thomas Galassi, Director, Directorate of Enforcement Programs: “Generation and Randomization of Inspection Targeting Lists.”

F) Region V Safety and Health Program.

G) CPL 02-00-051, Enforcement Exemptions and Limitations under the Appropriations Act.

Action Offices: All Region V Area Offices
Contact: Assistant Regional Administrator - Enforcement Programs
U. S. Department of Labor – OSHA
230 S. Dearborn, Room 3244, Chicago, IL 60604
(312) 353-2220

By and Under the Authority of

Nick A. Walters
Regional Administrator
I. **Purpose.** This Notice describes Region V’s policies and procedures for implementing the National Emphasis Program (NEP) to reduce occupational exposures to lead.

II. **Scope.** This Notice applies to all Region V federal enforcement offices.

III. **Expiration.** This Notice expires on September 30, 2015.

IV. **Action.** The Area Offices will implement the procedures described in paragraphs VI through X of this notice.

V. **Background.** Exposure to lead has been shown to be responsible for a large number of health effects, some irreversible, which differ depending on age, exposure magnitude and duration. Common adverse effects include neurodevelopmental and neurobehavioral effects, lowered IQ, reproductive effects and reduced fertility, decreased nerve conduction velocity and peripheral neuropathy, elevated blood pressure, lowered vitamin D levels, reduced hemoglobin levels, diminished kidney function, altered thyroid hormone levels, and depressed hemoglobin levels. In addition, the International Agency for Research on Cancer (IARC) lists lead in Group 2 A: "probably carcinogenic to humans."

On August 14, 2008, OSHA established the National Emphasis Program (NEP) for Lead. The NEP instructed each Area Office or Regional Office to develop a Local Emphasis Program (LEP) for lead based on one or more industries listed in Appendix A for the NEP. On November 25, 2013, a memorandum was issued expanding the targeting of establishments under the lead NEP. Construction and General Industry complaints and referrals will be handled in accordance with the current Lead NEP.

A total of 345 inspections (179 General Industry and 166 Construction) were coded under the National Emphasis Program for Lead by Region V Area Offices between April 1, 2011 and January 17, 2014. More than 800 serious hazards were identified in general industry and construction during inspections over this period. Serious lead hazards identified and cited during these inspections included, but were not limited, to employers’ failure to conduct initial determination or perform exposure monitoring, employee exposures above the Permissible Exposure Limit, failure to implement engineering and/or administrative controls, failure to establish a written compliance program, failure to institute a medical surveillance program, failure to make available protective clothing and personal protective equipment including respiratory protection, failure to arrange for change areas and hygiene facilities and failure to provide training to employees.
VI. Program Procedure.

A. Industry Selection.

1. Rationale for Industry Selection. Inspections conducted under this Notice will focus on worksites where lead exposures occur. The list in Appendix A of this LEP was derived from Appendix A of the NEP and Memoranda dated November 25, 2013 to the Regional Administrators regarding expanded targeting of establishments under the lead NEP. Primary metal industries were excluded from this LEP as they are targeted in the NEP for the Primary Metal Industries. The industry classifications in Appendix A of this LEP were included based on:

   a. A history of lead overexposures based on regional inspection data from the OSHA Information System (OIS) for dates between April 1, 2011 to January 17, 2014; and

   b. Industries with no regional inspection history.

SIC codes are used in this LEP as the industries used in the NEP were established using SIC codes.

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 (e.g., a documented history of referrals from local health agencies or healthcare providers, or previous inspection histories, etc.), to have demonstrated a pattern of lead overexposures or reports of employees experiencing elevated blood lead levels.

B. Site Selection. Site selection shall be conducted in accordance with the National Emphasis Program for Lead, CPL 03-00-009 as follows:

1. Master List Generation. 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. Deletions. Establishments inspected with in the past 36 months shall be deleted from the master list.

4. Cycle Generation. 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. Inspection Procedure. In addition to the instructions contained in the NEP for Lead, 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 the employer’s SIC/NAICS code is included under this program. During the preliminary investigation, if the CSHO determines that lead is not present at the listed establishment, the inspection should be discontinued.

B. All referrals that allege that an employer had an employee with elevated blood lead levels, i.e., blood lead levels at or above 30 μg/dL, and/or involving take-home exposures, shall require the Area Office to inspect that employee's employer.

C. Based upon the information provided, all potential lead 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 02-00-150, http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-00-150.pdf.

D. All inspections under this LEP must address all aspects of any potential lead work or exposure; include a review of all related written documentation (recordkeeping, monitoring, compliance program including engineering and administrative controls, medical surveillance, training, as well as respiratory protection, hazard communication, personal protective equipment, hygiene and housekeeping programs) and interface with other applicable OSHA standards.

For programmed inspections under this LEP which occur at firing ranges, which fall under the SIC of 7997 – Membership Sport and Recreation Clubs, the CSHO shall inquire as to who conducts related services and/or activities at the site including: cleaning, de-leading (spent bullet or brass removal) or lead remediation activities; and gun training instruction and landscaping (for outdoor firing ranges). These activities are covered under the NEP. If
contractor(s) are performing any of the above-listed activities at the firing range, the CSHO shall contact the Area Office for guidance and shall open programed related inspection(s) with the contractor(s) regarding lead exposure, where appropriate. [Refer to the Memoranda dated November 25, 2013 to the Regional Administrators regarding expanded targeting of establishments under the lead NEP.]

OSHA Instruction CPL 02-00-051 states that employers with 10 or fewer employees and with lost workday case rates below the national private sector rate are exempt from programmed safety inspections. CSHOs are permitted to take any action authorized by the Act with respect to health hazards. Health inspections are to be scheduled, observed health hazards cited, and penalties assessed for all classification of violations in accordance with current procedures. Safety violations noted during the inspection shall not be cited unless the violation constitutes imminent danger.

VIII. Recording and Tracking. Inspections conducted under this Notice will be coded in OIS.

A. National Emphasis Code: Lead (Potential Exposure to Lead in All Industries)

B. Local Emphasis Code: Lead

C. When safety violations are cited during a health inspection, the case file shall be marked as health.

IX. Program Evaluation.

A. This LEP will be evaluated in accordance with the guidelines in Appendix A of CPL 04-00-001, Procedures for Approval of Local Emphasis Programs, November 10, 1999. The evaluation will also include the following information:

1. The number of in-compliance inspections coded as LEP Lead;

2. The number of inspections where employers have been cited for “Repeat” or “Willful” violations;

3. The number of inspections where employers have been cited for “Serious” violations;

4. The total number of employees removed from lead hazards as a result of the inspection (if available);

5. The total number of violations resulting from employee exposures to lead above the OSHA PEL;
6. The total number of employees documented to have exposures to lead above the OSHA PEL (if available);

7. The total number of inspections resulting in employee exposures below the OSHA PEL, but above 50% of the OSHA PEL (if available);

8. The total number of inspections coded as Lead LEP with violations of 1910.1025;

9. The total number of 1910.1025 violations from inspections coded as Lead LEP;

10. The total number of inspections coded as Lead LEP with violations of 1926.62; and

11. The total number of 1926.62 violations from inspections coded as Lead NEP.

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 prepare an evaluation to be submitted to the Regional Administrator for review by September 8th of each year.

X. Safety and Health Considerations for CSHOs. Field work in industries where lead exposure is likely to occur shall be conducted in accordance with the National and Regional Safety and Health Management System.

A. Air Monitoring Data and PPE Selection. CSHOs shall request and review air monitoring data from the employer at the opening conference to determine the expected lead exposure levels for operations involving lead. CSHOs must evaluate all relevant safety and health hazards presented 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 be based on the anticipated lead exposure in the employer’s records at a minimum.

2. In cases where the employer does not have any air monitoring data and there is evidence that airborne lead can be expected during the walkaround 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 up to 10 times the permissible exposure limit. If a CSHO assesses a higher level of respiratory protection is necessary, the CSHO shall contact the Area Office for guidance.

B. **CSHO Self-sampling.** 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. **CSHO Exposure.** CSHOs must minimize time spent in work areas where lead is generated and shall use PPE including but not limited to gloves, disposable coveralls (to minimize contamination of personal clothing) and shoe covers (to avoid tracking of lead dust in the facility back to the car or OSHA office). Minimize the checking of sampling equipment until lead generation activities are completed. Interviews should be conducted away from operations generating lead.

D. For abrasive blasting enclosures, CSHOs shall not make entry when blasting or blow down operations are taking place. When conducting pump checks CSHOs shall stay outside of the containment and have employees come to the opening of the containment for a visual check of the pumps (if possible).

E. **Decontamination.** 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. Additional information is contained in Appendix B of the chapter, Decontamination Procedures for Toxic Metals and Particulates. The following should also be considered:

1. Wear proper PPE including disposable gloves (i.e., nitrile) and safety glasses during decontamination.

2. Wipe as much dust off the sampling equipment (pumps, hoses, cassettes, or cyclones, if used) as possible with wet wipes followed by D-Wipes, in the field. Plastic covers for pumps are available from CTC.

3. As an alternative to D-Wipes, carry a bottle of water and a roll of paper towels for this first cleaning step. Spray bottles filled with water and d-lead soap are also recommended.

4. For heavy/gross contamination, put the pumps, hoses, and cyclones into plastic bags before placing in the equipment bag. When cleaning
heavy/gross contaminated equipment the CSHO should wear their appropriate respiratory protection.

5. The outside of the sampling cassette may be dusty. After the sample has been plugged, D-Wipes can be used to wipe the outer cassette before the placement of the sample seal.

6. Before eating or drinking, use D-Wipes to clean your hands and face to prevent ingestion of lead.

7. If needed, clean the pumps, hoses, and cyclones more thoroughly when you return back to the office.

8. Clean the interior and exterior of your equipment bag/case with D-Wipes.

9. Where appropriate, the Area Office shall make provisions for the laundering of CSHO personal clothing.

10. Each Area Office shall keep track of CSHO exposures to lead and provide healthcare personnel, at the time of CSHO physicals, information on the frequencies and durations of possible exposures.

11. Each Area Office shall consider putting together a portable heavy metals decontamination kit that CSHOs can take in the field. Supplies are available through CTC’s Expendable Supply Program. Suggested contents include but are not limited to:
   i. D-Wipe Towels
   ii. Full Disclosure Solution – Colorimetric Indicator Kit
   iii. Moisturizing Shower Gel
   iv. Gloves (assorted sizes)
   v. Ziploc Bags
   vi. Water Spray Bottle
   vii. Paper Towels

   (Decontamination Kit credit - Chicago North Area Office)

   D-Wipe Towels
   https://www.esca-tech.com/ProductDetail.php?category=1100&productnum=WT
   Full Disclosure Solution

XI. CSHO Training. Each Area Office will be responsible for conducting training of their compliance staff that will be conducting 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 may 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 lead 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 would also be an effective way to reach out to affected employers and employees.
## Appendix A – Region V SIC Targeting Table

<table>
<thead>
<tr>
<th>SIC</th>
<th>Industry</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>0782</td>
<td>Landscaping services (at firing ranges)</td>
<td>MEMO</td>
</tr>
<tr>
<td>2816</td>
<td>Manufacturing: Inorganic Pigments</td>
<td>NEP</td>
</tr>
<tr>
<td>2819</td>
<td>Manufacturing: Inorganic Chemicals NEC</td>
<td>NEP</td>
</tr>
<tr>
<td>2821</td>
<td>Plastics Materials, Synthetic Resins, &amp; Non-Vulcanizable Elastomers</td>
<td>NEP</td>
</tr>
<tr>
<td>2851</td>
<td>Mfr of Paints, Varnishes, Lacquers, Enamels</td>
<td>NEP</td>
</tr>
<tr>
<td>3053</td>
<td>Mfr of Gaskets, Packing and Sealing Devices</td>
<td>NEP</td>
</tr>
<tr>
<td>3211</td>
<td>Manufacturing: Flat Glass</td>
<td>NEP</td>
</tr>
<tr>
<td>3229</td>
<td>Manufacturing: Pressed &amp; Blown Glass</td>
<td>NEP</td>
</tr>
<tr>
<td>3231</td>
<td>Mfr of Glass Products Made of Purchased Glass</td>
<td>NEP</td>
</tr>
<tr>
<td>3356</td>
<td>Rolling of Non Ferrous Metals Except Cu and Al</td>
<td>NEP</td>
</tr>
<tr>
<td>3399</td>
<td>Primary Metal Products, NEC</td>
<td>NEP</td>
</tr>
<tr>
<td>3482</td>
<td>Small Arms Ammunition</td>
<td>MEMO</td>
</tr>
<tr>
<td>3483</td>
<td>Ammunition, Except for Small Arms, NEC</td>
<td>MEMO</td>
</tr>
<tr>
<td>3484</td>
<td>Small Arms</td>
<td>MEMO</td>
</tr>
<tr>
<td>3489</td>
<td>Ordinance &amp; Accessories, NEC</td>
<td>NEP</td>
</tr>
<tr>
<td>3491</td>
<td>Manufacture of Industrial Valves</td>
<td>NEP</td>
</tr>
<tr>
<td>3492</td>
<td>Manufacture of Fluid Power Valves</td>
<td>NEP</td>
</tr>
<tr>
<td>3568</td>
<td>Mechanical Power Transmission Equipment NEC</td>
<td>NEP</td>
</tr>
<tr>
<td>3675</td>
<td>Manufacture of Electronic Capacitors</td>
<td>NEP</td>
</tr>
<tr>
<td>3691</td>
<td>Storage Batteries</td>
<td>NEP</td>
</tr>
<tr>
<td>3692</td>
<td>Primary Batteries</td>
<td>NEP</td>
</tr>
<tr>
<td>3713</td>
<td>Manufacture of Truck/Bus Bodies</td>
<td>NEP</td>
</tr>
<tr>
<td>3715</td>
<td>Manufacture of Truck Trailers</td>
<td>NEP</td>
</tr>
<tr>
<td>5093</td>
<td>Electronic Scrap and Waste Recycling</td>
<td>NEP</td>
</tr>
<tr>
<td>7349</td>
<td>Cleaning Contractors (at firing ranges)</td>
<td>MEMO</td>
</tr>
<tr>
<td>7532</td>
<td>Automotive Repair &amp; Painting</td>
<td>NEP</td>
</tr>
<tr>
<td>7539</td>
<td>Automotive Repair Shops NEC</td>
<td>NEP</td>
</tr>
<tr>
<td>7997</td>
<td>Membership Sports &amp; Recreation Clubs</td>
<td>NEP</td>
</tr>
<tr>
<td>7999</td>
<td>Misc. Sports, Recreation &amp; Amusement, NEC</td>
<td>NEP</td>
</tr>
<tr>
<td>8999</td>
<td>De-leaders (Services not otherwise classified)</td>
<td>MEMO</td>
</tr>
</tbody>
</table>

**Legend**
- NEP - National Emphasis Program – Lead, Appendix A
- MEMO - Memoranda dated November 25, 2013 to the Regional Administrators regarding expanded targeting of establishments under the lead NEP