

**North Carolina Department of Labor  
Division of Occupational Safety and Health**

**Raleigh, North Carolina**

Field Information System

Operational Procedure Notice 111D

**Subject:** Special Emphasis Program for Lead Exposure

A. **Purpose.**

This instruction establishes the Special Emphasis Program (SEP) for programmed health inspections of lead operations in accordance with the provisions of the Compliance Field Operations Manual.

B. **Scope.**

This instruction applies statewide to establishments under OSHNC jurisdiction.

C. **Action.**

Bureau Chiefs and District Supervisors will ensure that CSHOs follow the procedures established in this notice when conducting lead inspections. OSHNC Compliance will review this instruction on an annual basis to confirm the need to continue the Special Emphasis Program.

D. **References.**

1. Compliance Field Operations Manual.
2. Occupational Safety and Health Administration Technical Manual: OSHA Instruction TED 1-0.15A.
3. OSHA Instruction CPL 2-2.58, December 13, 1993, 29 CFR 1926.62, Lead Exposure in Construction: Inspection and Compliance Procedures.
4. OSHA Instruction STD 3-8.1, October 30, 1978, Welding, Cutting, or Heating of Metals Coated with Lead-bearing Paint.
5. OSHA Instruction CPL 2-2.38D, March 28, 1998, Inspection Procedures for the Hazard Communication Standard.
6. OSHA Instruction CPL 2-0.130, July 11, 2001, National Emphasis Program: **Lead.**

E. **Background.**

Over the past several years OSHA inspections have documented elevated blood lead levels in construction and other workers. The source of the exposure includes cutting, welding, grinding, or abrasive blasting on steel surfaces such as bridges and tanks that are coated with lead-bearing paints. In response, several state plan states, area offices, and regions have developed local emphasis programs to address this hazard. North Carolina has also determined that an increased uniform OSHA enforcement presence is warranted at work sites where such exposures occur.

1. In 1990, NIOSH set as a national goal the elimination of lead exposures that result in workers having blood lead concentrations greater than 25 ug/100 grams of whole blood.
2. In October 1992, Congress passed Sections 1031 and 1032 of Title X of the Housing and Community Development Act of 1992 (Public Law 102-550). The Act specifically required the Secretary of Labor to issue an interim final lead standard covering the construction industry.
3. In May 1993, OSHA issued the Interim Final Rule for Lead in Construction, 29 CFR 1926.62.
4. In March 1996, OSHA issued CPL 2.105, Special Emphasis Program, Lead in Construction.
5. In July 2001, OSHA issued CPL 2-0.130, National Emphasis Program: Lead. This replaced the original SEP for Lead in Construction, and expanded it to include General Industry, Longshoring, and Marine Terminals.
6. In North Carolina, doctors and laboratories are required to report and hospitals are encouraged to report elevated blood lead levels in adults. This information is communicated to the Health Hazards Control Unit of the North Carolina Department of Health and Human Services (NCDHHS), Division of Public Health.

F. **Procedures.**

Inspections under this special emphasis program shall be scheduled and conducted under the following priority:

1. Referrals:
  - a. CSHO.
    - i. An effort will be made to determine when activities involve worker exposure to hazards associated with lead. All compliance personnel will be instructed to look for activities where lead may be present. Such activities may include, but are not limited to:
      - residential remodeling
      - petroleum tank repainting
      - indoor and outdoor industrial maintenance and renovation
      - commercial and institutional remodeling
      - highway and railroad bridge repainting and rehabilitation
      - lead joint work on cast iron soil pipes
      - repair and removal of water lines
      - water tank repainting and demolition
      - highway and railroad bridge demolition
      - housing lead abatement projects
      - electric transmission and communication tower maintenance
      - electrical cable splicing and resplicing

- installation of terne roofing
  - elevator cable babbitting
  - underground storage tank demolition
  - stained glass window removal and repair
  - mineral wool insulation with lead contamination.
- ii. Any observation of an operation where the potential for lead exposure exists will be handled as follows:
- A. When a CSHO observes or receives information about potential lead exposure, regardless of whether or not a violation is observed, through complaints, referrals, or reports from members of the general public, the CSHO will:
1. Document the status and condition of the work operation, noting any serious hazards.
  2. Document the name, address and location of the worksite and the contractors performing the operation.
  3. Provide the appropriate Health District Supervisor with the information.
- B. Based upon the information provided, all potential lead work sites brought to the attention of the District Office will be inspected as follows:
1. If the worksite has been inspected within the last 30 days, the results of the inspection will be considered along with the current worksite observations in determining whether or not an inspection is to be conducted.
    - i. If the lead-related work was not in progress during the previous visit to the site but is currently in progress, an inspection will be opened.
    - ii. If the lead-related work was in progress and evaluated during the previous inspection, a new inspection will be opened only if apparent serious violations are present or can reasonably be expected at the site.
  2. If the worksite has not been inspected within the previous 30 days, an inspection will be conducted unless it is apparent that workers are not exposed to lead.
- iii. Reports of imminent danger, fatality/catastrophe reports, formal/nonformal complaints, safety and health referrals from other federal, state, county, and city agencies, media reports,

reports from physicians, hospitals, or medical clinics, and reports from the general public will be inspected.

- iv. The discovery of these work sites may be the result of a specific search to find this type of operation, at the discretion of the Bureau Chief.
- v. In case of a denial of entry, the District Office will maintain documentation of the events leading up to the observation.
- b. North Carolina Department of Health and Human Services (NCDHHS). Through a Memorandum of Understanding with NCDHHS, OSHNC will receive information related to elevated blood lead levels in adults. Where occupational exposure is a potential reason for a person's having blood lead levels above 25 ug/100 grams of whole blood, the employer of that person shall be targeted for inspection provided the worker can be identified with an employer.
- c. North Department of Transportation (NCDOT). OSHNC may receive bridge repair contract information from the NCDOT. This information will be used to assign lead-related inspections.
- d. Department of Housing and Urban Development (HUD). OSHNC will establish contact with HUD, and information received may be used to assign lead-related inspections.
- e. North Carolina Department of Environment and Natural Resources (NCDENR): OSHNC will periodically receive a list of permits for renovation of elevated water tanks from the NCDENR-Public Water Supply Division. Because of the high potential exposure to lead (and silica) during paint removal and prepping operations on elevated tanks, the sites listed on the permits may be targeted for inspection.

2. Programmed Inspections

- a. PSIM will develop a list of employers likely to be involved in lead related activities.
- b. The SIC Codes for this SEP may include, but are not limited to:

<i>SIC</i>	<i>Description</i>
1622	Bridge, tunnel, and elevated highway construction
1629	Heavy construction
1721	Painting and paperhanging
1791	Structural steel erection
1795	Wrecking and demolition work
1799	Special trade contractors, NEC

<i><b>SIC</b></i>	<i><b>Description</b></i>
2816	Inorganic pigments (lead, lead oxide)
2819	Industrial inorganic chemicals, NEC
2851	Paints, varnishes, lacquers, etc. (lead-in-oil paints)
2879	Pesticides and agricultural chemicals, NEC (lead arsenate)
2892	Explosives (lead azide)
3211	Flat glass
3229	Pressed and blown glass and glassware, NEC
3231	Glass products made of purchased glass (stained glass)
3295	Minerals and earths, ground or otherwise treated
3331	Primary smelting and refining of copper
3339	Primary smelting/refining of nonferrous metals, except Cu and Al
3341	Secondary smelting/refining of nonferrous metals
3356	Rolling, drawing, & extruding of nonferrous metals, except Cu and Al
3364	Nonferrous die casting, except Al
3366	Copper foundries
3482	Small arms ammunition
3483	Ammunition, except for small arms
3497	Metal foil and leaf (lead foil)
3672	Printed circuit boards
3674	Semiconductors & related devices
3675	Electronic capacitors
3676	Electronic resistors

<i><b>SIC</b></i>	<i><b>Description</b></i>
3677	Electronic coils, transformers, & other inductors
3679	Electronic components, NEC
3691	Storage batteries
3692	Primary batteries, dry and wet
3694	Electrical equipment for internal combustion engines
3952	Lead pencils, crayons, and artists' materials (modeling clay, paints, etc.)
4911	Electrical services
5052	Coal & other minerals and ores (lead ore distribution)
5093	Scrap and waste materials
5231	Paint, Glass, and Wallpaper Sales
7381	Detective, guard, and armored car service
7629	Electrical & electronics repair shops
7999-33 - 7999-60	Amusement/recreation services (shooting/gun safety ranges)
9221	Police departments

- c. Sources for contractors involved in lead related work may be obtained from a variety of sources including the following:
  - Federal or State Department of Transportation contacts (bridge contracts).
  - Dodge reports.
  - State and local building permits.
3. Joint Safety and Health Activities
  - a. Health Compliance Officers (HCO) conducting these inspections should, when necessary, consult with Safety Compliance Officers (SCO) on fall protection hazards and hazards associated with working over water.
  - b. Where resources permit, a joint safety and health inspection may be conducted. The HCO will submit referrals to the SCO where appropriate.

**G. Application.**

1. Inspections conducted under this SEP will address all lead work and exposure and will include a review of related written documentation (i.e., record keeping, monitoring, medical, respirator fit testing and procedures, hazard communication, and training materials). Any expansion of the scope of the inspection will be in accordance with the FOM for complaints and referrals.
2. If the company headquarters are located in another state, the CSHO will attempt to obtain the information in VII.A. The CSHO will document each attempt to obtain information and the information obtained.
3. If a site turns out to be located within the jurisdiction of another Field Office, a referral will be made to that Field Office according to current procedures. Information obtained from the employer's headquarters will be shared with any other Field Office having an active site.
4. The Assistant Director and the Bureau Chiefs of Compliance in consideration of site information will determine the number of inspections conducted under this SEP.
5. CSHOs will conduct personal monitoring and collect wipe samples as appropriate to document exposures. (See OSHA Instruction TED 1-0.15A.)
6. While evaluating worker exposures to lead, CSHOs will also need to be aware of and evaluate, as deemed appropriate, potential exposures to other metals including but not limited to: arsenic, manganese, chromium, cadmium, copper, and magnesium.

**H. Recording in the Integrated Management Information System (IMIS).**

Current instructions for completing the OSHA-1, OSHA-7 and OSHA-90 will be applied when recording inspections conducted under this SEP as follows:

1. The OSHA-1 form for any programmed inspection covered under this SEP will be marked "PLANNED" (item 24h), "MANUFACTURING OR CONSTRUCTION" (item 25a/b, as appropriate), "SPECIAL EMPHASIS PROGRAM" "LEAD" (item 25d) and "STRATEGIC PLAN" "LEAD EXPOSURE" (item 25f).
2. The OSHA-1 form for any unprogrammed inspection covered under this SEP will be marked "UNPROGRAMMED" (item 24a through 24g, as appropriate), "SPECIAL EMPHASIS PROGRAM" "LEAD" (item 25d) and "STRATEGIC PLAN" "LEAD EXPOSURE" (item 25f). Record "LEAD" in the space in items 25d and "REDUCTION LEAD/SILICA EXP" in item 25f.
3. Complete the OSHA-90 and mark "STRATEGIC PLAN ACTIVITY" "LEAD EXPOSURE" (item 32).
4. If an inspection covered under this SEP results in a program improvement (specifically associated with the employer's lead program), the following State IMIS code will be entered on the OSHA-1 form: "S 12 LEAD PROG IMPROVEMENT" (this is to be recorded in the Optional Information field).

**I. Other Division Activity.**

The Bureau of Education, Training and Technical Assistance (ETTA), and the Bureau of Consultative Services will develop outreach programs, which support the enforcement

effort. Such programs may include letters to employers, the Associated General Contractors (AGC), local unions, Associated Builders and Contractors, local safety councils, apprenticeship programs, local hospitals and occupational health clinics, and/or other employer organizations that engage in lead activities. Speeches through the local safety councils or industrial hygiene organizations may provide another avenue for dissemination of information, as will press releases to the local media.

Using the list compiled by PSIM, ETTA will contact each employer in writing and provide them with a copy of the lead in construction standard and other general lead information. The Bureau of Consultative Services, upon request, will provide on-site consultation for qualified small employers.

J. **Expiration.**

This SEP is effective on the date of signature. It will remain in effect until canceled by the Director.

Signed on Original  
John H. Johnson  
Director

Signed on Original  
Paul Sullivan  
Health Compliance Supervisor

5/21/02  
Date of Signature