

North Carolina Department of Labor  
Division of Occupational Safety and Health

Field Information System  
SN/OPN

Operational Procedure Notice 111

**SUBJECT: Special Emphasis Program Lead in Construction**

- A. Purpose. This instruction establishes a Special Emphasis Program (SEP) for programmed health inspections of lead in construction operations in accordance with the provisions of the Compliance Operations Manual.
- B. Scope. This instruction applies statewide.
- C. Action. Bureau Chiefs and District Supervisors shall ensure that the procedures established in this notice are adhered to in conducting lead inspections.
- D. References.
  - 1. Compliance Operations Manual.
  - 2. Occupational Safety and Health Administration Technical Manual: OSHA Instruction TED 1.15 Section I, Chapter 1, part C; Section I, Chapter 2; Section IV, Chapter 3, Parts A, B, and C; Section VII.
  - 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 2-2.38C, October 22, 1990, Inspection Procedures for the Hazard Communication Standard.
- E. Background. Over the past several years OSHA inspections have documented elevated blood lead levels in construction workers. The source of the exposure is from the cutting, welding, grinding, and/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 their own local emphasis programs to address this hazard in the construction industry.

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 26 ug/100 grams of whole blood.
2. In 1991, OSHA announced it would begin to develop a standard regulating lead exposure in construction.
3. 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.
4. In May 1993, OSHA issued the Interim Final Rule for Lead in Construction.
5. The construction scheduling procedure outlined in the Compliance Operations Manual cannot directly be used in scheduling health inspections for lead exposure in construction. Consequently, the following procedures are prescribed in scheduling these inspections.

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

1. Referrals:
  - a. North Carolina Department of Environment, Health and Natural Resources (NCDEHNR). Through a Memorandum of Understanding with NCDEHNR, OSHANC 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 40 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.
  - b. North Carolina Department of Transportation (NCDOT). OSHANC will receive bridge repair contract information from the NCDOT. This information will be used by MIE to assign lead related inspections.
  - c. Department of Housing and Urban Development(HUD). OSHANC will establish contact with HUD, and information received will be used by MIE to assign lead related inspections.
  - d. CSHO. An effort shall be made to determine when construction activities involve worker exposure to hazards associated with lead during abrasive blasting, sanding, cutting, burning, welding, painting, etc. of steel structures coated with lead contaminated paints, or during any other disturbance of lead containing materials. All

compliance personnel shall be instructed to be on the lookout for construction activities where there is a potential for exposure to lead. Such activities can 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 babbetting,\*  
underground storage tank demolition,  
stained glass window removal and repair, and  
mineral wool insulation with lead contamination.\*

**\*Note:** Construction work means any construction, alteration, and/or repair, including painting and decorating. The highlighted activities, may under some circumstances, fall under the General Industry lead standard 29 CFR 1910.1025. CSHOs should refer to page A-1 of CPL 2-2.58 for a discussion of such instances where 29 CFR 1910.1025 prevails. For inspections of these activities conducted under this SEP, CSHOs must document that the work is a construction activity as defined by CPL 2-2.58 and 29 CFR 1926.62.

Every observation of any operation where there exists the potential for lead exposure shall be handled as follows:

- a. Whenever a CSHO observes or receives information where there exists the potential for lead exposure, regardless of whether or not a violation is observed, through nonformal complaints, referrals, reports from members of the general public, and so forth, the CSHO shall:
  1. Document the status and condition of the work operation as far as it is known, noting any serious hazards.

2. Note the name and address and location of the worksite and the contractor(s) performing the operation.
3. Provide the Health Supervisor for the affected district with the information. Based upon the information provided, all potential lead in construction work sites brought to the attention of the District Office shall be investigated/inspected as follows:
  - a. If the worksite has been inspected within the last 30 days, the results of the inspection shall be considered along with the current worksite observations in determining whether or not an inspection is to be conducted.
    1. If the lead-related work was not in progress during the previous visit to the site but is currently in progress the inspection shall be authorized and opened.
    2. If the lead-related work was in progress and evaluated during the previous inspection, the inspection will be opened only if apparent serious violations are present or can reasonably be expected at the site.
  - b. If the worksite has not been inspected within the previous 30 days, an investigation/inspection shall be conducted unless it is apparent that workers are not exposed to lead.
  - b. 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 for physicians, hospitals, or medical clinics, and reports from the general public shall be investigated/inspected by the District Office.
  - c. 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. Although sightings will be those normally that occur during the course of routine travel during duty or non-duty hours, policy may provide that the District Supervisor investigate areas of high construction activity to identify potential lead in construction work sites.
  - d. Documentation of the events leading up to the observation shall be maintained by the District Office in case of a denial of entry.
2. MIE will develop a list of construction contractors likely to be involved in lead related activities. SIC Codes most likely to be included in the list involve 1622 (bridge tunnel, and elevated highway construction), 1629 (heavy construction), 1721 (painting and

paperhanging), 1791 (structural steel erection), 1795 (wrecking and demolition work, and 1799 (special trade contractors not elsewhere classified). Sources for contractors involved in lead related work will include, but are not limited to: federal or state Department of Transportation contacts (bridge contracts), Dodge reports, and state and local building permits.

As the list of contractors becomes viable, inspection sites can be randomly selected for inspection from the list compiled from the above sources using a random numbers table. (This selection process sets forth administratively neutral criteria to identify establishments for inspection.) As new sites are added, they should be randomized for inspection.

If a contractors' list is used for randomly selected inspections, the list of selected contractors should be checked with the NCDOT to determine whether or not the selected contractor are involved in an active site.

3. Industrial hygienists conducting these inspections should when necessary consult with safety CSHO's on fall protection hazards and hazards associated with working over water. Where resources permit, a joint safety and health inspection could be conducted. Referrals to safety compliance officers where appropriate shall be submitted.

**G. Application.**

1. Inspections under this SEP shall address all aspects of any potential lead work or exposure and include a review of all related written documentation (i.e., record keeping, monitoring, medical, respirator fit testing and procedures, hazard communication, and training materials). The CSHO may expand the inspection scope beyond the lead related activities if serious hazards or violations are observed.
2. Even if the company headquarters are located in another State, every attempt shall be made to obtain the above information.
3. If a site turns out to be located within the jurisdiction of another District Office, a referral will be made to the appropriate District Office according to current procedures. Information obtained from the contractors' headquarters will be shared with any other District Office having an active site.
4. The number of inspections conducted under this SEP shall be determined by the Bureau Chief of Health Compliance in consideration of site information.

5. CSHOs shall conduct personal monitoring and collect wipe samples as appropriate to document exposures. (See OSHA Instruction TED 1.15.)
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 IMIS. Current instructions for completing the appropriate inspection classification boxes (Items 24 and 25), as found in the IMIS Manual for the OSHA 1 Form shall be applied when recording inspections conducted under this SEP as follows:

1. The OSHA-1 Form for any programmed inspection covered under this special emphasis program for lead in construction shall be marked "PLANNED" (Item 24h), "CONSTRUCTION" (Item 25a) and "SPECIAL EMPHASIS PROGRAM" (Item 25d). Record "LEAD" in the space in item 25d.
2. The OSHA-1 Form for any unprogrammed inspection shall be marked as unprogrammed (Item 24a. through g. as appropriate). In addition, it shall be marked "SPECIAL EMPHASIS PROGRAM" (Item 25d). Record "LEAD" in the space in Item 25d.

I. Other Divisional Activity. The Bureaus of Education, Training and Technical Assistance, and Consultative Services shall develop outreach programs that will support the enforcement effort. Such programs could 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 construction employer organizations that engage in lead in construction activities. Speeches through the local safety councils or industrial hygiene organizations can provide another avenue for dissemination of information as can press releases to the local media.

Using the list compiled by MIE, ETTA shall contact each contractor in writing and provide them with a copy of the lead in construction standard and other general lead information. On-site consultation for qualified small employers will also be provided upon request.

J. Expiration: This SEP expires one year from the effective date unless extended by the Director.

July 26, 1996  
Date

Charles N. Jeffress