



# OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

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**DIRECTIVE NUMBER:** CPL 2-0.130

**EFFECTIVE DATE:** July 20, 2001

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**SUBJECT:** National Emphasis Program: Lead

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## ABSTRACT

- Purpose:** This Instruction transmits policies and procedures for implementing a National Emphasis Program to reduce occupational exposure to lead.
- Scope:** OSHA-wide.
- References:** OSHA Instruction 2.103, Field Inspection Reference Manual, September 26, 1994;  
OSHA Instruction TED 1.15, OSHA Technical Manual;  
OSHA Instruction CPL 2-2.58, 29 CFR 1926.62, Lead Exposure in Construction: Inspection and Compliance Procedures, December 13, 1993;  
OSHA Instruction STD 3-8.1, Welding, Cutting, or Heating of Metals Coated with Lead-bearing Paint, October 30, 1978
- State Impact:** This Instruction describes a Federal Program Change for which State adoption is not required.
- Action Offices:** OSHA Regional and Area Offices, State Plan and State Consultation Offices.
- Cancellation:** OSHA Instruction CPL 2.105, Special Emphasis Program for Lead in Construction, March 11, 1996, is cancelled
- Originating Office:** Office of Health Compliance Assistance

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By and Under the Authority of  
R. Davis Layne  
Acting Assistant Secretary

## **Major Changes**

This document does not supercede a previous OSHA document. There are no major changes to be reported.

## **Executive Summary**

This NEP is implemented to direct OSHA's field inspection efforts to address lead exposures in the workplace, including General Industry (1910), Construction (1926), Longshoring (1917), and Marine Terminals (1918). These efforts meet the Strategic Plan goals set forth by the Agency in addressing the requirements of the Government Performance and Results Act (GPRA). As a result of this Act, Federal agencies must demonstrate improved performance and devise a system for measuring results. Under GPRA, OSHA's effectiveness is to be evaluated by Congress based upon the goals set by the Agency.

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- I. Purpose. This instruction describes policies and procedures for implementing a National Emphasis Program (NEP) to reduce occupational exposures to lead.
- II. Scope. This instruction applies OSHA-wide.
- III. Action. Regional Administrators and Area Directors must ensure that the procedures established in this instruction are adhered to in all inspections, compliance investigations, and on-site consultation visits where there is a potential for overexposure to lead.

Regional Administrators must ensure that the State Consultation Program Managers and the State Plan State Designees in their Regions are apprised of the contents of this NEP.

IV. Action Information.

- A. Responsible Office. Office of Health Compliance Assistance, Directorate of Compliance Assistance.
- B. Action Offices. OSHA Regional and Area Offices, State Plan and State Consultation Offices.
- C. Information Offices. OSHA National Office Directorates.

V. References.

- A. OSHA Instruction CPL 2.103, Field Inspection Reference Manual (FIRM), September 26, 1994.
- B. OSHA Instruction TED 1.15: Occupational Safety and Health Administration Technical Manual.
- C. OSHA Instruction CPL 2-2.58, December 13, 1993, 29 CFR 1926.62, Lead Exposure in Construction: Inspection and Compliance Procedures, December 13, 1993.
- D. OSHA Instruction STD 3-8.1, October 30, 1978, Welding, Cutting, or Heating of Metals Coated with Lead-bearing Paint, October 30, 1978
- E. OSHA Notice 00-05 (CPL 2) Site Specific Targeting 2000 (SST-MM) Revised, September 8, 2000.
- F. MEMORANDUM FOR REGIONAL ADMINISTRATORS FROM R. DAVIS LAYNE, DEPUTY ASSISTANT SECRETARY, JULY 12, 1999, SUBJECT: Strategic Plan IMIS Coding.
- G. OSHA Instruction, CPL 2-0.51J, Enforcement Exemptions and Limitations under the Appropriations Act, May 28, 1998.

- VI. Cancellations. OSHA Instruction CPL 2.105, Special Emphasis Program for Lead in Construction, March 11, 1996, is cancelled.
- VII. State Impact. This instruction describes a Federal Program Change for which State adoption is not required.
- VIII. Federal Program Change. This instruction describes a Federal Program Change for which State adoption is not required. States with a similar Strategic Plan goal targeting lead may wish to implement procedures analogous to those contained in this directive and are encouraged to use the IMIS Performance Measurement tracking system by submitting the necessary Coding Instructions and appropriately coding all related activities.
- IX. Background. The toxic effects of occupational exposure to lead are well established. Lead is a potent, systemic poison that serves no known useful function once absorbed by the body. Lead adversely affects numerous body systems and causes forms of health impairment and disease which can arise from acute or chronic exposure, including damage to blood-forming, nervous, urinary, and reproductive systems. In 1990, the National Institute for Occupational Safety and Health (NIOSH) set as a national goal the elimination of lead exposures that result in workers having blood lead concentrations greater than 25 ug/dL of whole blood.

This NEP is being implemented to direct OSHA's field inspection efforts to address lead exposures in the workplace, including General Industry (1910), Construction (1926), Longshoring (1917), and Marine Terminals (1918). These efforts meet the Strategic Plan goals set forth by the Agency in addressing the requirements of the Government Performance and Results Act (GPRA). As a result of this Act, Federal agencies must demonstrate improved performance and devise a system for measuring results. Under GPRA, OSHA's effectiveness is to be evaluated by Congress based upon the goals set by the Agency.

Goal One of OSHA's Strategic Plan is to, "improve workplace safety and health for all workers, as evidenced by fewer hazards, reduced exposures, and fewer injuries, illnesses and fatalities." Under this goal, the Agency has committed to "reduce three of the most prevalent types of workplace injuries and illnesses by 15% by focusing on those industries and occupations that cause the most injuries/illnesses and pose the greatest risk to workers." To achieve this goal, the Agency has focused on amputations, and the hazards of silica and lead exposures. The purpose of this NEP is to outline an effective strategy for measuring a 15% decrease in occupational lead exposures by FY 2002.

OSHA will measure its progress toward meeting a reduction in lead poisoning by a 15% decrease in employee exposures to airborne lead. In addition, during these inspections Compliance Officers may evaluate surface concentrations of lead and the availability of hygiene facilities, practices, and engineering controls.

All inspections, regardless of the industry, where the compliance officer determines that there is potential worker exposure to lead, are to be counted under this NEP as a Strategic Plan inspection. These inspections must be designated as such in the IMIS by marking “Strategic Plan Activity” and “National Emphasis Program” on the OSHA 1 (see Section XIII, “IMIS Coding”). This guidance applies to all OSHA inspections (programmed and unprogrammed) in all industries, regardless of whether sampling was conducted.

- X. NEP Inspections. The inspections covered under this NEP include inspections conducted in any industry or at any worksite where the Agency determines that there is a potential worker exposure to lead. Compliance Officers must make an initial determination of whether or not the potential exists for worker exposure to lead. As an example, if the employer is removing lead sewer pipes or is engaged in bridge work, a potential exposure to lead exists if the workers are engaged in activities which generate dust or fumes, such as sawing, grinding, or torch cutting. In such potential exposure situations, the inspection would be coded as a strategic plan, lead-related NEP inspection. If, in the case of the first example, the sewer pipes are removed without the generation of dust or fumes, there would not be potential worker exposure and the inspection would not be so coded.
  
- XI. Inspection Procedures. Some establishments selected for inspection under this National Emphasis Program may also be selected under the Site Specific Targeting (SST) plan. This NEP, which is based upon a particular hazard, should be run concurrently with the SST plan. (If this is not possible, the SST plan inspections have priority and are to be conducted prior to NEP inspections. Refer to CPL 00-05, Site Specific Targeting 2000 (SST-MM) Revised, Sections XI.B., Inspection Priority, and XIV., Relationships to Other Programs.) All approved Local Emphasis Programs (LEPs) for lead-related activities remain effective under this NEP. Referrals to safety compliance officers shall be made where appropriate. Compliance officers will apply all applicable IMIS codes to the inspection. These procedures also apply for Longshoring and Marine Terminals.
  - A. General Industry Programmed Inspections - Area Offices are to develop a list of establishments under their jurisdiction which are likely to be involved in lead-related activities. Area Offices are expected to have knowledge of the industries under their jurisdiction which may result in high employee exposures to lead. This knowledge can be derived from many sources, including but not limited to, past inspection history, state and local health departments, industry advertisements, telephone books or yellow pages, employee unions, and local knowledge. (Appendix A to this document provides a list of SIC codes for which high employee exposure levels have been demonstrated or for which there are high blood lead levels. This list is by no means comprehensive, but is intended as a resource.)

1. Inspection sites will be randomly selected from the compiled list using a random numbers table (refer to CPL 2.25I, Appendix C for further information on random numbers tables). This selection process sets forth administratively neutral criteria to identify establishments for inspection. As new sites are added they should be randomized for inspection. The deletion criteria specified in CPL 2.25I applies for inspections conducted under this NEP.
  2. Establishments with fewer than ten employees are to be included in this NEP.
- B. General Industry Complaints and Referrals - Every complaint or referral for any general industry operation where there exists the potential for lead exposure, must be handled as follows:
1. Whenever a CSHO observes or receives information of work operations where the potential for exposure to lead exists, regardless of whether or not a violation is observed, through phone and fax investigations or phone calls alleging the hazard, referrals, including media or other Agency referrals, reports from other staff or members of the general public, and so forth, the CSHO must:
    - a. Document the status and condition of the work operation as far as they are known, noting any serious hazard(s). Documentation of the events leading up to the observation must be maintained by the Area Office in case of a denial of entry.
    - b. Note the location of the worksite and the name and address of the employer(s) performing the operation.
    - c. Provide the Team Leader (or Assistant Area Director) or Area Director with the information. Based upon the information provided, all potential lead work sites brought to the attention of the Area Office must be handled in accordance with the procedures outlined in CPL 2.115, Complaint Policies and Procedures.
  2. For states that have enacted requirements for mandatory reporting of elevated blood lead levels, the Area or Regional Office will contact the agencies responsible for these programs and will attempt to obtain the blood lead data of employees (where workplace exposures have been reported). Every employer with one or more workers whose blood lead level(s) equals or exceeds 40 ug/dL of whole blood must be targeted for inspection. At the discretion of the Area Director, worksites may be targeted for inspection even if the employee's blood lead level is below 40

ug/dL when the Area Office is aware of unusual circumstances which would warrant an inspection. Such unusual circumstances may include pregnancy or possible poisoning of family members. An administrative subpoena may be necessary to obtain information from outside agencies on worker blood lead levels.

3. Referrals received from States' Departments of Health, Labor, or Industry alleging elevated employee blood lead levels and/or take-home exposures, shall be considered high-gravity, serious and must be handled by inspection.

C. Construction Inspection Complaints and Referrals - Every complaint or referral for any construction operation where the potential for lead exposure exists must be handled in accordance with the instructions given in paragraph (B), above. The following procedures are prescribed in scheduling referral inspections at construction sites and shall be conducted in the following order or priority:

1. Reports of imminent danger; fatality/catastrophe reports; all 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 must be investigated/inspected by the Area Office.
  - a. Referrals received from States' Departments of Health, Labor, or Industry alleging elevated employee blood lead levels and/or take-home exposures, must be handled by inspection.
2. For states that have enacted requirements for mandatory reporting of elevated blood lead levels, the Area or Regional Office will contact the agencies responsible for these programs and will attempt to obtain the blood lead data of employees (where workplace exposures have been reported). Every employer with one or more workers whose blood lead level(s) equals or exceeds 40 ug/dL of whole blood must be targeted for inspection. At the discretion of the Area Director, worksites may be targeted for inspection even if the employee's blood lead level is below 40 ug/dL when the Area Office is aware of unusual circumstances which would warrant an inspection. Such unusual circumstances may include pregnancy or possible poisoning of family members. An administrative subpoena may be necessary to obtain information from outside agencies on worker blood lead levels.

3. The discovery of work sites to be inspected under this NEP may be the result of a specific search to find this type of operation, at the discretion of the Regional Administrator. Although observations will be those that normally occur during the course of routine travel during duty or non-duty hours, Regional policy may provide that the Area Director focus on areas of high construction activity to identify potential lead-in-construction work sites.
- D. Construction Programmed Inspections - Area Offices are expected to develop a list of construction projects under their jurisdiction likely to be involved in lead-related activities. Sources of information on projects involving lead-related work include, but are not limited to, federal or state Departments of Transportation (DOT) contracts (i.e., bridge projects), Dodge reports, state and local building permits, business administrators of applicable employee unions, or local knowledge.
1. Inspection sites will be randomly selected for inspection from the list compiled from the above sources using a random numbers table (refer to CPL 2.25I for further information on random numbers tables). This selection process sets forth administratively neutral criteria to identify establishments for inspection. As new sites are added, they should be randomized for inspection.
    - a. When using a list of contractors for randomly selected inspections, the CSHO, Team Leader, or Area Director should check with state agencies such as the DOT to determine whether or not the selected contractor is involved in an active site. If so, the contractor should be scheduled for inspection.
    - b. If a contractor does not have an active site, the Area Office may elect to review records at the company's office or headquarters (bid specifications, contracts, respirator program, medical surveillance records, air monitoring records, any training conducted for lead-exposed workers, written program, and hazard communication). Citations may be issued for any violations that can be documented provided that exposure to lead within the previous six months can be substantiated. The Regional Solicitors must be consulted prior to issuance of these citations.
  2. Joint Safety and Health Inspections - Industrial hygienists conducting construction inspections should consult with safety CSHOs on serious safety hazards such as falls, electrocution, struck-by, or caught-in hazards. Where resources permit, a joint safety and health inspection should be conducted.

## XII. Application.

- A. Inspections under this NEP must address all aspects of any potential lead work or exposure and include a review of all related written documentation (i.e., record keeping, monitoring, compliance program, medical, respirator fit testing and procedures, hazard communication, and training materials). The CSHO may expand the scope of the inspection beyond the lead-related activities if other hazards or violations are observed (FIRM CH. II-1).
- B. When the company headquarters are located in another region, every attempt must be made to obtain the above information. A referral to another Region should be considered for violation of 1926.33 or 1910.1020, if access to employee exposure and medical records is denied.
- C. If a site turns out to be located within the jurisdiction of another Area Office, a referral will be made to the appropriate Area Office according to current procedures. Information obtained from the contractor's headquarters will be shared with any other Area Office having an active site.
- D. CSHOs will conduct personal monitoring and collect wipe samples, as appropriate, to document exposures (see OSHA Instruction TED 1.15.). Employer-generated data may also be used to document employee exposure.
- E. While evaluating worker exposures to lead, CSHOs also need to be aware of and evaluate potential exposures to other metals including, but not limited to, arsenic, manganese, chromium, cadmium, copper, and magnesium. CSHOs should not request an ICP (inductively coupled plasma) analysis for abrasive blasting operations or when an arsenic analysis is needed without first contacting the inorganic lab of the Salt Lake Technical Center. Atomic Absorption (AA) Spectroscopy can be requested for arsenic and any of the other specific metals. With AA spectroscopy a total of four metals can be requested per sampling filter.
- F. When an inspection is conducted under this NEP, CSHOs will provide the employer with informational documents regarding the appropriate lead standard, the health effects of lead, effective control measures, and employer and employee rights and responsibilities. Documents of this nature may be obtained from OSHA's Office of Publications, the Directorate of Technical Support, or from OSHA's web site.

- G. All case files with documented overexposures to lead must include documentation of abatement verification detailing employee exposures subsequent to the intervention. This documentation may be obtained from employer-submitted data or follow-up monitoring and must be included in the file in a timely manner. Sampling data will be maintained in the case file. Whenever possible, case files are to be closed in the fiscal year in which the intervention was conducted, so as to allow the data to be applied to the Agency's Strategic Goal accomplishments. In cases where implementation of engineering controls exceeds the fiscal year in which the intervention was conducted, the case files will be closed as soon as possible.
- H. Area Directors are instructed to ensure that Compliance Officers understand how their own PPE is to be handled after an inspection, including provisions for laundering.

### XIII. IMIS Coding.

The following instructions remove the requirement for recording "Optional Information" for lead on IMIS forms. The instructions which follow are for recording lead inspections under this Lead NEP and the Strategic Plan. This instruction does not affect the coding of approved LEPs. Coding for approved LEPs will continue as previously. The following instructions for completing enforcement forms OSHA-1, OSHA-7, OSHA-36, OSHA-55 and OSHA-90 and Consultation Request Form-20 and Visit Form-30 must be applied when recording inspections or consultation visits conducted under this NEP:

- A. OSHA-1: Select **Lead** from both choice lists in Item 25d, National Emphasis Program and in Item 25f, Strategic Plan Activities.
- B. OSHA-7: Complete in the normal manner. It is not necessary to code for this NEP on the OSHA-7.
- C. OSHA-36: Complete in the normal manner. It is not necessary to code for this NEP on the OSHA 36.
- D. OSHA-55: Select **Lead** from both choice lists in Item 15, National Emphasis Program and in Item 17, Strategic Plan Activities.
- E. OSHA-90: Complete in the normal manner. It is not necessary to code for this NEP on the OSHA 90.
- F. OSHA Consultation Project Offices

Whenever a visit is made in response to this NEP, Consultation Request, and/or Visit forms are to be completed as follows:

1. Complete the Request Form-20 in the normal manner and enter the code Lead in “National Emphasis Program,” Item No. 25, when a request is being scheduled in response to the NEP.
2. Complete the Visit Form-30 in the normal manner and enter the code Lead in “National Emphasis Program,” Item No. 28, when a visit has been made and findings are appropriate to this NEP (potential or actual lead exposures have been found).

XIV. Full Service Program Support.

- A. Each Area Office/Region/Consultation Program Office is encouraged to develop outreach programs that will support the efforts of the Agency in meeting the Strategic Plan goals. Such programs could include letters to employers, professional associations, 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 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. A news release will be prepared by the National Office and made available to each Region. Additionally, the Directorate of Technical Support has prepared training materials which will be of assistance in this outreach effort.
- B. Two products distributed by the Office of Training and Education in 1993 remain current for the Interim Final Standard on Lead in Construction. These products are a set of 79 slides that discuss the provisions of the standard and a videotape, “Lead Safety Training for the Construction Site,” that introduces viewers to the hazards of lead in construction and gives, in general terms, the requirements of the standard. These products were distributed to all OSHA Regional and Area Offices as well as State Designees and 7(c)(1) Project Managers.

For additional outreach information and guidance, please contact the Office of Health Compliance Assistance at 200 Constitution Avenue, NW, Room N3603, Washington, DC, 20210, (202) 693-2190.

## APPENDIX A

The following three lists of SIC codes are provided for Area Office consideration in targeting under this NEP. These lists were culled from three sources: 1) blood lead data, 2) OSHA severity data, and 3) historical information. Explanations for each category are provided below.

**BLOOD LEAD DATA** - This first list of SIC codes was drawn from reports of the California Blood Lead Registry (1993-1994), Washington State Occupational Lead Exposure Registry (1996), and Massachusetts Occupational Lead Registry (April 1991 - December 1995). These registries are compiled under the states' Departments of Health Adult Blood Lead Epidemiology and Surveillance (ABLES) program and include all reported adult blood lead levels for the years indicated.

Of the various state data provided to OSHA, these three data sources categorized exposure levels by a four-digit Standard Industrial Classification (SIC) code. California and Washington reported blood lead levels in four identical ranges (25 to 39 ug/dl, 40 to 49 ug/dl, 50 to 59 ug/dl, and 60 ug/dl or greater). Massachusetts reported blood lead levels in two categories (40 to 59 ug/dl and 60 ug/dl or greater).

Blood lead levels are provided in ranges. For those SIC codes with data available from all three states, the data is reported in three ranges (25 to 39 ug/dl; 40 to 59 ug/dl; and 60 ug/dl or greater). Where, for a given SIC, blood lead data was only available from California and Washington, the data for that SIC code is reported in four exposure ranges (25 to 39ug/dl; 40 to 49ug/dl; 50 to 59ug/dl; and 60ug/dl or greater). Where necessary, further explanations are provided.

**1522/21** General Contractors - Residential other than single family. 12 reported blood leads ranging from 25 to 39 ug/dl; 16 reported blood leads ranging from 40 to 59 ug/dl; 2 reported blood leads at or above 60 ug/dl. One OSHA sample with a severity greater than 10.

**1611** Highway and Street Construction. 16 reported blood leads ranging from 25 to 39 ug/dl; 7 reported blood leads ranging from 40 to 49 ug/dl; 1 reported blood lead ranging from 50 to 59 ug/dl; and no reported blood leads at or above 60 ug/dl. One OSHA sample with a severity of 28.0.

**1623** Water, Sewer, Pipe Construction and Communication. 53 reported blood leads ranging from 25 to 39 ug/dl; 8 reported blood leads ranging from 40 to 49 ug/dl; one reported blood lead ranging from 50 to 59 ug/dl; and no reported blood leads at or above 60 ug/dl.

**2821** Plastic Materials, Synthetic Resins and Nonvulcanizable Elastomers. No blood leads in the range of 25 to 39 ug/dl; 34 reported blood leads ranging from 40 to 59 ug/dl; and 7 reported blood leads at or above 60 ug/dl.

**2873** Nitrogenous Fertilizers. 54 reported blood leads ranging from 25 to 39 ug/dl; 6 reported blood leads ranging from 40 to 49 ug/dl; 1 reported blood lead ranging from 50 to 59 ug/dl; and no reported blood leads at or above 60 ug/dl.

**3211** Flat Glass. 156 reported blood leads ranging from 25 to 39 ug/dl; 16 reported blood leads ranging from 40 to 49 ug/dl; no reported blood leads ranging from 50 to 59 ug/dl; and 1 reported blood lead at or above 60 ug/dl. Also, 3 OSHA samples with severities of 20.0.

**3229** Pressed and Blown Glass and Glassware, Not Elsewhere Classified. 14 reported blood leads ranging from 25 to 39 ug/dl; 8 reported blood leads ranging from 40 to 59 ug/dl; and 1 reported blood lead at or above 60 ug/dl.

**3321** Gray and Ductile Iron Foundries. 47 reported blood leads ranging from 25 to 39 ug/dl; 28 reported blood leads ranging from 40 to 59 ug/dl; and 8 reported blood lead at or above 60 ug/dl.

**3341** Secondary Smelting and Refining of Nonferrous Metals. 155 reported blood leads ranging from 25 to 39 ug/dl; 31 blood leads ranging from 40 to 59 ug/dl; and 4 blood leads at or above 60 ug/dl.

**3492** Fluid Power Valves and Hose Fittings. 11 reported blood leads ranging from 25 to 39 ug/dl; 1 reported blood lead ranging from 40 to 59 ug/dl; no blood leads reported from 50 to 59 ug/dl; and no blood lead reported at or above 60 ug/dl.

**3714** Motor Vehicle Parts and Accessories. 70 reported blood leads ranging from 25 to 39 ug/dl; 17 reported blood leads ranging from 40 to 49 ug/dl; three reported blood leads ranging from 50 to 59 ug/dl; and no reported blood leads at or above 60 ug/dl.

**3728** Aircraft Parts and Auxiliary Equipment, NEC. 20 reported blood leads ranging from 25 to 39 ug/dl; 3 reported blood leads ranging from 40 to 49 ug/dl; no reported blood leads ranging from 50 to 59ug/dl; and no reported blood leads at or above 60 ug/dl.

**3731** Ship Building and Repair. 24 reported blood leads ranging from 25 to 39 ug/dl; 5 reported blood leads ranging from 40 to 59 ug/dl; and 2 blood leads at or above 60 ug/dl. One OSHA sample with a severity greater than 10.

**3949** Sporting and Athletic Goods, NEC. 4 reported blood leads ranging from 25 to 39 ug/dl; 7 reported blood leads ranging from 40 to 59 ug/dl; and 2 reported blood leads at or above 60 ug/dl.

*This SIC code is primarily engaged in manufacturing sporting and athletic goods, including a wide range of objects which may not be a source of lead exposure. Under this NEP, OSHA would not be interested in inspecting establishments within these SIC codes unless lead exposure is suspected. Area Offices should determine whether the manufactured items, such as fishing tackle, could serve as a source of lead exposure.*

**5051** Metals Service Centers and Offices. 35 reported blood leads ranging from 25 to 39 ug/dl; 3 reported blood leads ranging from 40 to 49 ug/dl; no reported blood lead ranging from 50 to 59 ug/dl; and no reported blood leads at or above 60 ug/dl.

**5531** Automotive and Home Supply Stores. 12 reported blood leads ranging from 25 to 39 ug/dl; 5 reported blood leads ranging from 40 to 49 ug/dl; 2 reported blood lead ranging from 50 to 59 ug/dl; and no reported blood leads at or above 60 ug/dl.

**7539** Automotive Repair Shops (Radiator Repair). 137 reported blood leads ranging from 25 to 39 ug/dl; 62 reported blood leads ranging from 40 to 59 ug/dl; 11 reported blood leads at or above 60 ug/dl.

**7997** and **7999** Membership Sport and Recreation Clubs. Amusement and Recreations Services, NEC. 37 reported blood leads ranging from 25 to 39 ug/dl; 20 reported blood leads ranging from 40 to 59 ug/dl; and 4 reported blood lead at or above 60 ug/dl.

*7997 is Membership Sport and Recreation Clubs and includes gun clubs, shooting clubs and hunt clubs as well as such establishments as aviation clubs, beach clubs and yacht clubs. Similarly, 7999 is Amusement and Recreations Services, Not Elsewhere Classified and includes shooting galleries and shooting ranges as well as such establishments as baseball instruction schools, moped rental and yoga instruction. The California Blood Lead Registry grouped these codes together for the purposes of their report. It is assumed that the occupational lead exposure to employees in these two SIC codes is from gun clubs and shooting ranges and galleries. Under this NEP, OSHA would not be interested in inspecting establishments within these SIC codes unless lead exposure is suspected, such as at shooting ranges. (Also, we would not be concerned with exposure to non-employee members or participants of these establishments, but only with exposures to employees.) In this regard, Area Offices should be aware that armories and law enforcement organizations may house shooting ranges, as well. Federal law enforcement facilities would fall under Federal OSHA jurisdiction, while municipal facilities would fall under State control.*

**SEVERITY DATA** - The SIC codes listed below are included for consideration in targeting under this NEP due to a review of OSHA severity data for the fiscal years of 1995 to 1999. The criteria for inclusion was that for a given SIC code, a minimum of two samples had to have a severity of greater than 10 or that at least one sample had to have a severity greater than 25. Where necessary, further explanations are provided.

**1541** General Contractors - Industrial Buildings and Warehouses. 3 OSHA samples with severities of 18.2, 16.0 and 13.8.

**2899** Chemical and Chemical Preparations not elsewhere Classified. 1 OSHA sample with a severity of 82.0.

**3087** Custom Compounding of Purchased Plastic Resins. 2 OSHA samples with severities of 10.4 and 12.6.

**3356** Rolling Drawing and Extruding of Non Ferrous Metals other than Copper and Aluminum. 1 OSHA sample with a severity of 26.0.

**3431** Enameled Iron and Metal Sanitary Ware. 3 OSHA samples, with severities of 460.0, 80.0 and 12.2.

**3443** Fabricated Plate Work (Boiler Shops). 2 OSHA samples with severities of 38.9 and 37.2.

**3469** Metal Stampings Not Elsewhere Classified. 1 OSHA sample with a severity of 68.0.

**3537** Industrial Trucks, Tractors, Trailers and Stackers. 1 OSHA sample with a severity of 35.0.

**3563** Air and Gas Compressors. 1 OSHA sample with a severity of 190.0.

**4499** Water Transportation Services Not Elsewhere Classified. Although this SIC includes such establishments as canal operation and piloting vessels in and out of harbors, it also includes dismantling ships and marine wrecking. All of the severity data was for ship breaking. 4 OSHA samples with severities of 38.0, 17.4, 11.4 and 10.4.

**HISTORICAL SICs** - The following SIC codes are historically known to produce high employee exposures to lead. Blood lead data and severity data were not further analyzed:

**1622** Bridge, Tunnel and Elevated Highway Construction.

**1629** Heavy Construction Not Elsewhere Classified.

**1721** Painting and Paperhanging.

**1791** Structural Steel Erection.

**1795** Wrecking and Demolition.

**1799** Special Trade Contractors Not Elsewhere Classified.

**2816** Inorganic Pigments.

**2819** Industrial Inorganic Pigments Not Elsewhere Classified.

**3331** Primary Smelting and Refining of Copper.

**3339** Primary Smelting and Refining of Non-Ferrous Metals except Copper.

**3366** Copper Foundries.

**3675** Electronic Capacitors.

**3691** Storage Batteries.

**3692** Primary Batteries Dry and Wet.

**3713** Truck and Bus Bodies.

**3715** Truck Trailers.

**5093** Scrap Waste.

**7539** Automotive Repair Shops Not Elsewhere Classified.

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