

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

**Raleigh, North Carolina**

Field Information System

Operational Procedure Notice 135

**Subject:** Special Emphasis Program for Exposures to Health Hazards

**A. Purpose.**

This Operational Procedure Notice (OPN) establishes and implements the Special Emphasis Program (SEP) for health inspections where employees may be exposed to health hazards such as lead, crystalline silica, styrene, asbestos, and isocyanates. The SEP for Exposures to Health Hazards is intended to reduce levels of occupational exposures to lead, crystalline silica, styrene, asbestos, and isocyanates in targeted sites by the year 2008.

This OPN is also designed to provide guidance to Compliance Safety and Health Officers (CSHOs) for conducting inspections targeted by this OPN. This document also provides supplementary procedures beyond standard inspection protocol set forth in the OSHNC Field Operational Manual (FOM).

**B. Scope.**

This instruction applies statewide to establishments under OSHNC jurisdiction.

**C. Action.**

This Operational Procedure Notice provides for special emphasis inspections in accordance with NCGS 95-136.1(b)(3) due to a high risk for serious or fatal work related injuries or illnesses. Bureau Chiefs and District Supervisors will ensure that procedures established in this operational procedural notice are adhered to when scheduling and conducting inspections related to occupational exposures to lead, crystalline silica, styrene, asbestos, and isocyanates.

**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.
7. OSHA memorandum re: Special Emphasis Program (SEP) for Silicosis by Joseph A. Dear on May 2, 1996.
8. OSHA Instruction CPL 04-00 (LEP 003), February 1, 2005, Isocyanate Local Emphasis Program.
9. OSHA Instruction CPL 2-2.63 (Revised), November 3, 1995, Inspection Procedures for Occupational Exposure to Asbestos Final Rule 29 CFR Parts 1910.1001, 1926.1101, and 1915.1001.

**E. Special Emphasis Program History.**

Since 2000, NCDOL's Strategic Plan has included goals and two SEPs that focused on preventing silicosis and occupational exposure to lead. This special emphasis program for exposures to health hazards expands on the two previous SEPs to address other health hazards commonly found in North Carolina workplaces.

The efforts set forth herein are designed to reduce the number of occupational exposures, worker injuries, illnesses, and fatalities.

**F. Background.**

1. Lead.

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.

- 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.
- 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.
- In May 1993, OSHA issued the Interim Final Rule for Lead in Construction, 29 CFR 1926.62.

- In March 1996, OSHA issued CPL 2.105, Special Emphasis Program, Lead in Construction.
- 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.
- 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.

2. Crystalline Silica.

Crystalline Silica is silicon dioxide ( $\text{SiO}_2$ ) a ubiquitous substance which is the basic compound of sand, quartz, and granite rock. In pure, natural form,  $\text{SiO}_2$  crystals are minute, very hard, and translucent. Occupational exposure to crystalline silica dust has long been known to produce silicosis, pneumoconiosis or dust disease of the lung. The three most common crystalline forms of silica encountered in industry are: quartz, tridymite, and cristobalite.

Silica is present in almost every process where natural minerals are handled. It is prevalent in foundries, in the manufacture and use of abrasives, in the construction industry in construction materials and/or byproduct of activities, and in the manufacture of glass and pottery.

Silicosis is one of the world's oldest known occupational diseases. Although silicosis is preventable, silicosis continues to be a major health threat in the workplace. Annually, more than 250 silica-related deaths occur and greater than one million workers are exposed to silica nationwide. To address this problem, the State of North Carolina participates in the OSH national emphasis program. In North Carolina, doctors and laboratories are required to report and hospitals are encouraged to report suspected silicosis in adults. This information is communicated to the North Carolina Department of Health and Human Services (NCDHHS), Epidemiology Division, Occupational & Environmental Epidemiology Section.

3. Asbestos.

Asbestos is a generic name given to a fibrous variety of six naturally occurring minerals that have been used for decades in the development of thousands of commercial products. The term "asbestos" is not a mineralogical definition but a commercial name given to a group of minerals that possess high tensile strength, flexibility, resistance to chemical and thermal degradation, and electrical resistance. The asbestos minerals have a tendency to separate into microscopic size particles that can remain in the air and are easily inhaled.

Although the use of asbestos and asbestos products has dramatically decreased, they are still found in many residential and commercial settings and continue to pose a health risk to workers. An estimated 1.3 million employees in construction and general industry face significant asbestos exposure on the job. Heaviest exposures occur in the construction industry, particularly during the

removal of asbestos during renovation or demolition. Employees are also likely to be exposed during the manufacture of asbestos products (such as textiles, friction products, insulation, and other building materials) and during automotive brake and clutch work.

Since 1972 OSHA has regulated asbestos exposure in general industry thereby causing a significant decline in the use of asbestos-containing materials. The revised standard continues to protect workers, in general, who are exposed to asbestos-containing materials but now include provisions that apply to workers performing brake and clutch repair and to those doing housekeeping in buildings and facilities where asbestos-containing materials exists.

The final Occupational Exposure to Asbestos Standards, 29 CFR 1910.1001, 1926.1101, and 1915.1001, were published in the Federal Register on August 10, 1994 and became effective October 11, 1994. These final standards amend the Occupational Safety and Health Administration's (OSHA's) Asbestos Standards issued on June 17, 1986 (51 FR 22612, 29 CFR 1910.1001, June 20, 1986) for occupational exposure to asbestos in general industry, and the construction industry, 29 CFR 1926.1101 (previously 1926.58).

The final standards, 29 CFR 1910.1001, 1926.1101, and 1915.1001, apply to all activities (except agriculture) covered by the Act. The construction standard, 29 CFR 1926.1101, covers (but is not limited to) activities involving asbestos: demolition, removal, alteration, repair, maintenance, installation, clean-up, disposal, and storage.

4. Styrene.

Styrene is a volatile, highly flammable compound. Styrene vapor is heavier than air and evaporates more rapidly at high temperatures. It can be smelled at very low concentrations and prolonged exposure to styrene reduces a person's ability to smell styrene. Styrene is primarily a synthetic chemical that is used extensively in the manufacture of plastics, rubber, and resins. About 90,000 workers, including those who make boats, tubs, and showers are potentially exposed to styrene. It is also known as vinylbenzene, ethenylbenzene, cinnamene, or phenylethylene. Workers exposed to styrene for short durations through inhalation may experience eye and mucous membrane irritation and gastrointestinal effects. Long term inhalation exposures may result in central nervous system effects, such as headaches, fatigue, weakness, and depression. Studies indicate that exposures greater than 50 ppm may damage the central and peripheral nervous systems. Exposures between 50 to 100 ppm have also been linked to birth defects, chromosomal aberrations, sister chromatid exchanges, unscheduled DNA synthesis, impaired pulmonary function and liver injury. Styrene is classified as a possible human carcinogen by the Environmental Protection Agency (EPA) and by the International Agency for Research on Cancer (IARC).

5. Isocyanates.

Diisocyanates, commonly referred to as Isocyanates, are a group of low molecular weight aromatic and aliphatic compounds. The most common of these

are toluene diisocyanate (TDI), methylene biphenyl isocyanate (MDI), and hexamethylene diisocyanate (HDI). Isocyanates are widely used in the manufacture of flexible and rigid foams, fiber coatings, such as paints and varnishes, and elastomers. The compounds are increasingly used in the automotive industry, autobody repair, and building insulation materials.

Exposures to isocyanates can have adverse health effects for workers. TDI and other isocyanates are powerful irritants to the mucous membranes of the eyes, gastrointestinal and respiratory tracts [Swensson et al. 1955; Upjohn Company 1970]. Direct skin contact with TDI can also cause marked inflammation [Fisher 1967]. Respiratory irritation may progress to a chemical, bronchitis with severe bronchospasm [Williamsom 1965]. Hypersensitivity pneumonitis has been reported in isocyanate-exposed workers. Symptoms are known to continue for months or years after exposure has ceased and there are reports of deaths due to isocyanate induced hypersensitivity pneumonitis. Respiratory disease among workers exposed to isocyanate compounds has been recognized since the 1950's

Isocyanates are also allergic sensitizers and are known to cause respiratory sensitization, an allergic, asthma-type reaction. There is evidence of cross-sensitization in which a worker is exposed to one isocyanate but reacts adversely to others as well. There is also evidence that dermal exposures are a primary cause of respiratory sensitization. Workers may have skin contact with isocyanates, which causes their immune systems to become sensitized, making them susceptible to respiratory sensitivity reactions upon future exposures. Dermal sensitization may result in rash, itching, hives and swelling of the extremities. Because they are not water soluble, they cannot be easily washed off of skin or clothing.

The current OSHA permissible exposure limit (PEL) for TDI is 0.02 parts per million parts of air (0.02 ppm), or 0.14 milligram per cubic meter of air (0.14 mg/m<sup>3</sup>) as a ceiling limit [29 CFR 1910.1000]. The OSHA PEL for MDI is 0.02 ppm (0.2 mg/m<sup>3</sup>) as a ceiling limit.

**F. Program Procedures.**

Health Hazards SEP inspections will be generated through accidents, complaints, referrals, and General Industry programmed criteria in both construction and general industry. Sources of assignments may include the following:

1. **Imminent Danger, Fatality, Referrals and Complaints.**
  - a. Reports of imminent danger, fatality/ catastrophe reports, formal / non-formal complaints, and safety and health referrals from other federal, state, county and city agencies, media reports, reports for physicians, hospitals, or other medical clinics and reports from the general public will be investigated by the field office.
  - b. The discovery of worksites 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 that normally occur during the course of travel during duty or non-duty hours, policy may provide that the District

Supervisor may also investigate areas of high construction activity to identify potential work sites.

- c. In case of denial of entry, the field office will maintain documentation of the event leading up to the observation.
- d. Sources for contractors involved in lead, crystalline silica, or asbestos related work may also be obtained from a variety of sources including the following:
  - o Federal or State Department of Transportation contacts (bridge contracts).
  - o Construction reports.
  - o State and local building permits.

2. Referrals by Compliance Safety and Health Officers (CSHOs).

- a. An effort will be made to determine when activities involve worker exposure to hazards associated with health hazards including lead, crystalline silica, asbestos, styrene, and isocyanates. All compliance personnel will be instructed to look for activities where lead, crystalline silica, asbestos, styrene, and isocyanates may be present.
- b. Any observation of an operation where the potential for lead, crystalline silica, asbestos, styrene, and isocyanate exposures exists will be handled as follows:
  - i. When a CSHO observes or receives information about potential lead, crystalline silica, asbestos, styrene, and isocyanate exposure, regardless of whether or not a violation is observed, through complaints, referrals, or reports from members of the general public, the CSHO will:
    - A. Document the status and condition of the work operation, noting any serious hazards.
    - B. Document the name, address and location of the worksite and the employer(s) performing the operation.
    - C. Provide the appropriate District Supervisor with the information.
  - ii. Based upon the information provided, all potential lead, crystalline silica, asbestos, styrene, and isocyanate work sites brought to the attention of the District Office will be inspected as follows:
    - A. 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.

- B. If the lead, crystalline silica, asbestos, styrene, or isocyanate-related work were not in progress during the previous visit to the site but are currently in progress, an inspection will be opened.
- C. If the lead, crystalline silica, asbestos, styrene, or isocyanate-related work were 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.

- iii. 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, crystalline silica, asbestos, styrene, or isocyanates.

- 3. Referrals by North Carolina Department of Health and Human Services (NCDHHS).
  - a. 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 worker having blood lead levels above 25 ug/100 grams of whole blood, the employer of that worker shall be targeted for inspection provided the worker can be identified with an employer.
  - b. Through a Memorandum of Understanding with NCDHHS, OSHNC will receive information related to asbestos exposure from the Health Hazards Control Unit. This information may be used for targeted inspections. The Health Hazards Control Unit will make referrals to OSHNC for employers who have been granted an Asbestos Removal Permit for asbestos removals jobs that are projected to last 15 days or longer and for short duration projects with serious safety and health hazards. Once reviewing the referral, the OSHNC District Supervisor will make a determination to assign the referral to a HCO.
- 4. North Carolina Department of Transportation (NCDOT). OSHNC may receive bridge repair contract information from the NCDOT. This information will be used to assign lead-related inspections.
- 5. Department of Housing and Urban Development (HUD). OSHNC will establish contact with HUD, and information received may be used to assign lead-related inspections.
- 6. 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.

7. Programmed Inspections.

- a. Planning, Statistics and Information Management (PSIM) will search available databases to develop lists of general industry and construction employers likely to be involved in lead, crystalline silica, asbestos, styrene, and isocyanate related activities. As the lists in general industry and construction become 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.) PSIM will ensure that the lists are proportioned so that the majority of the programmed planned inspections are selected from the Class I group and/or are among the NAICS codes that likely have silica, crystalline silica, asbestos, styrene, and isocyanate related activities. As new sites are added, they should be randomized for inspection.
- b. The NAICS Codes for this SEP may include, but are not limited to, the NAICS codes listed in Appendix A.
- c. PSIM will review the generated lists to remove inactive and duplicate sites. PSIM will also review the lists to determine and remove those sites that have received a comprehensive health inspection within the last three years. Employers that have received a comprehensive safety inspection within the last three years may still be included on the lists. The health general industry programmed lists will identify employers meeting the Health Hazards SEP criteria. The District Supervisor will then assign the Health Hazard SEP inspections first and by the highest hazard sites. The safety general industry programmed lists will also identify any employers meeting the Health Hazards SEP criteria. Once identified, the District Supervisor will ensure the Health Hazards SEP inspections are assigned first and conducted as joint health and safety inspections.

G. Inspection Procedures.

1. General Industry Programmed Inspections.

General Industry Programmed Inspections conducted under this SEP will be comprehensive health inspections.

- a. Health Compliance Officers (HCOs) will indicate during the opening conference that a General Industry Programmed Inspection is being conducted along with the fact that there is a Health Hazards Special Emphasis Program inspection for lead, crystalline silica, asbestos, styrene, and/or isocyanate exposure. Once assigned the Health Hazards SEP inspection, the HCO shall cross-reference the employer's NAICS code to Appendix A and determine the targeted chemical. The HCO will

proceed with inspection guidelines as outlined in the Field Operations Manual.

- b. Lead, crystalline silica, asbestos, styrene, and/or isocyanate exposure producing operations will be evaluated along with any other health hazards including, but not limited to, noise, and other chemicals. All aspects of exposure, including a review of all related written documents (i.e., recordkeeping, air monitoring, dermal exposure surveys, personal protective equipment hazard assessments, medical monitoring, respiratory protection program, hazard communication and relevant training documentation) will be addressed. The inspection will be noted on the OSHA-1 as a “programmed planned” inspection, and the scope will be marked as comprehensive.
- c. Health Compliance Officers (HCOs) conducting these inspections should, when necessary, consult with Safety Compliance Officers (SCOs) and will submit referrals to the SCO where appropriate.

2. Unprogrammed Inspections.

Unprogrammed inspections including, fatality/accidents, referrals, and complaints will be limited scope inspections that will focus on the hazards of, exposures to, and proper work practices for working with lead, crystalline silica, asbestos, styrene, and/or isocyanates.

- a. Health Compliance Officers (HCOs) will indicate during the opening conference the purpose and scope of the inspection. The HCO will address the fatality/accident, referral or complaint items. If during the inspection lead, crystalline silica, asbestos, styrene, and/or isocyanate exposure producing operations are observed or determined to be present then the HCO will note any hazards present at the work site. These SEP inspections may be expanded in accordance with the guidelines established in the FOM.
- b. If lead, crystalline silica, asbestos, styrene, and/or isocyanate-producing operations are present, the HCO will continue with the inspection and evaluate for employee exposure(s) to lead, crystalline silica, asbestos, styrene, and/or isocyanates. All aspects of lead, crystalline silica, asbestos, styrene, and/or isocyanate related work or exposure, including a review of all related written documents and training (i.e., recordkeeping, air monitoring, dermal exposure surveys, personal protective equipment hazard assessments, medical monitoring, respiratory protection program, hazard communication and relevant training documentation) will be addressed. During the inspection, the HCO will note any other hazards associated with lead, crystalline silica, asbestos, styrene, and/or isocyanate-producing operations and applicable citations will be issued. Based on the type of unprogrammed activity the inspection will be noted on the OSHA-1 as a Complaint, Referral, or Fatality/Catastrophe and the scope will be marked as partial.

**H. Citation Guidance.**

1. Refer to the FOM and other OSHA reference documents prior to proceeding with citation issuance.
2. There is no exposure limit for dermal exposures to isocyanates, but potential skin contact with isocyanates should be considered a hazard. The relevant standards to address potential violations of skin contact, contamination of work surfaces, inadequate training of employees and improper selection and use of PPE include the following:
  - 1910.132(d)(1) - The employer shall assess the workplace to determine if hazards are present, which necessitate the use of personal protective equipment (PPE).
  - 1910.132(f) - The employer shall provide training to each employee who is required to use PPE.
  - 1910.138 - The employer shall provide hand protection to employees.
  - 1910.141(a)(3)(i) - All places of employment shall be kept clean to the extent that the nature of the work allows.
  - 1910.141(g)(2) - Employees shall not be allowed to consume food or beverages in a toilet room or in any area exposed to toxic materials.
  - 1910.1200(h) - Employees shall be trained in the measures they can take to protect themselves from these hazards.

**I. Compliance Officers.**

1. Sampling for surface contamination and air contaminants for any health hazards may require the HCO to wear personal protective equipment. Each HCO who is expected to use PPE shall be trained in the proper care, use, and limitations of the PPE.
  - a. In instances where respiratory protection is required, the HCO shall utilize the Unit Specific procedures for the use of respiratory protection by CSHOs contained in the NCDOLs written Respiratory Protection program. HCOs that are required to wear respiratory protection shall be medically cleared via the CSHO Physical Examination Process.
2. While evaluating worker exposures to lead, HCOs will 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.
3. HCOs on the asbestos team shall receive additional training prior to conducting inspections inside regulated areas. For inspections that involve Class I, II, and III asbestos removal, only properly trained HCOs shall perform the on-site asbestos evaluation.
  - a. HCOs required to enter a regulated area or negative pressure enclosure (containment area) shall wear personal protective equipment, such as but not limited to, disposable coveralls, head coverings, foot coverings, gloves, and appropriate respiratory protection.

- b. HCOs shall not enter a negative pressure enclosure unless it is absolutely necessary. Prior to entry into a containment area, the HCO shall determine if decontamination facilities exist and if the decontamination facilities are adequate. If the CSHO decides that decontamination cannot be adequately provided the supervisor shall be contacted for guidance.
- c. Prior to entering a containment area, HCOs shall closely review and examine the asbestos sampling data on-site concerning the exposures or potential exposures. If the employer does not have sampling data or cannot supply adequate data to support the selection of the types of respirators that are in use, the HCO shall not enter the areas where respirators are in use or the HCO must don a self-contained breathing apparatus (SCBA) to enter the containment area. If the hazard determination performed by the employer has been completed in accordance with the standard, the HCO must don the appropriate respirator prior to entering the containment area. Air sampling conducted by the HCO may be used to determine the appropriate level of respiratory protection.

**G. Application.**

1. CSHOs shall establish the presence of lead, crystalline silica, asbestos, styrene, and/or isocyanates by using material safety data sheets, material inventories, and material purchase orders regarding materials used during the process. Interviews with management officials and employees associated with the lead, crystalline silica, asbestos, styrene, and/or isocyanate-producing operations may also be needed to determine if the SEP chemical is present.
2. If the company headquarters are located in another state, the CSHO will attempt to obtain the above information. 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.)

**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. For any programmed inspection covered under this SEP the OSHA-1 form must be marked "program planned" in "Inspection Type"(item 24h) and

"manufacturing or construction" (item 25a/b, as appropriate) must be marked under "Industrial Type."

2. For all unprogrammed inspections conducted in conjunction with a Health Hazards SEP inspection, the OSHA-1 form must be marked "unprogrammed" in "Inspection Type" with the appropriate unprogrammed activity identified (accident, complaint, referral, etc).
3. Other codes that must be marked on the OSHA-1 for all program planned inspections and any unprogrammed inspections covered under this SEP.
  - a. National Emphasis Box (25d) must be marked with the appropriate value.
    - "Lead" inspection involving lead.
    - "Silica" inspection involving silica.
  - b. Strategic Plan box (25f) must be marked with the appropriate value.
    - "Lead Exposure" inspection involving lead.
    - "Silica Exposure" inspection involving silica.
    - "Asbestos Exposure" inspection involving asbestos.
    - "Styrene Exposure" inspection involving styrene.
    - "Isocyanates Exposure" inspection involving isocyanates.
  - c. Optional Information, item 42 must be marked with the appropriate value.
    - S 12 Health Hazards PROG IMPROVEMENT.
4. OSHA 90.
  - a. Strategic Plan Activity (item 32) must be marked with the appropriate value.
    - "Lead Exposure" inspection involving lead.
    - "Silica Exposure" inspection involving silica.
    - "Asbestos Exposure" inspection involving asbestos.
    - "Styrene Exposure" inspection involving styrene.
    - "Isocyanates Exposure" inspection involving isocyanates.
5. Health Hazards Program Improvements Guidelines.
  - a. As stated above under Optional Information, inspections covered under this SEP that result in a program improvement (specifically associated with the employer's lead, silica, asbestos, styrene, and isocyanates program) must be coded as a Health Hazards Program Improvement. Below are examples of when to code an inspection as Health Hazards Program Improvements:
    - Asbestos inspections - when there is citation issued from 29 CFR 1910.1001 or 29 CFR 1926.1101.

- Lead inspections - when there is citation issued from 29 CFR 1910.1025 or 29 CFR 1926.62.
- Lead, Silica, Asbestos, Styrene, Isocyanates inspections - when any of the following citations are issued: 1910.134 - Respiratory Protection; 1910.132 - PPE Hazard Assessment (including specific PPE standard); 1910.1200 - Hazard Communication; 1910.94 - Ventilation; and 1910.107 -Spray Operations.

b. Additional program improvements (i.e., hearing conservation, LOTO, frequent inspections) will not be coded as Health Hazards Program Improvement, but should be coded as "Program Improvements" under "Hazards" in "Strategic Plan Activity" (item 25f.)

**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 mailings to employers, local safety councils, apprenticeship programs, local hospitals and occupational health clinics, and/or employer organizations that engage in health hazard activities. Speeches through the local safety councils or industrial hygiene organizations may provide another avenue for dissemination of information.

Using the NAICS codes listed in the Health Hazards SEP and/or the targeting list PSIM will develop a mailing list or lists affected employers and provide the list(s) electronically to ETTA. ETTA will contact each employer in writing and provide a letter that explains the Health Hazards SEP. The Bureau of Consultative Services, upon request, will provide on-site consultation for qualified small employers. The SEP team leader(s) will provide similar information to the Communications Division for inclusion in the Labor Ledger, for press releases and for posting on the department's website.

**J. Expiration.**

OPN 111D and OPN 117E are canceled and combined with this new OPN. This OPN is effective on the date of signature. It will remain in effect until canceled by the Director.

Signed on Original  
Kevin Beauregard  
Assistant Director

Signed on Original  
Allen McNeely  
Director

2/13/06  
Date of Signature

## Appendix A: Industry Type and NAICS tables

### Lead Inspections

<b>NAICS</b>	<b>Industry Type</b>
237310, 237990	Bridge, tunnel, and elevated highway construction
236210,237110, 237130,237990	Heavy construction
237310,238320	Painting and paperhanging
238120	Structural steel erection
238910	Wrecking and demolition work
238150	Special trade contractors, NEC
325131,325182	Inorganic pigments (lead, lead oxide)
325131	Industrial inorganic chemicals, NEC
325510	Paints, varnishes, lacquers, etc. (lead-in-oil paints)
325320	Pesticides and agricultural chemicals, NEC (lead arsenate)
325920	Explosives (lead azide)
327211	Flat glass
327212	Pressed and blown glass and glassware, NEC
327215	Glass products made of purchased glass (stained glass)
212325,327992	Minerals and earths, treated
331411	Primary smelting and refining of copper
331419	Primary smelting/refining of nonferrous metals, except Cu and Al
331314,331423, 331492	Secondary smelting/refining of nonferrous metals
331491	Rolling, drawing, & extruding of nonferrous metals, except Cu and Al

<i>NAICS</i>	<i>Industry Type</i>
331522	Nonferrous die casting, except Al
331525	Copper foundries
332992-332994	Small arms ammunition
322225,332999	Metal foil and leaf (lead foil)
334412	Printed circuit boards
334413	Semiconductors & related devices
334414	Electronic capacitors
224415	Electronic resistors
334416	Electronic coils, transformers, & other inductors
334220, 334310,334418 334418,334419	Electronic components, NEC
335911	Storage batteries
335912	Primary batteries, dry and wet
336322	Electrical equipment for internal combustion engines
339942	Lead pencils, crayons, and artists' materials (modeling clay, paints, etc.)
221111,221112, 221121,221122	Electrical services
423930,425110	Scrap and waste materials
561611-561613	Detective, guard, and armored car service
443111,811211-811213, 811219	Electrical & electronics repair shops
713990	Shooting ranges
922120	Police protection

**Silica Inspections**

<b>NAICS</b>	<b><i>Industry Type</i></b>
236620	Nonresidential construction
237310, 237990	Bridge, tunnel, and elevated highway construction
236210,237110, 237130,237990	Heavy construction
238140	Masonry and other stone work
237990,238190, 238910,	Special trades contractors
327123,37124	Structural Clay Products
327332,327390, 32799	Concrete Products, Except Block and Brick
327320	Ready-Mixed Concrete
327991	Cut Stone and Stone Products
327910	Abrasive Products
212325,212399	Minerals and Earths, Ground and Otherwise Treated
327112	Nonmetallic Mineral Products, NEC
331511-331513	Iron and Steel Foundries
331521-331528	Nonferrous Foundries
332312	Fabricated structural metal
332313,332410, 332420, 333415	Fabricated plate work
332812	Metal coating and engraving and allied services
332997	Industrial patterns
336611	Shipbuilding and repair
337110	Wood kitchen cabinet and countertop manufacturing

**Styrene Inspections**

<i>NAICS</i>	<i>Industry Type</i>
336612	Boat Manufacturing
326199	Plastics Product Manufacturing
325211	Plastics Material and Resin Manufacturing
325110	Petrochemical Manufacturing

**Asbestos Inspections**

<i>NAICS</i>	<i>Industry Type</i>
562910	Asbestos Remediation Services
336340	Motor Vehicle Brake System Manufacturing
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing

**Isocyanate Inspections**

<i>NAICS</i>	<i>Industry Type</i>
811121	Automotive Body, Paint, and Interior Repair and Maintenance
325212	Synthetic Rubber Manufacturing
326140	Polystyrene Foam Product Manufacturing