



OSHA REGIONAL NOTICE

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-07-08 **EFFECTIVE DATE:** December 4, 2006

SUBJECT: Isocyanate Local Emphasis Program

REGIONAL IDENTIFIER: Region VII

ABSTRACT

Purpose: To institute a Local Emphasis Program for addressing isocyanates in facilities conducting spray-on truck and vehicle bed lining operations. The inspections will focus on evaluating inhalation and dermal exposures to isocyanates.

References: OSHA Instruction CPL 04-00-001 Procedures for Approval of Local Emphasis Programs, November 10, 1999.

OSHA Instruction CPL 02-00-103 Field Inspection Reference Manual (FIRM), September 26, 1994.

Wisconsin Safety and Health Administration, Hazard Alert, A Spray-on urethane truck bed linings and isocyanate exposures, March, 2003.

OSHA Safety & Health Topics: Isocyanates. August 27, 2003. Downloaded from <http://www.osha.gov/SLTC/isocyanates/index.html> on April 21, 2006.

National Institute of Occupational Safety & Health (NIOSH). Preventing Asthma and Death from Diisocyanate exposure. NIOSH Alert 1996, DHHS-NIOSH Publication number 96-111.

OSHA Instruction CPL 02-00-051 Enforcement Exemptions and Limitation under the Appropriations Act, May 28, 1998.

OSHA Instruction CPL 02-00-025 Scheduling System for Programmed Inspections, January 4, 1995.

OSHA Instruction CPL 02-00-111 Citation Policy for Paperwork and Written Program Requirement Violations, November 27, 1995.

OSHA Instruction CPL 02-00-140 Complaint Policies and Procedures, June 23, 2006.

Action Office: Kansas City Area Office

Originating Office: Enforcement Programs

Contact: Kansas City Area Office (816) 483-9531

By and Under the Authority of:

Charles E. Adkins, CIH
Regional Administrator

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- I. Purpose. This Notice establishes and implements a Local Emphasis Program (LEP) to address isocyanate exposures in facilities engaged in conducting spray-on truck and vehicle bed lining operations. Inspections will focus on evaluating inhalation and dermal exposures to isocyanates.
- II. Scope. This Notice applies to the Kansas City Area Office and the establishments located within its jurisdiction.
- III. Action. The Kansas City Area Offices shall use the LEP described herein as the basis for scheduling isocyanate-related **health** inspections in establishments engaged in truck and vehicle bed-liner application operations.
- IV. Expiration. This Notice expires on September 30, 2007. Prior to renewal of this LEP, an evaluation shall be conducted and the recommendations from the evaluation will be implemented.
- V. References.
 - A. OSHA Instruction CPL 04-00-001 Procedures for Approval of Local Emphasis Programs, November 10, 1999.
 - B. OSHA Instruction CPL 02-00-103 Field Inspection Reference Manual (FIRM), September 26, 1994.
 - C. Wisconsin Safety and Health Administration, Hazard Alert, A Spray-on urethane truck bed linings and isocyanate exposures, March, 2003.
 - D. OSHA Safety & Health Topics: Isocyanates. August 27, 2003. Downloaded from <http://www.osha.gov/SLTC/isocyanates/index.html> on April 21, 2006.
 - E. National Institute of Occupational Safety & Health (NIOSH). Preventing Asthma and Death from Diisocyanate exposure. NIOSH Alert 1996, DHHS-NIOSH Publication number 96-111.
 - F. OSHA Instruction CPL 02-00-051 Enforcement Exemptions and Limitation under the Appropriations Act, May 28, 1998.
 - G. OSHA Instruction CPL 02-00-025 Scheduling System for Programmed Inspections, January 4, 1995.

- H. OSHA Instruction CPL 02-00-111 Citation Policy for Paperwork and Written Program Requirement Violations, November 27, 1995.
- I. OSHA Instruction CPL 02-00-140 Complaint Policies and Procedures, June 23, 2006.

VI. Background. According to the Wisconsin Safety and Health Administration's Hazard Alert entitled "Spray-on urethane truck bed linings and isocyanate exposures" (2003), and OSHA's Safety & Health Topics web page entitled "Isocyanates" (2003), exposures to isocyanates can have adverse health effects on exposed workers. Isocyanates are a group of compounds known to result in severe respiratory disease among workers.

Isocyanates are powerful irritants to the mucous membranes, gastrointestinal, and respiratory tracts (NIOSH, "Preventing Asthma and Death from Diisocyanate Exposure", 1996). Irritation may be severe enough to produce bronchitis with bronchospasm. 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.

NIOSH, OSHA and the American Conference of Governmental Industrial Hygienists (ACGIH) have all set exposure limits for various isocyanate compounds used in industry.

Isocyanates are also allergic sensitizers and are known to cause respiratory sensitization, an allergic, asthma-type reaction (NIOSH, "Preventing Asthma and Death from Diisocyanate Exposure", 1996; Wisconsin Safety and Health Administration's Hazard Alert entitled "Spray-on urethane truck bed linings and isocyanate exposures" (2003); and OSHA's Safety & Health Topics web page entitled "Isocyanates" (2003),. These reports also point to 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.

VII. Site Selection. To select establishments, the Kansas City Area Office will utilize the "www.switchboard.com" internet-based site with the location of "Missouri". Individual cities having a population greater than 10,000 will also be searched by name or predominate zip code using a 50-mile radius as a geographical search criterion. This on-line yellow

pages website allows the user to search for business listings throughout the United States. The following key words will be searched: bedliners, truck accessories, truck bedliners, automotive accessories, aftermarket accessories, and automobile dealers. Establishments identified from this search will be placed on an establishment list for inspection. Another source used to compile the listing will include web sites of all major spray-on bedliner equipment suppliers and/or franchisors that provide dealership location information. Establishments with fewer than ten employees will be included. Prior to initiating the inspection scheduling process described in paragraph VIII., the list will be purged of establishments that are known not to be engaged in spray-on bedliner operations. In order to justify deleting establishments from this list, the area office will view the company's web-site, and/or contact the employer by phone to determine whether the company is engaged in spray-on bedliner application.

VIII. Inspection Scheduling. Inspections conducted under this program shall be scheduled pursuant to the following criteria.

- A. Cycle Size. After a complete establishment list is compiled, inspection cycles of 10 establishments will be randomly selected by using the random numbers table located in Appendix C of OSHA Instruction CPL 02-00-25, Scheduling System for Programmed Inspections. Within a cycle, the establishments may be scheduled and inspected in any order that makes efficient use of available resources. All establishments in a cycle must have inspections initiated before any establishments in a new cycle may be inspected. Carry-overs will be allowed, as provided in OSHA Instruction CPL 02-00-025, paragraph B.1.b.(1)(e).
- B. Additions. If truck bed lining operations using isocyanates are identified during the course of any inspection of a facility which is either not on the targeting list or is listed in a later cycle, the inspection will be expanded and the establishment will be moved into the current cycle to include isocyanate evaluation under this LEP.
- C. Deletions. The Area Office will be responsible for making appropriate deletions to the inspection list, such as for establishments that are no longer in business. Deletions will be made in accordance with CPL 02-00-25, section B.1. b.(1)(f). Establishments that have received a health inspection within the past three years that included sampling for isocyanates with no violations related to isocyanate exposure will be deleted from the inspection list.

- D. Unprogrammed Inspections. Unprogrammed inspections will be conducted according to the FIRM (CPL 02-00-103, Chapter I, section B. 2.). If the occasion for an unprogrammed inspection arises with respect to an establishment that is also to receive a programmed inspection under this isocyanate LEP, the two inspections may be conducted concurrently.
- E. Special Emphasis Programs. Some establishments may be selected for inspection under the isocyanate LEP and also under one or more other initiatives, National Emphasis (NEP) or Local Emphasis (LEP) programs. These inspections may run concurrently with the isocyanate LEP. All applicable IMIS codes should be entered.

IX. Inspection Procedures.

- A. Scope. Inspections conducted under this LEP will be programmed health inspections and focus on employee exposure to isocyanate-containing compounds. Document review and/or management interviews will address recordkeeping, air monitoring, dermal exposure surveys, personal protective equipment program, medical monitoring, respirator fit testing and procedures, hazard communication and training. If reasonable grounds exist to believe that isocyanates are present in the facility, processes suspected of creating an isocyanate exposure hazard to employees will be inspected. Inspections may be expanded in accordance with the FIRM (CPL 02-00-103, Chapter II, paragraph A. 1. b.). Any safety violations discovered under this program will be addressed in accordance with CPL 02-00-051, Section XI of the Enforcement Exemptions and Limitations Under the Appropriations Act.
- B. Change of Ownership. When an inspection is initiated pursuant to this LEP at an establishment that has changed name, ownership, or management, an evaluation of the facility will be conducted to determine whether employee exposure to isocyanates is likely to occur in the facility. In situations where exposure is likely the CSHO shall proceed with the inspection.

X. Recording in IMIS. The OSHA-1 for all isocyanate LEP inspections will be coded as follows:

- A. The OSHA-1 for a programmed inspection conducted under this local emphasis program shall be marked "Programmed Planned" (Item 24) and "Local Emphasis Program" (Item 25c) marked "**Bedliner**".

- B. The OSHA-1 for any unprogrammed inspection which falls under this LEP criteria will be marked as unprogrammed (Item 24a through g as appropriate). In addition, it will be marked "LOCAL EMPHASIS PROGRAM" (Item 25d), Record "**Bedliner**" in the space in item 25d.
 - C. Violation Coding: Violations that involve isocyanates, including those issued for inadequate recordkeeping, PPE, sanitation and hazard communication, shall be marked with the appropriate isocyanates substance code.
- XI. Evaluation. The effectiveness of this program will be evaluated by the Kansas City Area Office, using the "Program Evaluation Items" for Local Emphasis Programs (LEPs), as specified in Appendix A of CPL 04-00-001, and will submit this evaluation to the Regional Office by October 31, 2007. The evaluation will include a recommendation for the continuation or the elimination of the LEP. The Area Office shall collect data relevant to the effectiveness of this program, such as the number of employees covered, the number of workers removed from hazards, the reductions in employee exposures, LWDII rates, the number of serious violations related to isocyanate hazards and the number of inspections without violations.
- XII. Outreach. The Area Office will provide information on isocyanate related hazards and hazard prevention and control methods to each employer inspected pursuant to the requirements of this LEP during the inspection.

Thirty (30) days prior to the initiation of inspection activity, the Kansas City Office will initiate a News Release announcing the commencement of this program. In addition, the Area Office will mail information to all known employers on the initial list. The information will include a letter to the employer explaining the purpose, scope, and inspection targeting selection criteria. Outreach materials will also be made available upon request to employers, professional associations, and union representatives.

 Charles E. Adkins, CIH
 Regional Administrator, Region VII

 (Date)

Concurrence of the Regional Solicitor's Office:

 (Signature)

 (Date)

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