

STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
HAWAII OCCUPATIONAL SAFETY AND HEALTH DIVISION

August 23, 2007

TO: All HIOSH Branch Managers, OSHCOs & EHSs

FROM: Darwin L.D. Ching, Director
Department of Labor and Industrial Relations

SUBJECT: National Emphasis Program on Amputations

The attached is a guideline on the OSHA National Emphasis Program (NEP) on Amputations. This guideline describes policies and procedures for implementing a NEP to identify and reduce workplace machine and equipment hazards which are causing or likely to cause amputations.

OSHA is targeting selected industries that must meet two criteria: High IMIS violations coupled with High BLS Amputations Numbers, or High IMIS violations coupled with High BLS Amputation Rates.

This guideline will focus on identifying industries and establishments associated with amputations rather than on equipment associated with amputations.

Please insert this GOSH into Part I and annotate the index accordingly.

This GOSH is effective upon receipt.

Source: OSHA Instruction CPL 03-00-003, October 27, 2006



OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 03-00-003

EFFECTIVE DATE: October 27, 2006

SUBJECT: National Emphasis Program on Amputations

ABSTRACT

- Purpose:** This Instruction describes policies and procedures for implementing a National Emphasis Program (NEP) to identify and to reduce workplace machinery and equipment hazards which are causing or likely to cause amputations.
- Scope:** OSHA-wide.
- References:** OSHA Instruction CPL 04-00-001, (CPL 2-0.102A) Procedures for Approval of Local Emphasis Programs, November 11, 1999.
- Cancellations:** OSHA Instruction CPL 03-00-002 (CPL 2-1.35), National Emphasis Program on Amputations, March 26, 2002.
- State Impact:** State adoption required in part, See paragraph V.
- Action Offices:** National, Regional, and Area Offices
- Originating Office:** Directorate of Enforcement Programs
- Contact:** Directorate of Enforcement Programs
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By and Under the Authority of

Edwin G. Foulke, Jr.
Assistant Secretary

Executive Summary

On February 28, 1997, Instruction CPL 2-1.24 established and implemented a *National Emphasis Program on Mechanical Power Presses* as part of the Agency's strategic goal of reducing amputations in general industry workplaces. Following that Program, on March 26, 2002, OSHA implemented OSHA Instruction CPL 03-00-002 (previously known as CPL 2-1.35), *National Emphasis Program on Amputations*, in order to address additional machinery associated with amputation hazards thereby reducing injuries.

In order to build on the success of the previous programs, OSHA through this Instruction, *National Emphasis Program on Amputations*, is administratively revising OSHA Instruction CPL 03-00-002, *National Emphasis Program on Amputations* to more effectively reduce amputations and fatalities in selected industries. To qualify, the selected industry would need to meet two criteria, High IMIS violations coupled with High BLS Amputation Numbers, or High IMIS violations coupled with High BLS Amputation Rates. Through this approach, the Agency will use its resources to more effectively reduce amputation injuries and accomplish its strategic goals.

Significant Changes

This Instruction expands on the existing National Emphasis Program on Amputations. Major changes include:

- The revised directive focuses on identifying industries and establishments associated with amputations rather than on equipment associated with amputations.
- Appendix D of the revised directive lists some of the typical machinery and equipment associated with amputations.
- The revised directive incorporates a comparison chart for the Standard Industrial Classification (SIC) codes and the North American Industry Classification System (NAICS) codes in Appendix B.
- The revised targeting methodology is based on a combination of more current data from IMIS and BLS sources as explained in Appendix C.
- The revised targeting methodology includes two additional standards that are generally recognized as being related to amputation hazards. The additional standards are §1910.147, *The Control of Hazardous Energy (Lockout/Tagout)* and §1910.219, *Mechanical Power-transmission Apparatus*.

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- I. Purpose. This Instruction describes policies and procedures for implementing a National Emphasis Program (NEP) to identify and to reduce workplace machine and equipment hazards which are causing or likely to cause amputations.
- II. Scope. This Instruction applies OSHA-wide.
- III. References.
 - A. OSHA Instruction CPL 04-00-001, November 10, 1999, Procedures for Approval of Local Emphasis Programs and Experimental Programs.
 - B. OSHA Standards 29 CFR 1910, Subpart J, General Environmental Controls, §1910.147, The Control of Hazardous Energy (Lockout/Tagout).
 - C. OSHA Standards 29 CFR 1910, Subpart O, Machinery and Machine Guarding.
 - D. OSHA Standards 29 CFR 1910, Subpart P, Hand and Portable Powered Tools & Other Hand-Held Equipment.
 - E. OSHA's Safety and Health Management Guidelines, 54 FR 3904, January 26, 1989.
 - F. OSHA Instruction CPL 02-00-025, January 4, 1995, Scheduling System for Programmed Inspections.
 - G. OSHA Instruction STD 01-05-019, September 11, 1990, 29 CFR 1910.147, The Control of Hazardous Energy (Lockout/Tagout) – Inspection Procedures and Interpretive Guidance.
 - H. Executive Order 12196, Section 1-201.
 - I. OSHA Standards 29 CFR 1960.16, Compliance with OSHA Standards.
 - J. OSHA Instruction CSP 01-00-002, March 21, 2001, State Plan Policies and Procedures Manual (SPM).
 - K. OSHA Instruction CPL 02-00-103, September 26, 1994, Field Inspection Reference Manual (FIRM).
 - L. OSHA Publication 3157, A Guide for Protecting Workers from Woodworking Hazards.
 - M. OSHA Safety and Health Topics Web Page, Machine Guarding, <http://www.osha.gov/SLTC/machineguarding/index.html>

- N. OSHA Safety and Health Topics Web Page, Control of Hazardous Energy, <http://www.osha.gov/SLTC/controlhazardousenergy/index.html>
 - O. OSHA Instruction CPL 02-00-051, Enforcement Exemptions and Limitations under the Appropriations Act.
 - P. Bureau of Labor Statistics (BLS), Table R1. Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work by Industry and Selected Natures of Injury or Illness, 1999, 2000, 2001, and 2002.
 - Q. Bureau of Labor Statistics (BLS), Table R5. Incidence Rates for Nonfatal Occupational Injuries and Illnesses by Involving Days Away From Work per 10,000 Full-Time Workers by Industry and Selected Natures of Injury or Illness, 1999, 2000, 2001, and 2002.
 - R. Bureau of Labor Statistics (BLS), Table R25. Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work by Source of Injury or Illness and Selected Natures of Injury or Illness, 1999, 2000, 2001, and 2002.
 - S. Integrated Management Information System (IMIS), data for §1910.147, §1910.212, §1910.213, §1910.217, and §1910.219 limited to fiscal years 1999, 2000, 2001, 2002, 2003, 2004 and 2005.
 - T. Executive Office of the President, Standard Industrial Classification Manual, 1987.
 - U. Executive Office of the President, North American Industry Classification System, United States, 1997.
 - V. Executive Office of the President, North American Industry Classification System, United States, 2002.
 - W. Occupational Safety and Health Act of 1970 [29 U.S.C. §654(a)(1 - 2)].
- IV. Cancellations. OSHA Instruction CPL 03-00-002, National Emphasis Program on Amputations, March 26, 2002.
- V. Federal Program Change. This instruction describes a Federal Program change. Because of the significant nature of the policy changes contained in this instruction, notice of intent regarding State adoption of an Amputations emphasis program in response to this Instruction is required. The notice should indicate whether the State's program is/will be identical to or different from the Federal. If a State adopts an emphasis program on Amputations which differs from the Federal, States may either post their policy on their State Plan's website and provide a link to

OSHA or submit their policy to OSHA in electronic format, for posting on OSHA's website. An explanation of the differences must also be posted/submitted for posting. Where the State adopts an identical emphasis program on Amputations, a statement to that effect with appropriate State references may be sufficient for posting.

State Emphasis Programs: In general, States are expected to keep their Regional Administrators informed of all State emphasis programs, whether the same as the Federal or different, and of experimental programs, local problem solving projects, etc. A list of the State's Local Emphasis Programs must be accessible to all interested parties through posting on the State's website or submission to OSHA for posting. Where State emphasis programs differ from the Federal, the assignment of appropriate IMIS identifier codes should be coordinated with the Directorate of Information Technology and the Regional Administrator.

- VI. Action. OSHA Regional Administrators, Area Directors and National Office Directors must ensure that the policies and procedures set forth in this directive are followed. Regional Administrators must also ensure that the State Consultation Program Managers and the State Plan State Designees in their Regions are apprised of the contents of this NEP and its required Area Office Outreach initiatives. Regional Administrators are to encourage Consultation Programs' involvement in this Agency-wide effort.
- VII. Application. This instruction applies to general industry workplaces identified pursuant to paragraph IX(B)(6), where **any** machinery and equipment that are likely to cause amputations are present (See Appendix D (not inclusive) for guidance on the types of machinery and equipment most often associated with amputations).
- VIII. Background. The failure to properly apply machine guarding techniques and the failure to adequately control associated energy hazards during servicing and/or maintenance activities are primary causes of amputations. OSHA has determined that CPL 03-00-002 (CPL 2-1.35), *National Emphasis Program on Amputations*, which has been in effect since March 26, 2002, should be revised to better target industries with amputation hazards. OSHA has modified its targeting methodology to identify additional industries to further reduce the number of amputations and fatalities.

The operation of machinery and equipment can be extremely dangerous, and compliance with OSHA's machine guarding and hazardous energy control standards needs to be improved. Injuries involving machinery and equipment often result in death or permanent disability, and OSHA's inspection history indicates that employee exposures to unguarded or inadequately guarded machinery and equipment, together with associated hazardous energy employee exposures during servicing and maintenance activities, occur in many workplaces. Subparts J, O, and P of 29 CFR 1910 provide for safety measures that need to be used for the safe operation, servicing and maintenance of machinery and equipment. Machinery and equipment are covered by standards such as, but not limited to, §1910.147, §1910.212, §1910.213, §1910.217, and §1910.219.

- IX. Program Procedures. This NEP includes four major activities: outreach, targeting/selection, inspection, and program approval. In order to ensure that the selected industries have time to review their own compliance, inspections are not to begin until 60 calendar days after the effective date of this directive.
- A. Outreach. Each Regional and Area Office must develop or continue to offer outreach programs that support the purpose of this NEP to identify and reduce workplace hazards associated with all types of machinery and equipment. Outreach programs with employers, professional associations, and local unions may include meetings, training, education, mailings, speeches or other activities designed to involve employee and management stakeholders in the identification and elimination of hazards associated with machinery. The Office of Communications will provide support to the Regional and Area Offices. Employers with ten or fewer employees are to be included in the outreach effort. At the discretion of the Regional and Area Offices, outreach materials may either be mailed directly, or made available upon request, to employers, professional associations, and local unions.
- B. Targeting/Site Selection. Inspections conducted under this NEP must be scheduled and conducted pursuant to the following priorities.
1. The intent of the NEP is to target workplaces (See Section IX(B)(7)) with machinery and equipment that cause (or are capable of causing) amputations and workplaces where amputations have occurred, in order to reduce amputation injuries while maximizing the Agency's inspection resources. Although Section IX(B)(7) lists the target industries by SIC code, Area and Regional Offices are to ensure that they schedule and conduct enforcement activities following the guidelines set forth in CPL 02-00-051, Enforcement Exemptions and Limitations under the Appropriations Act using the most recent listing of the North American Industry Classification System (NAICS) codes found in Appendix A of CPL 02-00-051. For assistance, this (i.e., NEP on Amputations) Directive provides a comparison chart of the SIC and NAICS codes in Appendix B.
 2. Establishments with ten or fewer employees are not to be inspected but are to be included in the outreach effort.
 3. Developing Inspection Lists. Using the most recently available Dun & Bradstreet employer list prepared by the National Office, each Area and Regional Office will prepare a master list of establishments using the identified SIC codes referenced at Section IX(B)(7) of this directive.
 4. Area Offices will add to the master list general industry establishments where amputation injuries or fatalities related to machinery and equipment have occurred in the five years preceding the effective date of this

directive. Local evidence of amputations will be based on IMIS accident data and, if available, workers' compensation data, OSHA 200 and OSHA 300 data, NIOSH data, and other reliable sources of information (e.g., reports of amputations from hospital admissions, Emergency Medical Services, fire department, and police reports). The basis for an addition to the master list must be documented.

5. Establishments on the master list prepared by the National Office pursuant to Section IX(B)(3) of this directive are arranged alphabetically by company name.
6. Additions to the master list from the list prepared by the National Office pursuant to Section IX(B)(4) are to be arranged alphabetically and added to the bottom of the master list.

Based on local knowledge, Regional and Area offices may delete establishments that are not likely to have the targeted machinery and equipment, or firms known to be out of business, documenting the basis for such determinations. CSHOs will proceed with the programmed inspection where it has been determined that a new business is using the same plant and equipment of the previous business. Further, any establishment, other than those where amputations are known to have occurred which had a comprehensive safety inspection in the previous 24 months, will be deleted from the list.

Once the master list with additions and deletions is completed, each establishment is to be assigned a sequential number, starting at the top of the list with number one. The Random Number Table (see the most current version of OSHA instruction CPL 02-00-025) will then be applied to create the first cycle of five to fifty establishments. Subsequent cycles will be created in the same way until all establishments on the list have been assigned to a cycle. Cycles may be created all at once or as needed and need not be the same size.

Inspections may then be scheduled using the first cycle list. Establishments on the cycle list may be inspected in any order, so that Area Office resources are efficiently used. Once a cycle has begun, all establishments in the cycle will be inspected before a new cycle is begun, except for carryovers that will be allowed as provided in OSHA Instruction CPL 02-00-025, at paragraph B.1.b.(1)(e)(1).

If cycles are not prepared, establishments on the inspection list are to be inspected in the order determined by the application of the Random Number Table.

7. National Data Selection Criteria: The revised targeting methodology includes IMIS enforcement data from the following standards: §1910.147, *The Control of Hazardous Energy (Lockout/Tagout)*, §1910.212, *General Requirements for all Machines*, §1910.213 *Woodworking Machinery*, §1910.217, *Mechanical Power Presses* and §1910.219, *Mechanical Power-transmission Apparatus*. These standards are combined with BLS Amputation Numbers and Rates (See Appendix C).

The selected SICs have High IMIS Numbers coupled with High BLS Amputation Numbers or High IMIS Numbers coupled with High BLS Amputation Rates:

- 2011 Meat Packing Plants
- 2013 Sausages and Other Prepared Meat Products
- 2015 Poultry Slaughtering and Processing
- 2022 Natural, Processed, and Imitation Cheese
- 2051 Bread and Other Bakery Products, Except Cookies and Crackers
- 2099 Food Preparations, NEC
- 2299 Textile Goods, NEC
- 2411 Logging
- 2421 Sawmills and Planing Mills, General
- 2426 Hardwood Dimension and Flooring Mills
- 2431 Millwork
- 2434 Wood Kitchen Cabinets
- 2448 Wood Pallets and Skids
- 2511 Wood Household Furniture, Except Upholstered
- 2621 Paper Mills
- 2653 Corrugated and Solid Fiber Boxes
- 2671 Packaging Paper and Plastics Film, Coated and Laminated
- 2673 Plastics, Foil, and Coated Paper Bags
- 2752 Commercial Printing, Lithographic
- 3089 Plastics Products, NEC
- 3272 Concrete Products, Except Block and Brick
- 3315 Steel Wiredrawing and Steel Nails and Spikes
- 3316 Cold-Rolled Steel Sheet, Strip, and Bars
- 3317 Steel Pipe and Tubes
- 3325 Steel Foundries, NEC
- 3423 Hand and Edge Tools, Except Machine Tools and Handsaws
- 3441 Fabricated Structural Metal
- 3443 Fabricated Plate Work (Boiler Shops)

- 3444 Sheet Metal Work
- 3446 Architectural and Ornamental Metal Work
- 3462 Iron and Steel Forgings
- 3465 Automotive Stampings
- 3469 Metal Stampings, NEC
- 3496 Miscellaneous Fabricated Wire Products
- 3499 Fabricated Metal Products, NEC
- 3544 Special Dies and Tools, Die Sets, Jigs, and Fixtures, and Industrial Molds
- 3564 Industrial and Commercial Fans and Blowers and Air Purification Equipment
- 3585 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment
- 3599 Industrial and Commercial Machinery and Equipment, NEC
- 3714 Motor Vehicle Parts and Accessories

Note: The 40 industry SIC Codes are listed in ascending numerical order (not in the order of High IMIS violations, High BLS Amputation Numbers or High Amputation Rates).

C. Inspection Procedures. Inspections initiated under this NEP will be scheduled and conducted in accordance with provisions of the FIRM, except as noted below.

1. Once an inspection has been scheduled and assigned for the identified establishment, the OSHA IMIS database will be searched for the employer's citation and fatality/accident history prior to the opening conference.
2. At the opening conference, the CSHO will verify with the employer whether any of machinery and equipment in Appendix D or any other machinery and equipment that could cause amputations are present in the workplace. If any machinery and equipment associated with amputations are present in the workplace, the CSHO should exercise professional judgment in conducting an inspection of the machinery and equipment with particular attention to employee exposure to nip points, pinch points, shear points, cutting actions, and other point(s) of operation. The CSHO should consider and evaluate employee exposures during any of the following:
 - Regular operation of the machine;
 - Setup/threading/preparation for regular operation of the machine;
 - Clearing jams or upset conditions;

- Making running adjustments while the machine is operating;
 - Cleaning of the machine;
 - Oiling or greasing of the machine or machine pans;
 - Scheduled/unscheduled maintenance; and
 - Locking out or tagging out.
3. Before proceeding with the inspection, OSHA 200 and OSHA 300 logs will be reviewed to identify recorded amputations associated with machinery and equipment.
 4. Inspections will be scheduled beginning with the current fiscal year, and will continue until further notice or until all establishments on the list have been inspected.
 5. Area Directors, Supervisors, Team Leaders, and CSHOs should ensure that the requirements for case development (including significant cases) are being met.
- D. Program Approval. Inspection programs that deviate from this NEP must be approved by the National Office, Directorate of Enforcement Programs.
- X. Scheduling and Resource Allocation. This is a National initiative which affects existing inspection scheduling priorities, as indicated below.
- A. Resources. Regional Administrators must ensure that adequate resources are designated for this NEP.
 - B. Planning. Each Regional Administrator will report to the Director of Enforcement Programs the number of NEP inspections that are planned for each fiscal year.
 - C. Priority. Inspections conducted under this NEP have a lower priority than inspections conducted under Site Specific Targeting (SST), but have a higher priority than other programmed inspections. When possible, inspections conducted under this NEP will be combined with SST inspections and/or other programmed and unprogrammed inspections. This NEP may be combined with other existing initiatives, such as Local Emphasis Programs which identify targets on a different basis.
 - D. Voluntary Protection Program Sites (VPP). This National initiative exempts participating worksites. Unless they choose otherwise, VPP sites will be removed from OSHA's programmed inspection lists of targeted sites, for the duration of approved participation in the VPP. The applicant worksite will be removed from the programmed inspection lists no more than 75 calendar days prior to the

commencement of its scheduled pre-approved onsite review. The site will remain off those lists until official denial of the application, applicant withdrawal of its application, or, if the applicant is approved to the VPP, subsequent cessation of active participation in the VPP.

- E. OSHA Strategic Partnership Programs (OSP). This National initiative exempts Non-Construction worksites following a comprehensive onsite enforcement inspection conducted to meet OSP verification requirements, an establishment operated by an OSP partner will be deleted from programmed inspection lists for the period of time established for deletions in then-current OSHA Site-Specific Targeting directive.

If the OSP is designed to comprehensively address a hazard covered by the Act, the Area Director (AD), with the approval of the RA, may extend the deletion for one year if the partner continues to meet the conditions of the OSP agreement and demonstrates improved performance in areas measured by the OSP.

XI. Coordination.

- A. National Office. This NEP will be coordinated in the Office of General Industry Enforcement in the Directorate of Enforcement Programs. Questions and comments should be directed to the National Office Coordinator.
- B. Field. Each Regional Administrator will name a coordinator for this National Emphasis Program.

XII. Consultation Programs. The development and implementation of outreach programs for the LEPs may be a joint activity for the Area Office and Consultation Program. When appropriate, 21(d) Consultation Projects are encouraged to develop their own strategic approaches to address the need to reduce injuries and accidents related to machinery and equipment.

XIII. Training. Because of the technical nature of some of these inspections and/or machinery and equipment, CSHOs who conduct inspections under this NEP, and consultation staff, must have had adequate training or experience with both general and specific machine guarding concepts and techniques as well as with hazardous energy control (lockout/tagout) program requirements.

- A. The OSHA Training Institute (OTI).

The OTI provides training materials to CSHOs, consultation staff, and employers. Also, additional sessions of the OTI's mechanical power press and machine guarding courses can be made available. Technical training at the OTI can be expanded to include the use of a stop time measuring device to measure the safety

distance on a mechanical power press, should it be determined that such training is needed.

B. Additional Training.

1. On-the-Job Training. Area Directors and supervisors must ensure that inexperienced CSHOs receive on-the-job training by accompanying experienced compliance officers during these NEP inspections.
2. Enforcement Issues. Continuing guidance regarding enforcement issues will be provided by the Office of General Industry Enforcement as new issues arise.

XIV. Federal Agencies. This instruction describes a change that affects Federal agencies. Executive Order 12196, Section 1-201, and §1960.16, maintain that Federal agencies must follow the enforcement policy and procedures contained in this Directive.

XV. Program Evaluation. Area Offices will collect data relevant to the effectiveness of this NEP and submit it to the Regional Office. The Regional Office, after summarizing the information, will forward it to the National Office after the end of each fiscal year. At a minimum, the evaluation should respond to the requirements of CPL 04-00-001, Section D.

XVI. Relationship to Other Programs.

A. Unprogrammed Inspections. Unprogrammed inspections will be conducted according to the FIRM (OSHA Instruction CPL 02-00-103) or other guidance documents. If the occasion for an unprogrammed (e.g., complaint, fatality) inspection arises with respect to an establishment that is also scheduled to receive a programmed inspection under the amputations plan, the two inspections may be conducted either concurrently or separately. (See also XVII.C.)

B. Special Emphasis Programs. Some establishments may be selected for inspection under the Amputation Initiative and also under one or more other OSHA initiatives (National Emphasis (NEP) or Local Emphasis (LEP) Programs). Programs based upon particular hazards (such as silica, or lead) or on particular industries (such as logging, scrap yards, or shipyards) or the Site Specific Targeting Initiative (SST) can be run concurrently with the Amputations Initiative.

Whenever an establishment is scheduled for inspection on the Amputation Initiative and on the current cycle of an NEP/LEP plan, the inspections may be scheduled at the same time. CSHOs will apply all applicable IMIS codes to the inspection. The employer's DUNS number must also be recorded for each inspection since it is important for tracking. (See also Section XVIII.)

In the case of an establishment scheduled for inspection under both the Amputation Initiative and a NEP/LEP, an inspection limited in scope to the safety and health issues targeted by the NEP/LEP program will be conducted.

XVII. Recording and Tracking.

- A. Amputation Initiative Only Inspections. The OSHA-1 Forms must be marked as "programmed planned" in Item 24. In addition, the "NEP" value "AMPUTATE" should be recorded in Item 25d (the Amputations inspections are being coded under the NEP for ease of tracking).
- B. Programmed and Unprogrammed Inspections. All General Industry inspections must be coded as an **amputation hazard** in the IMIS by marking **“amputations”** in the Strategic Plan Activity item 25(f) on the OSHA 1, when there is potential worker exposure to an amputation hazard.
- C. Amputation Initiative Combined with Unprogrammed Inspections. For all unprogrammed inspections conducted in conjunction with an Amputations inspection, the OSHA-1 Forms must be marked as "unprogrammed" in Item 24 with the appropriate unprogrammed activity identified. In addition, the "NEP" value "AMPUTATE" should be recorded in Item 25d.
- D. Amputation Initiative Combined with NEP or LEP Inspections. For all programmed inspections such as NEPs and LEPs conducted in conjunction with an Amputations inspection, the OSHA-1 Forms must be marked as "programmed planned" in Item 24. In addition, the "NEP" value "AMPUTATE" should be recorded in Item 25d.
- E. Complaint Inspections. Whenever an OSHA-7 is completed by a Federal office and the applicable complaint alleges the presence of amputation hazards, complete the OSHA-7 in the usual manner, and record **“AMPUTATE”** in the space in item 50.
- F. Fatality and Catastrophe Inspections. Whenever an OSHA-36 is completed by a Federal office and the inspecting CSFO is able to identify at the site of the fatality/catastrophe the presence of amputation hazards, complete the OSHA-36 in the usual manner and record **“AMPUTATE”** in the space in item 36.
- G. Referral Inspections. Whenever an OSHA-90 is completed by a Federal office and the applicable referral case has amputation hazards as one of the subjects, complete the OSHA-90 in the usual manner and record **“AMPUTATE”** in the space in item 30.

H. Consultation Inspections. Consultations accomplished in support of this directive should input the following into the corresponding fields on the Request Form (20); the Visit Form (Form 30); and the Intervention Form (66); as applicable:

Field Name	Input
Strategic Initiative	Amputations
National Emphasis	Amputate

XVIII. Dun & Bradstreet's Number. The Data Universal Numbering System (DUNS) number, which is a required entry for all SST inspections, must be recorded in the appropriate field on the Establishment Detail Screen. In establishments where ownership has changed, enter the DUNS number for the new owner. If the new owner does not have a new DUNS number, enter the old DUNS number. Since the DUNS number is site-sensitive, the old DUNS number will give some useful data. The Establishment Detail Screen can be accessed by pressing F5 anywhere in any data entry form where establishment processing can be done. On the OSHA -1 inspection form, Item 8 displays the Estab Name. Once the DUNS number is entered, it will appear in Item 9b on the inspection form.

XIX. Appendices. The Appendices and a PowerPoint® presentation summarizing this NEP contain information developed to assist employers, employees, and compliance officers in the implementation, training and outreach requirements of this Program. The Area Office may use its discretion in selecting whatever materials it deems appropriate for outreach purposes. PowerPoint Presentation - Amputations Directive

APPENDIX A

Related ANSI and ASME Standards

(This appendix is not an inclusive list of all ANSI and ASME standards that are associated with hazardous machinery and equipment.)

OSHA recognizes the value of national consensus standards in terms of useful guidance for employers and employees attempting to comply with specific OSHA standards.

OSHA's enforcement policy provides that a violation may be *de minimis* if an employer complies with a proposed standard or amendment or a consensus standard rather than with the standard in effect at the time of the inspection, and the employer's action clearly provides equal or greater employee protection. See OSHA Instruction CPL 02-00-103, *Field Inspection Reference Manual*, Chapter III, Paragraph C(2)(g), September 26, 1994. In applying this principle, OSHA takes heed of its rulemaking findings.

1. ANSI B11.1- Mechanical Power Presses
2. ANSI B11.2- Hydraulic Power Presses
3. ANSI B11.3- Power Press Brakes
4. ANSI B11.4- Shears
5. ANSI B11.5- Ironworkers
6. ANSI B11.6- Lathes
7. ANSI B11.7- Cold Headers and Cold Formers
5. ANSI B11.8- Drilling, Milling, and Boring Machines
9. ANSI B11.9- Grinding Machinery
10. ANSI B11.10- Metal Sawing Machines
11. ANSI B11.11- Gear Cutting Machines
12. ANSI B11.12- Roll-Forming and Roll-Bending Machines
13. ANSI B11.14- Coil-Slitting Machines
14. ANSI B11.15- Pipe, Tube, and Shape Bending Machines
15. ANSI B11.16- Metal Powder Compacting Presses
16. ANSI B11.17- Horizontal Hydraulic Extrusion Presses
17. ANSI B11.18- Machinery and Machine Systems for Processing Strip, Sheet, or Plate From Coiled Configuration
18. ANSI B11.19- Safeguarding When Referenced by the Other B11 Machine Tool Safety Standards
19. ANSI B5.37- External Cylindrical Grinding Machines (Centerless)
20. ANSI B5.42- External Cylindrical Grinding Machines (Universal)
21. ANSI B65.1- Printing Press Systems
22. ANSI B65.2- Safety Standard – Binding and Finishing Systems
23. ANSI B65.3- Safety Standard for Guillotine Paper Cutters
24. ANSI B7.1- Use, Care, and Protection of Abrasive Wheels
25. ANSI B151.5- Plastic Film and Sheet Winding Equipment

26. ANSI B151.20- Plastic Sheet Production Machinery
27. ANSI B155.1- Packaging Machinery and Packaging-Related Converting Machinery
28. ANSI B177.1- Three Roller Printing Ink Mills
29. ANSI O1.1- Woodworking Machinery
30. ANSI Z244.1- Control of Hazardous Energy - Lockout/Tagout and Alternative Methods
31. ASME B5.52M- Mechanical Power Presses, General Purpose Single Point
32. ASME B15.1- Mechanical Power Transmission Apparatus
33. ASME B15.1A- Addenda to B15.1
34. ASME B15.1B- Addenda to B15.1
35. ASME B20.1- Conveyors and Related Equipment, with Interpretations A and B
36. ASME B20.1A and B20.1B- Addenda to B20.1
37. ASME/CEMA 350- Screw Conveyors
38. ASME/CEMA 401- Unit Handling Conveyors - Roller Conveyors - Non-Powered
39. ASME/CEMA 402- Unit Handling Conveyors - Belt Conveyors
40. ASME/CEMA 403- Unit Handling Conveyors - Belt Driven Live Roller Conveyors
41. ASME/CEMA 404- Unit Handling Conveyors - Chain Driven Live Roller Conveyors
42. ASME/CEMA 405- Packaging Handling Conveyors - Slant Conveyors

APPENDIX B

This appendix is an excerpt of a cross-comparison chart for the Standard Industrial Classification (SIC) codes and the North American Industry Classification System (NAICS) which is intended to assist enforcement personnel in identifying related industries and the new classification system. The source of this excerpt was NAICS United States, 1997, Appendix B.

SIC and NAICS Note: pt – Part of; NEC – Not Elsewhere Classified				
SIC	PT	SIC TEXT	NAICS	NAICS TEXT
2011		Meat Packing Plants	311611	Animal (except Poultry) Slaughtering (pt)
2013		Sausages and Other Prepared Meat Products		
2013	pt	Lard Made From Purchased Material	311613	Rendering and Meat Byproduct Processing (pt)
2013	pt	Except Lard Made From Purchased Material	311612	Meat Processed from Carcasses (pt)
2015		Poultry Slaughtering and Processing		
2015	pt	Poultry Processing	311615	Poultry Processing
2015	pt	Egg Processing	311999	All Other Miscellaneous Food Manufacturing (pt)
2022		Natural, Processed, and Imitation Cheese	311513	Cheese Manufacturing
2051		Bread and Other Bakery Products, Except Cookies and Crackers	311812	Commercial Bakeries (pt)
2099		Food Preparations, NEC		
2099	pt	Reducing Maple Sap to Maple Syrup	111998	All Other Miscellaneous Crop Farming (pt)
2099	pt	Marshmallow Crème	31134	Nonchocolate Confectionery Manufacturing (pt)
2099	pt	Peanut Butter	311911	Roasted Nuts and Peanut Butter Manufacturing (pt)
2099	pt	Potatoes, Dried and Packaged with Other Ingredients Made in Dehydrated Plants, and Bouillon	311423	Dried and Dehydrated Food Manufacturing (pt)
2099	pt	Perishable Prepared Food	311991	Perishable Prepared Food Manufacturing
2099	pt	Rice, Uncooked and Packaged with Other Ingredients Made in Rice Milling	311212	Rice Milling (pt)
2099	pt	Tortillas	31183	Tortilla Manufacturing
2099	pt	Dry Pasta Packaged with Other Ingredients Made in Dry Pasta Plants	311823	Dry Pasta Manufacturing (pt)
2099	pt	Tea	31192	Coffee and Tea Manufacturing (pt)
2099	pt	Vinegar, Prepared Dips Except Dairy and Cider	311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing (pt)
2099	pt	Spices and Extracts	311942	Spice and Extract Manufacturing (pt)

SIC and NAICS Note: pt – Part of; NEC – Not Elsewhere Classified				
SIC	PT	SIC TEXT	NAICS	NAICS TEXT
2099	pt	Other	311999	All Other Miscellaneous Food Manufacturing (pt)
2299		Textile Goods, NEC		
2299	pt	Broadwoven Fabric of Jute, Linen, Hemp, and Ramie and Handwoven	31321	Broadwoven Fabric Mills (pt)
	pt	Nonwoven Felt	31323	Nonwoven Fabric Mills (pt)
	pt	Finishing Thread and Yarn of Flax, Hemp, Jute, Linen, and Ramie	313312	Textile and Fabric Finishing (except Broadwoven Fabrics) Mills (pt)
	pt	Narrow Woven Fabric of Jute, Linen, Hemp, and Ramie	313221	Narrow Fabric Mills (pt)
	pt	Thread of Hemp, Linen, and Ramie	313113	Thread Mills (pt)
	pt	Yarn of Flax, Hemp, Jute, and Ramie	313111	Yarn Spinning Mills (pt)
	pt	Recovery and Processing of Fibers and Waste	314999	All Other Miscellaneous Textile Product Mills (pt)
2411		Logging	11331	Logging
2421		Sawmills and Planing Mills, General		
2421	pt	Lumber Manufacturing from Purchased Lumber, Softwood Cut Stock, Wood Lath and Planing Mill Products	321912	Cut Stock, Resawing Lumber, and Planing (pt)
2421	pt	Sawmills	321113	Sawmills (pt)
2421	pt	Softwood Flooring	321918	Other Millwork (including Flooring) (pt)
2421	pt	Kiln Drying	321999	All Other Miscellaneous Wood Product Manufacturing (pt)
2426		Hardwood Dimension and Flooring Mills		
2426	pt	Hardwood Flooring	321918	Other Millwork (including Flooring) (pt)
2426	pt	Wood Furniture Frames	337215	Showcase, Partition, Shelving, and Locker Manufacturing (pt)
2426	pt	Hardwood Dimension Lumber Made from Logs and Bolts	321113	Sawmills (pt)
2426	pt	Other Hardwood Dimension Except, Flooring	321912	Cut Stock, Resawing Lumber, and Planing (pt)
2431		Millwork		
2431	pt	Wood Windows and Doors	321911	Wood Window and Door Manufacturing
2431	pt	Except Wood Windows and Doors	321918	Other Millwork (including Flooring) (pt)
2434		Wood Kitchen Cabinets	33711	Wood Kitchen Cabinet and Countertop Manufacturing (pt)
2448		Wood Pallets and Skids	32192	Wood Container and Pallet Manufacturing (pt)

SIC and NAICS Note: pt – Part of; NEC – Not Elsewhere Classified				
SIC	PT	SIC TEXT	NAICS	NAICS TEXT
2511		Wood Household Furniture, Except Upholstered		
2511	pt	Wood Box Spring Frames	337215	Showcase, Partition, Shelving, and Locker Manufacturing (pt)
2511	pt	Except Wood Box Spring Frames	337122	Wood Household Furniture (except Upholstered) Manufacturing (pt)
2621		Paper Mills		
2621	pt	Except Newsprint Mills	322121	Paper (except Newsprint) Mills (pt)
2621	pt	Newsprint Mills	322122	Newsprint Mills (pt)
2653		Corrugated and Solid Fiber Boxes	322211	Corrugated and Solid Fiber Box Manufacturing (pt)
2671		Packaging Paper and Plastics Film, Coated and Laminated		
2671	pt	Single-Web Paper, Paper Multiweb Laminated Rolls and Sheets for Packaging Uses	322221	Coated and Laminated Packaging Paper and Plastic Film Manufacturing
2671	pt	Plastics Packaging Film and Sheet	326112	Unsupported Plastics Packaging Film and Sheet Manufacturing
2673		Plastics, Foil, and Coated Paper Bags		
2673	pt	Except All Plastics	322223	Plastics, Foil, and Coated Paper Bag Manufacturing
2673	pt	Plastics Bags	326111	Unsupported Plastics Bag
2752		Commercial Printing, Lithographic		
2752	pt	Quick Printing	323114	Quick Printing (pt)
2752	pt	Except Quick Printing	323110	Commercial Lithographic Printing (pt)
3089		Plastics Products, NEC		
3089	pt	Pipe Fittings	326122	Plastics Pipe and Pipe Fitting Manufacturing (pt)
3089	pt	Plastics Sausage Casings	326121	Unsupported Plastics Profile Shape Manufacturing (pt)
3089	pt	Finished Plastics Furniture Parts	337215	Showcase, Partition, Shelving, and Locker Manufacturing (pt)
3089	pt	Other	326199	All Other Plastics Product Manufacturing (pt)
3272		Concrete Products, Except Block and Brick		
3272	pt	Dry Mixture Concrete	327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing (pt)
3272	pt	Concrete Pipes	327332	Concrete Pipe Manufacturing

SIC and NAICS Note: pt – Part of; NEC – Not Elsewhere Classified				
SIC	PT	SIC TEXT	NAICS	NAICS TEXT
3272	pt	Other Concrete Products	32739	Other Concrete Product Manufacturing
3315		Steel Wiredrawing and Steel Nails and Spikes		
3315	pt	Steel Wire Drawing	331222	Steel Wire Drawing
3315	pt	Nails, Spikes, Paper Clips, and Wire Not Made in Wire Drawing Plants	332618	Other Fabricated Wire Product Manufacturing (pt)
3316		Cold-Rolled Steel Sheet, Strip, and Bars	331221	Rolled Steel Shape Manufacturing (pt)
3317		Steel Pipe and Tubes	33121	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel
3325		Steel Foundries, NEC	331513	Steel Foundries (except Investment)
3423		Hand and Edge tools, Except Machine Tools and Handsaws	332212	Hand and Edge Tool Manufacturing (pt)
3441		Fabricated Structural Metal	332312	Fabricated Structural Metal Manufacturing (pt)
3443		Fabricated Plate Work (Boiler Shops)		
3443	pt	Fabricated Plate Work and Metal Weldments	332313	Plate Work Manufacturing
3443	pt	Power Boilers and Heat Exchanges	33241	Power Boiler and Heat Exchanger Manufacturing (pt)
3443	pt	Heavy Gauge Tanks	33242	Metal Tank (Heavy Gauge) Manufacturing
3443	pt	Metal Cooling Towers	333414	Heating Equipment (except Warm Air Furnaces) Manufacturing (pt)
3444		Sheet Metal Work		
3444	pt	Ducts, Flumes, Flooring, Siding, Dampers, etc.	332322	Sheet Metal Work Manufacturing
3444	pt	Metal Bins and Vats	332439	Other Metal Container Manufacturing (pt)
3444	pt	Cooling Towers	333414	Heating Equipment (except Warm Air Furnaces) Manufacturing (pt)
3446		Architectural and Ornamental Metal Work	332323	Ornamental and Architectural Metal Work Manufacturing (pt)
3462		Iron and Steel Forgings	332111	Iron and Steel Forging
3465		Automotive Stamping	33637	Motor Vehicle Metal Stamping
3469		Metal Stamping, NEC		
3469	pt	Metal Stamping, NEC (Except Kitchen Utensils, Pots and Pans for Cooking and Coins)	332116	Metal Stamping

SIC and NAICS Note: pt – Part of; NEC – Not Elsewhere Classified				
SIC	PT	SIC TEXT	NAICS	NAICS TEXT
3469	pt	Kitchen Utensils and Pots and Pans for Cooking	332214	Kitchen Utensil, Pot, and Pan Manufacturing
3496		Miscellaneous Fabricated Wire Products		
3496	pt	Grocery Carts	333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing (pt)
3496	pt	Except Grocery Carts	332618	Other Fabricated Wire Product Manufacturing (pt)
3499		Fabricated Metal Products, NEC		
3499	pt	Metal Furniture Frames	337215	Showcase, Partition, Shelving, and Locker Manufacturing (pt)
3499	pt	Metal Motor Vehicle Seat Frames	33636	Motor Vehicle Seating and Interior Trim Manufacturing (pt)
3499	pt	Powder Metallurgy	332117	Powder Metallurgy Part Manufacturing
3499	pt	Metal Boxes	332439	Other Metal Container Manufacturing (pt)
3499	pt	Safe and Vault Locks	33251	Hardware Manufacturing (pt)
3499	pt	Metal Aerosol Valves	332919	Other Metal Valve and Pipe Fitting Manufacturing (pt)
3499	pt	Other Metal Products	332999	All Other Miscellaneous Fabricated Metal Product Manufacturing (pt)
3544		Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds		
3544	pt	Except Industrial Molds	333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing
3544	pt	Industrial Molds	333511	Industrial Mold Manufacturing
3564		Industrial and Commercial Fans and Blowers, and Air Purification Equipment		
3564	pt	Air Purification Equipment	333411	Air Purification Equipment Manufacturing
3564	pt	Fans and Blowers	333412	Industrial and Commercial Fan and Blower Manufacturing
3585		Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment		
3585	pt	Motor Vehicle Air-Conditioning	336391	Motor Vehicle Air-Conditioning Manufacturing

SIC and NAICS Note: pt – Part of; NEC – Not Elsewhere Classified				
SIC	PT	SIC TEXT	NAICS	NAICS TEXT
3585	pt	Except Motor Vehicle Air-Conditioning	333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing
3599		Industrial and Commercial Machinery and Equipment, NEC		
3599	pt	Gasoline, Oil and Intake Filters for Internal Combustion Engines, Except Motor Vehicle	336399	All Other Motor Vehicle Part Manufacturing (pt)
3599	pt	Flexible Metal Hose	332999	All Other Miscellaneous Fabricated Metal Product Manufacturing (pt)
3599	pt	Carnival Amusement Park Equipment	333319	Other Commercial and Service Industry Machinery Manufacturing (pt)
3599	pt	Machine Shops	33271	Machine Shops
3599	pt	Other Industrial and Commercial Machinery and Equipment	333999	All Other Miscellaneous General Purpose Machinery Manufacturing (pt)
3714		Motor Vehicle Parts and Accessories		
3714	pt	Dump-Truck Lifting Mechanisms and Fifth Wheels	336211	Motor Vehicle Body Manufacturing (pt)
3714	pt	Gasoline Engines Including Rebuilt and Engine Parts Including Rebuilt for Motor Vehicles	336312	Gasoline Engine and Engine Parts Manufacturing
3714	pt	Wiring Harness Sets, Other than Ignition; Block Heaters and Battery Heaters; Instrument Board Assemblies; Permanent Defroster; Windshield Washer-Wiper Mechanisms; Cruise Control Mechanisms; and Other Electrical Equipment for Internal Combustion Engines	336322	Other Motor Vehicle Electrical and Electronic Equipment Manufacturing (pt)
3714	pt	Steering and Suspension Parts	33633	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing
3714	pt	Brake and Brake Systems, Including Assemblies	33634	Motor Vehicle Brake System Manufacturing (pt)
3714	pt	Transmissions and Power Train Parts, Including Rebuilding	33635	Motor Vehicle Transmission and Power Train Parts Manufacturing
3714	pt	Other Motor Vehicle Parts	336399	All Other Motor Vehicle Parts Manufacturing (pt)

APPENDIX C

AMPUTATIONS TARGETING METHODOLOGY

NATIONAL DATA:

Selection Process for Industries with Significant Inspection Histories (High IMIS¹ Numbers:)

1. OSHA selected five standards (29 CFR 1910.147, .212, .213, .217, and .219) that are generally recognized as being related to amputation hazards.
2. OSHA IMIS data covering fiscal years 1999-2005 identified those industries with 40 or more federal OSHA inspections with one or more violations of the standards listed in #1 above.
3. OSHA limited the range to the Standard Industrial Classification Manual, Division D., Manufacturing, Major Group 20 through Major Group 39. This range encompasses all manufacturing operations and addresses amputation issues.
4. The process yielded 123 SICs.

Selection Process for Industries with High BLS Rates:

1. OSHA used the most recent four years of BLS Data (Calendar year 1999, 2000, 2001, and 2002.)² on incidence rates for nonfatal occupational injuries and illnesses involving days away from work per 10,000 full-time workers.
2. OSHA limited the range to the Standard Industrial Classification Manual, Division D., Manufacturing, Major Group 20 through Major Group 39.
3. OSHA selected SICs with BLS incidence rates of 10.0 or greater for amputations for any year.
4. The process yielded 38 SICs.

BLS Data Selection Process for Industries with High BLS Numbers:

1. OSHA used the most recent four years of BLS Data (Calendar year 1999, 2000, 2001, and 2002.)³ on the number of amputations.
2. OSHA limited the range to the Standard Industrial Classification Manual, Division D., Manufacturing, Major Group 20 through Major Group 39.
3. OSHA selected SICs with BLS numbers of 50 or more amputations for any year.
4. The process yielded 29 SICs.

1 IMIS- Integrated Management Information System. OSHA's database for enforcement data.

2 2003 and 2004 BLS data was not used as it had data sorted by NAICS.

3 Ibid.

OSHA then selected the industries that had High IMIS Numbers coupled with High BLS Rates or High IMIS Numbers coupled with High BLS Numbers.

- **The first category contains SICs that have High IMIS Numbers and High BLS Rates. The total number of SICs in this category is 25.**
- **The second category contains SICs that have High IMIS Numbers and High BLS Numbers. The total number of SICs in this category is 29.**
- **After eliminating the overlap⁴ between the two categories, the final total is 40 SIC codes.**

The 40 SICs comprise OSHA's list of industries that will be a part of the National Emphasis Program for Amputations.

⁴ The overlap consisted of 14 of the 40 SICs which had High IMIS Numbers, High BLS Rates, and High BLS Numbers.

APPENDIX D
(To be used for guidance/not inclusive)

1999-2002 (Table R-25*) Combined Amputation Sources
Sources of Amputations: Machinery and Equipment
Benders, Rollers and Shapers
Press Brakes (All Types)
Casting Machinery
Conveyors – Belt, Chain, Live Roller, and Auger Screw Conveyors
Drills – Stationary
Extruding Machinery
Grinders, Abraders, and Meat Grinders
Plastic Injection Molding Machinery
Milling Machines
Mixers, Blenders, Whippers, Slicers, and Food Beverage Processing Equipment
Packing, Wrapping, Bundling Machinery
Presses (Mechanical, Hydraulic, and Pneumatic)
Printing Presses
Sawing Machinery - (Band, Table, Radial Arm Saws)
Shears (All Types)

***Bureau of Labor Statistics (BLS) Table R25. Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work by Source of Injury or Illness and Selected Natures of Injury or Illness**

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