OSHA Issues Second Lockout/Tagout Clarification Letter for Printing Industry

On April 7, 2004, the Occupational Safety and Health Administration (OSHA) released a second letter of interpretation and clarification on how the Lockout/Tagout Standard applies to certain printing press and binding and finishing activities. This letter was issued as a result of a request from PIA/GATF for additional guidance and joins the previous one released on September 16, 1992. This letter briefly summarizes the important points of the standard and OSHA's current interpretation as it applies to the printing industry.

Introduction and Background

The Lockout/Tagout Standard for general industry was published in the September 1, 1989 issue of the *Federal Register* (54 FR 36645) and went into effect on January 2, 1990. It addresses the practices and procedures required to immobilize machinery and equipment to prevent the release of potentially hazardous energy or accidental start-up during maintenance or servicing.

To comply with the standard, printers must meet basic requirements:

1. Conduct a hazard assessment of production equipment including prepress, press, postpress areas, and other applicable equipment.

2. Develop a written program detailing the specific procedures and when they will be used.

3. Develop and conduct an employee-training program on lockout/tagout procedures.

4. Conduct annual program evaluation and document.

The standard requires that equipment powered by electricity or other energy source be de-energized (cut off from its source of power), that any stored energy be dissipated (i.e., hydraulic or pneumatic systems need to be discharged), and that the main or satellite breaker box switch or other sources of energy be locked or tagged in the "off" position when a guard or other safety device has to be bypassed (e.g., pivoted or moved) or removed to access the machinery. Tagging out is acceptable only when it can be proven that the equipment cannot be locked or retrofitted to allow for a lock.

September 16, 1992 Interpretation Letter

Since the Lockout/Tagout Standard applies to servicing or maintenance activities, a considerable amount of confusion arose regarding whether (and if so, how) the standard applies to routine cleaning/changing blankets, plates and rollers, minor lubrication, clearing paper jams that do not require press disassembly, and other makeready activities. OSHA's initial position, as outlined in the 1989 final rule, was that equipment had to be locked- or tagged-out during these procedures.

Over a three-year period, PIA/GATF and other industry representatives met with various OSHA officials to educate them about the equipment and procedures used in the industry that protect employees during the above procedures. According to industry practice, these procedures are an integral part of the production process (as opposed to servicing and maintenance). As such, they should be exempt from the lockout/tagout requirements because adequate alternative protection is provided through the proper use of the stop/safe/ready button and warning system.

The industry committee demonstrated to OSHA's satisfaction that the proper use of the stop/safe/ready button system, as outlined by the American National Standards Institute (ANSI) Standards, in conjunction with inch-safe servicing techniques, provides protection equivalent to the Lockout/Tagout Standard. Thus, certain press activities could be performed safely without having to lockout or tagout the press. The physical requirements for the stop/safe/ready button system are detailed in ANSI B65.1-1985, Safety Specifications for Printing Press Control Drives, and B65.2-1988, Safety Standard for Binding and Finishing Systems.

As a result, OSHA's letter of clarification acknowledges that the proper use of the stop/safe/ready button system and inch-safe service technique will allow printers to avoid lockout/tagout during makeready, minor lubrications, and most paper jam-clearing activities. The inch-safe service technique requires operators not to touch any moving machine part, especially blankets, rollers, and bearers.

The interpretation letter contains an example specifying that unless roller removal and replacement can be performed by a single employee or the roller system is equipped with a quick-disconnect, this activity must be done under lockout/tagout conditions. The letter also has an example requiring lockout/tagout while cleaning certain press components controlled by an auxiliary motor and not directly controlled by the stop/safe/ready main-drive control system. According to OSHA, simple toggle switches for auxiliary motors do not provide sufficient protection from accidental energization of equipment, and in order to avoid lockout/tagout, some form of redundant protection must be provided.

The interpretation contains a reference to the ANSI Standard for bindery equipment (B65.2). This will allow the printer to apply the same logic contained in the letter to many binding and finishing activities. It is the printer's responsibility to detail—in writing—every servicing and maintenance activity involved with each piece of production equipment and how the Lockout/Tagout Standard applies. This analysis should appear in the written training program.

April 7, 2004 Interpretation Letter

Shortly after the September 16 letter was issued, two critical events occurred. First, OSHA issued a memo on June 14, 1993 that has been interpreted by many OSHA compliance officers as rescinding the ability for the printing industry to use the inch-safe service method for minor servicing and maintenance and set up activities on binding and finishing equipment, meeting the ANSI B65.2 standard. This memo was issued in response to a request from a labor union representing print workers.

The second event was that two printing companies requested and received site-specific interpretations that allowed them to clean blankets while they were moving. The printers requested the interpretations based on a combination of machine guarding and safe work practices. As a result of this success, a letter requesting a nationwide interpretation, allowing for the cleaning of moving blankets was submitted to OSHA in 1995.

The 1993 memo was the most troublesome as it triggered, and continues to trigger, OSHA citations that have to be contested. The printing industry has won several contests where it had to be proven that inch-safe service techniques, in conjunction with equipment, meeting the ANSI B65.2 standard were an acceptable form of protection. Most recently, a printer was fined because the company had an operator who was making adjustments to a folder on a web press using inch-safe service, and OSHA used the 1993 memo as a basis for a citation because

folders are used in binding and finishing areas, and the September 16, 1992 letter did not define a printing press.

Capitalizing on the success of the Ergonomics Alliance signed between the printing industry and OSHA, an additional request was made to address the binding and finishing and cleaning blankets while moving. After eighteen months of educating OSHA personnel on common industry equipment and practices, including a visit to GATF to observe equipment and procedures, OSHA issued the second clarification letter on April 7, 2004.

The letter recognizes that certain operational activities can take place while equipment is energized as long as a combination of machine guarding and lockout/tagout procedures, or inch-safe service methods, is properly implemented. OSHA will now consider a printing operation to be compliant if certain combinations of lockout/tagout procedures and effective machine guarding are used on presses, inline auxiliary equipment, bindery and finishing equipment, and during blanket washing. Printers need to ensure their equipment meets the appropriate ANSI standard and proper safety precautions are available, in place, and used.

Specifically, the guidance does the following:

- While not formally defining a printing press, the letter acknowledges alternatives to a full lockout/tagout must effectively protect employees from exposure to hazards present during servicing and maintenance. With OSHA's recognition that the inch-safe service method, in conjunction with appropriate machine-guarding techniques, is acceptable for binding and finishing equipment (see below)—the June 14, 1993 memo now becomes moot.

- Recognizes that the inch-safe-service method, in conjunction with machine guarding, is also an alternative equivalent protection with respect to binding and finishing equipment so that setup, adjustments, and other minor servicing and maintenance activities can be performed safely without fear of a citation. The binding and finishing equipment must meet the appropriate control systems described in ANSI B65.2.

- Recognizes a combination of machine guarding and proper cleaning practices is an acceptable alternative form of equivalent protection during the performance of blanket washing when the press is energized or moving in a "slow run" mode.

In understanding the conditions specified in the April 7, 2004 letter, there are several important requirements that must be met in order to take full advantage of the ability to avoid locking- or tagging-out presses or binding and finishing equipment and cleaning blankets while they are moving.

The points are as follows:

- At no time is an employee allowed to access an unguarded hazard area while the equipment is energized or moving. Employees are not allowed to reach around guards, remove guards, or reach into an unguarded area while the equipment is energized or moving.

- In order to take advantage of the inch-safe service method, simple pushbuttons lacking a control logic providing for exclusive control, as specified in the appropriate

ANSI standard, are not acceptable. The letter further elaborates on what constitutes the inch-safe service method. It details each step of the method that must be followed.

- For changing knife blades on a three-knife trimmer and guillotine cutter blades, OSHA stated that changing them monthly was not an action that would be considered a normal production procedure and frequent enough to qualify as routine, which means the procedures do not qualify as minor servicing and maintenance and must be done under a complete lockout/tagout scenario. However, OSHA did recognize that power to the equipment could be allowed as long as adequate guarding was provided to protect the employee. For example, adjusting the blades on a three knife trimmer, once replaced under zero energy, could be made with power to the equipment if a guard was provided for the knife area.

In order to clean blankets and other rollers while the press is moving, the following conditions must be met:

- The press is operated in a "slow run" mode.
- The operator must use a towel that is folded so no loose ends are available, and it is held in the palm of the hand.
- Cleaning is to occur on the out-running side of the cylinder.
- The roll or cylinders are to have smooth surfaces without projections, gaps, notches, or other surface features that may grab a towel or otherwise cause an injury. This means that on sheetfed presses, cylinder covers need to be present on the plate and blanket cylinders.
- Guards must be installed for all ingoing nip points where cleaning is going to occur, which means between the plate and last ink form roller, plate and blanket cylinder, or blanket-to-blanket cylinder, blanket cylinder and press deck on sheetfed presses.
- The guards must meet OSHA's requirements and be adjusted to one-quarter (0.25) inch of the rolls that form in the ingoing nip.

Additional Clarification for April 7, 2004 Letter

In a review of the letter, there are two statements where additional clarification has been requested. The two statements are as follows:

1. On page 3, second full paragraph, first sentence, states, "As emphasized, above, the September 16 letter did not state that <u>all</u> *un-jamming, cleaning lubricating, adjusting, plate/blanket changing, and paper webbing/paper roll changing* operations in the printing industry...." Since the September 16 letter outlines the conditions where certain cleaning and paper un-jamming activities were not major, a statement of clarification that the September 16, 1992 letter should be used as the guidance in determining which procedures would be considered minor versus major would be very beneficial. Otherwise, the current sentence, as written, may lead to confusion as it raises the question as to which of the operations identified would be minor and subject to the inch-

safe-service alternative and which ones are major, which would be subject to lockout/tagout.

2. On page 6, first full paragraph, third sentence, the sentence identifies the use of "barrier guards" as part of the conditions for safe cleaning of blankets if the employee would be exposed to an ingoing nip point. The term "barrier guard" is troubling as it typically implies a guard that prevents access to an area and is usually constructed as a "cage, gate, or fence" guard. Barrier guards are typically the first type of guard used on presses that must be pivoted out of the way so the operator can access the plate and blanket area. The finger guards are those that are placed in the nip areas between the plate and blanket cylinders and other ingoing nips to prevent contact with a hazard area or ingoing nip.

   While it would be preferable if the letter stated "finger guard," a clarification that the use of barrier guard for this letter means a rigid, fixed and rigid, or rigid interlocked finger guard would be extremely beneficial. It is easily envisioned that a literal reading of "barrier guard" would mean that a barrier guard would have to be in place (i.e., covering the plate and blanket area), which would prevent the operator from accessing the plate and blanket cylinders, prior to them cleaning the plate or blanket cylinder. The literal reading would negate the entire section of the letter dedicated to allowing the operator to clean these areas while the press is moving very slowly.

Summary and Conclusion

The April 7, 2004 clarification letter is a significant advancement from the September 16, 1992 version for two reasons. OSHA is now formally recognizing that inch-safe service can be used in conjunction with binding and finishing equipment, meeting the appropriate control systems described in ANSI B65.2. The letter also allows the printer to clean blankets and other cylinders while the press is moving without fear of a citation as long as certain conditions are met. The conditions established by OSHA should ensure that these cleaning procedures are done safely.

It is important to understand that the two interpretation letters do not exempt printers from the Lockout/Tagout Standard. Since the Standard applies to servicing and maintenance procedures, a compliance program needs to be established by printers for activities involving electrical repairs, gear removal, repairing/replacing gripper bars, etc. In addition, current press and binding and finishing equipment configurations need to be reviewed to see if they meet the applicable ANSI Standards mentioned above.

For a copy of either the September 16, 1992 or April 7, 2004 letter, please visit www.gain.net or contact Gary Jones (gjones@gatf.org) or Rick Hartwig (rhartwig@gatf.org) at 412/741-6860. For a copy of either ANSI B65.1 or B65.2, please contact The Association for Suppliers of Printing, Publishing and Converting Technologies (NPES) at www.npes.org or 703/264-7200.