

August 7, 2026

Assistant Secretary Keeling
Occupational Safety and Health Occupational Safety and Health Administration U.S.
Department of Labor
200 Constitution Avenue, NW Washington, DC 20210
Submitted via email c/o Zachary Pisarski: Pisarski.Zachary.P@dol.gov

**Re: Request for Regulatory Reform and Clarification of 29 CFR 1910.147
(Lockout/Tagout) as Applied to Machine Set-Up Operations in the Flexible Packaging
Industry**

Dear Assistant Secretary Keeling,

On behalf of the Flexible Packaging Association, representing manufacturers and employers in the flexible packaging and printing industry, we respectfully submit this letter to request that the Occupational Safety and Health Administration ("OSHA") reconsider and modernize the application of the Control of Hazardous Energy (Lockout/Tagout) standard, 29 CFR 1910.147 ("LOTO Standard"), as it pertains to machine set-up. This letter serves as a follow-up from our virtual meeting held on Friday June 12, 2026 and is pursuant to OMB's Request for Information, Docket No. OMB-2025-0003-0001, requesting information on regulations that should be repealed, rescinded, or reformed. These comments are exclusively focused in the area of occupational safety and health regulation. We ask that OSHA either deregulate, provide a clear regulatory exception for, or issue administrative guidance addressing the compliance gap that currently exists for set-up activities in printing and flexible packaging equipment that has occurred since 1989 when the current regulations were last updated.

FPA represents flexible packaging manufacturers and their suppliers across the United States. Flexible packaging is the fastest-growing and second-largest segment of the U.S. packaging industry, representing \$51.5 billion in annual sales and approximately 98,000

workers nationally. Flexible packaging is produced from paper, plastic, film, aluminum foil, or any combination of these materials, and includes bags, pouches, labels, liners, wraps, rollstock, and other flexible products.

I. The Regulatory Problem

The LOTO Standard, promulgated in 1989, was designed around a binary regulatory structure: machines are either running in "normal production operations" or they are shut down and de-energized for "servicing and maintenance." This structure does not account for—and creates a compliance impossibility for—the machine set-up process that is foundational to today's manufacturing environment and our flexible packaging and printing operations.

In our industry, set-up between production runs routinely requires:

- **Continuous feeding** of film, paper, or substrate material through in-running nip points and rollers;
- **Real-time visual observation** of web tension, registration, and alignment while the machine is operating, even if only at slow or "crawl" speeds; and
- **Direct physical interaction** by the operator to guide, thread, or adjust material as it moves through the machine.

These activities cannot be performed with the machine fully de-energized, because the very purpose of the activity is to verify and adjust dynamic, moving conditions that only exist when the equipment is running.

II. The Regulatory Framework Does Not Fit Our Reality

We have carefully reviewed OSHA's existing framework and interpretive guidance, and we believe it demonstrates—rather than resolves—the compliance gap, which our members face:

1. Set-up is generally classified as servicing, not production. OSHA's April 7, 2004 Standard Interpretation confirms that machine set-up, adjustment, and troubleshooting are typically treated as "servicing and maintenance" activities subject to full LOTO requirements, not as "normal production operations," particularly where employees must enter a point of operation or bypass a guard.

2. The "minor servicing" exception does not apply to set-up. As explained in OSHA's [eTool guidance](#), the minor servicing exception under §1910.147(a)(2)(ii) requires that the activity (a) occur *during* normal production operations, (b) be routine, repetitive, and integral to production, and (c) be performed using alternative protective measures. Because set-up occurs *between* production runs rather than during them, it fails the threshold test for this exception in most cases—leaving employers without a viable compliance path.

3. The testing/positioning exception under §1910.147(f)(1) imposes conditions that are not practically achievable. OSHA's May 4, 2007 Standard Interpretation permits temporary re-energization for testing or positioning, but only if the machine is cleared of tools and materials and employees are removed from the hazard area before energization—conditions that are fundamentally incompatible with a task that requires an employee to observe and manually guide material while the machine runs. Where employees cannot be removed, OSHA's interpretation directs employers toward engineering controls such as two-hand controls, restraints, physical barriers, or remote camera observation—but offers no clear guidance on how, or whether, such controls can be reasonably retrofitted to satisfy compliance for web-fed printing and packaging equipment.

4. "Inch safe service" is not an adequate solution. OSHA has acknowledged the printing industry's use of "inch safe service" techniques, but only within the narrow confines of minor servicing during production—not as a general alternative for set-up activities that fall outside that exception. Moreover, incremental "inching" of equipment frequently does

not provide operators with sufficient dynamic information (web tension, tracking, registration) to complete an effective and safe set-up.

The result is a regulatory dead zone: an activity that is essential, routine, and industry-wide, but which does not cleanly satisfy the "normal production," "minor servicing," or "testing and positioning" categories under the current standard. Employers are left to comply with a rule that, by its own terms and OSHA's own interpretations, does not provide a workable path to compliance for this specific and common task.

III. The Standard Has Not Kept Pace with Technology

This compliance gap is symptomatic of a broader issue with the LOTO Standard, which has not been substantively updated since 1989. As has been raised in prior industry comments to the Office of Management and Budget regarding regulatory modernization, the standard was developed at a time when manual lockout with a lock and key was the only reliable means of energy control. Thirty-five years of technological advancement have produced alternative, globally recognized engineering controls—including interlocked guarding, presence-sensing devices, safety-rated motion and speed monitoring, light curtains, and remote/camera-based observation systems—that can provide effective, verifiable protection for employees during set-up operations without requiring a full manual lockout that is functionally impossible to apply to a running machine.

Despite the demonstrated effectiveness of these alternative methods, the current standard and its interpretive case law leave little room for their recognition as compliant alternatives to traditional lockout, exposing employers to citations and legal liability even when using controls that OSHA compliance officers themselves may recognize as protective.

IV. Our Request

We are not asking OSHA to abandon its commitment to hazardous energy control, nor do we seek rescission of the LOTO Standard generally. Hazardous energy remains a serious risk, and our members remain fully committed to protecting their employees. Rather, we respectfully request that OSHA:

1. **Issue a clarifying rulemaking or formal interpretation** that establishes a workable compliance framework specifically for machine set-up activities in printing and flexible packaging operations that require continuous material feeding and real-time observation during motion.
2. **Recognize alternative, technology-based protective measures**—such as engineering controls, safety-rated reduced-speed operation, presence-sensing systems, and remote observation technology—as acceptable substitutes for full lockout during set-up, where such measures can be demonstrated to provide protection equivalent to traditional LOTO procedures.
3. **Clarify the boundary between "minor servicing" and "set-up"** so that employers and compliance officers have consistent, predictable criteria to apply industry-wide, reducing the current uncertainty and inconsistent enforcement that undermines both compliance and safety outcomes.
4. **Consider a targeted exception or variance pathway** for routine, integral set-up tasks in web-fed printing and packaging equipment, subject to a defined set of alternative protective measures, consistent with the flexibility OSHA has already extended in the minor servicing and testing/positioning contexts.

V. Conclusion

The flexible packaging industry shares OSHA's foundational goal of ensuring that employees return home safely each day. However, the current LOTO framework, as applied to an essential and unavoidable operational task, creates confusion, inconsistent

enforcement, and legal exposure without a corresponding, demonstrated improvement in worker safety. Modernizing the standard—or at minimum, providing clear interpretive guidance—to reflect both the operational realities of set-up in our industry and the technological advances of the last three decades would allow our members to maintain, and in many cases improve, safety outcomes while achieving genuine, predictable regulatory compliance.

We appreciate the opportunity OSHA provided to meet with Staff this past June to discuss these issues further and your interest in having us provide additional technical information about set-up processes and available alternative protective technologies in our industry. We appreciate OSHA's consideration of this request, remain committed to constructive dialogue and look forward to next steps.

Respectfully submitted,



Kyla Fisher
Director of Regulatory Affairs and Sustainability
Flexible Packaging Association
kfisher@flexpack.org