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# **AUGUST 16, 2019**

## Via Electronic Transmission: www.regulations.gov

Occupational Safety and Health Administration, U.S. Department of Labor OSHA Docket Office 200 Constitutional Ave, NW Washington, DC 200210

**Re: Docket ID No.** OSHA-2016-0013

Dear Sir/Madam:

On behalf of the solid waste industry, the National Waste & Recycling Association (NWRA) is pleased to respond to the Occupational Safety and Health Administration's (OSHA) request for information regarding the control of hazardous energy, more commonly referred to as lockout/tagout (LOTO), OSHA-2016-0013. NWRA is a not-for-profit trade association representing private solid waste and recycling collection, processing, and management companies that operate in all fifty states.

We appreciate OSHA's effort in modernizing regulations. As an organization, we do not believe that modernizing the control of hazardous energy regulations would increase the safety of our workforce. Introduction of control circuit type devices as the single point of failure for the control of hazardous energy would add confusion and unnecessary administrative controls when servicing and operating machines in waste and recycling facilities.

Safety is the top concern for NWRA and our members. We want every single member of our industry to make it home each day safely in the same state as when they arrived at work. While NWRA recognizes some industries could benefit from control circuit type devices, we do not believe that control circuit type devices at this time would be beneficial or at least as effective as the current standards use of energy isolation devices.

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#### BACKGROUND

### **NWRA**

NWRA is the trade association representing the private sector waste and recycling industry that is essential to maintaining the quality of American life by protecting public health and the environment. The delivery of waste and recycling services impacts all residential, commercial, and industrial properties on a daily basis. Our members collect, process, and manage waste, recyclables, organics, and medical waste; operate and manage landfills in compliance with all federal and state laws; manage and service truck fleets and collection vehicles; design, manufacture, sell, and service equipment and supplies.

The association's mission is to provide leadership, education, safety expertise, research, and advocacy to promote the waste and recycling industry. NWRA's goal is to ensure a climate where our members can continue to provide safe, economically sustainable, and environmentally responsible services and jobs that benefit communities throughout America.

NWRA's Safety Committee provides insights and best practices on how to prevent injuries to the industry's workers. The association convenes a number of institutes that provide leadership on landfills, recycling, and healthcare waste. The association also serves as Secretariat for the American National Standards Institute (ANSI) Z245 Standard for Equipment Technology and Operations for Wastes and Recyclable Materials. Along with our partner Informa, we collaborate on WasteExpo, North America's largest waste and recycling exposition and conference. Our educational offerings are known and respected around the world.

Our members operate in all 50 states and the District of Columbia. Waste and recycling facilities number nearly 18,000 scattered throughout the U.S., mirroring population centers. Our nearly 700 members are a mix of publicly-traded and privately-owned local, regional, and Fortune 500 national and international companies. NWRA represents approximately 70 percent of the private sector waste and recycling market.

The solid waste industry directly employs about 450,000 people as of May 2019. It is estimated that the private sector waste and recycling industry is responsible for sustaining more than one million jobs.

### RESPONSES TO QUESTIONS FROM THE RFI

1. In what work processes should OSHA consider allowing the use of control circuit type devices for hazardous energy control?

NWRA does not believe that control circuit type devices at this time could be at least as effective as the current standard of energy isolation devices to control hazardous energy.

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2. What are the limitations to using control circuit type devices? Do they have specific weaknesses or failure points that make them unsuitable for hazardous energy control?

NWRA member companies have experienced failures of control circuit devices on machines resulting from rewiring of machines after maintenance by contractors. The weakness in the system is a result of the lack of physical verification that the energy has been isolated.

3. If OSHA were to allow the use of control circuit type devices or other methods to control hazardous energy, would your firm choose to use them? Why or why not? Do you anticipate that these devices would save your firm money? For example, would these devices simplify operations or maintenance? Are there fewer steps needed to implement the controls? How frequently do you employ some form of lockout/tagout system in your facility?

Our members believe that using existing LOTO methods are the safest and most effective tools to reduce exposure to uncontrolled energy events. Our facilities implement LOTO several times per day in our facilities and the simple process of flipping the breaker for a machine, locking it out, tagging it out, and the testing to ensure that it has been de-energized and depleted of stored energy is the best method. If complicated electronic devices are introduced into the system, it could cause confusion and additional risk especially if the equipment has had serious maintenance or an overhaul.

4. Are there any specific conditions under which the use of control circuit type devices would not be advisable?

Our members do not think that control circuit type devices would be advisable in the waste and recycling industry.

5. When the Lockout/Tagout standard was originally drafted, OSHA rejected the use of control circuit type devices for hazardous energy control due to concerns that the safety functions of these devices could fail as a result of component failure, program errors, magnetic field interference, electrical surges, or improper use or maintenance. Have new technological advances to control circuit type devices resolved these concerns? How so?

No, new technological advances have not resolved these issues. Our members have experienced a number of failures from control circuit type devices that resulted from improper maintenance and makeshift overrides. See Image 1.

7. What are the safety and health issues involving maintenance, installation, and use of control circuit type devices? Have you found that alternative safety measures themselves cause any new or unexpected hazards or safety problems? Please provide any examples if you have them.

The addition of control circuit type devices has increased the need for maintenance oversight. A lack of training protocol for electricians and other maintenance technicians working on machines with control circuit technology could result in a working machine where the safety circuits have been bypassed. See Image 1. The little red wire defeated the control circuit interlock on the back of a trapped key system.



Image 1: The red wire demonstrates the ease of defeating a control circuit interlock.

One member has had issues with the switch in Image 2. The switch was overridden and has experienced internal failures, is an Allen-Bradley 440T-MRPSE10AA. The device was defeated with a simple piece of wire and has also had the internal mechanism fail so an operator could turn the switch and remove the key without activating the e-stop circuit effectively stopping the motor controls. Fortunately, these "keys" are used in conjunction with a limit switch on an access door that is a secondary method to trip the e-stop circuit.



Image 2: Allen-Bradley 440T-MRPSE10AA

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10. What level of redundancy is necessary in determining whether a control circuit type device could be used instead of an EID?

We do not believe at this time the necessary redundancy can be achieved with control circuit type devices.

14. Control circuit type devices have a number of claimed benefits compared to energy isolating devices, including workers' greater willingness to use such devices, better efficiency, less downtime, and the lack of a requirement to clear programming on computer controlled devices. Are there any other benefits to using control circuit type devices? Are there certain situations where these devices are especially advantageous? For example, where machine tasks require frequent repetitive access, is the process faster and/or less physically demanding than applying mechanical lock(s)?

We believe that some industries may find efficiencies and benefits from control circuit technologies. With the current configurations that NWRA members have seen of control circuit devices, they do not believe that same level of safety for our workers is achieved.

15. What other methods or devices, if any, are being used with control circuit type devices to control the release of hazardous energy, especially in cases where the control circuit devices are only used to prevent machine start-up? Are there control circuit type devices that require additional methods or devices to fully control the release of hazardous energy? What improvements to safety or health does the use of these devices or methods provide?

As an industry we use the intended Electronic Isolation Devices along with a control circuit devices (removing a trapped key and using that key to open a panel or door) in order to access a "point of operation" as an additional control, common on balers and processing screens in the industry.

17. What additional actions is your firm taking to protect workers when they are servicing machinery with control circuit type devices in order to meet OSHA's Lockout/Tagout standard requirements? For example, does your firm purchase and use physical devices that you feel do not enhance worker protections but nonetheless are required by the OSHA standard? What are these items and how much do they cost? Please explain why you feel these items do not enhance worker protections.

We believe that additional physical devices are necessary to maintain a level of worker protection to enable all of our workers to come home each night. The lack of physical devices would expose our workers to unnecessary risk.

23. How much training do you currently provide on Lockout/Tagout requirements? How long does training on this subject take and how often do employees receive training on the subject? If OSHA were to revise the Lockout/Tagout standard to permit use of control circuit type devices in some circumstances, would newly hired workers require more training or less than under the current standard? What

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format do you use to provide training on the Lockout/Tagout standard at your facility (i.e., small group classroom session, self-guided computer modules, etc.)? If you have used third-party training vendors to provide similar training, what are the costs? If training is provided in-house, what sort of employee provides the training (i.e., a first-line supervisor, a safety and health specialist, etc.)?

From one of our members:

How much is provided?

It depends on the level of work & equipment required to be locked out.

How long and how often?

Newly Authorized worker is approx. 4 hours. Annual training requirement is approximately 1.5 hours assuming no procedural changes.

If revised, would new workers require more or less training than current? We would not implement control circuit methods but if we did, it would require more training with anticipation of tasks adequate with control circuit verses tasks requiring traditional electric disconnects. It is anticipated that that the same piece of equipment could have multiple ways to isolate energy based on the task performed, potentially adding multiple levels of LOTO.

What format?
All instructor led

What is cost of third-party training? No experience with third party LOTO

What employee provides training if in house?

Fanell Z. Smith

Training is performed by maintenance management, operations management or safety professional

#### Conclusion

NWRA appreciates the opportunity to provide comments on OSHA's RFI for the Control of Hazardous Energy, OSHA-2016-0013. NWRA believes that the technology associated with circuit control devices is not developed enough to act as the primary control of energy on devices. Should you have any questions about these comments, please contact Kirk Sander, VP of Safety and Standards for NWRA, at 202-364-3750 or e-mail at ksander@wasterecycling.org.

Very truly yours,

Darrel K. Smith President & CEO