

## LESSON PLAN

### Machine Guarding and Safeguarding Overview 1-Hour Refresher Module

#### Overview

There are a variety of potential machine hazards present during third shift (sanitation) in a poultry processing plant. Sound machine guarding and safeguarding practices, together with an effective energy control program (lockout/tagout), can help employers to control these hazards. This overview is meant to cover the fundamental principles of machine guarding and safeguarding, along with the relevant OSHA General Industry Standards related to machine guarding.

#### Topics to be covered

- a. General Machine Guarding Principles and Regulations – *29 CFR 1910.212*
- b. Woodworking and Abrasive Grinder Requirements (Maintenance Shop Applications) – *29 CFR 1910.213 and 29 CFR 1910.215*
- c. Mechanical Power Transmission Guarding – *29 CFR 1910.219*

#### Objectives

Upon completion of this topic students should be able to:

- a. Explain general machine guarding and safeguarding principles and the relevant contents and implications of *29 CFR 1910.212, 1910.213, 1910.215, and 1910.219*.

#### Training Resources

- a. PowerPoint Presentation with instructor notes (Black and White)

#### Hour 1

- I. Review of lesson objectives
- II. Fundamentals of machine guarding and safeguarding, including:
  - a. Enclosure guarding such as fixed, interlocked, adjustable, and self-adjusting guards
  - b. Safeguarding methods including presence sensing devices (e.g. light curtains), two-hand controls and trips, pullbacks and restraints (limited), and safeguarding by distance
  - c. Outline of *29 CFR 1910.212* – General Machine Guarding requirements.
- III. Outline of *29 CFR 1910.213 and 215* – Woodworking and abrasive grinder requirements:

- a. Outline the requirements for guarding/safeguarding woodworking and abrasive-wheel grinders as they relate to maintenance operations in a poultry processing plant.
- IV. Outline of *29 CFR 1910.219* – Mechanical Power Transmission:
  - a. Outline the requirements for guarding/safeguarding mechanical power transmission and show examples in poultry processing operations.
- V. OSHA e-Tools
  - a. Machine Guarding e-Tools demonstration

### **Activities and Classroom Procedures**

- a. Training Techniques
  - Show examples of good and bad machine guarding in poultry processing operations
  - Ask for examples from students
  - Use PowerPoint slides with OSHA e-Tools to overview the machine guarding standards

### **Evaluation and Assessment**

- a. Interactive conversations