

## **Heavy Equipment Safety Awareness Lesson Plan**

**Course Time: 120 Minutes**

**Course Description:**

This course is taught in accordance with the Occupational Health and Safety Administration Code of Federal standards that regulate work in construction sites are found in Construction Industry Standards 29 CFR 1926 General, 1926 Subpart O, and 29 CFR 1910.178, these are the Federal OSHA requirements (consult State plan requirements where applicable). The course is intended to train and/or retrain company employees in the essential safety skills and knowledge for Heavy Equipment Safety Awareness. This class presents the requirements for procedures to protect employees in general industry and construction from the hazards. Upon successful completion of this course the participant will receive a course certificate.

**Course Requirements:** Full attendance

***Step 1: Planning the Lesson***

**Instructional Materials:**

- Power point presentation
- Student Hand outs
- Instructional Notes
- Audio-visual equipment
- OSHA E-Tools /V-Tools
- Certificate of Completion for Company and Employees

**Participants Handouts:**

- Handout #1: OSHA We Can Help
- Handout #2: Crane Safety
- Handout #3: Crane Signals
- Handout #4: Work Zone Traffic Safety Fact Sheet
- Handout #5: Work Zone Safety Quick Card

## Learning Objectives:

- Participants will:
- Recognize potential hazards of various equipment
- Implement hazard prevention and controls
- Be familiar with OSHA's role and standards regarding heavy equipment hazards
- Prevent other potential hazards

## Step 2: Presenting the Lesson

### Introduction: (10 minutes)

- Introduce yourself
  - Include name
  - Title & Experience / Credentials
  - Explain facility emergency action plan procedures
  - Discuss classroom rules
  - Start the lesson with an “ice breaker” such as an applicable story to capture the participant's attention, etc.

### Class Power Point Presentation: (45 Minutes)

- OSHA Cares Video
- Objectives
- Heavy Equipment Hazards
- Hazards Prevention and Controls
- Pre Construction Analysis
- Spotters
- Spotters Hand Signals
- Perimeter Fencing
- Working Near Power Lines
- Crane Spotter Hand Signals
- OSHA Prevention Video – Struck by – Vehicle back up
- OSHA Prevention Video – Stuck by – Swinging Crane
- Heavy Equipment and Crane Accidents Video –  
[www.heavyconstructionacademy.com/certifications/](http://www.heavyconstructionacademy.com/certifications/)
- Summary
- Helpful OSHA resources
- OSHA Contact Numbers
- References

**Classroom Participant Discussion Activity: (30 Minutes)**

- Team Up for Problem Solving
- TBD

**Course Review: (15 Minutes)**

- Discuss Heavy Equipment Hazards – Open Forum

**Participant Critiques & Evaluation: (10 Minutes)**

- Students will complete a course critique

**References**

- [29 CFR 1926 Subpart O](#), Motor vehicles, mechanized equipment, and marine operations. OSHA.
- [29 CFR 1926.251](#), Rigging equipment for material handling. OSHA Standard.
- [29 CFR 1910.178](#), Powered industrial trucks. OSHA Standard.
- [29 CFR 1926](#),
- [29 CFR 1926.61 Retention of DOT Markings](#)

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