

Susan Harwood Training Grant
Outline
Electrical Safety Training for General Industry
(4 Hours)

Welcome

Introduction

1. Grant Background
2. Learning Objectives

Training Topics

1. General Electrical Safety Information
 - a. Injury and Death Statistics – Latest Year Available
 - b. Number of electrical injuries and deaths
 - c. Injury photos / videos
 - d. How this has changed in recent years
 - e. More performance improvement needed – Goal: Zero
2. General Electrical Safe Work Practices
 - a. What is electricity – voltage, amperage, frequency, insulators, conductors, AC/DC etc.
 - b. Generating, transmitting and distributing electricity (from a General Industry perspective)
 - c. Using electricity in general industry – motors, electroplating, welding
 - d. Working safely around electricity
 - e. Engineering, Administrative and Procedural Controls and PPE
3. Common Hazards
 - a. Extension cord trip and shock hazards
 - b. Other shock hazards
4. Permitted and Non-permitted uses
5. Arc Flash
 - a. Conditions conducive to arc flash
 - b. Warning Signs – Identifying Arc Flash conditions
 - c. Protecting yourself from an Arc Flashes
 - d. Boundaries
 - e. Authorized v. Affected workers

- f. Engineering controls
 - g. Administrative controls
 - h. Procedural controls
 - i. Personal Protective Equipment (Classes 1, 2, 3 & 4)
6. Energy Control Procedures (ECPs) / Lockout / Tag-out (LOTO)
- a. Energy Sources – Electrical, pneumatic, hydraulic, kinetic, capacitance, etc.
 - b. Locking out your equipment to safely service or clean it
 - c. Approved lockout procedure
 - d. Ensuring the machine is locked out while working on it
 - e. Returning the cleaned or serviced machine to service procedure
 - f. When written procedures are required
 - g. Verifying written procedures

Materials and Supplies:

1. PowerPoint
2. Training handout
3. Pre-test
4. Post-test
5. Electrical checklist
6. Training Certificate

The curriculum meets the 2024 NFP70e standards