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| Course Name: | | FPST 2023 Occupational and Industrial Safety | | | |
| Title: | | Technical Definitions Guide | | | | |
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**Confined Spaces**

Confined space: A space that is large enough for an employee to enter and perform work, has a limited or restricted means of entry or exit and is not designed for continuous occupancy.

Engulfment: Whole body submersion in a liquid or finely divided material, where the main hazards are crushing, suffocation, and constriction.

OSHA: The Occupational Safety and Health Administration.

Permit-required confined space: A confined space that has one or more of the following characteristics: contains or has the potential to contain a hazardous atmosphere, contains a material that has the potential to engulf an entrant, walls/floors that slope or converge inwards, or other recognized hazard.

Entrapment: A hazard where a person’s lower half (waist down) is submerged in a material causing the person to be unable to escape or move.

**Conveyors, Hoisting and Rigging**

Nip point: A point of convergence between two rolling parts, or a rolling part and a stationary part, where any part or the human body could become trapped and injured.

Overloading: Any situation during a lift that could cause the lift to exceed the capacity of the crane, whether it be: to heavy of a load, over extension, side loading, or wind.

Two-blocking: When the lower load block contacts the upper load block or crane boom.

Over-travel: A condition where the overhead crane travels further than designed or intended.

Competent person: A person that has sufficient training, experience or knowledge and other qualities that allow them to properly and safely perform a task.

Spotter: A person that is not operating the crane, who continuously watches the load during a lift and is in constant communication with the crane operator. There can be more than one spotter during carne lift.

Load charts: A chart that is displayed in the cockpit of the crane that details the capabilities if the crane.

Rigging: Designing and installing equipment such as, ropes, chains, slings, and wire ropes in the preparation of moving an object.

**Dropped Objects**

Object security: Attaching objects to the person or platform where the work is being performed to prevent the object from falling to the ground if it were to be dropped.

JSA: Job Safety Analysis

**Electrical Safety**

Electrocution: Death from an electrical shock.

Electrical shock: The discharge of electrical energy through a part of the human body.

Electrical burns: A burn that results from electricity passing through the body.

Electrical protective devices: Devices that are in place to contain the energy of electricity.

Ground-fault circuit-interrupter (GFCI): A type of circuit breaker that turns off electrical power when there is an in balance between incoming and outgoing current.

Circuit breaker: An automatic device that stops the flow of current in an electrical circuit as a safety measure.

PPE: Personal protective equipment. Specialized equipment or clothing worn by employees to protect against a hazard.

Junction box: A box that contains a junction of electrical wires or cables.

Knockouts: Round and sometimes square pieces that can be removed from a junction box to allow wires to be ran into the box.

Arc flash: A type of electrical explosion or discharge of energy that produces a large amount of heat, light and sound.

Blasting lung injury: An injury to the lungs as a result of external forceful damage to the chest.

**Emergency Preparedness**

Emergency action plan: A written procedure detailing the appropriate response to various types of emergencies.

Fire brigades: An organized group of employees that are trained and employed to respond to and extinguish fires.

Exit routes: A continuous unobstructed path of travel from any point within a building or facility to a place of safety outside the building.

Fire prevention plan: A written set of policies or procedures that is in place to prevent fires from occurring.

Hazardous waste: Waste that has substantial or potential to threats to public health and safety as well as the environment.

Evacuation: The process in which the occupants of a building exit the building and retreat to a predetermined and safe location.

Area of refuge: An area within a building or facility that is designed to hold and protect occupants during an emergency.

Life safety: Protection of the health and safety of building occupants during an emergency.

**Excavation and Trenching**

Cave-ins: A situation where one or both fall of an excavation or trench give away causing a large slide of earth material into the excavation/trench.

Shoring/shielding: Props, usually board or metal sheets, used to support and hold up the sides of an excavation.

Benching: A method to prevent cave-ins by creating a series of horizontal levels or steps on each side of the excavation.

Trench box: A steel or aluminum structure that is inserted into an excavation or trench to protect workers while they perform and complete tasks.

**Fall Protection**

Scaffolding: A temporary structure on the exterior of a building usually made of metal poles and wooden planks that is used by workers when working on the structure.

Personal fall arrest system: A system that consists of a body harness, anchorage point, and a connector or lanyard that is meant to catch an employee during a fall. The main goal of a personal fall arrest system is not to prevent the fall from occurring but rather preventing the fall from being fatal.

Impact force: The force exerted on the body on impact or when the fall is halted.

Shock absorber: A device that is in place to absorb the jolt or sudden force associated with fall arrest systems.

Anchorages: The point at which the fall arrest system is attached to the structure or life line.

Guardrail: A rail that is in place which prevents employees from falling off the edge of a surface.

Roof warning lines: A highly visible line that is placed a distance from the edge of a surface to warn and inform that the surface ends after the line. Usually these are in place to prevent employees from getting close to the edge.

Controlled access zone: An area in which work may be taking place in the absence of fall protection/prevention systems. Access to these areas is controlled by an entry guard.

**Flammable and combustible liquids**

Volatility: Refers the ability and the rate at which a liquid evaporates at any given temperature.

Flammable liquids: Liquids whose flash point is below 100F.

Combustible liquids: Liquids whose flash point is above 100F.

Transferring: The process in which liquids are moved from one container to another.

Self-closing safety faucet: A device that is attached to a container that closes on its own when not being actively held open by a worker.

EPA: Environmental Protection Agency.

Egress: The path and way that people will exit a building or facility.

Flame arrester screen: A safety device that is attached to a container that prevents fire flashback from entering the container and igniting the contents.

Storage cabinets: Cabinets that are constructed from nonflammable materials that are meant for the storage of flammable liquids.

Dip tank: A tank that holds a large quantity of material that products are submerged into.

**Grain Handling and Combustible Dusts**

Auger: A piece of equipment that is located at the bottom of a material storage silo, which is shaped like a spiral and spins to move material.

Bridging: A condition where a layer of material lays flat across a hollow gap in the material below.

Dust explosion: The rapid combustion of fine particles of dust suspended in air within an enclosed location.

SDS: Safety Data Sheet. A sheet where all the relevant safety information pertaining to a certain chemical can be located.

Written entry permit: A written document that is filled out to ensure that all the proper precautions have been taken prior to bin entry.

**Hand and Power Tools**

Point of operation: The point where the tool makes contact with the material to do work.

Machine guarding: To place a guard around the moving parts of the tool to prevent contact with the moving part. Another use is to direct flying particles away from the operator.

Insulation: The covering or coating around electrical components to contain the flow of energy within the tool.

**Hazard communication**

Globally Harmonized System: The system of labeling and communicating hazards associated with materials that is used on a global scale.

HazCom: an abbreviation for hazard communication.

**Introduction to OSHA**

Private sector employees: Employees that work for a private company. In other words, a person who does not work for the government.

Horizontal standards: A standard that applies to all private sector employers that operate in any industry.

Lockout/Tagout: The control of hazardous energy by equipment shut down or isolation form the energy source.

Vertical standards: Standards that only apply to one particular industry.

**Job Hazard Analysis**

Hierarchy of controls: A system used to rank the effectiveness of hazard control methods that provides an order of which control should be implemented as practical.

**Lockout/Tagout (LOTO)**

Zero energy state: When a machine or piece of equipment has no stored energy and no connection to the energy source.

**Machine Guarding**

Mechanical hazard: Hazards associated with moving equipment.

Guarding by location: The location of a hazard where accidental contact is not probable.

**Powered Industrial Trucks**

PIT: Abbreviation for powered industrial truck.

Stability triangle: The area that is based on the center of gravity of the PIT as well as the dimensions and weight of the load where the PIT can operate safely.

**Personal Protective Equipment (PPE)**

Acute exposure: A situation where the effects of an exposure to a chemical or hazard are immediate.

Chronic Exposure: A situation where the effects of an exposure to a chemical or hazard are not realized for a prolonged period of time.

**Safety Through Design**

Risk assessment matrix: A chart that depicts a systematic process or ranking risks based on severity and probability.

**Walking and Working Surfaces**

Near miss: An incident that had the potential to cause loss but did not.

Dock boards: A movable often metal plate for bridging the gap between a freight vehicle and a loading platform.

Toe boards: The bottom piece of metal or wood connected to a guardrail.

**Welding and Cutting**

Hot work: Any task or type of work that generate heat or an ignition source.

Flash burns: Burns to the skin or eyes as a result of exposure to an intense source of light produce form cutting or welding operations.

Slag burns: Burns sustained from contact with the molten metals produce by cutting or welding operations.