Hazard Identification Tool

Gravity

Gravitational energy is the force caused by the attraction of all other masses to the mass of the Earth.

Examples: a falling object, a collapsing roof, a body tripping or falling

Motion

The change in position of objects or substances.

Examples: vehicle, vessel or equipment movement, flowing water, wind, body positioning: lifting, straining, or bending

Mechanical

The energy of the components of a mechanical system, i.e., rotation, vibration, or motion within an otherwise stationary piece of equipment or machinery.

Examples: rotating equipment, compressed springs, drive belts, conveyors, motors

Electrical

The presence and flow of an electric charge.

Examples: power lines, transformers, static charges, lightning, energized equipment, wiring, batteries

Pressure

Energy applied by a liquid or gas which has been compressed or is under a vacuum.

Examples: pressure piping, compressed cylinders, control lines, vessels, tanks, hoses, pneumatic and hydraulic equipment

Hazard:

A condition or action that has the potential for an unplanned release of, or unwanted contact with, an energy source that may result in harm or injury to people, property, or the environment.

Identify hazards at your workplace, analyzing each energy source with the Hazard Identification Tool.

Temperature

Temperature is the measurement of differences in the thermal energy of objects or the environment, which the human body senses as either heat or cold.

Examples: open flame and ignition sources, hot or cold surfaces, liquids or gases, friction, general environmental conditions, steam, extreme and changing weather conditions

Chemical

The energy present in chemicals that inherently, or through reaction, has the potential to create a physical or health hazard to people, equipment, or the environment.

Examples: flammable vapors, reactive hazards, carcinogens or other toxic compounds, corrosives, pyrophorics, combustibles, inert gas, welding fumes, dusts

Biological

Living organisms that can present a hazard.

Examples: animals, bacteria, viruses, insects, bloodborne pathogens, improperly handled food, contaminated water

Radiation

The energy emitted from radioactive elements or sources and naturally occurring radioactive *materials.*

Examples: Lighting issues, welding arc, X-rays, solar rays, microwaves, naturally occurring radioactive material (NORM) scale, or other non-ionizing sources

Sound

Sound is produced when a force causes an object or substance to vibrate—the energy is transferred through the substance in waves.

Examples: impact noise, vibration, high-pressure relief, equipment noise