



Appendix B Common Hazards and Descriptions

Item	Hazard	Hazard Description
1	Chemical (Toxic)	A chemical that exposes a person by absorption through the skin, inhalation, or through the blood stream that causes illness, disease, or death. The amount of chemical exposure is critical in determining hazardous effects. Check Safety Data Sheets (SDS) and OSHA 1910.1000 for chemical hazard information.
2	Chemical (Flammable)	A chemical that, when exposed to a heat ignition source, results in combustion. Typically, the lower the chemical's flash point and boiling point, the more flammable the chemical is. Check SDS for flammability information.
3	Chemical (Corrosive)	A chemical that, when it comes into contact with the skin, metal or other materials, damages the materials. Acids and bases are examples of corrosives.
4	Explosion (Chemical Reaction)	A compound or mixture which, upon the application of heat or shock, decomposes or rearranges with extreme rapidity, yielding much gas and heat.
5	Explosion (Over Pressurization)	Sudden and violent release of a large amount of (Over gas/energy due to a significant pressure difference pressurization) such as rupture in a boiler or compressed gas cylinder.
6	Electrical (Shock/Short Circuit)	Contact with exposed conductors or a device that is incorrectly or inadvertently grounded, such as a short circuit, when a metal ladder comes into contact with power lines. 60 Hz alternating current (common house current) is very dangerous because it can stop the heart.
7	Electrical (Fire)	Use of electrical power that results in electrical overheating or arcing to the point of combustion or ignition of flammables or electrical component damage.
8	Electrical Static Discharge (ESD)	The moving or rubbing of wool, nylon, other (static/ESD) synthetic fibers, and even flowing liquids can generate static electricity. This creates an excess or deficiency of electrons on the surface of material that discharges (spark) to the ground resulting in the ignition of flammables or damage to electronics or the body's nervous system.
9	Electrical (Loss of Power)	Safety critical equipment failure as a result of loss of power.
10	Ergonomics (Strain)	Damage of tissue due to overexertion (sprains and strains) or repetitive motion.
11	Excavation (Collapse)	Soil collapse in a trench or excavation as a result of improper or inadequate shoring. Soil type is critical determining the hazard likelihood.



12	Fall (Slip, Trip)	Conditions that result in falls (impacts) from height or traditional walking surfaces (such as slippery floors, poor housekeeping, uneven walking surfaces, exposed ledges, etc.).
13	Fire/Heat	Temperatures that can cause burns to the skin or damage to other organs. Fire requires a heat source, fuel and oxygen.
14	Mechanical/Vibration (Chaffing/Fatigue)	Vibration that can cause damage to nerve endings, or material fatigue that results in a safety-critical failure (Examples are abraded slings and ropes, fatigue weakened hoses and belts).
15	Mechanical Failure	Typically occurs when devices exceed designed capacity or are inadequately maintained.
16	Noise	Noise levels (> 85 dBa) that result in hearing damage or inability to communicate safety-critical information.
17	Radiation (Ionizing)	Alpha, beta, gamma, neutral particles and X-rays that cause injury to tissue by ionization of cellular components.
18	Radiation (Non-ionizing)	Ultraviolet, visible light, infrared, and microwaves that cause injury to tissue by thermal or photochemical means.
19	Struck Against	Injury to a body part as a result of coming into contact of a surface in which action was initiated by the person. (An example is when a screwdriver slips.)
20	Struck By (Mass Acceleration)	Accelerated mass that strikes the body causing injury or death. (Examples are falling objects and projectiles).
21	Temperature Extreme (Heat/Cold)	Temperatures that result in heat stress, exhaustion, or metabolic slow down such as hypothermia.
22	Visibility	Lack of lighting or obstructed vision that results in an error or other hazard.
23	Weather	Snow, rain, wind, ice, heat.