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 Material Safety Data Sheets (MSDS), and/or 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 a chemical's flash point and boiling point, the more flammable the chemical. Check MSDS for flammability information
3	Chemical (Corrosive)	A chemical that, when it comes into contact with 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 Short Circuit) when a metal ladder comes into contact with power lines. 60Hz 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 (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 (strains and sprains) 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 in 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. Fires require a heat source, fuel, and oxygen.

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14	Mechanical /Vibration /Chaffing/Fatigue	Vibration that can cause damage to nerve endings, or material fatigue that results in a safety-critical (Chaffing/ 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 8 hr TWA) 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 (tissue damage) by ionization of cellular components.
18	Struck By Mass Acceleration)	Accelerated mass that strikes the body causing injury or death. (Examples are falling objects and projectiles)
19	Temperature Extreme (Heat/Cold)	Temperatures that result in heat stress, exhaustion, or metabolic slow down such as hypothermia
20	Visibility	Lack of lighting or obstructed vision that results in an error or other hazard
21	Weather	Snow, rain, wind, ice, heat