## Health and Safety Glossary of Terms

**ACQUIRED IMMUNITY:** is gaining the ability to prevent a particular infection. Immunity can be acquired by receiving a vaccination, or getting a disease once and then the body's immune system prevents further infection to that disease.

**BOILING POINT:** the temperature at which a liquid will boil or change to a gas. The lower the boiling point, the faster it will evaporate into the air.

CARCINOGEN: an agent that causes cancer.

CAS NUMBER: the identification number given to a chemical by the Chemical Abstracts Service (CAS).

**CEILING LIMIT:** the maximum level of exposure to a toxic agent that is allowed at any time.

**COMMUNICABLE DISEASE:** An infectious disease that can be spread from person to person or animals

to humans.

**CONFINED SPACE:** an area with a small opening that is large enough for someone to enter and work.

**DECIBEL** (**DB**): the unit that is used to measure sound.

**ERGONOMICS:** the practice of changing the work environment to meet the physical and other needs of

workers.

FLASH POINT: the lowest temperature at which a chemical vapor will light on fire.

**FUMES:** are solid particles that are formed when a substance that has evaporated, condenses in cool air. Fumes often result as molten metals cool.

GASES: are fluids that have no shape and expand to fill the shape of the space in which they are contained.

**HIERARCHY OF CONTROLS:** a term that refers to using the most effective means possible to control hazards. The order of effectiveness to control hazards is: using a different product or process (substitution), isolating the hazard, removing the hazard with equipment (engineering controls), using ergonomics, changing the way work is organized (administrative controls), using personal protective equipment.

**HIGH EFFICIENCY PARTICULATE AIR (HEPA):** a filter for respirators, vacuum cleaners, and other products that can trap extremely small particles, fibers and germs. HEPA filters are used to prevent breathing asbestos, lead, tuberculosis.

**IMMINENT DANGER:** a situation that poses an immediate threat of death or serious injury or illness.

**IONIZING RADIATION:** a form of physical energy that moves in wave-like motion and includes alpha, beta and X-rays. Ionizing radiation is powerful enough to change an atom's structure and can kill living cells and cause cancer, sterility and birth defects.

**MISTS:** droplets of a liquid that are suspended in the air.

**MATERIAL SAFETY DATA SHEET (MSDS):** a form containing information on a chemical. Employers must have an MSDS available to workers for each hazardous chemical used in the workplace under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

**MUTAGEN:** an agent that can change the genetic make-up of a cell. Mutagens can cause cancer, miscarriages and unwanted inherited traits.

**NON-IONIZING RADIATION:** physical energy that moves in wave-like motion that does not change the structure of atoms.

**PANICULATE:** a particle of a solid or liquid that is suspended in the air.

**PARTS PER MILLION (PPM):** a unit that is used to measure the concentration of a substance in a given area. Chemical exposures are usually given as the number of molecules of a chemical within a million molecules of air. One part per million is equal to one drop of water in 18 gallons of water, or one inch in 16 miles.

**PERMISSIBLE EXPOSURE LIMIT (PEL):** the legal level of exposure to a substance that is allowed by OSHA.

**REACTIVITY:** refers to how easily a substance will undergo a chemical change that can have a dangerous effect such as an explosion.

**RECOMMENDED EXPOSURE LIMIT (REL):** a level of exposure that is set by the National Institute for Occupational Safety and Health.

**REPRODUCTIVE EFFECTS:** exposure of men or women to agents that results in infertility, impotence, loss of sex drive and birth defects.

**SENSITIZER:** an agent that can cause an allergic reaction. Common sensitizers include formaldehyde and latex.

**SHORT-TERM EXPOSURE LIMIT (STEL):** the level of exposure that is allowed for a short period of time, up to 15 minutes. Certain OSHA standards have STELS.

SPECIFIC GRAVITY: the weight of a substance compared to air or water. A gas that is heavier than air

(more than 1.0) will sink.

**SUSCEPTIBLE HOST:** a person or animal that can be infected by a particular communicable disease.

**TERATOGEN:** a substance that causes birth defects.

THRESHOLD LIMIT VALUE (TLV): a level of exposure set by the American Conference of

Governmental Industrial Hygienists.

TIME-WEIGHTED AVERAGE (TWA): the level of exposure that is allowed based upon a full work

shift of 8 hours.

**VAPOR DENSITY:** is the weight of a vapor compared to air. A vapor that is lighter than air (less than 1.0)

will rise into the air.