**ALARA**: “As Low As Reasonably Achievable” Personnel working in the field are required to keep their radiation exposures ALARA.

**Atom:** The fundamental basic building block of matter made up of three subatomic particles called protons, neutrons, and electrons. The basic unit of a chemical element of the periodic chart.

**Curie:** (Ci) is the unit of measurement of the amount of radioactivity of a substance, named after Marie and Pierre Curie. 1 Ci = 3.7×1010 disintegrations per second (rate of decay)

**Becquerel (Bq)** – Si unit for measuring radioactivity.

**Electromagnetic spectrum:** A continuum of electric and magnetic radiation encompassing all wavelengths.

**Electron:** a stable subatomic particle with a charge of negative electricity, found in all atoms.

**Ion:** an atom or molecule with a net electric charge due to the loss or gain of one or more electrons. A positively or negatively charged atom or molecule.

**Ionization:** The removal of electrons from an atom. The essential characteristic of high-energy radiations when interacting with matter.

**Ionizing Radiation:** a type of radiation that is able to disrupt atoms and molecules on which they pass through, giving rise to ions and free radicals.

**Isotopes:** atoms with same atomic number and chemical properties as element atoms; the nucleas has same number of protons but a different number of neutrons and thus, a different atomic mass.

**Neutron:** a subatomic particle with about the same mass as a proton but without an electric charge. Neutrons are present in all atoms except the Hydrogen atom.

**Particulate (or particle) Radiation:** is the radiation of energy by means of fast-moving subatomic particles. Alpha particles, Beta particles, neutrons, and positrons are examples of particulate radiation.

**Photons:** Discrete particles of light or electromagnetic radiation hypothesized to explain the corpuscular theory of radiant energy.

**Proton:** a subatomic particle present in all atomic nuclei, with a positive electric charge equal in magnitude to that of an electron, but of opposite sign.

**Radiant energy (Qe):** Energy transmitted through a medium by electromagnetic waves. Also known as radiation.

**Radiation:** Energy in transit. Either as particles or electromagnetic waves.

**Radioactivity:** The characteristic of various materials to emit ionizing radiation.

**Roentgen (R) –** is a unit of measurement to the exposure of ionizing radiation, specifically Gamma radiation and X-rays, named after the German physicist.

**SI:** The International System of units of measurement. Includes most of the base units formerly called metric.

**X-ray** – a type of ionizing radiation formed in a Cathode Ray Tube (CRT) when high velocity electrons flow from the cathode to the anode.