

# HAZWOPER GLOSSARY AND ACRONYMS

**APR** – Air Purifying Respirator

**Biological agents** – Living organisms that cause disease, sickness and mortality in humans. Anthrax and Ebola are examples of biological agents.

**Blister agents (vesicants)** – Substances that cause blistering of the skin. Exposure is through liquid or vapor contact with any exposed tissue (eyes, skin, lungs). Mustard (H), Distilled Mustard (HD), Nitrogen Mustard (HN) and Lewisite (L) are blister agents.

**Blood agents** – Substances that injure a person by interfering with cell respiration (the exchange of oxygen and carbon dioxide between blood and tissues). Hydrogen cyanide (AC) and Cyanogen chloride (CK) are blood agents.

**Burn** – Refers to either a chemical or thermal burn, the former may be caused by corrosive substances and the latter by liquefied cryogenic gases, hot molten substances, or flames.

**CAS** – Chemical Abstracts Service

**CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act

**CFR** – Code of Federal Regulations

**Choking agents** – Substances that cause physical injury to the lungs. Exposure is through inhalation. In extreme cases, membranes swell and lungs become filled with liquid (pulmonary edema). Death results from lack of oxygen; hence, the victim is “choked”. Phosgene (CG) is a choking agent.

**CHRIS** – Chemical Hazards Response Information System

**Combustible liquid** – Liquids that have a flash point greater than 60.5 °C (141 °F) and below 93 °C (200 °F). U.S. regulations permit a flammable liquid with a flash point between 38 °C (100 °F) and 60.5 °C (141 °F) to be reclassified as a combustible liquid.

**Control zones** – Designated areas at hazardous materials incidents, based on safety and the degree of hazard. These zones are commonly referred to as the hot/exclusion/red/restricted zone, warm/contamination reduction/yellow/limited access zone, and cold/support/green/clean zone.

**CPC** – Chemical Protective Clothing

**CWA** – Clean Water Act (1972)

**Decontamination** – The removal of hazardous contamination from personnel and equipment to the extent necessary to prevent potential adverse health effects. Always avoid direct or indirect contact with hazardous materials; however, if contact occurs, personnel should be decontaminated as soon as possible. Since the methods used to decontaminate personnel and equipment differ from one chemical to another, contact the chemical manufacturer to determine the appropriate procedure. Contaminated clothing and equipment should be removed after use and stored in a controlled area (warm/contamination reduction/limited access zone) until cleanup procedures can be initiated. In some cases, protective clothing and equipment cannot be decontaminated and must be disposed of in a proper manner.

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**DOT** – Department of Transportation

**EPA** – Environmental Protection Agency

**EPCRA** – Emergency Planning and Community Right-to-know Act

**Flammable liquid** – A liquid that has a flash point of 60.5oC (141oF) or lower.

**Flash point** – Lowest temperature at which a liquid or solid gives off vapor in such a concentration that, when the vapor combines with air near the surface of the liquid or solid, a flammable mixture is formed. Hence, the lower the flash point, the more flammable the material.

**FRA** – First Responder Awareness

**FRO** – First Responder Operations

**Hot zone** – Area immediately surrounding a hazardous materials incident which extends far enough to prevent adverse effects from released hazardous materials to personnel outside the zone. This zone is also referred to as exclusion zone, red zone or restricted zone

**IDLH** – Immediately Dangerous to Life or Health

**LEL** – Lower Explosive Limit

**MSDS** – Material Safety Data Sheet

**NCP** – National Contingency Plan

**Nerve agents** – Substances that interfere with the central nervous system. Exposure is primarily through contact with the liquid (via skin and eyes) and secondarily through inhalation of the vapor. Tabun (GA), Sarin (GB), Soman (GD) and VX are nerve agents.

**NFPA** – National Fire Protection Association

**NIOSH** – National Institute for Occupational Safety and Health

**NOS** – Not Otherwise Specified

**NRC** – National Response Center

**NSF** – National Strike Force

**OPA 90** – Oil Pollution Act of 1990

**OSHA** – Occupational Safety and Health Administration

**Oxidizer** – A chemical which supplies its own oxygen and which helps other combustible material burn more readily.

**PEL** – Permissible Exposure Limit

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**PPE** – Personal Protective Equipment

**Pyrophoric** – A material which ignites spontaneously upon exposure to air (or oxygen).

**Radioactivity** – The property of some substances to emit invisible and potentially harmful radiation.

**RCRA** – Resource Conservation and Recovery Act (1976)

**SARA** – Superfund Amendments and Reauthorization Act

**SCBA** – Self-Contained Breathing Apparatus

**STEL** – Short Term Exposure Limit

**TLV** – Threshold Limit Value

**USCG** – U. S. Coast Guard

**USDOT** – U. S. Department of Transportation

**USEPA** – U. S. Environmental Protection Agency (EPA)

**Vapor density** – Weight of a volume of pure vapor or gas (with no air present) compared to the weight of an equal volume of dry air at the same temperature and pressure. A vapor density less than 1 (one) indicates that the vapor is lighter than air and will tend to rise. A vapor density greater than 1 (one) indicates that the vapor is heavier than air and may travel along the ground.

**Vapor pressure** – Pressure at which a liquid and its vapor are in equilibrium at a given temperature. Liquids with high vapor pressures evaporate rapidly.

**VOC** – Volatile Organic Compound

**Water-sensitive** – Substances which may produce flammable and/or toxic decomposition products upon contact with water.

**WMD** – Weapons of Mass Destruction