

## Glossary List for Lead Abatement Supervisor Certification Examination

**Abatement:** Any set of measures designed to reduce or eliminate lead hazards or lead-based paint from a building or structure.

**Acidic:** Describes a chemical compound with a pH of less than 7 that is capable of reacting with a base to form a salt. Has caustic properties. See Caustic.

**Action Level (AL):** The contaminant level at which medical surveillance and other measures are required by Cal/OSHA.

**Air Quality Management District (AQMD):** A regional agency with legislated authority to develop and enforce regulations for the control of air pollution in its jurisdiction.

**Aliquot:** A representative sub-sample of a field sample, or a laboratory sample.

**Alkali:** A compound that has the ability to neutralize an acid and form a salt. Also called a base.

**Anemometer:** An instrument that measures air speed.

**Anodic Stripping Voltametry:** An analytical method used to detect the presence of lead in various substances. It is typically used by mobile laboratories, and requires extensive sample preparation.

**Apron:** An interior window system component that is located below the lower window casing.

**Atomic Absorption:** The most common laboratory analysis method used to detect lead in samples.

**Balusters:** A thin, vertical stair system component that supports the railing.

**Bubble Buret:** A primary calibration standard for air sampling pumps. Also called a soap-bubble meter.

**Calibration:** Setting the flow rate of an air sampling pump by comparison with a secondary or primary reference standard.

**Cal/OSHA:** The California regulatory agency that enforces worker healthy and safety laws.

**Carcinogen:** A substance that causes cancer.

**Caustic:** A skin irritant capable of burning, corroding or destroying living tissue.

**Cellulose Ester:** Material used in particulate air filters, which typically can trap particles larger than 0.3 microns.

**Chain of Custody:** A sample tracking form that is signed by the sample collector, the sample transporter and the laboratory to ensure that the sample was not subject to tampering prior to analysis.

**Chair Rail:** An interior wall system component that separates the lower wall from the upper wall.

**Chalking:** A process by which the outer layers of lead-based paint turn into a powder from exposure to the weather.

**Chelation:** The use of drugs to remove lead from body tissues by binding the lead with other compounds that are excreted.

**Containment:** A system, process or barrier used to contain lead hazards inside a work area.

**Deciliter:** A volume measurement equal to one tenth (1/10) of a liter.

**Deionized Water:** Water from which ions have been removed through an ion exchange process.

**Decontamination:** The process of removing lead dust and debris from workers, worker's clothing and shoes, personal protection equipment, and tools before leaving a containment area.

**Department of Health Services (DHS):** The California State agency that accredits training providers and certifies lead-related construction personnel, and enforces the Title 17 lead-related construction regulations.

**Department of Toxic Substances Control (DTSC):** State of California body that regulates hazardous materials.

**Elastomeric:** A coating that has elastic, resilient properties.

**Elevated Blood Lead Level (EBL):** Blood lead concentration measured at or above 20 µg/dL or two measurements between 15 µg/dL and 20µg/dL taken at least 30 days apart.

**Encapsulant:** An elastomeric coating used to cover lead-based paint

**Encapsulation:** The process of applying encapsulants over lead-based paint.

**Enclosure:** Rigid construction materials mechanically fastened to the substrate of a wall to form a barrier from lead-based paint.

**Engineering Controls:** A procedure, process, or barrier used to reduce worker exposures to hazardous substances.

**Environmental Protection Agency (EPA):** The federal agency that regulates environmental contaminants.

**Exterior Horizontal Window Surfaces (trough, well):** The parts of the window sill that receive both the upper and lower window sashes when they are both lowered, may also consist of the portion of the window sill that is accessible from the exterior when the window is closed.

**Fascia:** Usually decorative board between the top of a wall and the eaves of a building.

**Fahrenheit:** A temperature scale in which water boils at 212 degrees above the zero point of the scale and water freezes at 32 degrees above the zero point of the scale.

**Flame Atomic Absorption Spectrophotometry (FAAS):** A laboratory analytical method typically used to measure lead in paint samples. FAAS works by passing light from a heated element of the substance of interest through the sample, and measuring the amount of light absorbed.

**Friction Surface:** Components such as door jambs that are subject to deterioration by scraping and grinding against other components.

**Fume:** Small airborne particles that are formed when a hot metal vapor condenses.

**Glacial Acetic Acid:** An acid recommended in the HUD Guidelines to neutralize chemical stripping agents that are alkali or bases before applying new paint.

**Graphite Furnace:** A laboratory analytical method, more sensitive than FAA, typically used to measure lead in water samples.

**HAZWOPER:** Hazardous waste operations and emergency response training required by OSHA under 29 CFR 1910.10 and 8 CCR 5192. This training applies to workers at hazardous waste cleanup sites and TSDF's, and emergency responders. The regulation requires Health and Safety programs, site evaluation, exposure control,

training, medical surveillance, air monitoring, decontamination procedures and on-site and off-site emergency response plans.

**High Efficiency Particulate Air (HEPA) Filter:** A filter that is 99.97% efficient at capturing particles of 0.3 microns or greater.

**HUD Guidelines:** A publication by the Federal Office of Housing and Urban Development that describes how to control lead-based paint hazards in public housing.

**HVAC:** A building's heating, ventilation, and air conditioning system.

**Hydroblasting:** Use of high-pressure (typically >10,000 psi) water jets to remove paint.

**Impact Surface:** Any surface that is subject to repeated impacts or friction from other objects, resulting in the deterioration of the paint.

**Inductively Coupled Plasma:** A laboratory analytical method used to identify multiple types of metals in a sample.

**Interim Controls:** Procedures designed to control lead-based paint hazards that will last less than 20 years.

**Isoamyl Acetate:** A substance with a strong odor, often called "banana oil," used to accomplish qualitative fit tests on respirators.

**Kilogram:** Metric unit of weight, equal to 1000 grams or 2.2 pounds.

**Lead Hazard Evaluation:** An on-site investigation, for compensation, of lead-based paint or lead-based paint hazards such as a lead inspection, risk assessment or clearance inspection.

**Liability:** Designated obligation according to law; legally responsible for actions or outcome.

**Lockout/Tag-out:** Part of the process by which electrical circuitry is de-energized or made inaccessible, locked out, and then labeled with a notification tag.

**Manometer:** An gauge used to measure the pressure within a containment compared to outside the containment.

**Material Safety Data Sheet (MSDS):** A description prepared by a product manufacturer that describes the composition and physical or chemical hazards associated with that product.

**MCEF:** Mixed cellulose ester filter used to collect air samples for laboratory analysis.

**Medical Surveillance:** A program required by 8 CCR 1532.1 that requires regular monitoring of blood lead levels and other medical information.

**Methylene Chloride:** A chemical compound found in some paint strippers that is not recommended for use by HUD because it is a cancer-producing agent.

**Micrograms:** A unit of measurement that is equal to one millionth (1/1,000,000) of a gram.

**Milligram:** Unit of measurement that is equal to one thousandth (1/1000) of a gram.

**Mullion:** A slender, vertical component that separates units of a window or door.

**National Emissions Standards for Hazardous Air Pollutants (NESHAP):** Developed in response to the clean air act (CAA) by the US EPA to protect the general public from exposure to airborne contaminants that are known to be hazardous to human health.

**Neoprene:** A synthetic rubber material often used in protective gloves.

**Newel Post:** An interior vertical component at the base of a stairway.

**NIOSH:** The National Institute for Occupational Safety and Health, the federal agency that performs worker health and safety research and approves respirators.

**Paint Stabilization:** An interim control measure consisting of: (1) wet scraping loose, chipping paint; (2) priming; and (3) re-painting the surface with new paint.

**Particulate (airborne):** Bits of solid or liquid matter suspended in the air, in the micron size range. HEPA filters remove particles larger than 0.3 microns.

**Parting Bead:** Thin strip of wood or metal used to separate window sections.

**Permissible Exposure Limit (PEL):** The contaminant regulatory level that is enforced by Cal/OSHA.

**Personal Protective Equipment (PPE):** Worker clothing and equipment, such as gloves and respirators, designed to reduce worker exposure to hazardous substances.

**Plinth Block:** A decorative interior component located in the top corners of window or door casings.

**Polychlorinated Biphenyls (PCBs):** PCBs are a group of chemicals that were widely used in cooling oil in large electrical transformers. PCB's are carcinogens, cause reproductive abnormalities, systemic diseases and developmental deficits.

**Polypropylene:** A type of plastic sheeting used for containment.

**Polyvinyl Chloride (PVC):** A rigid plastic material commonly used to make pipe.

**Powered Air Purifying Respirator (PAPR):** A respirator with mechanical or chemical filters and a pump to provide positive pressure.

**Protection Factor (PF):** The amount of protection a specific respirator will provide against a contaminant, calculated by taking the ratio of the contaminant level outside the respirator to the level inside the facepiece.

**Quantitative Fit Test:** A test of the protection factor of a respirator by measuring the concentration of a contaminant outside and inside of a mask.

**Resource Conservation and Recovery Act of 1976 (RCRA):** Amendment to the Solid Waste Disposal Act of 1965 that regulates the disposal of hazardous wastes.

**Respirator:** A facepiece or mask used to protect the worker from inhaling hazardous materials.

**Rotometer:** A secondary standard that is used to set air sampling pump flow rates.

**Scope of Work:** A description of the work and processes that will be performed as part of a contract.

**Self Contained Breathing Apparatus (SCBA):** A respirator that has it's own supply of air in a tank carried by the wearer.

**Soluble Threshold Limit Concentration (STLC):** The concentration threshold for the soluble portion of a waste. Concentrations of a compound or element above the threshold make that wastes hazardous. The contaminant concentrations are listed in 22 CCR 66261.24.

**Stringer:** A structural stair system component that is attached to the stair treads and risers.

**Stringent:** The strictness of a regulation or standard.

**Substrate:** Surface upon which paint or varnish is (or may be) applied.

**Tagout:** See Lockout/Tag-out

**Title X:** The Residential Lead-Based Paint Hazard Reduction Act passed by Congress in 1992.

**Title 17:** The California DHS lead-related construction regulation.

**Title 22:** The California Department of Toxic Substances Control (DTSC) hazardous materials handling and disposal regulations.

**Tort:** A wrongful act other than a breach of contract which may result in damage claims or an injunction.

**Total Threshold Limit Concentration (TTLC):** The concentration threshold of a compound or element in a waste. Concentrations above the threshold make that waste hazardous. The contaminant concentrations are listed in 22 CCR 66261.24.

**Toxicity Characteristic Leaching Procedure (TCLP):** The TCLP is the federal waste extraction procedure used to determine if a waste is hazardous. It simulates conditions that cause waste to leach in landfills. The waste is considered hazardous if the extract or leachate contains a listed compound or element in a concentration that exceeds the maximum contaminant concentration.

**Trigger Task:** A task listed in the Cal/OSHA Construction Safety Orders for Lead for which airborne exposure is expected to exceed the PEL.

**Tri-Sodium Phosphate (TSP):** A high phosphate cleaning surfactant that is mixed with water and used to clean-up lead dust.

**Uniform Hazardous Waste Manifest:** The shipping document that is required by Cal/EPA and the federal EPA which identifies the quantity, composition, origin and routing of hazardous waste as it is transported from the site at which the waste was generated to the disposal facility.

**Ventilation:** An engineering control that supplies non-contaminated air into a containment.

**Vicarious Liability:** An employer is legally responsible for the omissions or wrongful behavior of their employees.

**Volatile:** A substance that evaporates very quickly.

**Waste Extraction Test (WET):** The California waste extraction procedure used to determine if a waste is hazardous. This procedure simulates conditions that cause waste to leach in landfills. The waste is considered hazardous if the extract or leachate contains a listed compound or element in a concentration that exceeds the STLC.

**X-Cut Test:** A test to determine the effectiveness of the application of an encapsulant.

**XRF:** An X-ray Fluorescence instrument used for detecting lead-based paint.

**Zinc Protoporphorin (ZPP):** A chemical test that is performed at the same time as a blood lead level test. The level of ZPP present is an indicator of lead absorption over 3 to 4 months.