

Indoor Air Quality & Industrial Hygiene Monitoring Plan – Appendix A: Definitions

Air Exchange Rate - The rate at which outside air replaces indoor air in a space. This rate is expressed in one of two ways: the number of changes of outside air per unit of time – air changes per hour (ACH); or the rate at which a volume of outside air enters a space per unit of time - cubic feet per minute (CFM).

Allergen - A substance capable of causing an allergic reaction because of an individual's sensitivity to that substance.

ASHRAE - the American Society of Heating, Refrigerating and Air-Conditioning Engineers; a global professional association focused on advancing heating, ventilation, air conditioning, and refrigeration (HVAC&R) systems design, building sustainability, and indoor air quality.

Concentration - The relative amount of a substance in a specific volume of air, expressed in ppm (parts per million) or mg/m³ (milligrams per cubic meter).

Contaminant – See pollutant

Department of Environmental Quality (DEQ) – the State of Oregon's department which oversees the implementation of environmental protection regulations.

Dust - a fine, dry powder made of tiny solid pieces of matter like dirt, skin cells, and pollen that floats in the air and settles on objects.

Emission – the result of releasing something into the air as a result of an activity or process. Emissions come in the form of dusts, mists, fumes, fibers, gases, vapors or smoke.

Fiber - A thin, thread-like filament from natural sources (like cotton, wool, or plant cells) or synthetic materials (like glass or carbon fiber).

Fume - an airborne suspension of extremely fine solid particles formed when a volatilized solid (such as a molten metal) condenses back into a solid state, often accompanied by a chemical reaction like oxidation.

Gas – a fluid such as air that has neither independent shape nor volume but tends to expand indefinitely.

Hazard - A source of potential danger, harm, or damage to people, property, or the environment.

HVAC – Heating, ventilation, and air conditioning.

Indoor Air Pollutant - Particles and dust, fibers, mists, fumes, smoke, bioaerosols, and gases or vapors.

IAQ – Indoor Air Quality; the condition of the air inside and around buildings, specifically how it affects the health, comfort, and safety of the people inside.

Industrial Hygiene (IH) – the science and art devoted to the anticipation, recognition, evaluation, and control of workplace environmental factors and stresses that may cause illness, impaired health, or discomfort among workers.

Mist – a light cloud of tiny liquid droplets suspended in air.

Nuisance Dust - general airborne particulate matter that causes minor physical irritation or annoyance but does not typically cause significant toxic effects or long-term lung disease when kept under reasonable exposure limits.

Odor Threshold - the lowest concentration of a certain substance that is perceivable by the human sense of smell.

Oregon Occupational Safety & Health Administration (OR OSHA) – the State or Oregon’s department that oversees the implementation of workplace safety regulations.

Particulate - describes microscopic solids or liquids suspended in the air, such as dust, smoke, mists, fumes, fibers, soot, or dirt.

Perceived Hazard – A condition or activity that is subjectively believed to be a source of potential danger, harm, or damage to people, property, or the environment in the absence of any analytical and/or quantifiable data.

Permissible Exposure Limit (PEL) - a regulatory maximum airborne concentration of a contaminant to which a worker can be exposed without adverse health effects.

Pollutant - any substance that negatively impacts indoor air quality or in high enough concentrations, makes the air unsafe to breathe.

Smoke - a visible cloud of gas and particulate matter produced as a result of combustion.

Source – an operation or activity from which indoor air pollutants originate or are generated. Indoor air pollutants can originate within the building or be drawn in from outdoors. Common sources include people, preservatives on room furnishings such as carpeting, photocopiers, art supplies, etc.

Vapor - a substance in a gas state that is normally a solid or a liquid at room temperature.