

US EPA ARCHIVE DOCUMENT

# Glossary

Some terms within the Information Sheets may be unfamiliar to you and may be terms you encounter when you talk with owners and operators about pollution prevention. The General Terms define words and phrases typically used in the pollution prevention world as whole. The Topic-Specific terms are words or phrases that may be associated with particular business sectors. These sectors are listed in parentheses after the definition.

## General Terms

**Air Emissions** – The release or discharge of a pollutant into the air.<sup>1</sup>

**Carcinogen** – An agent capable of inducing cancer.<sup>2</sup>

**Fine Particulate Matter** – Particulate matter less 2.5 microns across or less.

**Fugitive Emissions** – Emission of a chemical to the air that does not occur from a stack, vent, duct, pipe, or other confined air stream (e.g., leaks from joints).<sup>3</sup>

**Greenhouse Gas (GHG)** – Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrochlorofluorocarbons (HCFCs), ozone (O<sub>3</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).<sup>4</sup>

**Hazardous Air Pollutants (HAPs)** – Defined under the Clean Air Act as pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. Currently, the Clean Air Act regulates 188 chemicals and chemical categories as HAP.<sup>5</sup>

**Heavy metals** – Metals such as chromium, cadmium, mercury, and lead.

**Ozone Depleting Substances (ODSs)** – Substances that cause the deterioration of the earth's protective ozone layer.

---

<sup>1</sup>Risk Glossary from Ken Mitchell.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

<sup>5</sup>Ibid.

**Particle Pollution** – Fine liquid or solids such as dust, smoke, fumes, or smog found in air or emissions.<sup>6</sup>

**Pollution Prevention (P2)** – Pollution prevention is the use of materials, processes, or practices that reduce or stop the creation of pollutants or waste at the source. It includes improved operating practices like material substitution, process and equipment modifications, and energy and wastewater conservation. Pollution prevention is stopping pollution before it starts.

**Solvent** – A solvent is a liquid that is capable of dissolving another substance to make a new solution. Solvents are used to dissolve paint solids to make paint and as cleaning solutions because they dissolve grease and oils.

**Source** – Any place or object from which pollutants are released.<sup>7</sup>

**Substrate** – The material on which another material is coated or fabricated (substratum).<sup>8</sup>

**Toxicity** – The degree to which a substance or mixture of substances can harm humans or animals.<sup>9</sup>

**Volatile Organic Compounds (VOC)** – Organic compounds (such as a solvent, thinner, or an alcohol-based material) that evaporates easily into the air and is the leading cause of ground-level ozone (air pollution, also known as smog.”) Volatile Organic Compounds include toluene, benzene, and xylene, which are also HAPs.

**Work practices** – an action performed by workers to prevent or reduce emissions of air toxics. Such actions can include vacuuming up dust, opening containers only when necessary, and keeping employees updated on housekeeping measures.<sup>10</sup>

## Topic-Specific Definitions

**Aneroid blood pressure cuffs** – non-liquid blood pressure cuffs. (Hospitals)

---

<sup>6</sup>EPA Terms of Environment.

<sup>7</sup>Glossary by Ken Mitchell.

<sup>8</sup>American Heritage Dictionary

<sup>9</sup>EPA Terms of Environment.

<sup>10</sup>Drawn from knowledge & context of fact sheets.

**Bath** – a tank of chemicals in which a metal part is dipped to apply a metal coating. (Electroplating Operations)

**Bath dumps** – Chemicals that have degraded or become contaminated over time and no longer serve their function. (Electroplating Operations)

**Carbon adsorbers** – Control devices that remove vapors from an air stream by adsorbing the vapor onto an activated carbon surface. (Dry Cleaning Operations)

**Creosote** – An oily residue that forms from unburned wood gases. (Residential Wood Burning)

**Densified logs** – Logs that are made of compressed sawdust. (Residential Wood Burning)

**Diisocyanates** – Chemicals in auto body part painting operations, especially for clear coat applications, which are a leading cause of occupational asthma. (Auto Body Shops, Metal Operations)

**Dry, seasoned wood** – Wood that has been split and dried for at least six months and has <20% moisture by weight. (Residential Wood Burning)

**Fountain solution** – A plating solution that keeps the ink from adhering where it should not on the plate. (Printing Operations)

**Gun wash system** – A cleaning system used to clean spray guns after being used to spray auto body parts. (Auto Body Shops, Paint and Coating Operations, Metal Operations, Wood Furniture Operations, Shipbuilding and Repair and Repair Operations)<sup>11</sup>

**High solids paints and coatings** – Paints and coatings with more solids and less solvents than conventional coatings. (Auto Body Shops, Paint and Coatings Manufacturing, Paint and Coating Operations, Wood Furniture Operations)

**High-Volume Low-Pressure (HVL) spray guns** – A spray gun that uses columns of low pressure air to cause turbulence within the paint as the first stage of atomization. The air used for the final step of atomization originates from high-volume turbine blowers and is transferred to the gun using large-diameter air lines.<sup>12</sup> (Auto Body Shops, Paint and Coating Manufacturing, Paint and Coating Operations, Metal Operations, Wood Furniture Operations, Ship Building and Repair Operations, Commercial Construction)

---

<sup>11</sup>Derived from context in auto body fact sheet.

<sup>12</sup>University of Northern Iowa, Small Business Pollution Prevention Center. Autobody Surface Coating: A Practical Guide to Reducing Air Emissions. P. 10.

**Incomplete Combustion** – Fuel from the firewood that does not burn. (Residential Wood Burning)

**Low emission vapor degreasers (LEVD)** – Completely enclosed, airtight units used to clean off machining oil and other contaminants from metal parts. (Metal Operations)

**Metalizing** – A process in which pure metal (not paint) is sprayed onto a ship's surface. (Shipbuilding and Repair Operations)

**Off-Specification** – Paint or coating material that does not meet quality or customer specifications. (Paint and Coating Manufacturing)

**Overspray** – The amount of spray that misses its target (Auto Body Shops, Paint and Coating Operations, Metal Operations, Wood Furniture Operations)

**Pigment** – Provides color to the paint or coating. (Paint and Coating Manufacturing)

**Plating** – The process where the surface of the metal is modified by adding several layers of metal coating by using a series of baths and then allowing the part to dry. (Electroplating Operations)

**Pyrometallurgical treatment** – High temperature processing used in metal casting. (Metal Operations)

**Refrigerated condensers** – Control devices that recover solvent vapor emissions by cooling the air stream to the point it condenses to liquid form. (Dry Cleaning Operations)

**Sharps** – Items such as needles or broken glass that may puncture the skin. (Hospitals)

**Solvent-based inks** – Set by evaporation of the ink oil at elevated temperatures. (Printing Operations)

**Spill container** – Catches and contains spilled solvent from the dry cleaning machine. (Dry Cleaning Operations)

**Transfer efficiency** – The percentage of material atomized through the spray gun that actually ends up as a coating on the desired surface. (Auto Body Shops, Paint Operations, Metal Operations, Wood Furniture Operations, Shipbuilding and Repair Operations)<sup>13</sup>

---

<sup>13</sup>University of Northern Iowa, Small Business Pollution Prevention Center. Autobody Surface Coating: A Practical Guide to Reducing Air Emissions. P. 7.

9/12/05

**UV-Cured Inks** – Inks that are set by using radiant energy. (Printing Operations)

**UV Light Cured Coatings** – These coatings use UV light to set the coating instead of solvents. (Paint and Coating Operations, Wood Furniture Operations, Metal Operations)