# Acronyms & Definitions of Common Terms in the Environmentally Preferable Procurement Realm

### Click Here for: <u>Acronyms</u> or <u>Definitions</u>

# DEFINITIONS

# <u>A B C D E F G H I J K L M N O P Q R S T U V W X Y Z</u>

More definitions available at: http://www.epa.gov/OCEPAterms/ and http://glossary.eea.eu.int/EEAGlossary

## A

### Anti-Microbial

An agent that kills microbes

### B

### **Bioaccumulants**

Substances that increase in concentration in living organisms as they take in contaminated air, water, or food because the substances are very slowly metabolized or excreted.

### **Biobased Product**

A commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.

#### Biodegradable

Capable of being broken down, especially into innocuous products, by the action of living things such as microorganisms.

### Biodiesel

A renewable, biodegradable, alternative fuel or fuel additive for diesel engines. It can be used in its pure form or it can be mixed with a petroleum-based diesel. Biodiesel can be made from a variety of products, including animal fats and virgin and recycled vegetable oils derived from crops such as soybeans, canola, corn and sunflowers.

### С

### California Proposition 65 List

Proposition 65 requires the Governor of California to publish, at least annually, a list of chemicals known to the state to cause cancer or reproductive toxicity.

### Carcinogen

Any substance that can cause or aggravate cancer

Climate Change (also referred to as 'global climate change')

The term 'climate change' is sometimes used to refer to all forms of climatic inconsistency, but because the Earth's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, 'climate change' has been used synonymously with the term, 'global warming'; scientists however, tend to use the term in the wider sense to also include natural changes in climate.

### **Chlorinated Hydrocarbons**

1. Chemicals containing only chlorine, carbon, and hydrogen. These include a class of persistent, broadspectrum insecticides (and other chemicals) that linger in the environment and accumulate in the food chain. Among them are DDT, aldrin, dieldrin, heptachlor, chlordane, lindane, endrin, Mirex, hexachloride, and toxaphene. Other examples include TCE, used as an industrial solvent. 2. Any chlorinated organic compounds including chlorinated solvents such as dichloromethane, trichloromethylene, chloroform.

### Chlorofluorocarbons (CFCs)

A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. Because CFCs are not destroyed in the lower atmosphere they drift into the upper atmosphere where their chlorine components destroy ozone. CFCs were banned in the developed world in 1996.

#### Compost

The relatively stable humus material that is produced from a composting process in which bacteria in soil mixed with garbage and degradable trash break down the mixture into organic fertilizer.

#### D

#### Dioxin

The terms 'dioxin' or 'dioxins and furans' generally refers to a group of 210 chlorinated pollutants, chemically known as the polychlorinated dibenzo-p-dioxins and dibenzofurans. Dioxins are organochlorines and are regarded as among the world's most toxic organic pollutants. They are produced as by-products of industrial processes involving chlorine and all types of incineration. Once released into the environment, dioxins are environmentally stable and tend to become associated with sediments or suspended material. Dioxins have the potential to bioaccumulate in the food chain and pose series risks to ecological and human health.

#### Ε

#### **Elemental Chlorine Free (ECF)**

With regard to the bleaching process used to whiten paper, ECF bleaching utilizes no elemental chlorine gas and instead substitutes chlorine compounds such as chlorine dioxide. Almost all U.S. paper mills currently use ECF bleaching processes. This process reduces organochlorine discharges (such as dioxin), but does not eliminate them.

#### **Endocrine Disruptors**

Exogenous agents that interfere with the production, release, transport, metabolism, binding, action, or elimination of the natural hormones in the body responsible for the maintenance of homeostasis and the regulation of developmental processes

#### **Energy Star®**

A U.S. EPA and Department of Energy labeling program designed to identify and promote energy-efficient products to help businesses and individuals protect the environment through superior energy efficiency.

#### **Environmentally Preferable**

Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

#### F

### Formaldehyde

A colorless, pungent, and irritating gas, CH20, used chiefly as a disinfectant and preservative and in synthesizing other compounds like resins.

#### Fungicide

Pesticides which are used to control, deter, or destroy fungi.

#### G

#### **Genetically Modified Organism (GMO)**

The modification of the genetic characteristics of a microorganism, plant or animal by inserting a modified gene or a gene from another variety or species.

#### **Global Warming**

An increase in the near surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases.

### **Green Building**

A generic term used to describe high-performance buildings or whole-building designs, that achieve superior performance in a variety of areas including: functionality, energy and water efficiency, quality of the indoor environment (air quality, thermal comfort, lighting), waste management and air emissions, site disturbance and storm water management, transportation options for occupants, and longevity (durability, adaptability to changing building user needs).

#### **Greenhouse Gas**

A gas, such as carbon dioxide or methane, which contributes to potential climate change.

#### H

## **Heavy Metals**

Metallic elements with high atomic weights; (e.g. mercury, chromium, cadmium, arsenic, and lead); can damage living things at low concentrations and tend to accumulate in the food chain.

### Herbicide

A chemical pesticide designed to control or destroy plants, weeds, or grasses.

## Hydrochlorofluorocarbons (HCFC)

HCFCs replaced the use of chlorofluorocarbons (CFCs) in many product applications (refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants). Although HCFCs are preferable to CFCs, they still are a factor in ozone depletion and are believed to contribute to global warming.

## I

## **Indoor Air Pollution**

Chemical, physical, or biological contaminants in indoor air.

## Insecticide

A pesticide compound specifically used to kill or prevent the growth of insects.

### Integrated Pest Management (IPM)

A holistic approach to pest (including weed) management. IPM stresses the prevention of pest problems through design and maintenance practices and uses a range of pest management techniques, including biological, cultural and mechanical. Chemical controls are to be considered a last resort

### **Invasive Species**

A species that is 1) non-native (or alien) to the ecosystem under consideration and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes).

## J

## K

### L

### LD 50/ Lethal Dose

The dose of a toxicant or microbe that will kill 50 percent of the test organisms within a designated period. The lower the LD 50, the more toxic the compound.

### Leachate

Water that collects contaminants as it trickles through wastes, pesticides or fertilizers. Leaching may occur in farming areas, feedlots, and landfills, and may result in hazardous substances entering surface water, ground water, or soil.

### Leaching

The process by which soluble constituents are dissolved and filtered through the soil by a percolating fluid. Leadership in Energy and Environmental Design (LEED)

A voluntary, consensus-based national standard for developing high-performance, sustainable buildings ("green buildings"). LEED is a program of the U.S. Green Building Council.

## Life Cycle Analysis

The comprehensive examination of a product's environmental and economic aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use, and disposal.

### Life Cycle of a Product

All stages of a product's development, from extraction of fuel for power to production, marketing, use, and disposal.

### Light-Emitting Diode (LED)

A long-lasting illumination technology, commonly used for exit signs and traffic signals, which requires very little power

#### Μ

### Material Safety Data Sheet (MSDS)

A compilation of information required under the OSHA Communication Standard on the identity of hazardous chemicals, health, and physical hazards, exposure limits, and precautions. Section 311 of SARA requires facilities to submit MSDSs under certain circumstances.

#### Municipal Solid Waste (MSW)

Common garbage or trash generated by industries, businesses, institutions, and homes.

### Mutagen/Mutagenicity

An agent that causes a permanent genetic change in a cell other than that which occurs during normal growth. Mutagenicity is the capacity of a chemical or physical agent to cause such permanent changes.

## N

## Naturescaping

A style of landscaping that is designed to have a minimal negative impact on the environment; also known as landscaping for wildlife. It features native plants, nature-like settings, minimal use of chemicals and low water-use gardening techniques.

## Nitrogen Oxide (NOx)

The result of photochemical reactions of nitric oxide in ambient air; major component of photochemical smog. Product of combustion from transportation and stationary sources and a major contributor to the formation of ozone in the troposphere and to acid deposition.

#### 0

### **Organic** (as relating to food)

Of, relating to, yielding, or involving the use of food produced with the use of feed or fertilizer of plant or animal origin without employment of chemically formulated fertilizers, growth stimulants, antibiotics, GMOs, or pesticides, etc.

#### Organochlorines

Organic (carbon based) chemicals that contain one or more chlorine atoms.

### Ozone (O<sub>3</sub>)

Found in two layers of the atmosphere, the stratosphere and the troposphere. In the stratosphere (the atmospheric layer 7 to 10 miles or more above the earth's surface) ozone is a natural form of oxygen that provides a protective layer shielding the earth from ultraviolet radiation. In the troposphere (the layer extending up 7 to 10 miles from the earth's surface), ozone is a chemical oxidant and major component of photochemical smog. It can seriously impair the respiratory system and is one of the most wide-spread of all the criteria pollutants for which the Clean Air Act required EPA to set standards. Ozone in the troposphere is produced through complex chemical reactions of nitrogen oxides, which are among the primary pollutants emitted by combustion sources; hydrocarbons, released into the atmosphere through the combustion, handling and processing of petroleum products; and sunlight.

#### P

### Particulate Matter (PM)

The term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Some particles are large or dark enough to be seen, others are so small that individually they can only be detected with an electron microscope.

### PBT (persistent, bioaccumulative toxin)

Chemicals that are toxic, **p**ersist in the environment and **b**ioaccumulate in food chains and, thus, pose risks to human health and ecosystems. PBTs transfer rather easily among air, water, and land, and span geographic boundaries and generations.

#### Pesticide

Substances or mixture there of intended for preventing, destroying, repelling, or mitigating any pest. Also, any substance or mixture intended for use as a plant regulator, defoliant, or desiccant.

#### pН

An expression of the intensity of the basic or acid condition of a liquid; may range from 0 to 14, where 0 is the most acid and 7 is neutral. Natural waters usually have a pH between 6.5 and 8.5.

#### **Phosphates**

Certain chemical compounds containing phosphorus.

#### **Photochemical Smog**

Air pollution caused by chemical reactions of various pollutants emitted from different sources.

#### Phthalates

Phthalates represent a broad family of chemicals with oily, plasticizing qualities. Phthalates are added to products to impart flexibility and other characteristics, yet they tend to escape from a product over time. While health affects vary, phthalates are linked to decreased fertility and birth defects.

#### **Pollution Prevention**

Identifying areas, processes, and activities which create excessive waste products or pollutants in order to reduce or prevent them through, alteration, or eliminating a process.

#### Post-Consumer Waste (PCW) or Post-Consumer Material (PCM)

A material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. "Post-consumer waste" is part of the broader category of recovered materials. "Post-consumer waste" does not include manufacturing waste

#### **Precautionary Principle**

When information about potential risks is incomplete, basing decisions about the best ways to manage or reduce risks on a preference for avoiding unnecessary health risks.

#### **Processed Chlorine Free (PCF)**

With regard to the bleaching process used to whiten paper, PCF is a term reserved for recycled content papers. All recycled fibers used as a feedstock in PCF paper are unbleached or have not been re-bleached with chlorine containing compounds. If a paper contains any virgin fiber that fiber is Totally Chlorine Free (TCF).

## Q

## R

#### **Recovered Materials or Secondary Waste Materials**

Waste materials and byproducts that have been recovered or diverted from solid waste, but does not include materials and byproducts generated from, and commonly reused within, an original manufacturing process. Recovered materials includes post-consumer waste.

#### **Recycle/Reuse**

Minimizing waste generation by recovering and reprocessing usable products that might otherwise become waste

#### **Reproductive Toxin**

A substance or agent that can cause adverse effects on the reproductive system. The toxic effects may include alterations to the reproductive [sexual] organs and/or the endocrine system (which includes the thyroid and adrenal glands). See also teratogens and endocrine disruptors.

#### Rodenticide

A chemical or agent used to destroy rats or other rodent pests, or to prevent them from damaging food, crops, etc.

#### **Run-Off**

That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surfacewater. It can carry pollutants from the air and land into receiving waters.

## S

#### Smog

Air pollution typically associated with oxidants. (See: photochemical smog.)

#### Sustainable Development

The Brundtland Commission defines Sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable development according to this definition involves three dimensions: ecological, economical and social, which includes cultural aspects.

#### Т

### Teratogen

A chemical, ionising agent, or virus that cause birth defects in organisms.

### **Totally Chlorine Free (TCF)**

With regard to the bleaching process used to whiten paper, TCF is a term reserved for virgin fiber papers. TCF papers are unbleached or do not use pulp produced with chlorine or chlorine containing compounds as bleaching agents.

#### **Toxic Pollutants**

Materials that cause death, disease, or birth defects in organisms that ingest or absorb them. The quantities and exposures necessary to cause these effects can vary widely.

### Toxicity

The degree to which a substance or mixture of substances can harm humans or animals. Acute toxicity involves harmful effects in an organism through a single or short-term exposure. Chronic toxicity is the ability of a substance or mixture of substances to cause harmful effects over an extended period, usually upon repeated or continuous exposure sometimes lasting for the entire life of the exposed organism. Subchronic toxicity is the ability of the substance to cause effects for more than one year but less than the lifetime of the exposed organism.

## U

### Ultra-Low Sulfur Diesel (ULSD)

In general, refers to diesel that meets the new U.S. EPA standards for sulfur content in diesel fuel that will be in effect starting June 2006. The new standards reduce sulfur content limits from 500 parts per million (ppm) to 15 ppm.

#### V

### Volatile Organic Compound (VOC)

Any organic compound that participates in atmospheric photochemical reactions except those designated by EPA as having negligible photochemical reactivity (EPA definition). Also: an organic compound characterized by a tendency to readily evaporate into the air, contributing to indoor air pollution and photochemical smog.

### W, X, Y, Z

# ACRONYMS

ASTM	American Society for Testing and Materials
B20	Biodiesel blend: 80% petroleum diesel, 20% biodiesel
CFC	Chlorofluorocarbon
CFL	Compact Fluorescent Lamp
CITES	Convention on International Trade in Endangered Species
CO	Carbon Monoxide
$CO_2$	Carbon Dioxide
CPG	Comprehensive Procurement Guidelines (U.S. EPA)
ECF	Elemental Chlorine Free
EPA	U.S. Environmental Protection Agency
EPP	Environmentally Preferable Procurement
FSC	Forest Stewardship Council
GMO	Genetically Modified Organism
GWP	Global Warming Potential
HC	Hydrocarbon
HCFC	Hydrochlorofluorocarbons
HDPE	High-Density Polyethylene (#2 plastic)
IPM	Integrated Pest Management
IAQ	Indoor Air Quality
IARC	International Agency for Research on Cancer
ISO	International Organization for Standardization
LCA	Life Cycle Analysis
LDPE	Low-Density Polyethylene (#4 plastic)
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
MSDS	Material Safety Data Sheet
MSW	Municipal Solid Waste
NIOSH	National Institute of Occupational Safety & Health (U.S.)
NOx	Nitrogen Oxide
NTP	National Toxicology Program (U.S.)
O <sub>3</sub>	Ozone
OSHA	Occupational Safety & Health Administration (U.S. Dept. of Labor)
PBT	Persistent Bioaccumulative Toxin
PCF	Processed Chlorine Free
PCW	Post-Consumer Waste
PET/PETE	Polyethylene Terephthalate (#1 plastic)
PM	Particulate Matter

PP	Polypropylene (#5 plastic)
PS	Polystyrene (#6 plastic)
PVC	Polyvinyl Chloride (#3 plastic)
RMAN	Recovered Materials Advisory Notices (U.S. EPA)
SARA	Superfund Amendments and Reauthorization Act (U.S.)
SCAQMD	South Coast Air Quality Management District (California)
$SO_2$	Sulfur Dioxide
TCF	Totally Chlorine Free
TSCA	Toxic Substance Control Act
TSDF	Treatment, Storage, Disposal Facility
UL	Underwriters Laboratories
ULSD	Ultra Low Sulfur Diesel
USGBC	U.S. Green Building Council
VOC	Volatile Organic Compound