

BAY AREA AIR QUALITY MANAGEMENT

DISTRICT

Toxic Air Contaminant Regulation Programs

Glossary of Terms

Acute –Something that takes place over a short period of time, typically one hour

Age Sensitivity Factors (ASF) – Adjustment calculations for cancer risk used in health risk assessments that account for children's increased sensitivity to air toxics

Best Available Control Technology (BACT) – Equipment, processes, or devices that limit or reduce the amount of air pollutants that are emitted in the air by sources

Best Available Control Technology for Toxics (TBACT) – For sources emitting toxic air contaminants (TAC), the most effective emissions controls that either have been used in practice or are technically possible.

Breathing Rate – The amount of air a person breathes in over a specified time period

Cancer Potency Factor (CPF) – A calculation that estimates the likelihood of developing cancer from exposure to a cancer-causing or a potentially cancer-causing substance

Cancer Risk – An estimate of the likelihood that an individual will develop cancer

Carcinogen – A substance that may cause cancer

Chronic – Something that takes place over a long period of time

Dose – The amount of substance that enters the body over a given exposure duration

Exposure Duration – The amount of time a person is exposed to a toxic air contaminant

Exposure Pathway – How a substance enters the body (e.g. breathing, eating, drinking, or touching skin)

Fraction of Time at Home (FAH) – The percentage or amount of time a person is home throughout the day.

Hazard Index (HI) – An estimate of the likelihood that an individual will develop non-cancer health effects

Health Effect – A change in human body function or cell structure that may cause or contribute to health problems ranging from temporary minor conditions, such as skin irritation, to permanent injury, serious disease, or death

Health Risk – The potential for health effects in humans resulting from exposure to toxic air contaminants. Types of health risks include cancer risk and non-cancer impacts **Health Risk Assessment (HRA)** – An estimate of the increased chance of negative health impacts for individuals that may be exposed to toxic air contaminants, based on the best scientific information available

Modified Source – Any air pollution source that undergoes a physical change, a change in the method of operation, or an increase in throughput that results in emission increases

Multi-Pathway TAC – A toxic air contaminant (TAC) that enters the body through breathing and at least one other pathway (eating, drinking, or touching skin) and that has health impacts resulting from these other exposure pathways

New Source – Any source of emissions that is proposed for construction or operation, including a replacement of an existing source or a relocation of an existing source to a different facility

Non-cancer Impact – Any negative health effect other than cancer

Non-carcinogen – A substance that may cause health effects other than cancer

New Source Review (NSR) – An evaluation of the air pollution emissions, potential health effects, and compliance with regulatory requirements for new or modified sources that is conducted before the project is built

Project – A group of one or more new or modified sources that are part of a proposed construction at a single facility and that are typically contained within a permit application or a group of related permit applications

Project Risk – The total health risk resulting from a project

Reference Exposure Level (REL) – The amount of air pollution that is considered safe for a specific period of exposure time

Source – Any article, machine, equipment, or operation that produces or emits air pollutants

Source Risk – The health risk resulting from a new source, a modified source, or an individual new or modified operation

Spatial Averaging – A calculation used in health risk assessments, which is an average of the predicted air concentrations within a small area, and that is intended to represent typical human behavior throughout the length of exposure under evaluation

Stationary Source – A fixed, non-mobile producer of pollution, usually at industrial or commercial facilities

Toxic Air Contaminant (TAC) – Air pollutants that may cause or contribute to negative health impacts (adverse health effects)

Trigger Levels – Air District-derived emission rate thresholds for a project at which an Air District Health Risk Assessment is required

Toxicity Weighting Factors – Air Districtderived factors for each toxic air contaminant that indicate that relative toxicity of the compound for a given type of health risk (cancer risk, chronic non-cancer impact, or acute non-cancer impact)