



Toxic Air Contaminant Regulation Programs

Glossary of Terms

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

Adverse Health Effect – A change in body function that might lead to disease or health problems

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

Air Dispersion Model – A computer program that predicts how air pollutant emissions will move from the source of emissions into the surrounding community

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) – The most stringent emissions controls that either have been used in practice or are technically possible.

Best Available Retrofit Control Technology for Toxics (TBARCT) – The most effective retrofit emission controls that have been achieved for a specific type of source

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

Cancer Potency Factor (CPF) – A factor 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 increased possibility of an individual developing 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)

Facility Risk - The health risk resulting from Toxic Air Contaminant emissions from all stationary sources at that facility

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

Maximum Exposed Individual (MEI) – Exposed individual location where the highest exposure to a Toxic Air Contaminant is predicted

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 exposure 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 of emissions 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

Prioritization Score – Relative potential for health impacts based on amount of TACs emitted, toxicity of the TAC, proximity to exposed individual, and exposure factors

CARE Priority Community – A neighborhood with a higher level of Toxic Air Contaminants, where people may be particularly vulnerable and bear disproportionately higher adverse health impacts

Project Risk – The total health risk resulting from a project

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

Risk Action Level (RAL) – A defined facility risk level, where exceedance requires risk reduction at that facility

Risk Reduction Plan (RRP) – A document outlining detailed risk reduction measures that will be implemented to reduce health risk below RALs, or ensure each significant source of risk is equipped with TBARCT

Risk Reduction Measure (RRM) – Emission controls and other practices that reduce health risks

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

Source Risk – The health risk resulting from TAC emissions associated with an individual source of emissions

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

Significant Source – An emission source, whose estimated health risk has been determined to exceed a significant source threshold

Significant Source Threshold – Health risk levels defined as 1.0 per million cancer risk, or chronic and acute hazard indices of 0.20

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 District-derived factors for each toxic air contaminant that indicate the relative toxicity of the compound for a given type of health risk (cancer risk, chronic non-cancer impact, or acute non-cancer impact)

