

## GLOSSARY

<b>ABTP</b>	Ashbridges Bay Treatment Plant
<b>As</b>	Arsenic
<b>BAF</b>	Bioaccumulation Factor
<b>BUC</b>	Biosolids Utilization Committee
<b>BW</b>	Body Weight
<b>Cancer</b>	A disease characterized by malignant, uncontrolled invasive growth of body tissue cells.
<b>Cancer Slope Factor (CSF)</b>	An upper bound estimate of the cancer risk associated with a specified chronic exposure or dose.
<b>Cancer Unit Risk (UR)</b>	An upper bound estimate of the cancer risk associated with a specified exposure point concentration.
<b>Carcinogen</b>	A chemical or substance known or suspected of being of capable producing cancer in living organisms.
<b>CCME</b>	Canadian Council of Ministers of the Environment.
<b>Cd</b>	Cadmium
<b>CDI</b>	Chronic Daily Intake
<b>Chronic exposure</b>	Long-term, low-level exposure to substances, i.e., the repeated exposure to a substance over a long period of time.
<b>CFIA</b>	Canadian Food Inspection Agency
<b>Chronic daily intake (CDI)</b>	The average daily intake of a substance, expressed in weight per kg body weight per day, averaged over a long period of time.
<b>Co</b>	Cobalt
<b>Concentration</b>	A quantitative measure of the amount of a substance present in a specified amount of sample (e.g. mg of a substance per kg).



## GLOSSARY

<b>Conservatism</b>	The tendency towards caution or protection. Conservative assumptions made in a risk assessment are designed so as to not under-predict the actual risks.
<b>Cr</b>	Chromium
<b>Cu</b>	Copper
<b>Dose</b>	That amount of a substance absorbed into the body of an exposed receptor.
<b>Dose-response</b>	The quantitative relationship between the dose of a substance and observed health effect caused by exposure to such substance.
<b>dw</b>	Dry weight
<b>EoPC</b>	Entity of Potential Concern.
<b>Ecological risk</b>	The likelihood (or probability) that a given exposure, or series of exposures, to a hazardous substance will cause adverse health or other response impacts on individual receptors (for species of special status) or populations experiencing the exposures.
<b>Effect</b>	The response observed in the receptor due to exposure to a substance (e.g., decreased body weight).
<b>EPC</b>	Exposure Point Concentration. The calculated concentration of a substance that is representative of the concentration at the point of exposure (e.g., the concentration of a substance in soil, water or air that is carried forward in the risk assessment calculations for a particular exposure pathway). An entity that is carried forward into a risk assessment.
<b>Exposure</b>	Receiving a dose of a substance; or coming in contact with a hazard.
<b>Exposure assessment</b>	The exposure assessment includes the identification of the receptors of interest, the identification of the relevant exposure pathways, and the quantification of the exposures from each pathway.
<b>Exposure pathway</b>	The mechanism by which a receptor can be exposed to a chemical hazard, such as ingestion of contaminated soil or inhalation of contaminated air.



## GLOSSARY

<b>ERA</b>	Ecological Risk Assessment
<b>fw</b>	Fresh weight
<b>Groundwater</b>	The water contained in interconnected pores in soil and bedrock located below the water table.
<b>Guidelines</b>	Guidelines for environmental quality are defined by regulators for many substances to quickly and easily identify the concentration of a substance where no further investigation or study is required. If the concentration of a sample exceeds an established guideline, then further investigation is carried out to determine if a potential risk exists and whether action might be required.
<b>ha</b>	Hectare. A unit of land area equivalent to 100 m x 100 m.
<b>Hazard</b>	The inherent toxic potency of a substance independent of level of exposure.
<b>Hazard identification</b>	The first step in a risk assessment, used to identify environmental hazards (e.g., EoPC) that may pose a health or environmental risk. The hazards at a site are identified based on the results of data reviewed and field investigations, as well as an understanding of the toxicology of the chemicals of potential concern.
<b>Hazard index (HI)</b>	Sum of the EoPC – specific hazard quotients for an exposure scenario.
<b>Hg</b>	Mercury
<b>HHERA</b>	Human Health and Ecological Risk Assessment
<b>HHRA</b>	Human Health Risk Assessment
<b>HQ</b>	Hazard Quotient. The ratio between the calculated potential dose of a substance and the toxicity reference value for that substance.
<b>HTP</b>	Humber Treatment Plant
<b>Human health risk</b>	The likelihood (or probability) that a given exposure or series of exposures to a hazardous substance will cause adverse health impacts on individual receptors experiencing the exposures.



## GLOSSARY

<b>ILCR</b>	Incremental lifetime cancer risk. An upper-bound estimate of the excess potential cancer risk, expressed as a probability of cancer incidence for an exposed individual over a lifetime.
<b>Ingestion</b>	Exposure to a substance through the mouth and into the gastrointestinal system.
<b>Inhalation</b>	Exposure to a substance through the respiratory tract system.
<b>Intake</b>	The amount of material taken into the body (e.g., inhaled, or ingested) during a specified time period. (i.e., a measure of exposure, often expressed in mg EOPC /kg BW-day).
<b>IR</b>	Ingestion (or intake) Rate
<b>Jacques Whitford</b>	Jacques Whitford Limited
<b>LADI</b>	Lifetime Average Daily Intake
<b>LCLM</b>	Lower Confidence Limit of the Mean
<b>Lifetime average daily dose</b>	The average dose of a substance over a lifetime, expressed as a mass of a substance per unit body weight per unit time.
<b>Modeling</b>	Use of mathematical algorithms to simulate and predict real events and processes.
<b>MOE</b>	Ontario Ministry of the Environment
<b>NEBRA</b>	New England Biosolids and Residual Association
<b>Ni</b>	Nickel
<b>NMA</b>	Nutrient Management Act
<b>NTTP</b>	North Toronto Treatment Plant
<b>OMAF</b>	Ontario Ministry of Agriculture and Food
<b>OTR</b>	The typical range of concentrations of a compound in Ontario soils.



## GLOSSARY

<b>OTR<sub>98</sub></b>	The 98 <sup>th</sup> percentile concentration of the Ontario Typical Range
<b>Pb</b>	Lead
<b>PCBs</b>	Polychlorinated biphenyls
<b>PCDD/F</b>	Polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs), commonly referred to as PCDD/F
<b>PhATE</b>	Pharmaceutical Assessment and Transport Evaluation model
<b>PhRMA</b>	Pharmaceutical Research and Manufacturers Association
<b>Potency</b>	A measure of the relative toxicity of a substance.
<b>Receptor</b>	Refers to members of a potentially exposed population, e.g., persons or organisms that are potentially exposed to a particular substance.
<b>Risk assessment</b>	The determination of the potential adverse health or environmental effects due to exposure to substances that may cause harm.
<b>Risk management</b>	The steps and processes taken to reduce, abate, or eliminate unacceptable risks that have been identified by a risk assessment.
<b>Risk</b>	The probability or likelihood of an adverse consequence from a hazardous situation or hazard, or the potential for the realization of undesirable adverse consequences from impending events.
<b>RME</b>	Reasonable Maximum Exposure
<b>SAS</b>	Surfers Against Sewage
<b>Se</b>	Selenium
<b>SEM</b>	Standard Error Mean
<b>SF</b>	Slope factor
<b>Slope factor</b>	A plausible upper-bound probability estimate of a response per unit intake of a substance over a lifetime. It is used to estimate an upper bound probability of an individual developing cancer as a result of a lifetime of exposure to a particular level of a potential carcinogen.



## GLOSSARY

<b>Stddev</b>	Standard deviation
<b>Surface Water</b>	Water from lakes, rivers and streams.
<b>TDI</b>	Tolerable Daily Intake
<b>TEQ</b>	Toxic Equivalent Quotient
<b>Threshold</b>	The lowest dose or exposure of a substance at which a specified measurable effect is observed and below which such effect is not observed.
<b>Tolerable Daily Intake</b>	The estimate of lifetime daily exposure of a non-carcinogenic substance for the general human population that appears to be without an appreciable risk of deleterious effects
<b>Toxicity</b>	The harmful effects produced by a substance; the quality or degree of being poisonous or harmful to human or ecological receptors.
<b>TPH</b>	Toronto Public Health
<b>TR</b>	Target Risk
<b>TRV</b>	Toxicity Reference Value
<b>UCLM</b>	Upper Confidence Limit of the Mean
<b>Uncertainty</b>	Lack of surety in the estimate of a variable's magnitude or probability of occurrence.
<b>Uncertainty factor</b>	Refers to a factor that is used to provide a margin of safety when extrapolating toxicity reference values from experimental or epidemiological data.
<b>UF</b>	Uptake Factor
<b>US EPA</b>	United States Environmental Protection Agency
<b>US FDA</b>	United States Federal Drug Agency
<b>WEAO</b>	Water Environment Association of Ontario



## GLOSSARY

<b>WES</b>	Works and Emergency Services, City of Toronto
<b>WHO</b>	World Health Organization
<b>Zn</b>	Zinc

