

APPENDIX C

GLOSSARY

Glossary

Absorption	The movement of pesticides into plants, animals or structures (soil or wood).
Action threshold	The point at which treatment should take place to prevent a pest from causing harm. Timing depends on the type of treatment.
Active ingredient	The substance in the pesticide that controls the pest.
Acute toxicity:	An adverse effect or response seen in a person within a few hours to days after exposure.
Adjuvant	A substance added to a pesticide solution to improve product effectiveness. Examples include emulsifiers, wetting agents, and surfactants.
Adsorption	The binding of a pesticide to the surface of a plant or soil particle
Air gap	Physical separation of a water system from a pesticide mixture by a vertical air space.
Antifoaming agents	A substance used to reduce foaming of spray mixtures that require vigorous agitation.
Behavioural controls	Use a pest's natural behaviour to suppress population.
Beneficial	Useful or helpful to people (i.e. beneficial insect that feeds on aphids).
Buffer zone	Areas or strips of land left untreated to protect a nearby area (i.e. a sensitive water body, habitation).
Buffering agents	Increase stability of pesticides in water.
Calibration	Checking and adjusting sprayer output of pesticide by application equipment.

Carrier	Material that is added to a pesticide formulation to dilute it and to make the formulation less toxic so it can be evenly applied.
Cartridge	The part of a respirator that absorbs fumes and vapours from the air before it is breathed in. It contains activated charcoal.
Chemical degradation	The breakdown of pesticides by chemical reactions with other materials in the soil. (i.e. water).
Chemical name	The chemical name of the active ingredient.
Chronic toxicity	Adverse responses that occur and persist over time after exposure(s). Chronic effects are often permanent. These may result from a single or repeated exposure.
Commercial class (Agricultural or Industrial) pesticide	Meant for use in commercial agriculture, forestry, or industry (not the general public). They have low to medium toxicity.
Contaminate	When a chemical alters or renders a material or food unfit to use.
Degradation	A complex chemical is reduced into a less complex form. This may be the result of microbes, water, air, sunlight or other agents.
Dermal	Relates to the skin.
Dermal absorption	The intake of a substance through skin. It results from direct contact to unprotected areas.
Desorption	When a pesticide bound (adsorbed) to soil particles or other material is released.
Diluent	A substance, often water, mixed with a pesticide to make the proper concentration for application.
Domestic class pesticide	Intended for home use. They contain active ingredients with low toxicity, or the concentration of the formulated product is low.

Drift	Movement of pesticide droplets or dust, by wind or air currents, from the target area. Drift is a major hazard of pesticide application.
Drift retardants/thickeners	Increase droplet size of spray material and reduce particle drift.
Ecosystem	A community of organisms that interact with one another and their environment.
Emulsifiers	Allow oil-based pesticides to mix with water.
Environment	The surroundings (water, air, soil, plants, and animals).
Face shield:	A see-through piece of protective equipment used to protect the face from exposure.
Fire point	The lowest temperature at which a substance will ignite and burn for at least 5 seconds.
First aid	A series of actions taken immediately to help stabilize a patient and sustain life until medical help arrives.
Flash point	The lowest temperature at which an ignition source will cause liquid vapours to ignite near the surface of a liquid.
Forest or Forest management category- restricted	Applies to wooded areas or sites to be planted to forest of more than 500 hectares.
Fume	a smoke, gas or vapour
Granular	A pesticide in the form of coarse particles that are applied dry with a spreader, seeder, or special applicator.
Habitat	An environment in which organisms live.
Hazard	The danger of exposure when working with pesticides.
Host	A living plant or animal that a pest depends on for survival.

Incompatible	When pesticides cannot be mixed or used together. When incompatible pesticides are mixed together, one or more may precipitate from the mixture, the effectiveness of one or more may be reduced, or injury to plants or animals may result.
Ingestion or Oral exposure	The intake of a substance by mouth (accidental ingestion, suicide attempts, or eating of contaminated food).
Inhalation exposure	The breathing in of airborne particles of a substance. Fine powders, spray droplets, vapours, or gases may be inhaled into the lungs.
Injury threshold	The level at which pest numbers are high enough to cause unacceptable injury or damage.
Integrated Pest Management (IPM)	A decision-making process based on preventing pest problems. All available information and treatment methods are considered in order to act in an economically and environmentally sound manner.
Invert emulsifiers	Allow water-based pesticides to mix with oil-based carriers
IPM	See: Integrated Pest Management
Large spill	More than 20 L or 20 kg of concentrated pesticide or more than 200 L of pesticide mix.
LC₅₀: (lethal concentration 50%)	The concentration (in parts per million) of a pesticide in the air or water that is needed to kill half of the test animals exposed to it.
Leaching	The movement of chemicals through soil or water.
Manufacturing class pesticide	Products used only to make or formulate end-use products.
Material Safety Data Sheet (MSDS)	Legislated under WHMIS. Provide information on health hazards, personal safety, and environmental

	protection for hazardous products.
Maximum Residue Limits (MRLs)	The maximum amount of pesticide residue permitted to be in food products.
Microbe	Tiny organisms (i.e. bacteria, fungi, and viruses)
Microbial degradation	The most common form of breakdown. It is the use of a pesticide product as an energy or food source by soil microorganisms. (Microbes)
Non-selective herbicide	A herbicide that affects all plants that contact it.
Ocular exposure	The intake of a substance through the eyes. Eyes absorb pesticides easily through their many blood vessels.
Parasite	An organism that lives in or on the body of another and obtains nourishment from it.
Particle drift	Pesticide particles that remain in the air after application and move away from the treatment site.
Penetrants	Allow a pesticide to get through the outer layer of a treated surface.
Persistence	The ability of a pesticide to remain in the environment for a long time without changing.
Personal protective equipment or clothing (PPE)	Clothes, materials, or devices that offer protection from pesticides; especially important when handling or applying toxic pesticides (i.e. gloves, apron, boots, coveralls, hat, respirator, splash apron, goggles, and face shield).
Pest	Any harmful, noxious, or trouble organism that may cause an undesirable effect. Pests include fungi, bacteria, viruses, weeds, insects, mites, rodents, and birds. Wildlife (raccoons, wolves, deer) may be named as pests.

Pesticide	Designed to kill, control, repel, attract, or manage pests. Any product that claims to do this is a pesticide under the <i>Pest Control Product Act and Regulations</i> . Chemicals that regulate plant growth, defoliants, and plant desiccants are also considered to be pesticides.
Pesticide label	As defined in the <i>Pest Control Product Act</i> . “Any legend, word, mark, symbol, or design applied or attached to, included in, belonging to, or accompanying any control product”. A pesticide label is a legal document in Canada.
Pesticide residue	A deposit that remains in or on a crop or other substance after the application of a pesticide.
Pesticide resistance	Occurs when a pest population is exposed to the same, or a similar, pesticide a number of times. A few individuals may have a genetic difference that enables them to survive a pesticide application. These reproduce and generate a new population that is resistant to the pesticide.
Pheromone	A chemical produced by insects to communicate to other insects. These are used as signals, alarms, or to attract mates.
Photodegradation	The breakdown of pesticides by sunlight into simpler compounds.
Phytotoxic	Poisonous or injurious to plants
Predator	An organism that preys on another. A predator kills its prey to feed on it.
Residue	Pesticide that remains on or in the crop (or other substance)
Respiration	Breathing. This is also the physical and chemical processes by which an organism supplies cells and tissues with oxygen. It is the use of oxygen to produce energy to sustain life.

Respirator	A device to protect the wearer from breathing hazardous air.
Restricted class pesticide	May have safety concerns related to human health, plants, animals, or the environment. They often have special, detailed labels to show how to handle them safely. Only certified applicators may use them.
Risk	The chance that someone or something will be harmed by the toxicity of and exposure to the pesticide.
Rodenticide	A pesticide used to control rodents.
Runoff	Movement of water down a sloping surface.
Small spill	Less than 20 L or 20 kg of pesticide concentrate or less than 200 L of pesticide mix.
Spray drift	The airborne movement of spray droplets from a treatment site during the application.
Spreader	Allow a pesticide to form a uniform coating over a treated surface.
Stickers	Allow a pesticide to stay on the treated surface.
Surface runoff	Movement of pesticide from the treated area over the soil surface.
Surfactant	A substance used in a pesticide to make mixing easier. It reduces surface tension of a liquid to spread it out over a surface (rather than "beading-up" in small droplets). This allows it to adhere to the surface being treated. Examples include: emulsifiers, soaps, wetting agents, detergents and spreader-stickers.
Tank mix	The blending of pesticides in the same spray tank. Pesticides should not be "tank mixed" unless approved on the label of each pesticide to be mixed.
Toxicity	The harm a particular pesticide may cause to an

organism. Toxic effects may vary with sex, health, age, weight, or prior exposure to other pesticides.

Vapour

Gas produced by a substance that is a solid or liquid at room temperature. A gas or vapour is not an aerosol or mist (composed of tiny droplets of liquid suspended in air).

Vapour drift

Movement of vapours (fumigant or volatile pesticide) from the area of application. It usually occurs after an application.

Volatilization

The process where solids or liquids become vapour (gas).

Wetting agents

Allow wettable powders and dry flowables to mix with water and stick or spread on target surfaces.

WHMIS:

Workplace Hazardous Materials Information System.

Woodlands management category - commercial

Applies to wooded areas of 500 hectares or less planted as tree nurseries, rights-of-way, and seed orchards.

Woodlands management category- restricted

Applies to wooded areas of 500 hectares or less or sites to be planted to forest.