# **GLOSSARY**

Beneficial use	<ul> <li>use of a product with a defined benefit, such as biosolids used as soil amendment</li> <li>disposal, such as landfilling or incineration, is not beneficial use</li> </ul>
Biosolids	<ul> <li>organic fertilizer or soil amendments produced by the treatment of domestic wastewater</li> <li>biosolids consist primarily of dead microbes and other organic matter</li> </ul>
BMPs – Best Management Practices	<ul> <li>operating methods that ensure the proper land application of biosolids for protection of the environment</li> <li>include agronomic loading rates, slope limitations, soil pH limitations, buffer zones, public access restrictions, grazing deferments, soil conservation practices, restrictions for saturated and frozen soils, protection of endangered species, and other site restrictions</li> </ul>
Dewatering, dewatered biosolids	• process used to remove water from biosolids, producing dewatered biosolids that contain equal to or greater than 20% dry solids
Disposal	<ul> <li>method of final disposition that does not provide any beneficial use</li> <li>includes landfilling and incineration</li> </ul>
Groundwater	<ul> <li>the subsurface water within the zone of saturation</li> <li>moves under the influence of gravity and is, in many instances, a source of well water for domestic and agricultural use</li> </ul>
Heavy metals	• 11 elements that must be measured in biosolids and soils that are to receive biosolids, including arsenic (As), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), mercury (Hg), molybdenum (Mo), nickel (Ni), lead (Pb), selenium (Se), and zinc (Zn)
Incorporation	<ul> <li>mixing biosolids with the soil</li> <li>includes injection, mouldboard ploughing, roto-tilling, chisel or disk ploughing, and tandem disk harrowing</li> </ul>
Land application • beneficial use of biosolids applied to land based on crop needs and the composition of biosolids	
Leaching	• the movement of soluble components in solution from the soil by water
Municipal (domestic) wastewater	<ul> <li>wastewater from restrooms and sanitary systems of residences, cities, mobile home parks, subdivisions, restaurants, rest homes, resorts, motels, factories, stores and other commercial businesses</li> <li>also includes industrial contributions when domestic and industrial wastewaters are combined in a city sewer system</li> </ul>
Pathogen	an organism capable of causing a susceptible host to develop a disease or infection
Plant-available nitrogen (PAN)	<ul> <li>a calculated quantity of nitrogen made available during the growing season after application of biosolids</li> <li>PAN includes a percentage of the organic nitrogen (30% in year 1), a percentage of the ammonium N (depends on pH and incorporation), and all the nitrate-nitrogen in the biosolids</li> </ul>
Septage	the biodegradable waste from septic tanks and similar treatment works     includes the sediments, water, grease and scum pumped from a septic tank
Sewage biosolids • the solid, semi-solid or liquid residue removed during the treatment of wastewater	
Soil pH	<ul> <li>an index of the acidity or alkalinity of a suspension of soil in a liquid such as distilled water or dilute salt solution</li> <li>the index is the logarithmic expression of the chemical concentration activity of H-ions in the liquid surrounding the soil particles</li> <li>a pH &gt;7.0 is alkaline and &lt;7.0 is acid</li> <li>a soil pH is not a measure of total acidity in a soil – it's a measure of the acidity or alkalinity of the soil</li> </ul>
Soil profile	• a two-dimensional view of the soil from Earth's surface down to and including the parent material
Soil saturation	• the water content of a soil beyond which no more water is absorbed
Surface runoff	• the water flow that occurs when soil is infiltrated to full capacity, and excess water (from rain, snowmelt, or other sources) flows over the land
Vectors	• rodents, flies, mosquitoes or other organisms capable of transporting infectious agents

### **Agencies and Offices**

# For More Information

## Acknowledgements

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web: www.ene.gov.on.ca

web: www.omafra.gov.on.ca

To obtain your copy or a link for downloading, please see the appropriate contact information under Agencies and Offices.

#### MOE

Spill Reporting – A Guide to Reporting Spills and Discharges (May 2007)

#### **OMAFRA**

Farm and Neighbour Relations: Preventing and Resolving Local Conflicts, Order. no. 05-001

Septic Smart www.omafra.gov.on.ca/english/environment/facts/sep\_smart.htm

Soil Fertility Handbook, OMAFRA Publication 611

FACTSHEETS, INFO SHEETS, Q and As www.omafra.gov.on.ca/english/nm/nasm.html www.ene.gov.on.ca/en/land/nasm

NUTRIENT MANAGEMENT LEGISLATION IN ONTARIO Ontario Regulation 267/03 www.e-laws.gov.on.ca Nutrient Management Act, 2002 – O.Reg. 267/03

BMP SERIES (see pg. i for a complete list)
Irrigation Management
Managing Crop Nutrients
Manure Management
Nutrient Management Planning

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