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Proposed Summerland Organics Processing Facility – Information Sheet

Preventing and diverting organic waste from entering landfills can save landfill space, nutrients, and greenhouse gas emissions.

Agricultural Organic Waste: means agricultural by-products within the meaning of the Code of Practice for Agricultural Environmental Management, except it does not include

- (a)human or animal food waste that is diverted from residential, commercial or institutional sources,
- (b) waste materials derived from non-agricultural operations, or
- (c)wood waste derived from land clearing, construction or demolition;

Biosolids: means stabilized municipal sewage sludge resulting from a municipal waste water treatment process or septage treatment process which has been sufficiently treated to reduce pathogen densities and vector attraction to allow the sludge to be beneficially recycled in accordance with the requirements of the Organic Matter Recycling Regulation. Biosolids are rich in nutrients which may be beneficially used to improve soil conditions and provide nutrition for plants. In B.C., the Organic Matter Recycling Regulation sets requirements for the production of high quality biosolids and subsequent beneficial use in land application and composting;

Compost: means a product which is

- (a)a stabilized earthy matter having the properties and structure of humus,
- (b)beneficial to plant growth when used as a soil amendment,
- (c)produced by composting, and
- (d)only derived from organic matter;

Composting: means the controlled biological oxidation and decomposition of organic matter in accordance with the time and temperature requirements specified in the Organic Matter Recycling Regulation;

Composting Facility/Organics Processing Facility: means a facility that processes organic matter to produce compost;

Feed Stock: refers to any bulk raw material constituting a principal input for a process;

Fertilizer: means an organic or inorganic material of natural or synthetic origin, other than liming material, that is added to a soil to supply one or more plant nutrients;

Foreign Matter: means a contaminant that is not readily decomposed during the composting process, and includes demolition waste, metal, glass, plastic, rubber and leather, but does not include silt, sand, rocks or stones, or gravel less than 2.5 centimetres in diameter, or other similar mineral materials naturally found in soil;

Greenhouse Gas (GHG): A greenhouse gas is a gas that absorbs and emits radiant energy within the thermal infrared range. Greenhouse gases cause the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone.

Industrial, Commercial and Institutional (ICI) Organic Waste: refers to business organic waste. For example, restaurants, supermarkets, hospitals and universities generate organic waste – whether it is anything from mowing their lawns to feeding their clients – organic waste is produced;

Land Application: means the application to land, after biosolids treatment or composting, of managed organic matter;

Leachate: means

- (a)effluent originating from organic matter being received, processed, composted, cured or stored at a composting facility,
- (b)effluent originating from managed organic matter being stored or applied to land, or
- (c)precipitation, storm water, equipment wash water or other water which has come into contact with, or mixed with, organic matter or managed organic matter being received, processed, composted, cured or stored;

Managed Organic Matter: means Class A biosolids, Class B biosolids or Class B compost;

Organic Matter: means those materials that are suitable for composting:

Column 1 — Organic Matter	Column 2 — Constituents of Organic Matter
animal bedding	animal bedding derived from straw, paper, hog fuel, wood chips, bark, shavings or sawdust.
biosolids	stabilized municipal sewage sludge resulting from a municipal waste water treatment process or septage treatment process which has been sufficiently treated to reduce pathogen densities and vector attraction to allow the sludge to be beneficially recycled in accordance with the requirements of this regulation.
brewery waste/winery waste	used or diverted grain, malt, hop flowers, berries, fruit, leaves and twigs and yeast resulting from brewing or wine making process.
domestic septic tank sludge	sludge removed from a septic tank used for receiving, treating and settling domestic sewage.

fish wastes	fish carcasses and parts from harvested wild stocks, commercial aquaculture operations and fish processing facilities. This would include offal, viscera and mortalities from fish and shellfish. It would also include faeces captured from commercial aquaculture net pens.
food waste	recyclable food for humans that has been diverted from residential, commercial or institutional sources.
hatchery waste	broken or unhatched eggs, unhatched chicks, membranes, embryonic fluids and eggshell.
manure	animal excreta from pets, animals in zoological facilities, fish held in commercial aquaculture or aquarium facilities, livestock, farmed game or poultry. This does not include the management of animal excreta (manure) to which the Code of Practice for Agricultural Environmental Management applies on agricultural land bases, but does include animal excreta (manure) to which that code does not apply.
milk processing waste	sludge or biomass from treatment of milk or fluid milk which has been diverted from human food consumption.
plant matter derived from processing plants	fruit, vegetable and vegetative material derived from fruit and vegetable processing plants that have been removed from an agricultural land base but are no longer agricultural by-products within the meaning of the Code of Practice for Agricultural Environmental Management.
poultry carcasses	carcasses of domestic fowls, such as chickens, turkeys, ducks or geese, raised for meat or eggs. This would include offal and viscera as well as mortalities from fowl which died from reported "Federally Reported Diseases".
red-meat waste	carcasses of red-meat animals such as cattle, swine, sheep, fallow deer, farmed game and farmed bison.
untreated and unprocessed wood residuals	clean (non-contaminated and untreated) wood from lumber manufacture, e.g. shavings, sawdust, chips, hog fuel, ground mill ends and land clearing waste which has been ground with the majority of the greenery removed and no soil present but does not include construction and demolition debris.
whey	the serum or watery part of milk that remains after the manufacture of cheese.
yard waste	clean and untreated wood waste or non-food vegetative matter resulting from gardening operations, landscaping, and land clearing; yard waste does not include wood waste derived from construction or demolition. Neither human or animal food waste that is diverted from residential, commercial or institutional sources, nor manure, is yard waste.

Organic Waste: Generally, refers to biodegradable, compostable waste from homes, agriculture, businesses, institutions, and industrial sources. Examples include food scraps, yard and garden trimmings, food-soiled paper products and biosolids;

Retail-grade Organic Matter: means biosolids growing medium or Class A compost;

Residential Food Scrap/Waste: Single-family and/or multi-family food that is intended for human consumption that is discarded without ever being eaten;

Residential Organic Waste: means residential food scraps/waste and/or residential yard waste;

Yard Waste: means

- (a)clean and untreated wood waste, or
- (b)non-food vegetative matter resulting from gardening operations, landscaping and land clearing,

but does not include wood waste derived from construction or demolition.

- (2)For greater certainty, neither
 - (a)human or animal food waste that is diverted from residential, commercial or institutional sources, nor
 - (b)manure,

is yard waste.



BIOSOLIDS IN BRITISH COLUMBIA

Biosolids are a product of wastewater treatment The Ministry of Environment establishes and enforces standards for wastewater treatment. The treatment plant separates and Sludge is further cleans the water, removes some treated to produce **Biosolids** contaminants, and produces sludge. biosolids. Wastewater treatment Sewage ___ The Organic Matter Recycling Regulation (OMRR) sets requirements for biosolids production, and Waste from homes and Local governments have businesses is piped to source control bylaws to dictates maximum levels of harmful pathogens and the wastewater limit contaminants from contaminants (e.g., heavy metals) to ensure treatment plant. entering the sewer. Sludge | protection of human health and the environment.

38,000 dry tonnes of biosolids are produced in BC every year, enough to cover a football field 25 metres deep.



Biosolids are used in many beneficial ways

Biosolids can be applied to land to support forestry, agriculture or land reclamation

Other Some local governments send sludge or biosolids to the landfill. The Canadian Council 6% **Beneficial Use** of Ministers of Environment **Compost** recommends against this, as Lagooned* it wastes resources and **24%** increases greenhouse gas 16% emissions. Landfilled **7**% (waste) 4% **Beneficial Use -**22% **Landfill closure Beneficial Use -**8% **Beneficial Use -Forestry** 9% **Biosolids Beneficial Use** growing medium Reclamation **Beneficial Use -**Agriculture

Biosolids

- add organic matter and plant nutrients to the soil
- store carbon in soil and decrease greenhouse gas emissions
- increase soil water holding capacity
- sustain healthy soils



Biosolids can be mixed with wood chips, yard waste, or other ingredients to create compost or biosolids growing medium. These materials are well suited for landscaping and agriculture.

Compost facilities and soil amendments are regulated by the Organic Matter Recycling Regulation (or permits).

Use of biosolids is strictly controlled for human health and environmental protection

The Organic Matter Recycling Regulation provides strict controls on how biosolids may be used for agriculture, forestry or land reclamation



*Lagooned: biosolids that are being processed in lagoons at wastewater treatment plants

> A qualified professional must prepare a Land Application Plan (LAP) that specifies where, how much and when the biosolids will be applied.



The LAP is submitted to the Ministry of Environment as well as to Health Authorities (if used on agricultural land or in a watershed used as a permitted water supply) and the Agricultural Land Commission (if on agricultural land).

The Ministry of Environment and Health Authorities can request changes to the LAP to address potential concerns about human health or the environment. Health Authori-





A qualified professional must certify that the LAP was followed and that the soil standards for contaminants were met.

