

COMMODITY

MUSHROOM

Description

Mushrooms are grown in insulated houses, each typically comprising several closed-system growing rooms with each room containing five to seven tiers of wooden or metal framed beds. Growing conditions in each room are carefully monitored and controlled. Mushrooms are picked by hand and must be shipped and refrigerated immediately. The majority of B.C.'s white and brown mushrooms are grown in the Fraser Valley. Common species are agaricus, crimini and portabella.

Mushroom spawn is mixed into compost made from hay, straw, manure, gypsum and other nitrogen-containing compounds. Mushroom-growing medium may be purchased in bulk from a centralized composting operation or it may be produced by a grower on the farm.

Farm Practices of Particular Interest

Practices for specific farm activities can be found in the Farm Practice section of this reference guide. Farm practices that are of particular interest to mushroom production include the following.

Compost Production

Mushroom growers may compost agricultural waste and other additives on their farms to produce mushroom growing media.

See also Farm Practice: [Composting](#)

Equipment Use

The production of mushrooms requires the operation of equipment – in many situations for up to 24 hours a day – for growing, grading, packing, and cooling mushrooms and for maintaining and operating the production facility.

See also Farm Practice: [Mobile Equipment](#)
[Stationary Equipment](#)

Farm Buildings

Mushroom producers require buildings to produce and store mushrooms, to protect equipment, to store fertilizers and pesticides, and to make or store compost.

See also Farm Practice: [Storage of Hazardous Material](#)
[Storage of Farm Supplies and Products](#)
[Structures](#)
[Ventilation](#)

Transportation

Mushroom growers may own or manage vehicles hauling products and making deliveries, in some cases for up to 24 hours a day. Farmers must supply adequate space on the farm property to service the volume, movement and parking of trucks and other traffic related to the activities and production of the farm. Operations which sell directly to the public must provide adequate parking for customers to park off the road.

See also Farm Practice: [Direct Farm Marketing Transportation](#)

Waste Management

Used mushroom growing media may be stored on the farm and applied to cropland as a fertilizer. Storing spent mushroom products is not recommended as a general practice because they attract pests such as flies and rodents. By-products and waste materials that pose a potential for pollution of surface water or ground water should be covered or stored during the rainy season in such a way that contaminated runoff or leachates generated are collected.

See also Farm Practice: [Fertilizers and Soil Conditioners Storage of Farm Supplies and Products](#)

Water Management

Uncontaminated stormwater runoff from farms is permitted to enter municipal drainage systems, provided that a storm water management plan has been prepared in accordance with local government bylaws.

Wastewater or other contaminated runoff cannot be discharged to ditches or streams. Contaminated runoff or wastewater must be collected and applied to vegetated land at an appropriate time and rate or treated and discharged under a permit from the Ministry of Environment.

See also Farm Practice: [Fertilizers and Soil Conditioners Stormwater Management](#)

Principal and Accessory Buildings

From an operational perspective, principal farm buildings on mushroom farms are typically barns used primarily for mushroom beds. Accessory farm buildings can include storages for agricultural wastes, chemicals, compost input materials, compost products, and woodwaste. Other accessory structures may include machine sheds, on-farm composting buildings and detention ponds. From a watercourse protection perspective, however, the definition of principal and accessory buildings may differ. For the purposes of determining applicable setbacks from watercourses and property lines, therefore, local government bylaws or the *Guide for Bylaw Development in Farming Areas* should be consulted. Building assessments may need to be conducted on a case-by-case basis if the designation of a building as principal or accessory is unclear.

Legislation

Agricultural producers are expected to follow all legislation that pertains to their farming operations. The *Farm Practices Protection (Right to Farm) Act* stipulates that the farm operation must meet the *Public Health Act*, *Integrated Pest Management Act*, *Environmental Management Act* and the

regulations under those Acts. Information on federal and provincial legislation can be found in Appendices B and C.

Acts that pertain to specific farm activities are listed in the Farm Practices section of this reference guide. Local government bylaws may also apply to some farm practices. Acts that are not referenced elsewhere and which may be of special interest to mushroom producers include the following.

Federal Legislation

The *Fisheries Act* prohibits the discharge of deleterious substances such as agricultural wastes and fertilizers into waters frequented by fish.

Provincial Legislation

The *Environmental Management Act* protects the soil, water and air environment from pollution.

The *Mushroom Composting Pollution Prevention Regulation* under the *Environmental Management Act* sets minimum standards for composting.

Local Government Legislation

Applicable local government legislation may include stormwater bylaws.

Publications

Publications that provide information on mushroom production include, but are not limited to, the following. Refer to Appendix D for details.

British Columbia Agricultural Composting Handbook
British Columbia Environmental Farm Plan Reference Guide
Mushroom Production Guide