

Environmental FACTSHEET



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WOODWASTE USE IN AGRICULTURE - Precautions -

The Agriculture Waste Control Regulation, under the Environmental Management Act, defines woodwaste as follows: Woodwaste includes hog fuel, mill ends, wood chips, bark and sawdust, but does not include demolition waste, construction waste, tree stumps, branches, logs or log ends.

All woodwaste, particularly woodwaste that contains softwood residues from western red cedar, will produce leachate when exposed to rainfall or irrigation. This leachate can be toxic to the environment and then classed as a pollutant. Therefore, uses of woodwaste which result in the generation of leachate that could escape to the environment and cause pollution must be avoided.

CHARACTERISTICS OF WOODWASTE LEACHATE

Woodwaste leachate is typically a black, strong smelling, foamy liquid with a high chemical and biological oxygen demand and a high toxicity to fish when it enters water. It usually contains lignins, tannins and tropolones which are toxic compounds. The leachate is generally acidic and has a high reserve acidity (buffering capacity). It creates an iridescent (oily) slick on water it enters into and may have a sweet industrial or petroleum odour. Due to its colour, which is black rather than the tea brown colour of peat water, woodwaste leachate screens the passage of light into water. Light and oxygen are essential to the production of aquatic plant production and fish rearing.

The impact of woodwaste leachate is more severe on watercourses such as small streams and ditches that are distant from main water bodies like the Fraser River. These small watercourses often have low flow levels and are critical fish habitat for rearing and growth of fry. Therefore, farming operations, particularly those growing nursery stock, blueberries and cranberries or having equestrian riding facilities, which are located near watercourses, **must use woodwaste with caution.** Although minimum setback distances are not presented in any regulations, a setback of 15 meters has been suggested as being potentially acceptable where practical based on site conditions. Natural attenuation may aid in the treatment of woodwaste leachate. However, it is not likely to be successful for the large volumes of leachate generated on most farming operations in South Coastal British Columbia, as a result of the high rainfall conditions which are experienced in this area.

Woodwaste leachate can also cause contamination of irrigation and drinking water. Consumption of drinking water contaminated with woodwaste leachate can result in human illness, hence the 30-meter setback in the Agriculture Waste Control Regulation. Irrigating with water contaminated with woodwaste leachate can lead to damage and discolouration of fruit and plants. Woodwaste leachate in combination with other suspended solids may form slimes that can plug trickle irrigation systems.

WOODWASTE AND REGULATIONS

The Environmental Management Act for British Columbia has permit provisions for the storage and use of woodwaste. Most agricultural operations are exempt from a permit for these activities as long as they comply with the Agriculture Waste Control Regulation. Municipal Bylaws may also restrict the use of woodwaste in some cases.

The Agricultural Land Reserve Use, Subdivision and Procedure Regulation also regulates wood waste and requires that it is used and stored for agricultural purposes and in compliance with the Agriculture Waste Control Regulation.

Woodwaste Use

The use of woodwaste in agriculture is accepted so long as it is used for: plant mulch, soil conditioner, ground cover, on-farm access ways, livestock bedding and areas where livestock, poultry or farmed game are confined or exercised, berms for cranberry production, or as fuel for wood fired boilers.

Woodwaste is not allowed to be placed in watercourses (including ditches) or used as fill.

Woodwaste Storage

Woodwaste stored and used on a farm must be handled so as to prevent any escape of particulate or solid matter from the woodwaste into the air, or particulate or solid matter or leachate from the woodwaste into any watercourse or ground water that causes pollution.

Woodwaste used on a farm must **not** be used for landfill, or on sites within 30 meters of any source of water used for domestic purposes.

The key to all sections of the Agriculture Waste Control Regulation as it pertains to woodwaste, is that it does not allow the use of woodwaste if that use causes pollution.

FOR FURTHER INFORMATION CONTACT

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