



Dryland Log Sorting Operations Best Management Practices

DLS operations pose a number of environmental risks which may be reduced if appropriate environmental management practices are followed. As such, DLS operations must comply with waste discharge authorizations for landfilling waste and other requirements contained in the Hazardous Waste Regulation for the storage of waste oil, antifreeze and batteries, the British Columbia Fire Code for the management of petroleum products, and the Spill Reporting Regulation for reporting spills and other emergencies. The following Best Management Practices combine regulatory requirements with stewardship considerations to minimize the environmental risks associated with DLS operations.

A. LOG SORT:

- All surface water associated with the DLS site should be collected in ditches and diverted away from the active area, the temporary wood waste storage area, and any sediment sources. Ditches should be cleaned-out on a regular basis. The ditches should be designed to allow settling out of material, and if possible an oil/water separator installed prior to the runoff discharging to the environment.
- The sort should be protected from run-on drainage from upslope areas to reduce the potential for leachate generation.
- The working surface should be graded to prevent ponding of water. If possible the working surface should be paved.
- Recovery of wood waste for firewood or other uses should be undertaken where practicable. Recycling of wood waste by returning it to deactivated roads or forestlands as organic material or soil conditioner may be good alternatives.
- Measures should be taken to prevent the “escape” of wood waste from the DLS site such as a berm around the outer edge of the sort surface.
- Removal of wood waste from high generation areas such as loading bunks, jack ladders, log decks and high traffic areas to temporary storage or authorized disposal sites should be conducted frequently.
- The working area should be cleaned between loads to prevent loss of material to the environment.
- When stored, wood waste should be placed in a conical pile and transferred to the landfill as soon as possible. The storage area should be protected from run-on drainage.

B. LANDFILL:

- Unacceptable waste includes: hazardous waste (e.g., antifreeze, batteries, oil containers, paints, solvents), dead animals, putrescible wastes, liquids, tires, metals and other recyclable products, and large (greater than 1 meter) pieces of wood.
- All water entering into the landfill site should be intercepted by diversion ditches. The ditches should also prevent run-on drainage from upslope areas.
- The landfill should be properly contoured to prevent ponding and enhance run-off into the diversion ditches.

- Landfill side slopes should be constructed with slopes of 25% (4H:1V) or less.
- Wood waste should be well compacted.
- The maximum depth of waste lifts is 3 meters.
- An intermediate cover of 0.3 meters of compacted sediment material should be placed on areas where no additional waste will be deposited within 30 days and on all completed lifts.
- No smoking or open flames at the landfill.
- Fire extinguishing equipment should be maintained and be available to landfill operational staff.
- A closure plan should be established

C. OPEN BURNING (Authorization applications are only considered in remote locations)

- Pave the sort or use a trammel screen to reduce the presence of fines (i.e., soil and wood particles) in wood waste to be open burned. Fines restrict the oxygen supply which can in turn result in low temperature combustion and poor emission quality.
- Make sure the weather conditions are adequate prior to starting a burn by checking Environment Canada's Venting Index at <http://www.bcairquality.ca/> or by calling the Venting Index Hotline at 1-888-281-2992. A higher venting index (i.e., >55) indicates that emissions are able to disperse over a greater area thereby reducing local impact.
- Use an auxiliary air supply source such as a blower to increase the temperature of the burn.
- Do not feed wood-waste to an active burn pile because it causes a short-term increase in flyash and reduction in the fire temperature and thereby reduced emissions quality.
- Always have an adequate firebreak to combustibles and have fire tools available for extinguishing the fire.
- The residual ash should be cooled and then disposed of at the authorized wood-waste landfill.
- Always have an attendant on duty while a burn is underway.

D. HAZARDOUS WASTE MANAGEMENT

- If the following hazardous wastes are stored in quantities above the volumes listed below, then registration under and compliance with the Hazardous Waste Regulation is necessary:
 - Oil - 5,000L (approximately 25 drums)
 - Anti freeze - 500L
 - Batteries - 2,000 kg (approximately 100 units)
- Regardless of quantities, the above waste should be stored in such a way as to protect them from the elements of weather and contain a spills.

E. PETROLEUM PRODUCTS MANAGEMENT

- If there is >100,000 L of fuel being stored on site, the facility should be registered under and comply with the Petroleum Storage and Distribution Stormwater Regulation.
- All petroleum products should have adequate containment and protection from weather in order to prevent accidental releases to the environment

F. SPILL / EMERGENCY MANAGEMENT

- An emergency response plan should be developed.
- DLS staff should receive training in spill response and hazardous waste handling.
- If a spill occurs, it must be reported to the Provincial Emergency Program at 1-800-663-3456. A spill means a release into the environment of a substance in an amount equal or greater than the following:
 - Oil – 100L (1/2 drum)
 - Fuel – 100 L
 - Anti freeze – 5 L
 - Batteries – 200 Kg (10 units)
- All petroleum product storage facilities and fueling stations must be equipped with complete spill containment in accordance with the BC Fire Code (Part 4, Section 4.1.6).
- If there is an emergency or condition beyond the control of the operator, which prevents them from meeting the requirements of the authorization, the person must immediately take appropriate measures and notify the Director within two business days. Examples of emergencies include:
 - Any fire at the landfill site;
 - Any unplanned escape of leachate or another substance from the landfill site;
 - Any subsidence or other sign of instability of the landfill site;
 - Any other occurrence at the landfill site posing a risk to public health and safety.

For further information or inquiries in:

- Haida Gwaii and Central Coast please contact Melanie Mamoser at 250-751-3197 or Melanie.Mamoser@gov.bc.ca, or
- Vancouver Island and Johnstone Strait please contact Ruth-Ann Devos at 250-751-3187 or RuthAnn.Devos@gov.bc.ca.