Landfill Best Practices



Solid Waste Management
Fire at the Landfill
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Training Session Agenda

- Fire Prevention Act
- Emergency Fire Plan
- Fire Safe Perimeter
- Health and Safety at the Landfill
- Daily operations
- Day to Day requirements



Fire Prevention Act

Under Section 29 of the Forest Fire
 Prevention Act, it is illegal to throw or drop
 smoking materials, hot ashes or live coals
 within 300 meters of a forest area. Anyone
 who ignores the provision of the act and
 starts a wildfire can be charged and held
 liable for the costs of putting out the fire.



Fire Prevention Act Continued

Every person having charge of a camp, a mine, a mill for the purpose of manufacturing timber or wood products or a garbage dump that is located in or within 300 meters of a forested area shall have the area surrounding the camp, mine, mill or dump cleared of flammable debris for a distance of 30 meters and such further distance as may be ordered by an officer



The following things should be considered when preparing a fire plan for the Landfill

- What are the risks, should a Fire happen at the Landfill
- Can the fire escape the Landfill boundaries
- Is there a fire break at least 30 meters from the Landfill to the tree line.
- Is the fire break down to mineral soil
- No combustible materials are located in break



- Are all emergency phone numbers posted, With O & M Manager, Fire Department, or possibly Chief or Council Members.
- Does the Landfill have a water supply, pond, stream, lake, is it easily accessible.
- Does the Landfill have working Fire Extinguishers, Fire Pack Cans.
- Are signs posted at landfill for location of Extinguishers and Pack Cans.



- Does your community have a organized Fire Team?
- Does your community have a working Fire Truck?
- Does your community have suppression agreements with surrounding municipalities? (Mutual Aid)
- Does your community have a Fire Chief
- Are your local police part of your plan



- Are No Smoking signs posted in several spots at Landfill
- No burning of garbage at landfill site signage posted at Landfill.
- Is Landfill entrance and road into Landfill wide enough to allow Fire Truck or Water Truck enough room to drive into active landfill area to action fire.



- Are the Landfill Heavy Equipment parked in a Fire Safe location.
- Are ditches heading into Landfill free from combustible material.
- Do ditches have a10 to 30 meter Fire Safe perimeter from tree line
- Beyond the 30 meter Fire Safe perimeter has the forest around the Landfill been cleared of laddering fuels.



Fire Safe Perimeter





Ditch Along Roadway



Cleared of Laddering Fuels





- Community needs a fire safe area in or around community should a forest fire start at Community Landfill.
- Prevailing spring and summer winds need to be considered when determining fire safe area to evacuate to.
- Aspect, slope. Is the Landfill facing South?
 If it is everything will be much drier. Fire always spreads faster uphill.



- Who is responsible for transportation to ensure all community members get moved to pre determined safe area.
- Who is responsible to account for everyone.
- How will you get the message out to all community members that they have to evacuate to fire safe area. Radio, Community TV, Door to Door.



Capping Landfill

- It is very important to cap the landfill garbage with mineral soil, before all of the snow is gone in April.
- By capping landfill you reduce the risk of spring fires when the forest surrounding landfill, is extremely dry and very susceptible to fire.
- Capping landfill after winter months also will help eliminate odors and animals.



Capping Landfill

- Depending on size of community and Landfill use, you should determine schedule for capping Landfill. Weekly, By Weekly, Monthly.
- Soil used for capping should be organic free.
- Cap material should be mineral soil that will not burn.



Health and Safety

- Never work on a Landfill Fire down wind, smoke from burning garbage is hazardous to your health.
- When a Landfill is on fire, aerosol cans, used propane bottles may explode from the heat. Pieces of hot jagged metal will be sent flying in and around landfill.
- Cans of paint, cooking oil, most cans or bottles with liquid in them will explode



Health and Safety

- Cans and Bottles with liquids in them, when they explode will shoot pieces of steel and glass into the air along with boiling hot liquids which could severely injure yourself or anyone that is near the Landfill.
- Deep holes in landfill caused by subsurface fires could cause a high risk, should someone step into garbage and fall to the bottom of the burning hole.

Tires

- Tires should not be stored by combustible materials such as; brush piles, scrap wood piles.
- Tires should be stored on a gravel surface free from combustible vegetation.
- Tires should not be stored next to a stream or waterway.
- Tires should be stacked for ease of loading in the winter in remote communities.

Site Conditions

- Scrap wood and brush storage cell must be located to ensure that if pile was to catch fire it would not escape fire safe perimeter.
- Is scrap wood and brush storage cell close to a water source that could be used for fire suppression.
- What are the prevailing winds at location?
- Before lighting piles what is the forecasted wind speed and direction for the next 48 hours.



Wood Waste and Construction Waste

- Cell should be on bare gravel, with Fire Safe perimeter.
- Wood waste needs to be separated. Brush only, building materials only.
- Pressure treated lumber only
- With the exception of pressure treated lumber, which <u>Cannot</u> be burned. Brush piles and regular non treated lumber can be burnt. Burning must only be done during

Wood Waste and Construction Waste

- Wet conditions. Burning would be best done with snow on the ground.
- Wood piles should not be located right next to regular waste part of the landfill.
- Wood piles should be a minimum of 30 meters from the tree line and Landfill.



Site Conditions

- Scrap wood and brush storage cell must be located to ensure that if pile was to catch fire it would not escape fire safe perimeter.
- Is scrap wood and brush storage cell, close to a water source that could be used for fire suppression.
- Aspect, is scrap wood and brush storage site on a southerly slope.
- What are the prevailing winds at location?



Fire Smart Program

MNRF Fire Smart Program

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- Agreements Advisor
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Questions?





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