

2.2 Burn Management

Burning must be contained, controlled, and managed to minimize adverse environmental effects and limit the amount of smoke generated. (18 AAC 60.233, 18 AAC 60.355, 18 AAC 50.065(b))

Key aspects of good burn management:

Waste should be kept dry.

Burn unit should be loaded, lit, and monitored by the operator.

Burning should only occur in appropriate weather.

Why are these actions important?

- Waste that is kept dry lights more easily and burns at hotter temperatures. Hotter temperatures lead to more efficient burning so less smoke is generated, and more waste is turned to ash.
- Having **only** the operator load, light, and monitor the burn unit ensures a more complete and efficient burn, reduces the risk of injury to landfill users, and reduces the risk of a fire escaping the landfill.



Waste kept dry prior to burning.

- Burning should only occur when the weather conditions are appropriate. It is not safe to burn in windy conditions or during a burn ban, as that increases the risk of causing a wildfire. It is also best to burn when the wind is blowing away from town so that potentially hazardous smoke does not drift towards the community.

Helpful Tips:

- A fire extinguisher or other fire suppression equipment, such as a loader with a bucket full of soil, must be kept near the burn unit for safety. Having a water tank and a pump or a gravity-fed hose staged at the landfill is a great idea during the dry season while burning. Having a fire suppression system already staged at the landfill will be worth the effort and investment in case it is ever needed.
- Check the weather report for predicted high winds or for the potential of wind blowing

towards the community.

- In the summer months **check for a burn ban prior to igniting waste** by contacting the Department of Natural Resources or the Bureau of Land Management. The regional number for burn ban information can be found in your landfill permit.
- Don't let the waste smolder or create black smoke.
- Clear brush, dead trees, and dead vegetation within a 50-foot boundary surrounding the landfill to prevent wildfires. It is strongly recommended by Alaska's wildfire professionals to increase the firebreak to 90 feet, if possible. This recommendation is anticipated to become required for new facilities, so new landfills and lateral expansions should have a 90-foot firebreak incorporated into the design.
- Maintain a firebreak 25 feet wide down to soil around the burn unit and any staging area for hot ash.
 - If you live in an area of permafrost, it is best to keep the tundra vegetation in place. However, cutting the brush away from the burn unit and fence is still helpful for controlling fires and is considered a best management practice if your landfill does not include a gravel pad to protect permafrost. A maintained gravel pad is acceptable for maintaining a firebreak around a burn unit in permafrost areas, but it must be maintained, and grasses and shrubs must be removed.
- **Ensure that ash is completely cool before placing it at the working face.**
- **Ash residue** from burning can contain toxic pollutants, so be sure to manage it appropriately by **covering it with soil** and **not placing it in or near water**.

Personal Protective Equipment (PPE): At a minimum, the landfill operator should be wearing an OSHA compliant half mask respirator with cartridge filters for smoke and volatile organic compounds (VOCs) if they will be exposed to smoke from the burn unit while it is burning. Proper fit testing is required if a respirator is needed for the job, in order to ensure that it is protecting the individual who needs to rely on that equipment to protect them from hazards they may be exposed to while performing their job duties.

Examples of burn management:



Waste transfer from the collection trailer to the burn unit by the operator.



Covered storage to keep waste dry prior to burning.