

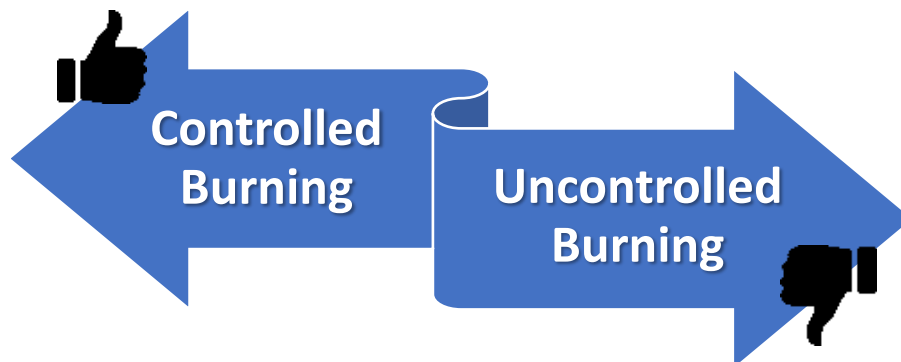
2.0 Burning Waste

It is important to note that a community is not required to burn waste. However, if the community chooses to separate and burn certain wastes, best management practices must be followed to minimize impacts to the community.

Why do communities burn waste?

- Burning separated wastes reduces the volume of waste that needs to be placed in the landfill, so the landfill lasts longer.
- Since the volume of waste is reduced, less cover material is needed.
- Burning food waste reduces animal attraction to the waste and improves landfill safety in areas where wild animals are a hazard.

There are two methods of burning:



Uncontrolled or Open Burning:

Uncontrolled burning, also known as burning waste on the ground, is not an efficient way to burn waste. This method of burning does not burn the waste completely. Instead the waste may smolder for long periods of time, which creates hazardous smoke. These fires also produce uncontrolled fly ash that can start wildfires. Uncontrolled burning does not burn hot and thoroughly enough to prevent environmental and public health hazards.

The risks and impacts of improper burning include air pollution, incomplete combustion (leading to the production of hazardous smoke), the need to use more landfill space, fire hazards, lack of fly ash control, and potential public nuisances (smoke and smell).

Because of the risk and negative impacts, uncontrolled or open burning of municipal waste on the ground is not allowed at Class III landfills.

Controlled Burning:

Controlled burning, which is burning waste within a constructed burn unit, is a more efficient

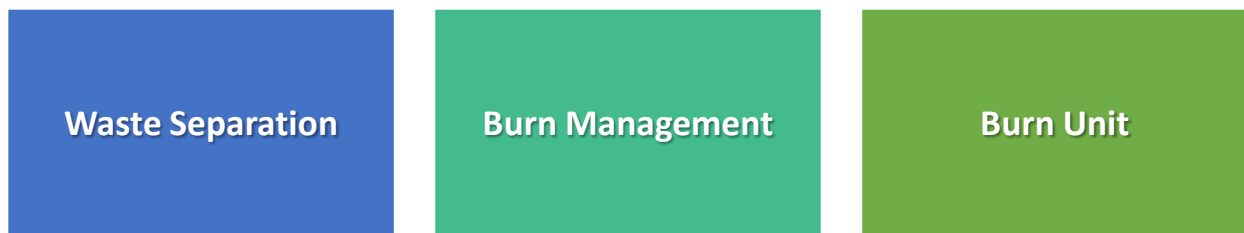
and safer way to burn waste. If waste is properly sorted (see “Waste Management”) and the burn properly managed (see “Burn Management”), a good burn unit helps ensure that the fire burns hot enough to reduce environmental and public health hazards. To burn effectively:

- Waste is segregated (hazardous waste and non-burnables removed) and kept dry
- Only dry waste is placed in the burn unit
- Waste is only lit during favorable wind conditions
- Waste is only lit by the operator who then monitors the fire
- A controlled burn always includes a way to extinguish the fire as necessary

Controlled burning has many benefits. The waste burns hotter, which reduces smoke production, yields a more complete burn, and the resulting ash does not attract animals.

Controlled burning is also safer for the community than uncontrolled burning. Controlled burning reduces the risk of wildfires and reduces the production of hazardous smoke which can drift into the community and/or settle out of the air and impact subsistence resources.

Three key aspects to good burning practices:



These aspects are discussed in detail in the following sections.

2.1 Waste Separation

Burning of plastics, asphalt, rubber, tar, oily wastes, or other materials in a way that gives off black smoke is prohibited. (18 AAC 50.065(b))

Burning is most efficient when the waste is dry, is conducted in a burn unit with plenty of air flow, and the waste streams burned produce little to no smoke. Separating wastes prior to loading the burn unit is an effective way to minimize smoke and ensure that the fire burns clean, hot, and fast.

Waste separation occurs in one of two locations:

At Home

Resident sorts burnables from non-burnables at home and delivers waste to the landfill in separate containers.

At the Landfill

Operator sorts the waste that is delivered to the landfill.

Separating waste at home is the most efficient and least expensive option for a community. It takes less time than separating waste at the landfill because everyone separates their own garbage, which allows the operator more time to focus on other tasks. However, separating at home means that the residents need to accept the responsibility and commit to doing so.

Separating waste at the landfill requires more billable hours for the operator because one person must sort everyone's garbage. This is a viable option if community members are willing to pay additional fees. Personal protective equipment for the operator is also important as they may be exposed to additional safety and health hazards when sorting waste.



Burnable waste segregated into the burn unit.

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The following wastes can be burned:

- Paper
- Cardboard
- Clean wood
- Food waste
- Yard waste or brush cuttings
- Sorted household waste

The following wastes can **NOT** be burned:

- Hazardous waste
- Used oil
- Polluted soil
- Batteries
- Ammunition
- Aerosol cans
- Asbestos containing materials
- PCBs
- Radioactive waste
- Plastics (heavy)
- Styrofoam
- Electronics
- Light bulbs
- Septage waste
- Drums
- Gasoline, diesel, or oil
- Aluminum cans
- Oily rags
- Household chemicals
- Mattresses/Furniture
- Building materials
- Medical waste
- Paint
- Large metals
- Rubber
- Propane cylinders
- Gas canisters



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Helpful Tips:

- Post clear signage listing burnable items and non-burnable items at the landfill and around town if waste is separated at home.
- Post signage stating where and how to dispose of or recycle non-burnable items.

Examples:



Burn unit with a sign nearby describing where burnable and non-burnable waste should be placed.



Sign with instructions for the burn unit.

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Sign outlining burnable vs non-burnable wastes.