2.3 Burn Unit

Uncontrolled or uncontained burning of municipal waste on the ground is not allowed at Class III landfills. Burning must be conducted in a burn unit, burn cage, or other device where the fire is contained and controlled. (18 AAC 60.233, 18 AAC 60.355)

Important features of a burn unit:

Burn units need adequate air flow to provide a complete burn. When purchasing a burn unit, follow the manufacturer's specifications on loading and operating the burn unit to allow enough air to feed the fire. Keeping air vents clear is a must.

A smokestack with a spark arrestor helps direct the smoke up and away from the people on the ground, as well as helps keep sparks and fly ash from escaping the burn unit and causing wildfires. The smokestack also provides ventilation for better combustion.

Purchase or construct a burn unit that is easy to empty using equipment that is already available in the community. If it is not easy to empty the ash, the unit will often become packed with ash, reducing air flow and eventually making the unit unusable.

Factors in choosing the right burn unit:

The number of residents in the community affects the size and type of burn unit to select for the landfill. Most manufacturers will state how many people their burn units are meant to serve so it is important to obtain this information in order to purchase the correct size for the community. A larger community (more than 300 people) may require more than one burn unit, or a larger version of the unit, to suit its needs. A burn unit scaled to fit the community size can be constructed out of local materials for use at the landfill.

The type of equipment on site also impacts the type of burn unit that should be selected for the landfill. It is important to buy or build a burn unit that can easily be emptied using the equipment that is available.

The method of waste collection will also help determine the type of burn unit needed. For example, if waste is collected in large dumpsters (like hook trucks), it would be a lot of work to hand load the trash into a barrel-style burn unit, and a burn cage would be a better choice.

Helpful Tips:

- No matter which burn unit is used, it is important to regularly remove the cooled ash, preferably before the next burn. Ash build-up decreases both air flow and burning temperatures, causing incomplete burns. An easy tip for remembering this is to remember the phrase: **never put trash on top of ash!**
- Once the ash is completely cooled, it should be treated like regular garbage and covered with soil or alternative cover material. Wind and water can move the ash offsite impacting nearby areas and creating potential health hazards. Ash should be covered each time it is placed into the working face to prevent the migration of ash offsite.
- For examples of both manufactured and homemade burn units, more photographs, to obtain assistance finding websites or manufacturers, or for any other help in finding the burn unit that is right for a given community, contact your ADEC Rural Landfill Specialist.

Examples

Enclosed commercial burn unit.

Enclosed commercial burn unit.

Commercial burn unit.

Homemade burn unit.

Homemade burn unit.

Homemade burn unit.