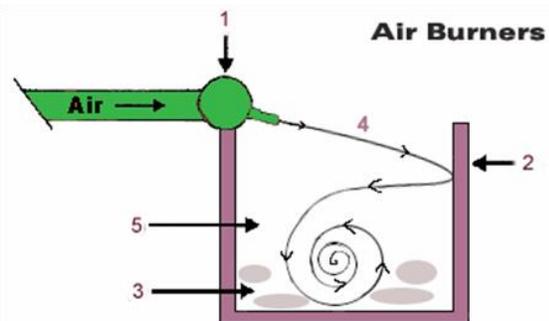
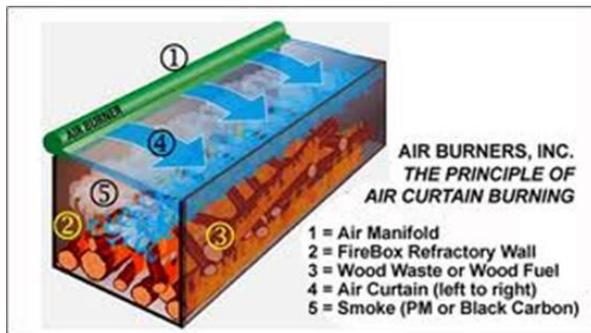


Responsible Air Curtain Burner Usage

CVRD Bylaw No. 2020 (Landclearing Management Regulation Bylaw) bans the open burning of landclearing debris in CVRD Electoral Areas; please refer to the bylaw itself for specific details. In the event that chipping, grinding, or reusing the material onsite are not an option, you will be required to use an air curtain burner.

Air curtain technology, also known as air curtain or trench burners, burns vegetative matter in an enclosed space, with an open top, over which a high velocity 'curtain' of air is directed. Exposure to a constant curtain of air allows for a high temperature, efficient burn that significantly reduces combustion time and smoke generation. If done properly the combustion process can reduce vegetation volumes by up to 98%. Curtain or trench burners function as a pollution control device and reduce the particulate matter emitted from an open burn. Smoke particles are subjected to higher temperatures causing them to re-burn, which greatly reduces their size. The result is a very clean and efficient burn.



The below photos depict a trench burner (left) and a box burner (right) being operated correctly. On the left, a deep trench has been constructed with vertical sides, sized for the blower, so that an air curtain can be maintained over the fire to facilitate recirculation and re-burning of emissions. Note that the landclearing material being burnt, in both formats, is purposely kept well below the curtain of air being blown over the top. Hence, there is minimal, if any, smoke being emitted.



If an air curtain burner is operated properly, there may be slight emissions during start-up and occasionally during feeding as material breaks the curtain of air. However, for the majority of the time, if the material is kept below the curtain of air, and the trench is constructed with deep vertical sides, the result should be a clean, efficient burn.

The below photo depicts a box burner being operated incorrectly. The operational error causing the smokiness is that the landclearing material has been overloaded and has not been kept below the curtain of air.



The below photo depicts a trench burner being operated incorrectly. Note that the trench is too shallow and has not been constructed with deep vertical sides. As a result, the air cannot recirculate correctly. The undesirable end result is, in effect, blowing air on a smoky fire.

