Tree and Brush Mulch Processing and Storage Areas Technical Guidance Document SW-2008-G3

This Technical Guidance Document contains best management practices for areas that are used for processing and storing mulch produced from trees and brush.

Security
Provide security for the site to prevent unauthorized dumping. This security could be either a fence with a locked gate or regular police patrols.

Size
Keep the dimensions of mulch storage areas no larger than 15 feet high and 20 to 30 feet wide. Row length is determined by the size of the area to be used.

Pollution Prevention
Provide a buffer between the brush or mulch and streams to prevent unfiltered runoff from entering the streams. A good stand of grass between the storage area and the stream will provide control of any organics that could be in the runoff.

Mosquito Control
Standing water will allow mosquitoes to reproduce in warmer weather. Do not allow standing water on the storage pad. Keep all ruts and low areas filled in with soil or rock.

Equipment storage
Keep equipment parked away from the brush or mulch to prevent loss in the event of a fire.

Fire Prevention
Trees and brush, when stored in large quantities close to town, can become an attractive place to start a fire. Having a fence with a locked gate may help prevent nuisance fires.

Mulch, especially from green wood, may spontaneously combust if not managed correctly.

✓ Keep storage areas as small as practical.
✓ Allow a minimum of 50 feet on each end of the windrow for fire equipment to maneuver.
✓ Allow room between windrows for fire equipment to maneuver.
✓ Do not pack down the mulch, as this holds moisture in the mulch. Moisture allows the composting process to begin, which provides the heat necessary for spontaneous combustion.
✓ Do not add water to the mulch.
✓ If a fire starts, move the mulch that is not on fire far enough away that sparks will not set it on fire. Dismantle the remaining mulch slowly and use a mist to put the fire out.
On-site Use of Wood Mulch

Wood mulch can be used at the processing and storage site for temporary surfacing of drives and paths, or for filling in holes to level the site for working. When using the mulch in an area that will have traffic, the layer would need to be thick enough to support that traffic (6-12 inches). Walking paths could be made with a fairly thin layer (2-4 inches). Holes that are filled with mulch will most likely need refilled occasionally due to compacting of the mulch. On-site burial is prohibited without obtaining a landfill permit (KSA 65-3407) or authorization for disposal without a permit (KSA 65-3407c) from the Kansas Department of Health and Environment.

As the mulch mixes with the soil it will tend to make the site less stable. The mulch will hold moisture longer and this will cause the soil to soften. The area can also become slick on the surface as the mulch breaks down. Depending on the length of time the site will be used and the amount of traffic, mulch may prove to be unsuitable for the surface and gravel could be necessary.

If the area where the mulch has been used is a grassed area or crop field, the mulch can be incorporated after the area is no longer needed for a wood processing and storage area. The wood waste should be incorporated a minimum of 1 inch deep for each inch of mulch depth. Some extra nitrogen may be needed in the first couple of years to obtain a normal crop yield or a good stand of grass.

For additional information regarding the proper management of solid or hazardous waste in Kansas, you may visit the Bureau of Waste Management website at http://www.kdheks.gov/waste/ or contact the Bureau at: (785) 296-1600, bwm_web@kdheks.gov, or the address at the top of this document.