Patrick White

From: Jay Cullinan

Sent: Thursday, January 3, 2019 11:30 AM

To: Ben Loveday

Cc: Patrick White; Phil Sullivan; Wanda Parrish; Susan B. Eggen; Alexandra Spaulding

Subject: Re: Burning prohibition at sPower

Ben's answer is correct and provides a pretty comprehensive description of the issue. They likely would need to haul off the mulch rather than continue to process it on site.

Jay Cullinan, CFO, EFO, NREMTP

Fire Chief

Spotsylvania Fire, Rescue & Emergency Management

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On Jan 3, 2019, at 11:23 AM, Ben Loveday <BLoveday@spotsylvania.va.us> wrote:

Patrick,

The County runs both a forestry operation and a mulching operation at the Landfill. We have multiple fires each year due to the spontaneous combustion of mulch (typically in the late fall and early spring). Typically the wetter the mulch gets the more it is likely to spontaneously combust as it begins to decompose. You can reduce the risk of mulch fires but you must rotate and aerate the pile either by an excavator and or windrow turner at regular intervals and maintain fire breaks. Mulch will take a long time (years) to fully breakdown to the point that the risk of spontaneous combustion is eliminated.

From experience mulch fires are more difficult to manage verses brush fires.

- 1. Mulch tends to smolder due to lack of oxygen and produces larger volumes of smoke.
- 2. The mulch fire tends to be at the center of the pile and can burn for days with very little to indicate that the fire is burning.
- 3. Mulch fires require that the pile be broken down and the mulch either smothered with dirt and/or large volumes of water. This process can take literally days, all the while producing large volumes of smoke. Simply flooding the pile with water does not work as mulch will basically seal itself from the outside and continue to burn.

We do accept commercial mulch and brush at the landfill but this is subject to operational and safety needs. I would not foresee being able to accept the volume generated from the site.

Other items that you may want to consider:

- 1. The County, County Contractors, and Developers have been allowed to pit burn areas up to 500 acres in size in the past.
- Should the cleared acreage be placed back into silviculture a prescribed burn will most likely be conducted to prepare the site for reseeding (standard industry practice). The County does this on its managed land when areas are clear cut for reseeding.
- 3. The property may be subject to the seed tree law based on the percentage of pines that were on the property. This would require reseeding or conversion to agriculture within 10 years of the initial clearing. This law is on the state books but not sure when the last time it was enforced.

4. Stump harvesting can be a prolonged process. Stumps are typically removed during none wet periods and then stacked to allow excess soils/rock to be washed away prior to mulching of the stump. Stump mulching can take additional processing time over mulching of brash (small branches and tops) due to size and density of the wood.

Benjamin L. Loveday, P.E. Director, Spotsylvania County Utilities/Public Works 600 Hudgins Road, Fredericksburg, VA 22408 C. 1.540.455.7636 O. 1.540.507.7307

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From: Patrick White

Sent: Thursday, January 03, 2019 10:22 AM **To:** Ben Loveday; Jay Cullinan; Phil Sullivan

Cc: Wanda Parrish; Susan B. Eggen; Alexandra Spaulding

Subject: Burning prohibition at sPower

Hello Sirs,

Do you or your teams have any condition ideas regarding the implications from a total prohibition on burning at sPower? I'm thinking that should the PC go in that direction, we might consider adding some provisions related to storage and wetting of stored mulch (onsite). Potentially prohibit placing this at our landfills (as that would just increase our own risks)...

Do we see many mulch fires at our landfills? (If a statistic is available, it would be valuable). What common practices are employed at our landfills to manage stored mulch? Is there anything we can do to minimize fire risks from stored mulch apart from preventing it from completely drying out?

Any feedback is appreciated on this concern. Thanks –PCW

Patrick Carlton White Planner III Spotsylvania County, Va 540-507-7427