

mill, which was more conservative than the methanol emission rate for a similar source from the Georgia EPD guidance for pellet mills. The formaldehyde and acetaldehyde emission rates are from Georgia EPD guidance for storage/handling at wood pellets manufacturing facilities. Pursuant to the NCASI database as referenced in the Enviva application, emissions of other HAP are not expected from dry material storage. Therefore, no other individual HAP emissions are quantified from this source.

3.5 Dry Hammermills and Pelletizers/ Pellet Coolers

The grinding and pelletizing operations are non-fugitive sources of filterable PM/PM₁₀/PM_{2.5}, VOC, and organic HAP emissions. Filterable PM/PM₁₀/PM_{2.5} emissions from the dry hammermill and pelletizing operation are controlled by dust collector systems. Filterable PM/PM₁₀/PM_{2.5} emissions from the dry hammermill, pelletizing operation are calculated using an exit grain loading rate methodology based on vendor estimates for the control devices. This emissions calculation method uses the exhaust air flow rate and estimated mass concentration as opposed to control device efficiency. As these sources are not combustion sources, condensable PM is negligible. Therefore, filterable PM/PM₁₀/PM_{2.5} equals total PM/PM₁₀/PM_{2.5}.

The VOC, formaldehyde, acetaldehyde, and methanol emission rates for the dry hammermills are from Georgia EPD guidance for dry hammermills at wood pellets manufacturing facilities. Acrolein, phenol, and propionaldehyde emission rates for the dry hammermills are based on historical site-specific stack testing of the Enviva Pellets Sampson (NC) dry hammermill and emission factors from AP-42 Section 10.6.2-7 for a hammermill. Dry hammermill emissions are then routed to the RCO for further emission control. Per Georgia EPD's guidance for wood pellet manufacturing facilities, a 95% DRE is applied for VOC and HAP emissions routed to an RCO.

The VOC, formaldehyde, acetaldehyde, and methanol emission rates for the pellet mills and coolers are from Georgia EPD guidance for pellet mills/pellet coolers (without steam injection or extraction) at wood pellet manufacturing facilities. Acrolein, phenol, and propionaldehyde emission rates for the pellet mills and pellet coolers are based on historical site-specific stack testing of the Enviva Pellets Sampson (NC) dry hammermill, which was conservatively used for pellet mill/pellet cooler as no publicly available data for pellet milling/pellet cooling is available at this time, and uncontrolled emission factors from AP-42 Section 10.6.2 (Particleboard Manufacturing) for a Board Cooler, UF resin. The pellet mill and pellet cooler emissions are routed to the RCO for further emission control. Per Georgia EPD's guidance for wood pellet manufacturing facilities, a 95% DRE is applied for VOC and HAP emissions routed to an RCO.

3.6 Pellet Storage and Loadout

Pellet storage and loadout operations are non-fugitive sources of filterable PM/PM₁₀/PM_{2.5}, VOC, and organic HAP emissions. Filterable PM/PM₁₀/PM_{2.5} emissions from pellet storage and loadout operations are controlled by a dust collector. Filterable PM/PM₁₀/PM_{2.5} emissions are calculated using an exit grain loading rate methodology based on vendor estimates for the control devices. This emissions calculation method uses the exhaust air flow rate and estimated mass concentration as opposed to control device efficiency. As these sources are not combustion sources, condensable PM is negligible. Therefore, filterable PM/PM₁₀/PM_{2.5} equals total PM/PM₁₀/PM_{2.5}.

The VOC, formaldehyde, acetaldehyde, and methanol emission rates are from Georgia EPD guidance for storage/handling at wood pellets manufacturing facilities. Pursuant to the NCASI database as referenced in the Enviva application for dry material storage and included in Section 3.4, emissions of other HAP are not expected from pellet storage. Therefore, no other individual HAP emissions are quantified from this source.