

The burners (ID Nos. BUR1 – BUR6) fires exclusively on wood. U.S. EPA AP-42 Chapter 1.6 “Wood Residue Combustion in Boilers” contains emission factors for arsenic and hexavalent chromium. However, A toxic impact assessment (TIA) for these two HAPs was not performed by the facility based on the ascertainment that burning virgin wood in the burners would not emit any As and Cr VI. In order to ensure that the facility would comply with the Georgia Air Toxics Guidelines, the Division has imposed the minimum emission rates (MERs) for As and Cr VI, under which no TIA would be needed, as the annual emission caps in the permit (Conditions 2.9 and 2.10).

Note that, depending on the raw material type, operating conditions, different pellet mills would generate different levels of emissions. There are also comments from Environmental Integrity Project (EIP) and WWALS Watershed Coalition, Inc. that questioned the use of the emission factors in the application for various reasons, such as high control efficiency without detailed information for the control devices, use of after-control tested data as uncontrol emission factors, and so on. In reality, there is limited credible information available for pellet mill emission factors. Available data shows widely varying emission factors; therefore, the Division has determined that the permit will require that the facility conduct performance testing to validate all the emission factors provided in the application. These testing requirements are included in Section 6 of the permit.

Georgia Rule (b) applies to various operations/processes that emit through stacks at the proposed facility and limits visible emissions to 40% opacity.

Particulate matter (PM) emissions from various production operations/processes at the proposed facility are subject to Georgia Rule (e).

Georgia Rule (g) applies to the wood burned in the dryer burners and the natural gas fired in the RTO burners. This rule limits the sulfur content of the fuel burned in the dryers and the RTO. The wood burned in the dryer burners have low sulfur content and should easily comply with the fuel sulfur limit of Rule (g). Natural gas has insignificant amounts of sulfur in it.

Fugitive emissions from the facility operations are subject to Georgia Rule (n) and are limited to less than 20%.

Permit Conditions

Condition 2.1 includes the PSD avoidance limits (synthetic minor limit of 249 tpy) for NO_x, CO, Total PM, and VOC.

Please note that the Division replaced PM/PM₁₀/PM_{2.5} with Total PM to simplify the requirements, especially testing requirements. The Division define Total PM as filterable PM and condensable PM; Total PM can be determined with Test Method 5 in combination with Test Method 202. Since the Total PM include both filterable and condensable PM, the amount of Total PM will include the amount of PM₁₀ and PM_{2.5}. When the facility-wide Total PM is capped below 250 tpy, the facility-wide PM₁₀ and PM_{2.5} emissions will also stay below 250 tpy. The benefit of this is to reduce the need to separately test PM₁₀ and PM_{2.5} emissions.

Condition 2.2 includes the single/combined HAP emission limits of 10/25 tpy in order to maintain the facility’s HAP area source status and therefore avoid all major source MACT requirements.