Wood Pellet Industry

SIC CODE: 519999 NAICS CODE: 32111353

Georgia is home to nearly 170 wood using manufacturing companies spread throughout the state. Biomass/wood pellet product manufacturing is a natural fit, with producers capitalizing on Georgia's forest resources,



geographic location and cutting-edge research facilities.

Georgia has eight operational wood pellet plants in operation (January 2016). ¹

Typical feedstock for pellet plants in Georgia include:

- Pine tree logs
- Hardwood/wood bark/wood chips (usually smaller plants)
- Sawdust from sawmills (less emissions with dried sawdust)
- Peanut shells
- Processed wood scraps

Typical emissions such as nitrous oxides(NO_X), sulfur dioxide (SO_2), carbon monoxide CO), particulate matter PM) are a result of wood residue burning, and hazardous air pollutants (HAPs) and volatile organic compounds VOC's) are generated from a pellet furnace which is used as the drying equipment for the pellets during the process of wood pellet manufacturing.

Due to these potential emissions an Air Quality permit may be required for your operations if emissions of air pollutants exceed permit exemption limits.

Regulatory Information and Factsheets

- Rules for Air Quality Control p23
- Wood Drying Incinerators
- Fugitive Dust

Wood Pellet Manufacturing Permitting and Compliance

All wood pellet plants will likely need an air quality permit to construct and operate. The type of permit you are issued will depend on the capacity of your plant.

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In all cases, you will need to complete the applicable SIP Permitting Forms and submit them to the Air Protection Branch.

- SIP Permitting Forms for New Sources
- Synthetic Minor
- Title V
- Title V Permit Applications

Compliance issues were encountered during inspections by EPD during the early years of wood pellet manufacturing in Georgia. Typical issues included the following:

- Application submitted late
- Start-up notification not submitted
- High visible emissions (VE), CO and VOC test results
- Performance test not performed or test results submitted late
- Oxygen monitor not installed
- Lack of records available during inspection
- · Semi-annual report not submitted
- Methanol or formaldehyde levels exceeded permit limits
- ESP, RTO, and O2 monitors excursions noted
- Operating without a permit
- Temperature range was not established
- Modifications without submittal of request for permit modification

Helpful Tools & Resources

- Emission Factors for Wood Combustion
- Woodland Stewardship Education Fact Sheets
- Pellet Fuel Standards
- Community Biomass Handbook eBook
- Wood Energy Financial App
- Wood Heat Solutions: A Community Guide to Biomass Thermal Projects
- Wood2Energy Facility Database

Georgia & Regional Trade Associations

- The Georgia Forestry Commission
- The Georgia Forestry Association
- The University of Georgia Warnell School of Forestry and Natural Resources
- Georgia's Sustainable Forestry Initiative
- USDA Forest Service Southern Research Station
- <u>US Industrial Pellet Association</u>
- Pellet Fuels Institute
- Biomass Energy Resource Center

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¹Sources