

Cotton Ginning

SIC CODE: 0724 NAICS CODE: 115111

Cotton gins are machines used to separate cotton fibers from cotton seeds, a process that must be done before cotton fibers can be used for textiles. High quality cotton is the combined result of the original characteristics of the fiber and the degree of cleaning and drying it receives. The amount of trash



and moisture in the cotton helps to determine the efficiency of the overall ginning process.

State of Georgia Air Quality Control Chapter <u>391-3-1-.02(2)(q)</u> "Particulate Emissions from Cotton Gins" is the rule that describes permitting requirements for cotton gins, as outlined below:

- 1. The emission of particulate matter from any cotton ginning operation shall not exceed the amounts specified below.
- (i) The following equation shall be used to calculate the allowable rates of emission:

 $E = 7B^{0.5}$

E = allowable emission rate in pounds per hour

B = number of standard bales per hour (A standard bale is defined as a finished bale weighing 500 pounds.)

- 2. In lieu of demonstrating compliance with the applicable emission standard contained in 391-3-1-.02 (2)(q)1.(i) the following control devices may be utilized:
- for emission control from low pressure exhausts, the use of screens with a mesh size of 80 by 80 or finer, or the use of perforated condenser drums with holes not exceeding .045 inches in diameter, or the use of a dust house.
- (ii) for emission control from high pressure exhausts, the use of high efficiency cyclones.

If compliance with the emission standard specified in 391-3-1-.02 (2)(q)1.(i) is required, then the testing methodology to be utilized shall be that specified in the Georgia Department of Natural Resources Procedures for Testing and Monitoring Sources of Air Pollutants.

The Permit-by-Rule that applies to Cotton gin is found in 391-3-1-.03(11)(b)(6):

1. Notwithstanding any other provision of these Rules, this standard applies to facilities with a potential to emit in excess of the Part 70 major source threshold without existing permit conditions that are federally enforceable or enforceable as a practical matter limiting the source to below Part 70 major source thresholds.

Cotton ginning operations shall be deemed to have a Permit by Rule if the conditions in paragraph (I) and (II) are met. Facilities that have potential emissions greater than major source thresholds even after this rule is met or are not able to meet the conditions in paragraphs (I) and (II) shall obtain a Part 70 Permit.

- (I) Monitoring and Record keeping. A log of the monthly production must be kept. The total production for the previous twelve consecutive months must be included in each month's log. This log shall be kept for five years from the date of last entry. The log shall be available for inspection or submittal to the Division.
- (II) Annual Production. Production shall be limited to 120,000 standard bales of cotton during any twelve consecutive months.

Permit by Rule Information

https://epd.georgia.gov/permit-rule

Permitting for Facilities of Larger Capacity (non-permit by rule)

• <u>https://epd.georgia.gov/air-protection-branch-technical-</u> <u>guidance-0/types-air-quality-permits/state-implementation-</u> <u>plan-sip</u>

Helpful Tools & Resources

• Emission Factor for Cotton Gins

Industry News & Events

<u>Cotton Farming Industry news</u>

Georgia & Regional Trade Associations

• <u>The Southern Cotton Ginners Association</u>