



Memorandum

Florida Department of Environmental Protection

TO: Sandra F. Veazey *SV 12/20*
FROM: Kevin M. White, P.E.
THROUGH: Andy Allen *AA 12/18*
DATE: 12/17/2001
SUBJECT: Evaluation Summary for **Burkhead Gin Company, Jay Facility** 1130027-002-AC, Santa Rosa County

We recommend issuing a permit to Burkhead Gin Company to increase production capacity and operational hours from 25,267 bales per year of finished product (cotton) to 60,000 bales per year and 2,016 hours per year to 3,000 hours per year.

Process Description This is a cotton ginning facility consisting of seven processes: raw cotton unloading, seed cotton drying and cleaning, ginning, lint cleaning and bailing, seed handling, trash and mote system, and trash handling. Particulate emissions from these systems are controlled by 25 cyclones (1 through 25). Four natural gas-fired heaters; all with a capacity of 3 MMBtu/hour, are used to dry the seed cotton during unloading and cleaning. Cleaned (lint) cotton is baled (500 lbs/bale) as the final product.

The facility's four air heaters are exempt from permitting by rule 62-210.300(3)(b)1. -- Generic Emission Unit Exemption." This exemption is based on the facility operating 3,000 hours per year, producing no more than 60,000 bales of cotton per year, and an AP-42 emission factor of 2.537 lbs (PM)/bale of cotton produced..

Pollution Control Equipment 25 cyclones are used to control particulate, primarily greater than PM10, emissions (1 through 25).

Environmental Impact

Airborne Contaminant Emitted	FAC Rule	Estimated Emissions		Allowable Emissions	
		lbs/hr	T/yr	lb/hr	T/yr
PM	N/A	N/A	76.24	N/A	N/A
TRS	N/A	N/A	N/A	N/A	N/A
SO2	N/A	N/A	0.01	N/A	N/A
VOC	N/A	N/A	0.09	N/A	N/A
NOx	N/A	N/A	1.71	N/A	N/A

Airborne Contaminant Emitted	FAC Rule	Estimated Emissions		Allowable Emissions	
		lbs/hr	T/yr	lb/hr	T/yr
CO ₂	N/A	N/A	N/A	N/A	N/A
CO	N/A	N/A	1.44	N/A	N/A
Objectionable Odors	62-296.320(2)	N/A	N/A	None allowed off plant property.	
VE	62-296.320(4)	N/A	N/A	Not more than 20% opacity	

Applicable Rules & Regulations This source is regulated in accordance with F.A.C. Rule 62-.62-296.320(4)(b)1., F.A.C. – “General Visible Emission Standards” and 62-210.200(178), F.A.C. – “Major Source of Air Pollution” or “Title V Source.”

Compliance Monitoring A visible emissions test is required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. The test shall be conducted in accordance with DEP Method 9 on the one cyclone from the Raw Cotton Unloading; Ginning; Lint Cleaning and Baling/Trash and Mote System, and Trash Handling processes deemed to have the highest visible emissions. The tests shall be scheduled within thirty (30) days after initial operation.

Compliance History On October 25, 2000, the Department conducted an annual inspection in which no significant compliance issues were reported. However, the inspector did suggest that the facility begin logging operational hours. It was explained that the records are necessary for the Department to determine the facility’s throughput and verify compliance. On October 18, 2001, the Department conducted an annual inspection. During this visit it was determined that the gin had most likely exceeded the permitted maximum production limit. However, due to the age of the permit and the changes that have occurred in the way Gins are monitored for compliance and at the facility, it was not completely clear. The inspection report recommended that the facility immediately submit an air construction permit application to increase their permitted production limits and their hours of operation if necessary. Once again the facility was recommended to keep operational hour records.

Fee Summary *This is an AC1D (\$2,000 fee) with an increase of emissions of 25 tons/year but less than 50 tons/year. The last application processed was an AO2B (\$1,000 fee) minor source with VE testing.*

SFV:kwc