

**MEMORANDUM**

TO : Ed K. Middleswart, P.E.  
FROM : ~~ASA~~ Andy Allen, Rick Bradburn  
DATE : 3/16 : 03/16/99  
SUBJECT : Evaluation Summary for Burkhead Gin Company,  
1130027-001-AO, Santa Rosa County

We recommend issuing a renewal permit to Burkhead Gin Company for the operation of Burkhead Cotton Gin Facility in Jay.

Facility Description: This facility consists of the operation of a cotton gin facility. This facility consists of four sources of air emissions: 1) Raw Cotton Unloading System, 2) Seed Cotton Cleaning System, 3) Lint Cotton Handling System, and 4) Trash System. These four sources are described as follows:

1) Seed cotton from the field is pneumatically conveyed from the transport vehicle through a separator to two Seed Cotton Cleaning Systems.

2) Seed cotton is dried, cleaned and extracted through two parallel systems each consisting of a tower dryer, hot air cleaners, stick and burr machine, a second tower dryer and a second hot air cleaner. Particulate emissions from these operations are controlled by cyclones. The cyclones are the 1st, 2nd, 4th and 5th cyclone pairs counting from north to south. The cleaned seed cotton is fed to the Lint Cotton Handling System.

3) The Lint Cotton Handling System contains four gin stands. For each gin stand the "huller front" strips off hulls and sticks followed by the roll box where seeds are separated from fibers. cotton lint is doffed from the gin saws and is pneumatically conveyed to a condenser which separates the fiber bat from the conveying air. The cotton bat is fed to a lint cleaner where saws comb the lint cotton to remove trash. The fiber is pneumatically conveyed to a second condenser and lint cleaners. The cleaned cotton lint from all four gin/lint cleaning systems is pneumatically conveyed to the main battery condenser and fed to the baler.

The trash from the "huller front" of each gin stand is gravity-separated followed by pneumatic conveying to cyclone separators. These gin trash systems are in two parallel systems (two gins per system). The cyclones are the 3rd and 6th cyclone pairs counting north to south.

Trash from the lint cleaners is pneumatically conveyed to twin cyclones for particulate emissions control. The cyclones are the 7th, 8th, 9th and 10th cyclone pairs counting north to south.

The conveying air for the eight condensers feeding the lint cleaners is exhausted through the back wall of the building. The fiber bat collected on the screen condenser controls particulate emissions. The conveying air from the main battery condenser is exhausted from the back of the building with the fiber bat as the only particulate emissions control.

4) The trash collected by the ten cyclone pairs is discharged to an auger conveyor and discharged into enclosed trailers to be hauled back to be spread upon farm fields. This source is regulated in accordance with Rule 62-296.320(4)(b), F.A.C., Visible Emissions shall be less than 20% opacity.

Pollution Control Equipment. Cyclones remove dirt, twigs, seeds and lint from air stream used in conveying product.

Compliance Monitoring. Annual testing for VE within 30 days of the beginning of the ginning season (Oct., Nov. and Dec.)

Compliance History. Past VE tests have been satisfactory.

Fee Summary This is an AO2B (\$1,000 fee) minor source-other sample.

RB:rbc