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Burkhead Gin Company  
Jay Facility  
**Facility ID No.:** 1130027  
Santa Rosa County

Air Construction Permit  
**Permit No.:** 1130027-002-AC

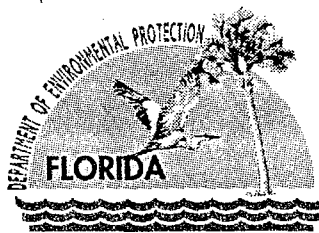
Permitting and Compliance Authority:  
Department of Environmental Protection  
Northwest District Office  
160 Governmental Center  
Pensacola, FL 32501-5794  
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[electronic file name: 1130027-002-ac.doc]

Air Construction Permit  
Permit No.: 1130027-002-AC

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Jeb Bush  
Governor

# Department of Environmental Protection

Northwest District  
160 Governmental Center  
Pensacola, Florida 32501-5794

David B. Struhs  
Secretary

**Permittee:**  
Burkhead Gin Company

**Permit No.:** 1130027-002-AC  
**Facility ID No.:** 1130027  
**SIC Nos.:** 0724  
**Project:** Air Construction Permit

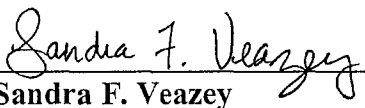
This permit is for the construction of the Jay Facility located at 14294 Highway 89 North in Jay, Santa Rosa County; UTM Coordinates: Zone 16, 485.3 km East and 3425.80 km North; Latitude: 30° 57' 22" North and Longitude: 87° 08' 43" West.

**STATEMENT OF BASIS:** This air construction permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

**Referenced attachments made a part of this permit:**  
Appendix G-1, General Conditions

**Effective Date:** January 23, 2002  
**Expiration Date:** January 23, 2007

**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

  
**Sandra F. Veazey**  
Air Program Administrator

SFV/kwc

## **Section I. Facility Information.**

### **Subsection A. Facility Description.**

This facility consists of the operation of a cotton gin facility. The facility normally only operates for three months (October, November, and December) out of each year and consists 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.

Raw Cotton Unloading: The unloading at this facility is primarily modular. Cotton modules are unloading from trucks and conveyed to the unloading separator. From the separator, seed cotton falls into the fed controller, which control the speed of the unloading and prevents the backups or overflow. The suction required to move the cotton through this process is provided by a pull fan and exhausts to Cyclone #1 and #2. This facility also has the capability to unload loose cotton from trailer (old process, before modules) using a suction pipe. This system is used infrequently.

Drying and Cleaning: Drying and cleaning is done in three streams (conveyed by a fan and two natural gas heaters, #1 and #2), each consisting of first step tower dryer, incline cleaner, stick and burr machine, second step tower dryer, and incline cleaner. Between the first step and second step of cleaning, additional conveying air is provided by two push fans and two natural gas air heaters, #3 and #4. Trash, burrs, and sticks removed by the incline cleaners and stick and burr machines are pneumatically removed by exhaust systems (fans) delivering its contents to the facility main trash plenum. Dried and clean seed cotton from all three streams fall into a distribution screw conveyor to be carried to the gin stands.

Ginning: Ginning is accomplished by four gin stands into which seed cotton is feed by distribution screw conveyor. Gin stands separate seeds, motes, and trash from seed cotton. From this point on, cotton is referred to as lint (cotton). Lint cotton is delivered by pneumatic exhaust system (fan) to the next process called lint cleaning. The removed trash and motes from the ginning process are picked up by an exhaust system terminating in cyclone #3, while the removed seeds fall into an enclosed screw conveyor which delivers them to the seed handling system.

Lint Cleaning and Bailing: Lint cotton is pneumatically removed from the gin stands and delivered into four streams (one from each gin stand). Each stream is equipped with a super jet and two line cleaners. After cleaning, lint cotton is delivered into the battery condenser by suction conveying system (pull fan). Lint cotton is separated from the exhaust air system in the battery condenser and falls through a chute into a bale press, where it is pressed into bales as a finished product. The finished bales weigh approximately 500 pounds each. An exhaust blower provides suction exhaust into a facility dust house. The motes and trash removed from lint cotton by the super jet and cleaners are removed by exhaust blowers terminating in cyclones #4, #5, #6, and #7. Fine fibers, called nits, are exhausted from the lint cleaners by a separate exhaust stream terminating into cyclones #9, #10, #11, and #12.

Seed handling: Seed handling consists of a seed screw conveyor which picks up the seeds removed at the four gin stands and several additional screw conveyors which deliver seeds to a seed house. From there, seeds are pneumatically blown into truck trailers for removal.

Trash and Mote System: The motes and trash removed by the gin stands are delivered to cyclone #3 as mentioned before. Motes and trash removed from the lint cleaning process are delivered to cyclones #4, #5, #6, #7, #9, #10, #11, and #12. All of these cyclones discharge into a trash and mote screw conveyor. From this conveyor, trash and motes are carried by suction system (pull fan) and delivered into cyclone #8. Cyclone #8 empties into an inclined screen where trash is separated from the motes. Motes fall from the screen into a motes baler similar to the lint cotton baler. The trash is pneumatically conveyed into the facility's main trash plenum.

Trash Handling: All of the trash produced by the various activities ends up in the facility's trash plenum. From the plenum, trash is removed by a system of vacuum wheels to be emptied into a pneumatic system terminating at cyclone #25. Trash is also removed from this plenum by air streams terminating at cyclones #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, and #24. Cyclones #13, #15, #17, #19, #21, #23, and #25 discharge trash into an enclosed screw conveyor which delivers trash into a trailer underneath. Cyclones #14, #16, #18, #20, #22, and #24 also discharge into another screw conveyor which delivers trash into a trailer parked underneath.

Based on the permit application received December 5, 2001, this facility is not a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).**

**E.U.**

<b><u>ID No.</u></b>	<b><u>Brief Description</u></b>
005	Cotton Gin Operations

*Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.*

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are on file with permitting authority:  
Permit Application received December 5, 2001

## **Section II. Facility-wide Conditions.**

### **The following conditions apply facility-wide:**

1. APPENDIX G-1, GENERAL CONDITIONS, is a part of this permit.
2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants that cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
  - a. Maintenance of roads, parking areas, and yards.
  - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.  
[Rule 62-296.320(4)(c)2., F.A.C.]
5. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.  
[Rule 62-213.440, F.A.C.]
6. The applicant shall retain a Professional Engineer, registered in the State of Florida, for the inspection of this project. Upon completion the engineer shall inspect for conformity to the permit application and associated documents. An application for an operation permit shall be submitted with the compliance test results and appropriate fee when applicable. These are to be submitted within 45 days after initial operation.  
[Rules 62-210.300(2) and 62-4.050(3), F.A.C.]

7. The permittee shall submit all compliance related notifications and reports required by this permit to the Department's Northwest District office.

Department of Environmental Protection  
Northwest District Office  
160 Governmental Center  
Pensacola, Florida 32501-5794

Notification of compliance testing may be submitted by electronic mail to [NWDAIR@dep.state.fl.us](mailto:NWDAIR@dep.state.fl.us).

8. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (850) 595-8364, extension 1220, day or night, and for emergencies involving a significant threat to human health or the environment is (800) 320-0519. For routine business, telephone (850) 595-8364, then press 7, during normal working hours.  
[Rules 62-210.700 and 62-4.130, F.A.C.]

**Section III. Emissions Unit(s) and Conditions.**

**Subsection A. This section addresses the following emissions unit(s).**

**E.U.**

<b><u>ID No.</u></b>	<b><u>Brief Description</u></b>
005	Cotton Gin Operations

**Emission Unit 005**

Raw (Seed) Cotton Unloading

<u>Cyclone</u>	<u>Diameter</u>	<u>Process</u>
1	48"	Unloading System Suction
2	48"	Unloading System Suction

Ginning

<u>Cyclone</u>	<u>Diameter</u>	<u>Process</u>
3	32"	Trash and Mote Removal from Seed Cotton

Lint Cleaning and Baling / Trash and Mote System

<u>Cyclone</u>	<u>Diameter</u>	<u>Process</u>
4	36"	Trash and Mote Removal from Lint Cleaners
5	36"	Trash and Mote Removal from Lint Cleaners
6	36"	Trash and Mote Removal from Lint Cleaners
7	36"	Trash and Mote Removal from Lint Cleaners
8	60"	Trash and Mote separation
9	60"	Nit Removal from Lint Cleaners
10	60"	Nit Removal from Lint Cleaners
11	60"	Nit Removal from Lint Cleaners
12	60"	Nit Removal from Lint Cleaners

Trash Handling

<u>Cyclone</u>	<u>Diameter</u>	<u>Process</u>
13	48"	Trash Removal from Trash Plenum
14	48"	Trash Removal from Trash Plenum
15	48"	Trash Removal from Trash Plenum
16	48"	Trash Removal from Trash Plenum
17	48"	Trash Removal from Trash Plenum
18	48"	Trash Removal from Trash Plenum
19	48"	Trash Removal from Trash Plenum
20	48"	Trash Removal from Trash Plenum
21	48"	Trash Removal from Trash Plenum



<u>Cyclone</u>	<u>Diameter</u>	<u>Process</u>
22	48"	Trash Removal from Trash Plenum
23	48"	Trash Removal from Trash Plenum
24	48"	Trash Removal from Trash Plenum
25	24"	Trash Removal from Trash Plenum

**(Exempt from Permitting) Conveying/Drying Operation Air Heaters and Steam Generator**

<u>Size</u>	<u>Description</u>
3 MM Btu/hr heat input (new)	Natural gas-fired air heater, unloading
3 MM Btu/hr heat input (new)	Natural gas-fired air heater, unloading
3 MM Btu/hr heat input (new)	Natural gas-fired air heater, cleaning
3 MM Btu/hr heat input	Natural gas-fired air heater, cleaning

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**A.1. Capacity.** The maximum operating rate shall not exceed 32 bales of lint cotton per hour (finished product) per hour. This is operating rate at which compliance with standards shall be demonstrated. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**A.2. Methods of Operation.** The maximum annual throughput shall not exceed 60,000 bales of lint cotton (finished product) per 12-consecutive-month period (year). The Permittee shall maintain throughput records certifying total throughput, which shall be made available for Department inspection (Condition A.8.). [Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

**A.3. Hours of Operation.** The maximum hours of operation are 3,000 hours per 12-consecutive-month period. The Permittee shall maintain operational records available for Department inspection certifying the total hours of operation (Condition A.8.). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**Emission Limitations and Standards**

**A.4. Visible Emissions.** Visible emissions shall be less than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]

**Test Methods and Procedures**

**A.5** 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 for 30 minutes on the one cyclone from the Raw Cotton Unloading; Ginning; Lint Cleaning and Baling/Trash and Mote System, and Trash Handling (provided in above Emission Unit 005 description) processes deemed to have the highest visible emissions. The test shall be scheduled once per year, during the first month of the ginning season. The Department shall be notified at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing. [Rule 62-297.310(2), F.A.C.]

A.6. Test reports shall comply with F.A.C. Rule 62-297.310(8) – “Test Reports.” The Department can require special compliance tests in accordance with F.A.C. Rule 62-297.310(7)(b). Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing.

[Rules 62-297.310(7) and 62-297.620(1), F.A.C.]

A.7. Testing emissions shall be conducted with the sources operating at capacity. Capacity is defined as 90-100 percent of rated capacity. If it is impractical to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department.

[Rules 62-297.310(2) and 62-4.070, F.A.C.]

**Recordkeeping and Reporting Requirements.**

A.8. The Permittee shall maintain finished product output (500 pound bales produced) and operational hours records certifying total output and total hours of operation. This information shall be provided in the form of a monthly summary (output and operational hours) and kept on site for Department inspection for at least five years.

[Rules 62-4.160(2) and Rule 62-210.200 (PTE), F.A.C.]

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Appendix G-1

**GENERAL CONDITIONS:**

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1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions", and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
  - a. Having access to and copying any records that must be kept under the conditions of this permit;
  - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit;and,
  - c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of noncompliance; and
  - b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent

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Appendix G-1

**GENERAL CONDITIONS:**

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recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurement;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.