

FACT SHEET

COTTON GINS

When ginning cotton, large amounts of dust are generated. Fortunately, with improved ginning and air emission control technology, the dust emitted to the atmosphere is minimal. This minimization of dust is largely attributed to the use of multiple cyclones and improved operational practices (i.e., no open, unfiltered exhausts).

The following is an explanation of the DEQ air quality requirements for cotton gins.

PERMITTING

The Louisiana Environmental Regulatory Code currently reads: "Emissions below levels defining a major source [100 tons per year] do not relieve the owner or operator from the obligation to obtain a [air] permit." This applies to all industries throughout the state including cotton gins. **Those exempt from permitting are those sources which have grandfather status.**

GRANDFATHER STATUS

Grandfather status is defined as those facilities which were in operation or under actual construction as of June 19, 1969. Those with grandfather status are required to provide a current Emissions Inventory Questionnaire to the permitting authority. Grandfathered facilities may be required to obtain a permit if:

*The facility emits more than 100 tons per year of dust; or,
Ownership of the facility has changed since June 19, 1969; or,
Emissions have been initiated or increased since June 19, 1969; or,
The permitting authority requires it.*

PERMIT APPLICATIONS

To apply for a permit, one must complete an air permit application and emissions inventory questionnaire and submit these to the permit authority in Baton Rouge. These forms can be obtained from your nearest DEQ office or can be downloaded from the Internet. For assistance with completing these forms, call the SBAP Hotline at 1-800-259-2890.

AIR EMISSIONS ESTIMATIONS

The most difficult part of completing the application forms is the quantification of the air pollutants emitted by the facility. Several methods can be used to do this. The more common methods are the use of emission factors and actual testing of the exhaust. If emission factors are available, they are the easiest and least expensive method of estimating emissions. Unfortunately, the only accurate method of quantifying emissions is through testing.

EMISSION FACTORS

The EPA has generated emission factors for cotton gins using controls (cyclones, filters). These factors are based upon the air emissions from gins throughout the U.S. To calculate the emissions for your facility, multiply the maximum number bales you gin each year by the respective emission factor; the result is the number of pounds of dust emitted each year from that point. The emissions factors for cotton gins are as follows:

Particulate Emissions for a Cotton Gin With Controls

1. unloading fan:	0.32 lb/bale
2. no. 1 dryer and cleaner:	0.18 lb/bale
3. no. 2 dryer and cleaner:	0.10 lb/bale
4. trash fan:	0.04 lb/bale
5. overflow fan:	0.08 lb/bale
6. no. 1 lint cleaner condenser:	0.81 lb/bale
7. no. 2 lint cleaner condenser:	0.15 lb/bale
8. mote fan:	0.20 lb/bale
9. battery condenser:	0.19 lb/bale
10. master trash fan	0.17 lb/bale
TOTAL	2.24 lb/bale