

**AJAX PAVING INDUSTRIES OF FLORIDA, LLC
1550 STARKEY ROAD
LARGO, FLORIDA 33771
TELEPHONE: (727) 499-2168 FAX (727) 499-2169**

**Air Permit 1030026-009-AO, Emission Unit 001
OPERATIONS AND MAINTENANCE PROCEDURES**

The plant should be started each time based on the Gencor Manual.

On daily basis, the items on the Baghouse and Exhaust System Inspection Log should be completed.

On weekly basis, the items on the Plant and Material Handling Equipment Inspection Log should be completed.

On monthly basis, the items on the Monthly Inspection Log should be completed.

Keep the following spare parts on hand to minimize down time if repairs are needed:

- Thermocouples - 2 if possible
- Air valves - 2 if possible
- Pulser Solenoids - at least 5
- Plastic lines for Photohelic - 20'
- Bearings - keep one of each different type or at least 2 if it is a common bearing
- Slates and chains
- Assorted belts and chains
- Assorted motors
- Bags for bag house - try to keep 100 on hand at all times

The plant should never be operated if any of the pollution control devices are not working properly.

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Air Permit 1030026-009-AO, Emission Unit 001

BAGHOUSE AND EXHAUST SYSTEM

Daily Inspection Log

INSPECTOR NAME: _____

WEEK ENDING: _____

Bag house and Exhaust System	Mon	Tues	Wed	Thur	Fri	Sat	Notes:
Check Hi-temperature Damper Air Valve for Operation							
Observe exhaust stack for visible emissions							
Check air line filter lubrication, check oil level, drain water from separator							
Check for fuel distillates in baghouse dust							
Check baghouse for excessive emissions							
Check temperature measuring devices							
Check all thermocouples & connections							
Check for leaks in air system							
Check air pressure to baghouse (100 psi Minimum)							
Check pulse timer for baghouse							
Check for leaks in dust recovery system							
Check all air hose for leaks and wear							
Check air valves for leaks and wear							
Check all solenoids for proper operation							
Check Photohelic® lines for clogs & wear (dryer negative air pressure)							
Check Photohelic® readings for proper burner & exhaust operation							
Check all dust augers for operation							
Check baghouse for wear and deterioration							
Check air compressor for proper operation							
Check air compressor filters, replace as required							
Check all bearings and grease as required							
Check Magnehelic® gauge for operation (bag house pressure drop indicator)							
Check Magnehelic® lines for blockage							
Check all v-belt tensions (check weekly)							
Record Baghouse Pressure Drop during Normal Operation (Min. / Max.) (Guideline: 2 to 7 inches water)	Min/Max	Min/Max	Min/Max	Min/Max	Min/Max	Min/Max	
Record Baghouse Temperature (Min. / Max.) (< 400 degrees Fahrenheit) WF (Pinellas County AQD 2/28/05)	Min/Max	Min/Max	Min/Max	Min/Max	Min/Max	Min/Max	

Description of Maintenance Performed, Date Comments:

SECTION 4. APPENDIX H
Operation and maintenance Plan

<p style="text-align: center;">AJAX PAVING INDUSTRIES OF FLORIDA, LLC 1550 STARKEY ROAD LARGO, FLORIDA 33771 TELEPHONE: (727) 499-2168 FAX (727) 499-2169</p> <p style="text-align: center;">Air Permit 1030026-009-AO, Emission Unit 001 BAGHOUSE AND EXHAUST SYSTEM Monthly Inspection Log</p>												
Inspector Name: _____ Year Ending: _____												
Bag house and Exhaust System	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
Check screw conveyor bearings & hangers (replace as required)												
Check exhaust fan bearings (replace as required)												
Check gear reducer oil levels												
Check dust removal system components for wear & proper operation												
Check dust removal system operation												
Check bag house structure for lose bolts, cracks in welds, cracked or chipped paint or worn paint and corrosion												
Check airlock for wear												
Check all compressed air lines for leaks and wear												
Check bags for blinding (yearly)												
Check duct work for dust buildup												
Check pulsar valves for proper seating												
Check all indicating equipment for proper operation												
Description of maintenance performed, date & comments:												



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

DARM-PER-37

SUBJECT: Guidance on Using Ground Tire Rubber in Asphalt

DATE: March 1, 2000

Section 336.044(2), Florida Statutes, requires the addition of ground tire rubber (GTR) to the asphalt cement used for state road construction. This will require some asphalt plants to use a GTR/asphalt mix instead of asphalt cement alone to make asphalt concrete. In this process, GTR will be mixed with hot asphalt cement at approximately a 5 to 20 percent by weight ratio, depending on the paving specifications. Then the asphalt cement/GTR mix will be blended with the hot dried aggregate at the asphalt plant in a ratio of approximately 7.2 percent mix and 92.8 percent aggregate to produce asphalt concrete. The maximum amount of GTR in the total mixture (asphalt concrete) will be approximately 1 percent. It is estimated that a minimum of 9,500 tons of GTR will be used in asphalt concrete in Florida in 1994. In carrying out this program, the following **activities** could be involved:

1. **Manufacture of GTR from tires.** During this process, tires are ground to a powder, -20, -40 or -80 mesh. This is approximately 830, 350 and 175 microns in diameter, respectively. The grinding of the tires could be a source of particulate matter (PM), fugitive dust, and odor emissions.

2. **Handling of GTR (transportation, loading/unloading, and storage) and mixing GTR with asphalt cement.** Some of these operations could occur at the GTR manufacturing plant, the bulk terminal where asphalt cement is received prior to distribution to the hot-mix asphalt plants, and at the hot-mix asphalt plant. Stationary and mobile equipment may be used to mix the GTR with the asphalt cement. Although some GTR may be transferred pneumatically (moving GTR in an air stream), most of the GTR is expected to be shipped in 50 and 1,500 pound bags. Handling operations will typically involve pouring GTR from 50 pound bags into a hopper and then conveying and mixing the material with the hot asphalt cement. Due to the size of the GTR, -20 to -80 mesh or approximately 830 to 175 microns in diameter, minimal dust should be generated. As tire rubber volatilizes at about 475°F (and emits potentially hazardous organic compounds and objectionable odors), the temperature of the asphalt cement and aggregate should always be less than 375°F. There is a low potential for PM and fugitive dust emissions from the handling of GTR in bags along with a low potential for odor emissions from the mixing of GTR with hot asphalt cement below 375°F.

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3. Blending of the GTR/asphalt cement with dried aggregate at the hot-mix asphalt plant. The GTR/asphalt mix is handled by the same equipment and procedures that is used to handle asphalt cement. There is a minimal potential for the PM, fugitive dust, and odor emissions to change when the GTR/asphalt mix is included in the process.

4. Application of the GTR/asphalt concrete to the road. The GTR/asphalt concrete is applied to the road in the same manner as asphalt concrete. There is a potential for a slight change in odors when the GTR/asphalt concrete is used. Data submitted by DOT indicated that emissions will not be a problem (see August 20, 1991, letter from Clair Fancy to Murphy, DOT).

For consistency under our current regulations, the air permitting activity should be handled as follows:

1. GTR manufacturing plants will need air construction and operation permits issued by the district or county air program offices. Particulate matter and fugitive emissions along with objectionable odors shall be addressed in the permits. Particulate matter emission standards shall be based on the unconfined emissions of particulate matter regulation (F.A.C. Rule 62-296.320 (4)(c)) PM RACT standard (F.A.C. Rule 62-296.700), or the alternate procedures regulations (F.A.C. Rule 62-297.620) if a filter is used to control emissions - whichever regulation is applicable. Also, an objectionable odor condition (F.A.C. Rule 62-296.320(2)) shall be included in the permits. The construction permitting fee will be based on the calculated TPY PM emissions from the GTR facility. Visible emission testing and an odor evaluation (test team's opinion on whether objectionable odors are being emitted by the facility) shall be required annually. Particulate matter tests shall be required initially and upon renewal of the operating permit unless the 5 percent opacity standard in lieu of a particulate matter test is specified in the permits (F.A.C. Rule 62-297.620).

2. Manually operated GTR transfer/mixing facilities (both stationary and mobile). When used in conjunction with an asphalt terminal or hot-mix asphalt plant, these will not require air construction and operation permits.

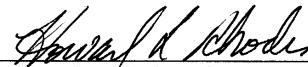
3. Pneumatically operated GTR transfer equipment (both stationary and mobile) will need air permits. Particulate matter and fugitive emissions along with objectionable odors shall be addressed in the permits. Particulate matter emission standards shall be based on the unconfined emissions of particulate matter regulation (F.A.C. Rule 62-296-320(4)(c)), PM RACT standard (F.A.C. Rule 62-296.700), or the alternate procedures regulations (F.A.C. Rule 62-297.620) if a filter is used to control emissions - whichever regulation is applicable. Also, an objectionable odor condition (F.A.C. Rule 62-296.320(2)) shall be included in the permits. The construction permitting fee will be based on the calculated TPY PM emissions from the GTR transfer/mixing facility. Visible emission testing and an odor evaluation (test team's opinion on whether objectionable odors are being emitted from the facility) shall be required annually. Particulate matter tests shall be required initially and upon renewal of the operating permit unless the 5

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percent opacity standard in lieu of a particulate matter test is specified in the permits (F.A.C. Rule 62-297-620)).

4. The hot-mix asphalt plant permit need not be amended or modified to allow the use of GTR/asphalt mix. Facility testing requirements should not change because of the use of GTR/asphalt mix in the plant.

5. Application of GTR/asphalt concrete to a road. An air permit is not required for this operation.



Howard L. Rhodes, Director
Division of Air Resources Management