Florida Department of

Environmental Protection

Memorandum

TO: Rick Bradburn
THROUGH: Armando Sarasua, P.E.
FROM: Teresa Knepper, P.E.
DATE: August 23, 2011
SUBJECT: Evaluation Summary for Anderson Columbia Co., Inc., Plant #16; 7775064-007-AO; Jackson County

We recommend issuing a permit to Anderson Columbia Co., Inc., to operate their Plant #16. This permit follows permit 7775064-005-AO, effective August 27, 2008, and incorporates permit 7775064-006-AC effective March 31, 2010 and 7775064-008-AC effective April 11, 2011.

Process Description.
This is an Astec Model DB-8438 7' X 38' Double Barrel® counter flow drum mixer/dryer hot mix asphalt plant. The mixing chamber includes inlets for asphalt cement, recovered fines, recycle asphalt product (RAP), and dry additives. The drum mixer/dryer is equipped with a 140 MMBtu/hr natural gas or oil fired heater. Asphalt cement is supplied from two 20,000 gallon asphalt cement tanks heated by a 1.2 MMBtu/hr natural gas or oil fired oil heater. Lime additive is stored in a silo equipped with a baghouse. Fuel oil Nos. 2 through 6 as well as on-spec used oil may be used in the drum mixer. No.2 Fuel oil or natural gas may be used in the asphalt cement heater. The plant has an operating capacity of 300 TPH of asphalt mix. Fugitive emissions at the facility result from uncontrolled process emissions, aggregate stockpiles, and vehicular traffic.

This plant replaced the #3 Plant, which has been dismantled.

Pollution Control Equipment.
Particulate emissions from the combined drum mixer/dryer and associated heater are controlled by an Astec Model BH-59 59,669 cfm pulse jet baghouse containing 896 14 oz. aramid fiber bags, 10, 849 square feet of cloth, and air-to-cloth ratio of 5.5 to 1. The normal pressure drop across the bags is 2-6 in wc.

Particulate emissions from the lime silo system are controlled by an Astec JVB-24 Jet Vent Baghouse. The baghouse uses 24 4-5/8 inch diameter by 8 feet long 16 ounce dacron polyester bags in one compartment. The air to cloth ratio for this unit is approximately 5.5:1. The total square footage of all bags is approximately 233 square feet.

Environmental Impact.

Airborne Contaminant Emitted	FAC Rule	#3 Plant Estimated PTE*	#16 Plant Estimated PTE*	Net Effect of this Permit	Allowable Emissions
		T/yr	T/yr	T/yr	T/yr
PM	62-210.300(3)(c)2.d**	8.1	8.31	+0.2	0.04 gr/dscf
SO2	62-210.300(3)(c)2.b,c	69.6	69.6	0	N/A
VOC	N/A	8.84	8.01	-.83	N/A
NOx	N/A	98	14.5	-83.5	N/A
CO	N/A	53.6	32.7	-20.9	N/A
Objectionable Odors	62-296.320(2)	N/A	None allowed off plant property		
VE	62-210.300(3)(c)2.f.	N/A	Not more than 20% opacity		

* potential to emit
** The particulate emission limit does not apply to the cement heater or the lime silo

Applicable Rules & Regulations. The asphalt concrete plant is regulated in accordance with Rule 62-210.300(3)(c)2., F.A.C., and 40 CFR 60.90 subpart I. The asphalt heater and lime silo are included as unregulated emissions units. The permit also provides for the operation of a portable RAP crusher operating under a valid general permit meeting the requirements of Rule 62-210.310(5)(e), F.A.C.

Compliance Monitoring. The asphalt concrete plant baghouse must be tested for Particulate Matter emissions and Visible Emissions annually.

Compliance History.
The compliance status noted on the 4/29/04 inspection report was non-compliant. The compliance test date had been changed without notifying the Department and test documentation was missing or not clear.

Since then, all compliance reports have been in compliance. However, there is a pattern of testing below the permitted rate and the documentation does not always make it clear that subsequent production was limited to 110% of the tested rate:

Test Date	Inspection Date	12-Month Average Hourly Production Rate or Test Rate(TPH)
4/29/04		259.3
	9/8/05	not recorded
12/6/05		201.4
9/26/06		273
	12/28/06	247.5*
4/3/07		262.4
	5/19/08	not recorded
5/19/08		251.7
	4/6/09	not recorded
11/3/09		178
	8/19/10	under construction
10/19/10		201.3
	11/23/10	201

*For the 9 month period from the test conducted 12/6/05 to the test conducted 9/26/06, production would have been limited to a maximum of 221 TPH due to being tested at 201.4 TPH on 12/6/05. However, the inspection report on 12/8/06 indicates that the production for the previous 12 month period averaged 247.5 TPH. This seems to indicate that the facility might have been operating above its maximum allowable production rate during some of the previous 12 month period.

A permitting note will be included under the specific condition for the maximum allowable production rate emphasizing that the plant is limited to 110% of the rate achieved during the previous test.

Fee Summary. This is an AO2A ($1,500 fee) minor source with a stack test. The original construction permit fee was $4500.00 for an AC1C (source 50 TPY, but less than 100 TPY).

TK/c