Florida Department of

Memorandum

Environmental Protection

TO: Rick Bradburn
THROUGH: Armando I. Sarasua, P.E.
FROM: Maria J. Irizarry
DATE: May 10, 2012
SUBJECT: Evaluation Summary for C. W. Roberts Contracting, Inc., Freeport Asphalt Plant No. 3, 7775118-008-AO, Walton County

We recommend issuing a permit to C. W. Roberts Contracting, Inc., to operate their Freeport Asphalt Plant No. 3. This permit follows 7775118-006-AO, effective May 15, 2007, and incorporates permit 7775118-007-AC, effective May 13, 2010.

Process Description.

This facility consists of a CMI drum hot mix asphalt concrete plant constructed November 7, 2000 with a design operating capacity of 400 tons of asphalt mix per hour. This facility has a material and recycle feed system, drum mixer, an asphalt cement storage tank, heater and two hot mix asphalt storage silos and truck load-outs.

Additionally, the facility has a 20,000 gallon asphalt cement/GTR storage tank, and a 25,000 gallon mineral filler silo with baghouse. Both the asphalt storage and asphalt cement/GTR tanks are heated by the asphalt heater. The material feed system consist of a five bin aggregate hopper which feeds to a conveyor, screen and to the drum dryer/mixer. The drum dryer/mixer has a maximum heat input of 120 MMBtu/hr. This uses biomass fuel oil, fuel oil or "on-spec" used oil, or alternatively, may operate using natural gas. Reclaimed asphalt pavement (RAP) is fed by conveyor to the approximate middle of the drum dryer/mixer. Liquid asphalt cement is mixed with the heated, dried aggregate further down the drum dryer/mixer, and the mixed asphalt concrete discharges to a hot elevator to two storage silos and truck loaders. A current Air General permitted portable recycled asphalt paving (RAP) crushing unit will be operated at the facility periodically to provide RAP for the asphalt mix.

Pollution Control Equipment.
Particulate emissions from the plant are controlled by a fabric filter baghouse-and limiting asphalt production to 500,000 tons/year. SO_2 emissions are controlled by limiting facility oil consumption to 1.2 million gallons in any consecutive twelve-month period and the sulfur content of the fuel oil to not exceed 1.0%, by weight. Fugitive emissions result from uncontrolled process emissions, aggregate stockpiles, and vehicular traffic. Fugitive emissions are controlled by the application of water to unpaved roadways and work areas.

Environmental Impact.

Airborne Contaminant Emitted	FAC Rule	Estimated Emissions		Allowable Emissions	
		lbs/hr	T/yr	lb/hr	T/yr
PM	40 CFR 60 Subpart I	13.05	8.16 [a]	N/A	0.04gpdscf
SO_2	N/A	131.39	98.5[b]	N/A	<100

VOC	N/A	12.8	8.00*	N/A	<100
NO_x	N/A	22	13.8*	N/A	<100
CO	N/A	52	32.5*	N/A	<100
Objectionable Odors	62-296.320(2)	N/A	N/A	None allowed off plant property	
VE	40 CFR 60 Subpart I	N/A	N/A	Not more than 20% opacity	

[a] Based on a production limit of 500,000 t/yr obtained at 400 T/hr maximum rate for 1250 hours of operation.

[b] Based on (1,200,000gal/yr)(8.212 lb/gal)(0.010 S)(2 lb SO_2/S)(1 ton/2,000lb)

*- Based on a production limit of (500,000 t/yr)(AP-42 Emission Factor lb/ton)(1 ton/2000 lb)

Applicable Rules & Regulations.
The facility is regulated under NSPS, 40 CFR part 60, subpart I (Standards of Performance for Hot Mix Asphalt Facilities, provided the facility was built or last modified on or after June 11, 1973) and Rule 62-210.300(3)(c)2., F.A.C. (Conditional Exemptions from Title V Permitting). To ensure that the facility remains a Non-Title V facility, the above-mentioned facility-wide limits for fuel usage and asphalt production shall also include the periodically operated portable RAP crusher.

The asphalt heater is exempt from permitting in accordance with Rule 62-210.300(3)(b)1, F.A.C. – Generic Emission Unit Exemption and a letter dated August 17, 2000. The mineral filler silo is exempt from permitting in accordance with Rule 62-210.300(3)(b)1, F.A.C.

Compliance Monitoring. Annual visible emissions and particulate matter testing.

Compliance History. 2011 – 2007 – Facility noted to be “In compliance”.

Fee Summary. This is an AO2A ($1,500 fee) minor source with a stack test.

MJI/c