Florida Department of

Environmental Protection

Memorandum

TO: Rick Bradburn
THROUGH: Armando I. Sarasua, P.E.
FROM: Angelia Jackson
DATE: August 23, 2011
SUBJECT: Evaluation Summary for C. W. Roberts Contracting, Inc., Panama City Asphalt Plant 7770062-010-AO, Bay County

We recommend issuing a renewal permit to C. W. Roberts Contracting, Inc., to operate their Panama City Asphalt Plant. This permit follows 7770062-009-AO, effective April 16, 2006. This relocateable facility is an asphalt concrete plant constructed (or last modified) on April 29, 2003.

Process Description.
This facility consists of a 400 ton per hour CMI triple-drum continuous flow counter-current drum mixer asphalt plant. The maximum heat input of the drum dryer is 120 MMBtu/hr and will operate on natural gas; No. 2 through No. 6 fuel oil or on specification ("on-spec") used oil. Particulate emissions are controlled by a baghouse. The fines from the baghouse are recycled into the asphalt mix. Fugitive emissions at the facility result from uncontrolled process emissions, aggregate stockpiles, and vehicular traffic. A portable recycled asphalt paving (RAP) crushing unit, with a current Air General (AG) permit, will be operated at the facility periodically to provide RAP for the asphalt mix.

The asphalt storage and asphalt cement GTR tank is heated by the asphalt heater. The GTR is obtained pre-mixed in the liquid asphalt cement. The asphalt cement heater is a Gencor Turbocoil HY-100 thermal fluid heater with a maximum fuel input for oil at 7 gallons per hour. Fuel will be No. 2 through No. 6 fuel oil, on-spec used oil, and natural gas with a maximum sulfur content of 0.95% by weight. The asphalt heater and the mineral filler silo are exempt from permitting in accordance with Rule 62-210.300(3)(b)1, F.A.C. – Generic Emission Unit Exemption.

Pollution Control Equipment.
Particulate emissions are controlled by a Roto-Aire model 318P Fabric Filter baghouse with 756 Nomex bags and a pulse jet cleaning air to cloth ratio 5.1:1. Sulfur dioxide emissions are controlled by limiting fuel consumption to No. 2 through No. 6 fuel oil, on-spec used oil, and natural gas with a maximum sulfur content of 0.95% by weight.

Environmental Impact.

Asphalt Plant Dryer					
Airborne Contaminant Emitted	**FAC Rule**	**Estimated Emissions**		**Allowable Emissions**	
		lbs/hr	**T/yr**	**lb/hr**	**T/yr**
PM	62-210.300(3)(c)2.d	N/A	6.5	N/A	0.04 gr/dscf
SO2	N/A	N/A	89.83	N/A	<100
VOC	N/A	N/A	8.0	N/A	<100
NOx	N/A	N/A	13.8	N/A	<100
CO	N/A	N/A	32.5	N/A	<100
Objectionable Odors	62-296.320(2)	N/A	N/A	None allowed off plant property	
VE	62-210.300(3)(c)2.f.	N/A	N/A	Not more than 20% opacity	

Crusher					
Airborne Contaminant Emitted	**FAC Rule**	**Estimated Emissions**		**Allowable Emissions**	
		lbs/hr	**T/yr**	**lb/hr**	**T/yr**
PM	N/A	0.49	1.185	N/A	<100
SO2	N/A	0.23	1.01	N/A	<100
VOC	N/A	0.29	1.25	N/A	<100
NOx	N/A	3.05	15.34	N/A	<100
CO	N/A	0.75	3.30	N/A	<100
Objectionable Odors	62-296.320(2)	N/A	N/A	None allowed off plant property	
VE	62-204.800(8).	Conveyor Transfer Points		Not more than 10% opacity	
		Crusher		Not more than 15% opacity	

Applicable Rules & Regulations.
The facility is regulated under NSPS - 40 CFR 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities) and Rule 62-210.300(3)(c)2., F.A.C. (Conditional Exemptions from Title V Permitting). The facility is conditionally exempt from Title V permitting with annual throughput limited to 500,000 tons of asphalt concrete per year and fuel consumption limited to 1.2 MM gallons of fuel oil with no greater than 0.95 percent sulfur content by weight, from both plants at this common location. RAP Production has been Limited to 150,000 tons/year by applicant's request.

Compliance Monitoring.
Annually for PM and VE; Annual Operating Report (AOR). Recordkeeping required for verification of the fuel oil usage and asphalt production limitations. RAP processing is limited to 150,000 tons per consecutive 12-month period, as requested by the Permittee. The portable RAP crusher is subject to the testing requirements of its current AG permit.

Compliance History.
2011 – 2008 Facility noted to be "In-Compliance"
2007 – Facility received "Minor Non-Compliance" status due to incomplete recordkeeping. Compliance without enforcement (CWOE) letter issued.

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

Additional Notes:
The original construction permit fee was $2,000.oo for an AC1D facility (source25 TPY but less than 50TPY). The initial application submitted, with a sulfur content limit increase from 0.5% to 1.0%, represented a SO2 emission increase of 52.26 tons per year (AC1C - $4,500.oo). In order to reduce the applicable permit fee, the permittee requested a sulfur content limit of 0.95%, which reduced the potential emissions of SO2 to less than 50 tons per year (AC1D).

AMJ/c