



Florida Department of Environmental Protection

Memorandum

TO: Rick Bradburn
THROUGH: Armando I. Sarasua, P.E.
FROM: Maria J. Irizarry
DATE: July 11, 2012
SUBJECT: Evaluation Summary for APAC Mid-South, Inc., DeFuniak Springs Plant #04028
 7770040-009-AO, Walton County

We recommend issuing a permit to APAC Mid-South, Inc. to operate their DeFuniak Springs Plant #04028. This permit follows 7770040-007-AO, effective May 17, 2007. Outstanding air construction permit 777040-008-AC, effective November 30, 2009 and expiration date November 30, 2014, authorizes the use of Biomass fuel oil in the asphalt plant dryer. However, this facility has neither used nor tested Biomass fuel oil at the time this operating permit becomes effective; therefore biomass fuel oil is not included in this permit.

Process Description. This facility consists of a 275 ton per hour triple drum mix asphalt plant. The fuel oil fired burner has a heat input of 120 MMBtu/hour. Heating of asphalt and the asphaltic concrete storage silo is accomplished by a recirculating hot oil system heated by a 2 MMBtu/hr burner. The facility is permitted to burn fuel oil, on-specification used oil and natural gas. The plant is permitted for a currently Air General permitted portable recycled asphalt paving (RAP) crushing unit to be operated periodically at the facility to provide RAP for the asphalt mix. Overall RAP processing is limited to 200,000 tons per consecutive 12-month period, as requested by the Permittee.

Pollution Control Equipment. Particulate emissions control is provided by a primary dry cyclone separator followed by a baghouse. Asphalt production is limited to 500,000 tons per year. SO₂ emissions are controlled by limiting facility oil consumption to 1.2 million gallons in any consecutive 12-month period and the sulfur content of the fuel oil to not exceed 1.0%, by weight.

Environmental Impact.

| Airborne Contaminant Emitted | FAC Rule | Estimated Emissions | | Allowable Emissions | |
|------------------------------|---------------------|---------------------|--------------------|---------------------------------|-------------------|
| | | lbs/hr | T/yr | lb/hr | T/yr |
| PM | 62-204.800(8)(b)12 | 12.17 | 11.06 ^a | 12.17 | 0.04 grains/dscfm |
| SO ₂ | 62-210.300(3)(c)2.c | 137.34 | 89.28 ^b | N/A | <100 ^b |
| VOC | N/A | N/A | 8.00 | N/A | <100 |
| NO _x | N/A | N/A | 13.75 | N/A | <100 |
| CO | N/A | N/A | 32.50 | N/A | <100 |
| Objectionable Odors | 62-296.320(2) | N/A | N/A | None allowed off plant property | |
| VE | 62-204.800(8)(b)12 | N/A | N/A | Not more than 20% opacity | |

^a Flow at 35,500dscfm, 35% moisture, 1818 hrs/yr at 0.04 grains/dscfm

^b May operate using fuel oil or "on-spec." used oil with a maximum sulfur content of 1.0 percent by weight, or alternatively, may operate using natural gas.

- Although the operation of the portable RAP crusher was added to the operation of this facility, there should be no significant increase in emission because the operation of the crusher will just displace the opportunity of the asphalt plant to operate. This is due to the non-TV exemption limits in place.

Outstanding air construction Permit 7770040-008-AC, effective November 30, 2009 and expiration date November 30, 2014, authorizes the use of Biomass fuel oil (BFO-1 comprised of 0.1% diesel, 99.9% Free Fatty Acids (FFA) oil) in the asphalt plant dryer. Stack testing at another facility indicates that should this facility use biomass fuel oil, carbon monoxide emissions could increase by 38.26 tons per year and nitrogen oxides emissions could decrease by 5.84 tons per year. However, the facility has neither used nor tested biomass fuel oil by the time this air operating permit becomes effective.

Applicable Rules & Regulations. This emissions unit 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. The fuel oil consumption is limited to 1.2 million gallons in any consecutive twelve-month period and the sulfur content of the fuel oil shall not exceed 1.0 percent, by weight. To ensure that the facility remains a non-Title V facility, the above-mentioned facility-wide limits shall also include the periodically operated portable RAP crusher.

Compliance Monitoring.

The facility must conduct annual particulate matter and visible emissions testing to provide proof of compliance with 40 CFR part 60 subpart I (0.04 grains/dscfm) and 62-210.300(3)(c)2.f., F.A.C. (< 20% opacity). The facility must also maintain records to prove compliance with fuel usage and asphalt concrete production limits and must only burn fuel oil with a sulfur content of 1% sulfur or less. The portable RAP crusher will conduct VE testing in conjunction with its current Air General (AG) Permit requirements.

Compliance History.

The only recent record of non-compliance at this facility was on August 22, 2011 for not performing the visible emissions and particulate matter emissions tests during the 2010 fiscal year.

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

MJI/c