APAC Mid-South, Inc.
500 Riverhills Park, Suite 590
Birmingham, AL 35242

Facility Address:

Walton County

AIRS No.: 7770040
Dated
Received May 16, 2012
Contact Christine Hamilton
Phone No. (850) 776-6317

Asphalt Process: Drum Mix

Process Factors (From Facility Permit Application)

Burning Fuel Oil

Max Production Rate	275	Tons/Hour
Max Fuel Usage	923	Gallons/Hour
Type Fuel	7.44	lb/Gallon
Max. Sulfur	0.01	S (1.0%)
Avg. Heat Content	140,000	BTU/Gallon
Max Hours of Operation	8,760	Hours/Year
Normal Operational Hours	1,818	Hours/Year

AP-42 Emission Factors (Fu

NO_x	0.055
CO	0.13
SO_2	0.058
VOC	0.032
HAPs	0.0077
Formalehyde	0.00074

Baghouse Factors

Inlet Gas Flow Rate	68,000	acfm	0.04	gpdscf	35,500	dscf/min
Inlet Gas Temperature	300	F				
Exit Gas Temperature	250	F				

Synthetic Minor (SM) Limits

(the limits deemed necessary to limit the source's emissions below the Title V major source thresholds)

Maximum Annual Fuel Usage Limit = 1,200,000 Gallons/Year *(limited to assure minor status for SO_2 emissions*

Maximum Annual Asphalt Production Limit = 500,000 Tons/Year *(limited to assure minor s for NO_x emissions)*

CALCULATED RESULTS

Pollutant	Potental to Emit (PTE)	Synthetic Minor Limited (SM)
PART.	53.31	11.06
NO_x	66.25	13.75
CO	156.59	32.50
SO_2	601.56	89.28
VOC	38.54	8.00
HAPs	9.27	1.93

Forma.	0.89	0.19

NOTE: THE PM IS CALCULATED BASED ON THE NSPS ALLOWABLE LIMIT (0.04 GR/DSCF) AND THE SO_2 IS BASED UPON THE MAXIMUM SULFUR CONTENT OF THE FUEL (1.0%), WHILE THE REMAINDER OF THE POLLUTANTS ARE CALCULATED USING AP-42 VALUES.

Particulate Matter (PM) Emissions

Assume Moisture Content 35% **NSPS Limit for Hot Mix Asphalt Facilities = 90 mg/dscm or 0.04 gr/dscf**

(0.04 gr/dscf)(35,500 dscf/min)(60 min/hr)(1lb/7,000 gr) = **12.17 lb/Hour**

(12.17 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **53.31 Tons/Year (PTE)**

Applying the SM annual asphalt production limit of 500,000 ton/yr:

(500,000 ton/yr)/(275 ton/hr) = **1,818 Hour/Year** ***(Annual operational time assuming ar asphalt production (SM) limit applied at the hourly production capacity)***

(12.17 lb/hr)(1,818 hr/yr)(1 ton/2,000 lb) = **11.06 Tons/Year (SM)**

Nitrogen Oxides (NOx) Emissions

(0.055 lb/ton)(400 tons/hr)= **15.13 lb/Hour**

(22.00 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **66.25 Tons/Year (PTE)**

The asphalt production maximum has been limited to 500,000 ton/year to meet the requirements of the asphalt concrete plant's conditional exemption requirements of Rule 62-210.300(3)(c)1.

(500,000 tons/yr)(0.055 lb/ton)(1 ton/2,000lb)= **13.75 Ton/Year (SM)**

Carbon Monoxide (CO) Emissions

(0.13 lb/ton)(275 ton/hr) = **35.75 lb/Hour**

(35.75 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **156.59 Ton/Year (PTE)**

Applying the SM annual asphalt production limit of 500,000 ton/yr of Rule 62-210.300(3)(c)1.

(500,000 ton/yr)(0.13 lb/ton)(1 ton/2,000 lb) = **32.50 Ton/Year (SM)**

Sulfur Dioxide (SO_2) Emissions

(923 gal/hr)(7.43 lb/gal)(0.010 S)(2 lb SO2/S) = **137.34** **lb/Hour**

(137.34 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **601.56** **Ton/Year** **(PTE)**

The fuel usage maximum has been limited to 1,200,000 gal/year to meet the requirements of the asphalt concrete plant's conditional exemption requirements of Rule 62-210.300(3)(c)1.

(1,200,000 gal/yr)(7.43 lb/gal)(0.010 S)(2 lb SO_2/S)(1 ton/2,000 lb) = **89.28** **Ton/Year**

Volatile Organic Compounds (VOC) Emissions

(0.032 lb/ton)(275 ton/hr) = **8.80** **lb/Hour**

(12.80 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **38.54** **Ton/Year** **(PTE)**

Applying the SM annual asphalt production limit of 500,000 ton/yr of Rule 62-210.300(3)(c)1.

(500,000 ton/yr)(0.032 lb/ton)(1 ton/2,000 lb) = **8.00** **Ton/Year** **(SM)**

Hazardous Air Pollutants (HAPs) Emissions

(0.0077 lb/ton)(275 ton/hr) = **2.12** **lb/Hour**

(2.12 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **9.27** **Ton/Year** **(PTE)**

Applying the SM annual asphalt production limit of 500,000 ton/yr of Rule 62-210.300(3)(c)1.

(500,000 ton/yr)(0.0077 lb/ton)(1 ton/2,000 lb) = **1.93** **Ton/Year** **(SM)**

Formaldehyde Emissions (Maximum Individual HAP)

(0.00074 lb/ton)(275 ton/hr) = **0.20** **lb/Hour**

(0.20 lb/hr)(8,760 hr/yr)(1 ton/2,000 lb) = **0.89** **Ton/Year** **(PTE)**

Applying the SM annual asphalt production limit of 500,000 ton/yr of Rule 62-210.300(3)(c)1.

(500,000 ton/yr)(0.00074 lb/ton)(1 ton/2,000 lb) = **0.19** **Ton/Year** **(SM)**

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