

STATEMENT OF BASIS

For the issuance of Air Permit #1912-AGP-000 AFIN: Statewide

1. PERMITTING AUTHORITY:
Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317
2. APPLICANT:

Qualifying Hot Mix Asphalt Facilities
3. PERMIT WRITER:

Alexander Sudibjo
4. NAICS DESCRIPTION AND CODE:

NAICS Description:
NAICS Code:
5. SUBMITTALS:

Date of Submittal	Type of Permitting Action (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
Not Applicable	Renewal	None

6. REVIEWER'S NOTES:

This permit is a renewal of Air Permit #1912-AGP-000 for certain minor source Hot Mix Asphalt Facilities in Arkansas (referred to as either the "General Permit" or "GP"). Changes to the General Permit include: updating the language of General Condition #23 to DEQ's SEEK system for NOI submissions.

This permit is applicable to facilities where multiple asphalt production units are located at a common site. Facilities wishing to operate under this permit must comply with all conditions and requirements set forth herein. This permit is issued for the asphalt mixing, aggregate feed, asphalt heater, aggregate storage piles, RAP processing, shingle grinding, diesel/fuel storage, and stationary compression ignition engines at the facility. Facilities which operate processes other than that described in this permit may not qualify for this general permit and may be required to obtain a standard Minor Source or Title V air permit from the Division.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

Not Applicable – This is a General Permit.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N
If yes, were GHG emission increases significant? N

b) Is the facility categorized as a major source for PSD? N

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
01	PM, NO _x , CO, VOC, & Opacity	40 C.F.R. § 60 Subpart I - <i>Standards of Performance for Hot Mix Asphalt Facilities</i>
03	Asbestos	40 C.F.R. § 61 Subpart M – <i>National Emission Standard for Asbestos</i>
Facility	HAPs	40 C.F.R. § 63 Subpart ZZZZ - <i>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>
Facility	PM, CO, NO _x , HC	40 C.F.R. § 60 Subpart IIII - <i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines</i>
Facility	HAPs	40 C.F.R. § 63 Subpart CCCCC - <i>National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities</i>

10. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
Minor source permit facilities are not subject to CAM.		

11. EMISSION CHANGES AND FEE CALCULATION:

Plantwide Permitted Emissions (tons/yr)			
Pollutant	Previous Permit	This Permit	Change
PM	95.7	95.7	0
PM ₁₀	47.2	47.2	0
SO ₂	95.0	95.0	0
VOC	95.0	95.0	0
CO	95.0	95.0	0
NO _x	95.0	95.0	0
Asbestos	0.001	0.001	0
Single HAP	9.9	9.9	0
Total HAPs	24.9	24.9	0

12. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards
 If exempt, explain: No permitted H₂S emissions.

Y

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	AP-42 11.1	PM=0.042 lb/ton PM ₁₀ =0.027 lb/ton NO _x =0.12 lb/ton CO=0.4 lb/ton VOC=0.0044 lb/ton SO ₂ =0.088 lb/ton	Baghouse	95%	Emissions were back-calculated from a maximum allowable rate of any criteria pollutant of 95 tpy using a 0.4 emission factor. This is the maximum lb/ton factor allowable in order for the facility to remain a minor source (below 95 tpy). Mass balance was used to calculate worst-case SO ₂ emissions based on 100% conversion of sulfur to SO ₂ .
02	AP-42 13.2.1 or 2 for haul roads		Water Suppression	75%	40 tpy emission rate established for haul roads, storage piles, and conveyor belts will use water suppression to reduce emissions.
03	AP-42 11.19.2	<u>Shingle Grinder Emissions</u> PM= 0.0012 lb/ton PM ₁₀ = 0.00054 lb/ton Asbestos= 1% of PM Emissions			
04	AP-42 11.1	<u>Screens</u> lb/ton 0.0125 PM 0.0043 PM ₁₀ <u>Crushers</u>	None	N/A	Two crushers and two screens were used to come up with the emissions. At a max of 1500 hours per year which allows about 30 hr. per week, the screen and

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		<u>lb/ton</u> 0.0054 PM 0.0024 PM ₁₀			crusher both have a throughput of 50 tons per hour. The throughput is 75,000 tons per year.
N/A	AP-42 Table 3.3-1	<u>Stationary Engine</u> <u>lb/hp-hr</u> CO = 6.68 E-03 NO _x = 0.031 <u>lb/MMBtu</u> CO = 0.95 NO _x = 4.41	N/A		

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01	PM Opacity	5 9	5 Years	40 C.F.R. § 60 Subpart I – <i>Standards of Performance for Hot Mix Asphalt Facilities</i>
Engines	CO NO _x	10 7E	5 Years if NOI has CO or NO _x over 50 tpy	To show compliance with emission limits if facilities are approaching emission thresholds of general permit and Title V
Engines	CO NO _x			Federal Requirements

15. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring

equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
N/A				

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
Facility	Aggregate	475,000 tons of aggregate	Annual	N
Facility	Opacity	Use limits listed below in Section 16 (Opacity)	Weekly	N
Facility	Sulfur Content of #2 Diesel Received	1% or 10,000 ppm (testing or bill of lading)	Each Shipment	N
03	Shingle Weight	100,000 tons	Annual	N
04	Hours Used	1,500 hours	Annual	N
Facility	Emission totals	Below Title V threshold Limit	Monthly	N

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01	20%	8 C.A.R. § 41-403 and 40 C.F.R. § 60 Subpart I	Weekly Observation
02	10%	8 C.A.R. § 41-403	Inspector Observation
03	20%	8 C.A.R. § 41-403	Inspector Observation
04	12%	8 C.A.R. § 41-403	Inspector Observation
Engine	20%	8 C.A.R. § 41-403	Inspector Observation

18. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

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19. GROUP A INSIGNIFICANT ACTIVITIES:

The insignificant activities will be detailed in the Notice of Intent.

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
All Previously Issued Permits