

Statement of Basis - Narrative
NSR Permit

Type of Permit Action: Regular-New
Facility: Santa Fe Facility
Company: Associated Asphalt and Materials, LLC
Permit No(s): 8585
Tempo/IDEA ID No.: 39276 - PRN20190001
Permit Writer: Kathy Primm

Fee Tracking (not required for Title V)

Tracking	NSR tracking entries completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	NSR tracking page attached to front cover of permit folder: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Paid Invoice Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Balance Due Invoice Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Invoice Comments: filing fee paid 11/26/19, invoice #160147 sent 12/20/19

Permit Review	Date to Enforcement: TBD	Date of Enforcement Reply: TBD
	Date to Applicant: TBD	Date of Applicant Reply: TBD
	Date to EPA: N/A	Date of EPA Reply: N/A
	Date to Supervisor: TBD	

1.0 Plant Process Description:

Associated Asphalt and Materials, LLC (AAM) is applying for a new 20.2.72 NMAC air quality permit to consolidate a 200 ton per hour (TPH) aggregate crushing and screening plant, a 50 TPH aggregate scalping screen, a 150 TPH hot mix asphalt plant (Plant #2 HMA) and a 300 TPH hot mix asphalt plant (Plant #5 HMA) at 86 Paseo de River, Santa Fe, NM 87507.

Material Throughputs

Plant	Tons Per Hour	Tons Per Day	Tons Per Year
Crushing and Screening Plant	200	2,000	400,000
Scalping Screen Plant	50	500	100,000
Plant #2 HMA	150	1,800	190,000
Plant #5 HMA	300	3,600	750,000

Crushing and Screening Plant

The 200 tph aggregate crushing and screening plant will include: a feeder, impact crusher, screen, six (6) transfer conveyors, and stacker conveyor. The plant will be powered by a 360 horsepower (hp) generator. Processed aggregate will be transported from the aggregate crushing and screening plant to the HMA plants and/or off-site sales. Aggregate/recycle material is delivered to the site by haul truck (CSHTRCK) and stored in the raw material storage pile (CH_RAW). From the raw material storage pile,

the material is transported to the crusher/screen plant feeder (CH_F). From the feeder, the material is crushed (CH), conveyed (CH_C1), and sized in the plant screen (CH_S). From the screen, oversized material is sent back to the crusher by a screen conveyor (CH_SC1) and recycle conveyor (CH_RC). Product from the screen is conveyed by a screen conveyor (CH_SC2), and transfer conveyors (CH_C2 and CH_C3) to the stacker conveyor (CH_STK) where the processed material is dropped into a pile. Processed material is stored in a finish storage pile (CH_FP) until needed or loaded into haul trucks.

Scalping Screen Plant

The 50 tph aggregate scalping screen plant will include: a scalping screen, under conveyor, and stacker conveyor. The plant will be powered by a 50 horsepower (hp) engine. Clean aggregate fill will be transported from the aggregate scalping screen plant to the HMA plants and/or off-site sales. Fill is delivered to the site by haul truck (CSHTRCK) and stored in the raw material storage pile (SS_RAW). From the raw material storage pile, the material is transported to the scalping screen plant feeder (SS_F). From the feeder, the material is sized in the plant screen (SS). From the screen, clean fill is conveyed by a screen conveyor (SS_C) to the stacker conveyor (SS_STK) where the processed material is dropped into a pile. Clean fill is stored in a storage pile (SS_FP) until needed or loaded into haul trucks.

Plant #2 HMA

The 150 tph hot mix asphalt plant will include: aggregate storage piles, a 4-bin cold aggregate feeder, three (3) transfer conveyors, mineral filler silo with screw conveyor and baghouse, drum dryer/bucket elevator/hot screens/weigh hopper/asphalt mixer with baghouse, asphalt heater, and two (2) asphalt cement storage tanks. The plant will be powered by commercial line power. Processed asphalt will be transported from the HMA plant to off-site sales. Aggregate/mineral filler/asphalt cement is transported to the site by haul truck (P2TRCK). Cold aggregate from the aggregate storage piles (P2HMAP) is transferred to the feed bin (P2HMABIN). From the feed bin the aggregate is conveyed by conveyor (P2HMATP1) to a transfer conveyor (P2HMATP2) where mineral filler (P2HMAFIL) is added. The transfer conveyor conveys the material to the drum sling conveyor (P2HMATP3), where the aggregate sent to the drum dryer (P2HMASTK) is dried. From the drum dryer, a bucket elevator (P2HMASTK) conveys to hot aggregate to the hot screens (P2HMASTK), where the aggregate is size and dropped to the appropriate feed hopper (P2HMASTK). From the feed hopper, the aggregate is sent to the asphalt mixer (P2HMASTK) where asphalt cement, from one of two asphalt cement tanks (P2ASPHTNK), is mixed with the aggregate. Each batch from the mixer is then loaded (P2BATCHUL) into asphalt trucks (P2TRCK) for delivery. A baghouse is used to control particulate emissions during loading of mineral filler to the mineral filler silo. A baghouse is used to control particulate emissions for the drum dryer/bucket elevator/hot screens/feed hoppers/asphalt mixer during asphalt production.

Plant #5 HMA

The 300 tph hot mix asphalt plant will include: aggregate storage piles, a 4-bin cold aggregate feeder, auxiliary feeder, scalping screen, pug mill, mineral filler silo with screw conveyor and baghouse, drum dryer/mixer with baghouse, incline conveyor, asphalt silo, asphalt heater, five (5) transfer conveyors, and two (2) asphalt cement storage tanks. The plant will be powered by commercial line power. Processed asphalt will be transported from the HMA plant to off-site sales. Aggregate/mineral filler/asphalt cement is transported to the site by haul truck (P5TRCK). Cold aggregate from the aggregate storage piles (P5HMAP) is transferred to the feed bin or auxiliary feed bin (P5HMABIN). From the feed bin or auxiliary feed bin the aggregate is conveyed by either the feed bin conveyor or auxiliary feed bin conveyor (P5HMATP1) to the scalping screen (P5HMASCR), where oversized aggregate is removed. The scalping screen conveyor (P5HMATP2) conveys the material to the pugmill (P5HMAPUG), where mineral filler (P5HMAFIL) is added. The pugmill conveyor (P5HMATP3) conveys the material to

the drum sling conveyor (P5HMATP4), where the aggregate sent to the drum dryer/mixer (P5HMASTK) is dried and asphalt cement, from one of two asphalt cement tanks (P5ASPHTNK), is added. From the drum dryer/mixer, asphalt is sent by incline conveyor (P5DRUMUL) to the asphalt storage silo (P5SILOUL), where the asphalt is loaded into asphalt trucks (P5TRCK) for delivery. A baghouse is used to control particulate emissions during loading of mineral filler to the mineral filler silo. A baghouse is used to control particulate emissions for the drum dryer/mixer during asphalt production.

2.0 Description of this Action:

Plant #5 HMA is presently on this site (86 Paseo de River, Santa Fe, NM 87507) and the crushing and screening plant is operating just west of this site. AAM will be moving equipment operating at other sites in Santa Fe, including Plant #2 HMA and the scalping screen plant, to this location. AAM will be reducing its number of sites in Santa Fe, consolidating its operations, and closing two existing permits upon startup under this new permit.

Table 2.1 below compares the hours of operation and throughputs in the existing permits for Plant #2 HMA, Plant #5 HMA, and the crushing and screening plant to the hours of operation and throughputs in this permitting action. (Note there is no existing permit for the 50 tph scalping screen plant.)

Table 2.1 Consolidation of Permits

	Plant #2 HMA		Plant #5 HMA		Crushing and Screening Plant	
	Permit 0052MI	New Permit	Permit 0803	New Permit	Permit 6195	New Permit
Daily Hours of Operation	8	24	8	24	Daylight	10
Hourly Throughput (tons)	200	150	450	300	250	200
Daily Throughput (tons)	1,600	1,800	3,600	3,600	3,000	2,000
Annual Throughput (tons)	345,600	190,000	864,000	750,000	1,095,000	400,000

3.0 Source Determination:

1. The emission sources evaluated include a 200 TPH Crushing and Screening Plant, a 50 TPH Scalping Screen Plant, a 150 TPH Plant #2 Hot Mix Asphalt Plant, and a 300 TPH Plant #5 Hot Mix Asphalt Plant with the following equipment: feeder, impact crusher, screen, fourteen (14) transfer conveyors, two (2) stacker conveyors, 360 horsepower (hp) generator, scalping screens, under conveyor, 50 horsepower (hp) engine, aggregate storage piles, two (2) 4-bin cold aggregate feeders, two (2) mineral filler silos with screw conveyors and baghouses, drum dryer/bucket elevator/hot screens/weigh hopper/asphalt mixer with baghouse, asphalt heaters, four (4) asphalt cement storage tanks, auxiliary feeder, pug mill, drum dryer/mixer with baghouse, incline conveyor, and asphalt silo.

2. Single Source Analysis:

- A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? No, the HMAs are under SIC Code 2951, and the crushing/screening plant and scalping screen plant are under SIC Codes 1429 and 1442.
- B. Common Ownership or Control: Are the facilities under common ownership or control? Yes
- C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes

3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes? Yes

4.0 PSD Applicability: The source, as determined in 3.0 above, is a minor source before and after this modification.

5.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
*8585	Current action	Regular New Permit	Plant #5 HMA is presently on this site (86 Paseo de River, Santa Fe, NM 87507) and the crushing and screening plant is operating just west of this site. AAM will be moving equipment operating at other sites in Santa Fe to this location (86 Paseo de River, Santa Fe, NM 87507). This includes Plant #2 HMA and a 50 TPH scalping screen plant. Hours of operation and throughputs will be updated, according to Table 2.1 above. Permit 0052M1R1 and Permit 0803R1 will be closed upon startup under this new Permit 8585.
GCP-2-6195 (Crushing and Screening Plant)	2/8/15	General Construction Permit-2 (GCP-2)	250 tph asphalt and concrete recycling crushing and screening plant in Santa Fe at UTME 402,948 m, UTMN 3,945,074 m
0052M1R1 (Plant #2 HMA)	1/16/08	Admin Revision	Replacement of Stansteel aggregate dryer drum shell assembly
0803R1 (Plant #5 HMA)	6/25/97	Relocation	Plant #5 HMA allowed to relocate to SW Section 2 and SE Section 3, Range 8E, Township 16N in Santa Fe County
0803 (Plant #5 HMA)	1/31/90	Regular New Permit	Authorized 450 tph asphalt drum mix plant with baghouse to operate 8 hours/day between 7:00 am and 6:00 pm, 5 days/week
0052M1 (Plant #2 HMA)	12/19/84	Significant Revision	200 tph Stansteel asphalt batch plant authorized to add lime to the asphalt mixture
0052 (Plant #2 HMA)	10/3/74	Regular New Permit	Stansteel Model RM-50 hot plant with pugmill, screen, aggregate storage, dryer, hot elevator, burner, 4 bin cold feed system, feed conveyor baghouse, exhaust fan, van trailer with batch controls, heater, hot oil storage tank, and yard piping "5 miles SW of Santa Fe, off Agua Fria Rd"

6.0 Public Response/Concerns: As of January 23, 2020, this permit writer has received written public comment from 46 citizens.

7.0 Compliance Testing:

Unit No.	Compliance Test	Test Dates
CH_E	Initial compliance: EPA Methods Test for NOx and CO	within sixty (60) days after the unit achieves the maximum normal production rate or no later than one hundred eighty (180) days after initial startup of the source
Crushers, screens, and conveyors	40 CFR 60, Subpart OOO Monthly Opacity Testing	Monthly

8.0 Startup and Shutdown:

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? N/A
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? Yes
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? Yes
- D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? N/A. Section 3 of the application states, “No SSM emissions are predicted for this permit application. All control systems will be operational prior to the start or shutdown of asphalt production or aggregate processing. Maintenance will be performed during periods with no production.”

9.0 Compliance and Enforcement Status: Shannon Duran provided the following enforcement history and pending information on 1/22/20:

ASS-1659-1001-FC (Field Citation, 2010) FC for over 20% opacity. (This is NSR 0052M1R1, the “Plant #2 HMA” being moved to the 86 Paseo de River site with this action)

We do not currently have any Enforcement cases with Associated Asphalt, but the inspection of AI#1746, Asphalt Plant #803, on July 29, 2019 resulted in three pending potential violations. (This is NSR 0803, the “Plant #5 HMA” already operating at 86 Paseo de River and remaining there with this action)

10.0 Modeling: Eric Peters provided the modeling review report on 1/27/20. The following is from his report:

Facility Identification:

Project: Santa Fe Facility Company: Associated Asphalt and Materials, LLC

Permit number: 8585 TEMPO ID: 39276

Modeling Assumptions: *HMA Plants #2 and #5 operate twelve hours per day, but starting time is flexible. The HMA plants do not operate at night during the winter but may during other seasons.*

Permit Conditions: Operating hours: The asphalt plants shall only operate during daylight hours in the winter and may operate day or night during other seasons.

(Other permit limits should be based on production limits instead of operating hours.)

Conclusion: This modeling analysis demonstrates that operation of the facility described in this report neither causes nor contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NAAQS for CO, NO2, PM10, PM2.5, and SO2; NMAAQs for CO, NO2, and SO2. 20.2.72.400-499 NMAC establishes permitting requirements for State Toxic Air Pollutants (TAPs) which are identified in 20.2.72.502 NMAC. The regulations require a source to conduct modeling to predict the concentration of a TAP if its potential emission rate is greater than the screening level identified in that section. The screening level may be adjusted by the stack height correction factor listed in 20.2.72.502 NMAC. If a source must model the concentration of a TAP, the TAP is not expected to pose an environmental concern, and no further action is required, if its concentration remain below one percent of the Occupational Exposure Limit (OEL) for that TAP. For this application, modeling demonstrates that the concentrations of Asphalt Fumes remain below one percent of the OEL.

Action: The permit can be issued based on this modeling analysis.

11.0 State Regulatory Analysis (NMAC/AQCR):

STATE REGU- LATIONS CITATION 20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	JUSTIFICATION:
2.1	GENERAL PROVISIONS	Y	Entire Facility	The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements.
2.3	Ambient Air Quality Standards	Y	Entire Facility	NSR: 20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
2.7	Excess Emissions	Y	Entire Facility	Applies to all facilities' sources
2.11	Asphalt Process Equipment	Y	P2HM AFIL, P2HM ASTK, P5HM AFIL, P5HM ASTK	These sources are subject to 20.2.11.108 NMAC and 20.2.11.109 NMAC.
2.61	Smoke and Visible Emissions	Y	P2HMAHT, P5HMAHT, CH_E, SS_E	This regulation that limits opacity to 20% applies to stationary combustion equipment, such as engines and heaters.

STATE REGU- LATIONS CITATION 20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	JUSTIFICATION:
2.70	Operating Permits	N		The source is not a Title V Major Source as defined at 20.2.70.7 NMAC.
2.71	Operating Permit Fees	N	Entire Facility	The source is not a Title V Major Source as defined at 20.2.70.7 NMAC.
2.72	Construction Permits	Y	Entire Facility	NSR Permits are the applicable requirement, including 20.2.72 NMAC.
2.73	NOI & Emissions Inventory Requirements	Y	Entire Facility	Applicable to all facilities that require a permit. Emissions Inventory Reporting: 20.2.73.300 NMAC applies.
2.74	Permits-Prevention of Significant Deterioration	N		This facility is not a PSD major source.
2.75	Construction Permit Fees		Entire Facility	This facility is subject to 20.2.72 NMAC OR TV: No, in accordance with 20.2.75.11.E an annual NSR enforcement and compliance fee shall not apply to sources subject to 20.2.71 NMAC.
2.77	New Source Performance	Y	See Sources subject to 40 CFR 60	Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60.
2.78	Emissions Standards for HAPs	N		This facility does not emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61.
2.80	Stack Heights	Y	P2HMASTK, P2HMAHT, P5HMASTK,P5 HMAHT, CH_E, SS_E	The objective of this Part is to establish requirements for the evaluation of stack heights and other dispersion techniques in permitting decisions. The Department shall give no credit for reductions in emissions due to the length of a source's stack height that exceeds good engineering practice or due to any other dispersion technique. The facility will meet all requirements of good engineering practices.
2.82	MACT Standards for Source Categories of HAPs	Y	See sources subject to 40 CFR 63	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

12.0 Federal Regulatory Analysis:

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
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Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
Air Programs Subchapter C (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Y	Entire Facility	Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard.
NSPS Subpart A (40 CFR 60)	General Provisions	Y	See sources subject to a Subpart in 40 CFR 60	Applies if any other subpart applies, and Subparts I, OOO, and IIII apply.
40 CFR 60, Subpart I	Performance Standards for Hot Mix Asphalt Facilities	Y	P2HMASTK, P2HMAFIL, P5HMASTK, P5HMAFIL	The affected facility, that commences construction or modification after June 11, 1973, to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.
40 CFR 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	Y	CH, CH_C1, CH_S, CH_SC1, CH_RC, CH_C2, CH_C3, CH_SC2, CH_STK	NSPS standards for non-metallic minerals apply to applicable crushers, screens, and conveyors.
40 CFR Part 60 Subpart IIII (Quad-I)	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Y	CH_E	The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE). Units CH_E is applicable to 60.4202(a) and Subpart IIII Table 1 emission standards for its year and size category.
NESHAP Subpart A (40 CFR 61)	General Provisions	N		Applies if any other subpart applies, and no subpart applies.
MACT Subpart A (40 CFR 63)	General Provisions	Y	See sources subject to a Subpart in 40 CFR 63	Applies if any other subpart applies, and Subpart ZZZZ applies.
40 CFR 63 Subpart ZZZZ (Quad Z)	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating	Y	CH_E, SS_E	CH_E and SS_E are reciprocating internal combustion engines (RICE). Facilities are subject to this subpart if they own or operate a stationary RICE, except if the stationary RICE is being tested at

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
	Internal Combustion Engines (RICE MACT)			a stationary RICE test cell/stand.