#### **Mail Application To:**

New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505

Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb



# **Universal Air Quality Permit Application**

#### Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. See Section 1-I for submittal instructions for other permits.

This application is submitted as (check all that apply): Request for a No Permit Required Determination (no fee)

Updating an application currently under NMED review. Include this page and all pages that are being updated (no fee required). Not Constructed **X** Existing Permitted (or NOI) Facility Existing Non-permitted (or NOI) Facility Construction Status: Minor Source: a NOI 20.2.73 NMAC X 20.2.72 NMAC application or revision 20.2.72.300 NMAC Streamline application Title V Source: Title V (new) Title V renewal TV minor mod. TV significant mod. TV Acid Rain: New Renewal minor modification to a PSD source PSD Major Source: PSD major source (new) a PSD major modification

#### Acknowledgements:

X I acknowledge that a pre-application meeting is available to me upon request. Title V Operating, Title IV Acid Rain, and NPR applications have no fees.

X \$500 NSR application Filing Fee enclosed OR The full permit fee associated with 10 fee points (required w/ streamline applications).

X Check No.: 2744 in the amount of \$500

X I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.

This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for 50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with the Small Business Certification Form for your company.

This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business certification form go to https://www.env.nm.gov/aqb/sbap/small\_business\_criteria.html ).

**Citation:** Please provide the **low level citation** under which this application is being submitted: **20.2.72.200.A NMAC** (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

### **Section 1 – Facility Information**

Sec	tion 1-A: Company Information	AI # if known (see 1st3 to 5 #s of permitIDEA ID No.):Permit#: GCP3-3665				
1	Facility Name: Vado Asphalt Plant	Plant primary SIC Cod	Plant primary SIC Code (4 digits): 2951			
1		Plant NAIC code (6 digits): 324121				
a	Facility Street Address (If no facility street address, provide directions from 55 High Valley Rd, Vado, NM 88072	):				
2	Plant Operator Company Name: Jobe Materials, L.P.	Phone/Fax: (915) 298-9	9900			
a	a Plant Operator Address: 1150 Southview Dr., El Paso, TX 79928					
b	Plant Operator's New Mexico Corporate ID or Tax ID:					

3	Plant Owner(s) name(s): Jobe Materials, L.P.	Phone/Fax: (915) 298-9900					
a	Plant Owner(s) Mailing Address(s): 1150 Southview Dr., El Paso, TX 79928						
4	Bill To (Company): Jobe Materials, L.P.	Phone/Fax: (915) 298-9900					
a	Mailing Address: 1150 Southview Dr., El Paso, TX 79928	E-mail: Ralph@Jobematerials.com					
5	Preparer: Kevin Ellis, POWER Engineers, Inc. Consultant:	Phone/Fax: (512) 879-6647					
a	Mailing Address: 2600 Via Fortuna, Suite 450, Austin, TX 78746	E-mail: Kevin.Ellis@Powereng.com					
6	Plant Operator Contact: Ralph Richards	Phone/Fax: (915) 298-9900					
a	Address: 1150 Southview Dr., El Paso, TX 79928	E-mail: Ralph@Jobematerials.com					
7	Air Permit Contact:	Title: (915) 298-9900					
a	E-mail: Ralph@Jobematerials.com	Phone/Fax: (915) 298-9900					
b	Mailing Address: 1150 Southview Dr., El Paso, TX 79928						
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.						

### Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? X Yes No	1.b If yes to question 1.a, is it currently operating in New Mexico? <b>X</b> Yes No				
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? Yes X No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? X Yes No (GCP3)				
3	Is the facility currently shut down? Yes X No	If yes, give month and year of shut down (MM/YY):				
4	Was this facility constructed before 8/31/1972 and continuously operated s	since 1972? Yes <b>X</b> No				
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? Yes No N/A					
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? Yes X No	If yes, the permit No. is: P-				
7	Has this facility been issued a No Permit Required (NPR)? Yes X No	If yes, the NPR No. is:				
8	Has this facility been issued a Notice of Intent (NOI)? Yes X No	If yes, the NOI No. is:				
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? X Yes No	If yes, the permit No. is: GCP3-3665				
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? X Yes No	If yes, the register No. is: GCP3-3665				

### Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)						
а	a Current Hourly: 325 Daily: 7,800 Annually: 600,000						
b	b Proposed Hourly: 325 Daily: 7,800 Annually: 600,000						
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)						
а	a Current Hourly: 325 Daily: 7,800 Annually: 600,000						
1.		XX 1 005	D 1 7 900	A 11 COO 000			

#### Section 1-D: Facility Location Information

1	Section: 16	Range: 3E	Township: 25S	County: D	ona Ana		Elevation (ft): 3.972
2	UTM Zone:	12 or <b>X</b> 13		Datum:	NAD 27	X NAD	83 WGS 84
a	UTM E (in meter	UTM N (in	meters, to nearest	10 meters):	3555815		
b	AND Latitude	(deg., min., sec.):	Longitude	(deg., min., se	c.): 106° 3	8' 5" W	
3	Name and zip c	code of nearest No	ew Mexico town: Las Cruc	es, 88310			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Las Cruces, head South on Interstate Highway 10 approximately 10.5 miles to Exit 155, also known as Vado Interchange. Cross I-10 at Vado Interchange and go east 0.2 miles on New Mexico State Road 227 to the cattle guard and beginning of County Road B19 (also known as High Valley Road) for the entrance to the site. The asphalt plant will be located on the North side of New Mexico State Road 227.						
5	The facility is 9 miles NNW of Anthony.						
6	Status of land at facility (check one): Private Indian/Pueblo Federal BLM Federal Forest Service X Other (specify)						
7	List all munici on which the f	palities, Indian t acility is propose	ribes, and counties within ed to be constructed or op	a ten (10) 1 erated: Tov	nile radius (2 wn of Anthony	0.2.72.203 y, Doña Ar	.B.2 NMAC) of the property na County
8	<b>20.2.72</b> NMAC applications <b>only</b> : Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <a href="http://www.env.nm.gov/aqb/modeling/class1areas.html">www.env.nm.gov/aqb/modeling/class1areas.html</a> )? X Yes No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Texas 14 km						
9	Name nearest C	Class I area: Guad	alupe Mountains National	Park			
10	Shortest distant	ce (in km) from fa	cility boundary to the boundary	ndary of the	nearest Class I	area (to the	e nearest 10 meters): 152 km
11	Distance (meter lands, including	rs) from the perin g mining overbure	neter of the Area of Operati len removal areas) to neare	ions (AO is c est residence,	lefined as the j school or occ	plant site in upied struc	nclusive of all disturbed eture: 560 m
12	Method(s) used to delineate the Restricted Area: fencing <b>"Restricted Area"</b> is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area						
13	Does the owner Yes X No A portable stati one location or	r/operator intend o ionary source is n <u>that can be re-ins</u>	to operate this source as a p ot a mobile source, such as <u>talled at various locations</u> ,	an automob such as a ho	onary source a ile, but a sourc t mix asphalt p	s defined i se that can plant that is	n 20.2.72.7.X NMAC? be installed permanently at s moved to different job sites.
14	If yes, what is t	the name and perr	nit number (if known) of th	ne other facil	ity? NSR 364	40, GCP5	-4530

### Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility <b>maximum</b> operating $\left(\frac{\text{hours}}{\text{day}}\right)$ : 24	$(\frac{\text{days}}{\text{week}}): 7$	$\left(\frac{\text{weeks}}{\text{year}}\right)$ : 52	$(\frac{\text{hours}}{\text{year}})$ : 8,760			
2	Facility's maximum daily operating schedule (if les	s than $24 \frac{\text{hours}}{\text{day}}$ )? Start:	AM PM	End:	□AM □PM		
3	Month and year of anticipated start of construction: existing						
4	Month and year of anticipated construction completion: existing, no new construction						
5	Month and year of anticipated startup of new or modified facility: existing						
6	Will this facility operate at this site for more than or	ne year? <b>X</b> Yes No					

#### Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? X Yes No If yes, specify:						
a	If yes, NOV date or description of issue: NOV Tracking No:						
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? Yes X No If Yes, provide the 1c & 1d info below:						
c	Document Title:Date:Requirement # (or page # and paragraph #):						
d	Provide the required text to be inserted in this permit:						
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? X Yes No						
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? Yes X No						
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? X Yes No						
a	If Yes, what type of source?Major ( $\geq 10$ tpy of any single HAPOR $\geq 25$ tpy of any combination of HAPS)ORXMinor (X < 10 tpy of any single HAPANDX <25 tpy of any combination ofHAPS)						
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? Yes X No						
	If yes, include the name of company providing commercial electric power to the facility:						
a	Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.						

#### Section 1-G: Streamline Application

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	I have filled out Section 18, "Addendum for Streamline Applications."	<b>X</b> N/A (This is not a Streamline application.)
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### **Section 1-H:** Current Title V Information - Required for all applications from TV Sources (Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits) or

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC):	, <i>n</i>	Phone:		
a	R.O. Title:	R.O. e-mail:			
b	R. O. Address:				
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:		
а	A. R.O. Title: A. R.O. e-mail:				
b	A. R. O. Address:				
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship):				
4	Name of Parent Company ("Parent Company" means the primary r permitted wholly or in part.):	ame of the organiza	tion that owns the company to be		
а	Address of Parent Company:				
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.):				
6	Telephone numbers & names of the owners' agents and site contact	ts familiar with plan	t operations:		

7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:

### Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (NOI), a 20.2.70 NMAC (Title V), a 20.2.72 NMAC (NSR minor source), or 20.2.74 NMAC (PSD) application package shall consist of the following:

#### Hard Copy Submittal Requirements:

- One hard copy original signed and notarized application package printed double sided 'head-to-toe' 2-hole punched as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use numbered tab separators in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard copy for Department use. This copy should be printed in book form, 3-hole punched, and must be double sided. Note that this is in addition to the head-toto 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, two CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a single CD submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

#### Electronic files sent by (check one):

CD/DVD attached to paper application

X secure electronic transfer. Air Permit Contact Name\_\_\_Kevin Ellis\_\_\_\_

Email\_\_Kevin.Ellis@POWEREng.com\_\_\_\_

Phone number 512.657.9856

a. If the file transfer service is chosen by the applicant, after receipt of the application, the Bureau will email the applicant with instructions for submitting the electronic files through a secure file transfer service. Submission of the electronic files through the file transfer service needs to be completed within 3 business days after the invitation is received, so the applicant should ensure that the files are ready when sending the hard copy of the application. The applicant will not need a password to complete the transfer. **Do not use the file transfer service for NOIs, any type of GCP, or technical revisions to NSR permits.** 

- 4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.
- 5) If air dispersion modeling is required by the application type, include the NMED Modeling Waiver and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling <u>summary report only</u> should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.
- 6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
  - a. one additional CD copy for US EPA,
  - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
  - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

If the application is submitted electronically through the secure file transfer service, these extra CDs do not need to be submitted.

#### Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible

format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

- 3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The electronic file names shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the core permit number (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the section # (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the header information throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

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#### Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

					Manufact- urer's Rated	Requested Permitted	Date of Manufacture <sup>2</sup>	Controlled by Unit #	olled hit # Source		RICE Ignition		
Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Capacity <sup>3</sup> (Specify Units)	Capacity <sup>3</sup> (Specify Units)	Date of Construction/ Reconstruction <sup>2</sup>	Emissions vented to Stack #	Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.	
BINS	Cold Bin System and	Astec/Excel	PCF-1014-4	04-096-9001	NA	NA	Jul-04	-	2971	□ Existing (unchanged)	NA	NA	
DING	conveyors 4 +1bin	A ISICO/ EXCO	10110111	01 090 9001	1474	1171	Jul-04	DP1, TR1	2571			1471	
SC1	Screen and Scale Conveyor	Astec	PSS412-60	04-096-1401	NA	NA	Jul-04 Jul-04	- SC1	2971	□ Existing (unchanged)	NA	NA	
MIX1	Mixer with water stay system	Excel			400 tph	400 tph		- MIX1	2971	Existing (unchanged)			
			22204		200		Jul-04	BH1	2051				
DRUMI	Dryer Drum	Astec	PDB843	04-096-2201	300	325	Jul-04	STK1	2971	Existing (unchanged)			
	Double Barrel Green	Astaa	00.150	00.150	NA	NIA	2009	BH1	2071	Existing (unshanged)			
DRUMZ	System	Astec	09-139	09-139	INA	NA	2009	STK1	2971	□ Existing (unchanged)	ingeu)		
RΔP	Single bin RAP system	Astec	PRB814-50	04-96-4401	NA	NΔ	Jul-04	-	2971	Existing (unchanged)			
ICAI	w/ screen and conveyor	Astee	110014-50	04-90-4401	1474	1174	Jul-04	DP2, TR4	2771				
SIL01	Split compartment dry	Astec	DA-650	04-096-3601	650 barrels	650 barrels	Jul-04	VENT1, VENT2	2971	Existing (unchanged)			
51201	additive system (silo)		211 000	01 070 2001	000 000000		Jul-04	SILO1	2771				
HOP1	SEB (loading silo	Astec	SEB 10024	04-096-4201	90 tons	90 tons	Jul-04	-	2971	Existing (unchanged)			
	w/drag slat)						Jul-04	H1A, LO1A			ļ		Ļ
HOP2	Asphalt silo and	Gencor	181TD-138-		181 tons	181 tons		-	2971	Existing (unchanged)			
	conveyors/transfers		1823-04-MA				2017	H1B, LO1B					
HOP3	Asphalt silo and	CMI	CE200	110	200 tons	200 tons		-	2971	Existing (unchanged)			
	conveyors/transfers						2017	HIC, LOIB				───	
HTR	Hot oil heater and	Heatec	HT25P/ HC120	H04-185			Jul-04		2971	□ Existing (unchanged)			
	Telated equipment		110120	1(121.2			Jul-04	HIKI VENT2					
SILO4	Dust Silo		DA-500	2522-3-1	500 barrels	500 barrels		SIL OA	2971	□ Existing (unchanged)			
BH1	Portable pulse jet	Astec	BH52-17.5	04-096-3000	52 000	52 000	Ju1-04	51204	2971	Existing (unchanged)			
DIII	baghouse	713100	D1132 17.5	01 090 5000	acfm	acfm	Jul-04	STK1	2571	Disting (unenanged)			
VENT1	Silo top baghouse	Astec	JVB-27				Jul-04		2971	□ Existing (unchanged)			
	1 0						Jul-04	SILO1					
							Jul-04					<u> </u>	
VENT2	Silo top baghouse	Astec	JVB-27				Jul-04	SILO1	2971	□ Existing (unchanged)			
VENTES		A							2071	Frainting (court)			
VEN13	Silo top baghouse	Astec	JVB-24				Aug-16	SILO4	29/1				

#### **Table 2-C: Emissions Control Equipment**

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
BH1	Dryer Drum Baghouse	Jul-04	Particulate	DRUM1, DRUM2	NA	NA
VENT1	Additive Silo Bin Vent 1	Jul-04	Particulate	SILO1	99.5+	design
VENT2	Additive Silo Bin Vent 2	Jul-04	Particulate	SILO1	99.5+	design
VENT3	Fines Silo Bin Vent	Aug-16	Particulate	SILO4	99.5+	design
<sup>1</sup> List each con	ntrol device on a separate line. For each control device, list all er	nission units o	controlled by the control device.			

#### Table 2-D: Maximum Emissions (under normal operating conditions)

#### □ This Table was intentionally left blank because it would be identical to Table 2-E.

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	N	Ox	C	0	V	DC	SC	Ox	PI	$\mathbf{M}^{1}$	PM	[10 <sup>1</sup>	PM	$2.5^{1}$	Н	$_2S$	Le	ad
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr								
BINS									0.050	0.219	0.016	0.072	0.005	0.020				
SC1									0.358	1.566	0.120	0.527	0.008	0.036				
MIX1									0.046	0.199	0.015	0.065	0.004	0.019				
DRUM1/2	17.88	78.29	42.25	185.06	10.40	45.55	18.85	82.56	9100	39858	2113	9253	320	1401			0.1755	0.76869
RAP									0.013	0.055	0.004	0.018	0.001	0.005				
SILO1									0.025	0.005	0.009	0.002	0.001	0.000				
HOPx			0.92	4.05	5.97	26.15			0.384	1.682	0.182	0.795	0.028	0.120				
HTR	0.118	0.515	0.099	0.433	0.006	0.028	0.001	0.003	0.009	0.039	0.009	0.039	0.009	0.039				
SILO4									0.005	0.005	0.002	0.002	0.000	0.000				
SP									1.13	4.93	0.54	2.35	0.08	0.36				
RD									46.70	204.54	11.90	52.13	1.19	5.21				
Totals	17.99	78.81	43.27	189.53	16.38	71.73	18.85	82.57	9149	40071	2125	9309	321	1407	0.00	0.00	0.18	0.77

<sup>1</sup>Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

#### Table 2-E: Requested Allowable Emissions

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E<sup>-4</sup>).

Unit No.	N	Ox	0	<b>CO</b>	V	DC	S	Ox	P	$M^1$	PN	<b>110<sup>1</sup></b>	PM	[2.5 <sup>1</sup>	Н	I <sub>2</sub> S	Le	ad
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
BINS									0.050	0.046	0.016	0.015	0.005	0.004				
SC1									0.072	0.066	0.024	0.022	0.002	0.002				
MIX1									0.046	0.042	0.015	0.014	0.004	0.004				
DRUM1/2	17.88	9.54	42.25	39.00	10.40	9.60	18.85	4.30	3.11	2.87	2.15	1.98	2.15	1.98			0.00488	0.00105
RAP									0.013	0.044	0.004	0.014	0.001	0.004				
SILO1									0.025	0.005	0.009	0.002	0.0013	0.0003				
HOPx			0.924	0.853	5.970	5.511			0.384	0.354	0.182	0.168	0.028	0.025				
HTR	0.118	0.515	0.099	0.433	0.006	0.028	0.001	0.003	0.009	0.039	0.009	0.039	0.009	0.039				
SILO4									0.005	0.005	0.002	0.002	0.000	0.000				
SP									0.20	0.89	0.10	0.42	0.01	0.06				
RD									1.94	2.02	0.50	0.52	0.05	0.05				
Totals	17.99	10.06	43.27	40.29	16.38	15.14	18.85	4.30	5.86	6.38	3.00	3.20	2.26	2.17	0.00	0.00	0.00	0.00

\* Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC)

#### Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the "-" symbol and on significant figures.

	Serving Unit	N	Ox	C	0	V	DC	S	Ox	Р	М	PN	110	PM	12.5	□ H <sub>2</sub> S or	r 🗆 Lead
Stack No.	Number(s) from Table 2-A	lb/hr	ton/yr	lb/hr	ton/yr												
VENT1	SILO1									0.012	0.002	0.004	0.0009	0.001	0.0001		
VENT2	SILO1									0.012	0.002	0.004	0.0009	0.001	0.0001		
	Totals:																

#### Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

Stack	Serving Unit Number(s)	Orientation	Rain Caps	Height Above	Temp.	Flow	Rate	Moisture by	Velocity	Inside
Number	from Table 2-A	(H-Horizontal V=Vertical)	(Yes or No)	Ground (ft)	(F)	(acfs)	(dscfs)	Volume (%)	(ft/sec)	Diameter (ft)
BH1	DRUM1/2	V	Ν	30.0	285	871	494	20	95	3.42
VENT1	SILO1	V	Ν	40	ambient	13.33	13.33	ambient	26.5	0.80
VENT2	SILO1	V	N	40	ambient	13.33	13.33	ambient	26.5	0.80
VENT3	SILO4	V	Ν	40	ambient	13.33	13.33	ambient	26.5	0.80
HTR1	HTR1	V	Ν	12	800	8.19	3.02	12	42	0.50

#### Table 2-J: Fuel

#### Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

	Fuel Type (low sulfur Diesel,	Fuel Source: purchased commercial,		Speci	fy Units		
Unit No.	ultra low sulfur diesel, Natural Gas, Coal,)	gas, raw/field natural gas, residue (e.g. SRU tail gas) or other	Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
DRUM1/2	Natural Gas	Pipeline quality natural gas	~1020 btu/scf	73.5 Mscf/hr	135,692 Mscf/yr (max)	0.5 gr/100 cf	-
DRUM1/2	Used oil	Commercial used oil	~150000 Btu/gal	500 gal/hr	184,615 gal/yr (max)	<1,000 ppm	-

#### Vado Asphalt Plant

#### Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box **X** By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO <sub>2</sub> ton/yr	N2O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>					<b>Total</b> GHG Mass Basis ton/yr <sup>4</sup>	<b>Total</b> <b>CO<sub>2</sub>e</b> ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3						
DRUM	mass GHG	11100	0.20								11100	
	CO <sub>2</sub> e	11100	60.64									11161
HTR	mass GHG	618	0.01								618	
	CO <sub>2</sub> e	618	3.38				 		 			622
	mass GHG									 		
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	mass GHG											
	CO <sub>2</sub> e											
	mass CHC											
	CO.e											
	mass CHC											
	CO.e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO2e											
Tetal	mass GHG										11719	
Total	CO <sub>2</sub> e											11782

GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

<sup>2</sup> For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

<sup>3</sup> For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

<sup>4</sup> Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

### **Application Summary**

The <u>Application Summary</u> shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The <u>Process</u> <u>Summary</u> shall include a brief description of the facility and its processes.

<u>Startup, Shutdown, and Maintenance (SSM)</u> routine or predictable emissions: Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app\_form.html) for more detailed instructions on SSM emissions.

The Vado Asphalt Plant (the Plant) is a standard drum-mix asphalt paving plant. The Plant receives aggregates, sand, and recycled asphalt product (RAP) and stores the materials in open stockpiles. Lime or similar additive is received and stored in a silo. Liquid asphalt, diesel fuel, and oil are stored in horizontal tanks.

The aggregate and sand are transported via front end loader to a series of feed hoppers. A drag belt under the hoppers removes the materials and transports them to the dryer drum. The aggregate passes through a vibratory screen and lime (if required) is added (along with water) via an enclosed pugmill. The mixture is then dropped into the dryer drum. The dryer drum is used to dry and heat the aggregate prior to the addition of the liquid asphalt binder. The dryer is primarily fueled with natural gas, although diesel or used oil can also be used. Liquid binder is piped from the heated storage tanks and injected into the drum to create the asphalt mixture. The product is carried by an elevator to one of three storage bins/silos. The Plant had two loadout points to load the product to haul trucks.

RAP can be used to displace aggregate in the process. The RAP is handled in a similar manner - it is loaded to a feed hopper and then transported to the dryer drum via conveyor. The RAP enters the drum via the recycle collar, which is downstream of where the aggregate enters the drum. This removes the material from the hottest section of the dryer and prevents scorching.

The haul trucks enter the property and circle to the loadout points/scales. The travel path is a compacted base and is watered, as necessary, to minimize emissions.

The Plant was originally constructed in 2008 and is currently authorized under a GCP3-3665. Jobe Materials, L.P. is submitted this application for a construction permit under 20.2.72.200.A.2 which will convert the facility from a GCP to a minor NSR case-by-case permit. In addition, the hourly and annual production will be limited to rates lower than allowed under the GCP.

A rock crushing operation authorized under minor NSR Permit No. 3640 is currently located to the north on the same site, and a concrete batch plant is operating to the west under a GCP5.

### **Process Flow Sheet**

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

A process flow diagram is on the following page.

### Vado Asphalt Concrete Plant

#### **Process Flow Diagram**



### **Plot Plan Drawn To Scale**

A <u>plot plan drawn to scale</u> showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

Two plot plans are included.

Plot A is a close-up and shows all the equipment and roads, as well as enough of the restricted area/area of operations to match up the equipment to Plot B.

Plot B is a further-out view which allows the entire property line (restricted area) to be shown





### **All Calculations**

<u>Show all calculations</u> used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

**Tank Flashing Calculations**: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

**SSM Calculations**: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app\_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

**Glycol Dehydrator Calculations**: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

- 1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
- 2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

#### **Significant Figures:**

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

**C.** In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; and
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

**Control Devices:** In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

The calculations have been included in the entirety in the UA2 workbook. No additional calculations have been shown here, as they would consist of print-outs from the workbook.

# Section 6.a

### **Green House Gas Emissions**

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must

estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

#### **Calculating GHG Emissions:**

**1.** Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e emissions from your facility.

**2.** GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 <u>Mandatory Greenhouse Gas Reporting</u>.

3. Emissions from routine or predictable start up, shut down, and maintenance must be included.

**4.** Report GHG mass and GHG  $CO_2e$  emissions in Table 2-P of this application. Emissions are reported in <u>short</u> tons per year and represent each emission unit's Potential to Emit (PTE).

**5.** All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.

**6.** For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following  $\Box$  By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

#### Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/

• 40 CFR 98 <u>Mandatory Green House Gas Reporting</u> except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.

• API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.

• Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

#### **Global Warming Potentials (GWP):**

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of  $CO_2$  over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. (20.2.70.7 NMAC, 20.2.74.7 NMAC). You may also find GHGs defined in 40 CFR 86.1818-12(a).

#### Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 <u>Mandatory Greenhouse Reporting</u> requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

### **Information Used To Determine Emissions**

#### Information Used to Determine Emissions shall include the following:

If manufacturer data are used, include specifications for emissions units <u>and</u> control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.

If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.

If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.

If an older version of AP-42 is used, include a complete copy of the section.

If an EPA document or other material is referenced, include a complete copy.

Fuel specifications sheet.

If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

The following sources for emission factors are used in the calculations.

- AP-42, 5<sup>th</sup> Edition, Volume I, Section 11.19.2 Crushed Stone Processing, August 2004.
- AP-42, 5<sup>th</sup> Edition, Volume I, Section 11.1 Hot Mix Asphalt Plants, December 2000.
- AP-42, 5<sup>th</sup> Edition, Volume I, Section 11.12 Concrete Batching, June 2006.
- Development of Emission Factors for Fugitive Dust Source, Cowherd, 1974
- AP-42, 5<sup>th</sup> Edition, Volume I, Section 13.2.2 Unpaved Roads, November 2006.
- AP-42, 5<sup>th</sup> Edition, Volume I, Section 1.4 Natural Gas Combustion, July 1998

#### Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)<sup>a</sup>

Source <sup>b</sup>	Total	EMISSION	Total	EMISSION	Total	EMISSION
	Particulate	FACTOR	PM-10	FACTOR	PM-2.5	FACTOR
	Matter <sup>r,s</sup>	RATING		RATING		RATING
Primary Crushing	ND		$ND^{n}$		$ND^{n}$	
(SCC 3-05-020-01)						
Primary Crushing (controlled)	ND		$ND^{n}$		$ND^{n}$	
(SCC 3-05-020-01)						
Secondary Crushing	ND		$ND^{n}$		ND <sup>n</sup>	
(SCC 3-05-020-02)			n		P	
Secondary Crushing (controlled)	ND		ND"		ND"	
(SCC 3-05-020-02)	0.0054		0.00040	G		
Tertiary Crushing	0.0054	E	0.0024°	C	ND.	
(SCC 3-050030-03)	0.0012 <sup>d</sup>	Б	0.0005 4 <sup>p</sup>	C	0.000109	Б
(SCC 3 05 020 03)	0.0012	E	0.00054*	C	0.00010*	E
(See 5-05-020-03) Fines Crushing	0.0300 <sup>e</sup>	F	0.0150 <sup>e</sup>	F	ND	
(SCC 3-05-020-05)	0.0370	L	0.0150	L	ND	
Fines Crushing (controlled)	0.0030 <sup>f</sup>	F	$0.0012^{\rm f}$	F	0.000070 <sup>q</sup>	F
(SCC 3-05-020-05)	0.0050	Ľ	0.0012	Ľ	0.000070	Ľ
Screening	0.025 <sup>c</sup>	Е	$0.0087^{1}$	С	ND	
(SCC 3-05-020-02, 03)				-		
Screening (controlled)	0.0022 <sup>d</sup>	E	$0.00074^{\rm m}$	C	0.000050 <sup>q</sup>	E
(SCC 3-05-020-02, 03)		_		_		_
Fines Screening	0.30 <sup>g</sup>	E	0.072 <sup>g</sup>	E	ND	
(SCC 3-05-020-21)						
Fines Screening (controlled)	0.0036 <sup>g</sup>	E	$0.0022^{g}$	E	ND	
(SCC 3-05-020-21)						
Conveyor Transfer Point	0.0030 <sup>h</sup>	E	0.00110 <sup>n</sup>	D	ND	
(SCC 3-05-020-06)			5		50	
Conveyor Transfer Point (controlled)	0.00014	E	$\frac{4.6 \text{ x} 10^{-31}}{10^{-31}}$	D	$\frac{1.3 \text{ x} 10^{-34}}{10^{-34}}$	E
(SCC 3-05-020-06)			0.0.105			
Wet Drilling - Unfragmented Stone	ND		$8.0 \ge 10^{-51}$	E	ND	
(SCC 3-05-020-10)	NID		1 ( 10-51	Г	ND	
Fragmented Stone	ND		1.6 x 10 <sup>-5</sup>	E	ND	
(SUC 5-05-020-51) Truck Loading Conveyor aryshed	ND		0.00010 <sup>k</sup>	E	ND	
stope (SCC 3-05-020-32)	IND		0.00010	E	IND	
stone (SCC 3-03-020-32)						

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

#### Table 11.1-3. PARTICULATE MATTER EMISSION FACTORS FOR DRUM MIX HOT MIX ASPHALT PLANTS<sup>a</sup>

		Filtera	ble PM			Condensa	able PM <sup>b</sup>			Тс	otal PM	
Process	PM <sup>c</sup>	EMISSION FACTOR RATING	<b>PM-</b> 10 <sup>d</sup>	EMISSION FACTOR RATING	Inorganic	EMISSION FACTOR RATING	Organic	EMISSION FACTOR RATING	PM <sup>e</sup>	EMISSION FACTOR RATING	<b>PM-10<sup>f</sup></b>	EMISSION FACTOR RATING
Dryer <sup>g</sup> (SCC 3-05-002-05,-55 to -63)												
Uncontrolled	28 <sup>h</sup>	D	6.4	D	$0.0074^{j}$	Е	0.058 <sup>k</sup>	Е	28	D	6.5	D
Venturi or wet scrubber	0.026 <sup>m</sup>	А	ND	NA	$0.0074^{n}$	А	0.012 <sup>p</sup>	А	0.045	А	ND	NA
Fabric filter	0.014 <sup>q</sup>	А	0.0039	С	0.0074 <sup>n</sup>	А	0.012 <sup>p</sup>	А	<mark>0.033</mark>	A	0.023	C

Factors are lb/ton of product. SCC = Source Classification Code. ND = no data. NA = not applicable. To convert from lb/ton to kg/Mg, а multiply by 0.5.

Condensable PM is that PM collected using an EPA Method 202, Method 5 (analysis of "back-half" or impingers), or equivalent sampling train.

Filterable PM is that PM collected on or before the filter of an EPA Method 5 (or equivalent) sampling train.

Particle size data from Reference 23 were used in conjunction with the filterable PM emission factors shown.

Total PM is the sum of filterable PM, condensable inorganic PM, and condensable organic PM.

Total PM-10 is the sum of filterable PM-10, condensable inorganic PM, and condensable organic PM.

EMISSION FACTORS Drum mix dryer fired with natural gas, propane, fuel oil, and waste oil. The data indicate that fuel type does not significantly effect PM emissions.

References 31, 36-38, 340. h

Because no data are available for uncontrolled condensable inorganic PM, the emission factor is assumed to be equal to the maximum j controlled condensable inorganic PM emission factor.

References 36-37. k

Reference 1, Table 4-14. Average of data from 36 facilities. Range: 0.0036 to 0.097 lb/ton. Median: 0.020 lb/ton. Standard m deviation: 0.022 lb/ton.

<sup>n</sup> Reference 1, Table 4-14. Average of data from 30 facilities. Range: 0.0012 to 0.027 lb/ton. Median: 0.0051 lb/ton. Standard deviation: 0.0063 lb/ton.

<sup>p</sup> Reference 1, Table 4-14. Average of data from 41 facilities. Range: 0.00035 to 0.074 lb/ton. Median: 0.0046 lb/ton. Standard deviation: 0.016 lb/ton.

q Reference 1, Table 4-14. Average of data from 155 facilities. Range: 0.00089 to 0.14 lb/ton. Median: 0.010 lb/ton. Standard deviation: 0.017 lb/ton.

11.1-17

# Table 11.1-7. EMISSION FACTORS FOR CO, CO2, NOx, AND SO2 FROM<br/>DRUM MIX HOT MIX ASPHALT PLANTS<sup>a</sup>

Process	CO <sup>b</sup>	EMISSION FACTOR RATING	CO <sub>2</sub> <sup>c</sup>	EMISSION FACTOR RATING	NO <sub>x</sub>	EMISSION FACTOR RATING	SO <sub>2</sub> <sup>c</sup>	EMISSION FACTOR RATING
Natural gas-fired dryer (SCC 3-05-002-55,-56,-57)	<mark>0.13</mark>	B	<mark>33<sup>d</sup></mark>	A	0.026 <sup>e</sup>	D	0.0034 <sup>f</sup>	D
No. 2 fuel oil-fired dryer (SCC 3-05-002-58,-59,-60)	0.13	В	33 <sup>d</sup>	А	0.055 <sup>g</sup>	С	0.011 <sup>h</sup>	Е
Waste oil-fired dryer (SCC 3-05-002-61,-62,-63)	0.13	В	<mark>33<sup>d</sup></mark>	A	0.055 <sup>g</sup>	C	0.058 <sup>j</sup>	В
Coal-fired dryer <sup>k</sup> (SCC 3-05-002-98)	ND	NA	33 <sup>d</sup>	А	ND	NA	0.19 <sup>m</sup>	Е

EMISSION FACTORS

<sup>a</sup> Emission factor units are lb per ton of HMA produced. SCC = Source Classification Code. ND = no data available. NA = not applicable. To convert from lb/ton to kg/Mg, multiply by 0.5.

<sup>b</sup> References 25, 44, 48, 50, 149, 154, 197, 214, 229, 254, 339-342, 344, 346, 347, 390. The CO emission factors represent normal plant operations without scrutiny of the burner design, operation, and maintenance. Information is available that indicates that attention to burner design, periodic evaluation of burner operation, and appropriate maintenance can reduce CO emissions. Data for dryers firing natural gas, No. 2 fuel oil, and No. 6 fuel oil were combined to develop a single emission factor because the magnitude of emissions was similar for dryers fired with these fuels.

<sup>2</sup> Emissions of  $CO_2$  and  $SO_2$  can also be estimated based on fuel usage and the fuel combustion emission factors (for the appropriate fuel) presented in AP-42 Chapter 1. The  $CO_2$  emission factors are an average of all available data, regardless of the dryer fuel (emissions were similar from dryers firing any of the various fuels). Fifty percent of the fuel-bound sulfur, up to a maximum (as  $SO_2$ ) of 0.1 lb/ton of product, is expected to be retained in the product, with the remainder emitted as  $SO_2$ .

<sup>d</sup> Reference 1, Table 4-15. Average of data from 180 facilities. Range: 2.6 to 96 lb/ton. Median: 31 lb/ton. Standard deviation: 13 lb/ton.

- <sup>e</sup> References 44-45, 48, 209, 341, 342.
- <sup>f</sup> References 44-45, 48.
- <sup>g</sup> References 25, 50, 153, 214, 229, 344, 346, 347, 352-354.
- <sup>h</sup> References 50, 119, 255, 340
- <sup>j</sup> References 25, 299, 300, 339, 345, 351, 371-377, 379, 380, 386-388.
- <sup>k</sup> Dryer fired with coal and supplemental natural gas or fuel oil.
- <sup>m</sup> References 88, 108, 189-190.

#### Table 11.1-14. PREDICTIVE EMISSION FACTOR EQUATIONS FOR LOAD-OUT AND SILO FILLING OPERATIONS<sup>a</sup>

Source	Pollutant	Equation
Drum mix or batch mix	Total PM <sup>b</sup>	$EF = 0.000181 + 0.00141(-V)e^{((0.0251)(T + 460) - 20.43)}$
plant load-out (SCC 3-05-002-14)	Organic PM <sup>c</sup>	$EF = 0.00141(-V)e^{((0.0251)(T + 460) - 20.43)}$
	$\mathrm{TOC}^{\mathrm{d}}$	$EF = 0.0172(-V)e^{((0.0251)(T + 460) - 20.43)}$
	СО	$EF = 0.00558(-V)e^{((0.0251)(T + 460) - 20.43)}$
Silo filling	Total PM <sup>b</sup>	$EF = 0.000332 + 0.00105(-V)e^{((0.0251)(T + 460) - 20.43)}$
(SCC 3-05-002-13)	Organic PM <sup>c</sup>	$EF = 0.00105(-V)e^{((0.0251)(T + 460) - 20.43)}$
	$TOC^d$	$EF = 0.0504(-V)e^{((0.0251)(T + 460) - 20.43)}$
	СО	$EF = 0.00488(-V)e^{((0.0251)(T + 460) - 20.43)}$

#### EMISSION FACTOR RATING: C

- <sup>a</sup> Emission factor units are lb/ton of HMA produced. SCC = Source Classification Code. To convert from lb/ton to kg/Mg, multiply by 0.5. EF = emission factor; V = asphalt volatility, as determined by ASTM Method D2872-88 "Effects of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test - RTFOT)," where a 0.5 percent loss-on-heating is expressed as "-0.5." Regional- or sitespecific data for asphalt volatility should be used, whenever possible; otherwise, a default value of -0.5 should be used for V in these equations. T = HMA mix temperature in °F. Site-specific temperature data should be used, whenever possible; otherwise a default temperature of 325°F can be used. Reference 1, Tables 4-27 through 4-31, 4-34 through 4-36, and 4-38 through 4-41.
- <sup>b</sup> Total PM, as measured by EPA Method 315 (EPA Method 5 plus the extractable organic particulate from the impingers). Total PM is assumed to be predominantly PM-2.5 since emissions consist of condensed vapors.
- <sup>c</sup> Extractable organic PM, as measured by EPA Method 315 (methylene chloride extract of EPA Method 5 particulate plus methylene chloride extract of impinger particulate).
- <sup>d</sup> TOC as propane, as measured with an EPA Method 25A sampling train or equivalent sampling train.

#### Source (SCC) Controlled Uncontrolled Emission Emission Emission Emission Total PM Total PM<sub>10</sub> Total PM Total Factor $PM_{10}$ Factor Factor Factor Rating Rating Rating Rating Aggregate transfer <sup>b</sup> 0.0069 D 0.0033 D ND ND (3-05-011-04,-21,23) Sand transfer<sup>b</sup> 0.0021 D 0.00099 D ND ND (3-05-011-05,22,24) Cement unloading to elevated storage silo (pneumatic)<sup>c</sup> 0.00099 0.00034 0.73 Ε 0.47 Ε D D (3-05-011-07) Cement supplement unloading to elevated storage silo E D 3.14 Ε 1.10 Ε 0.0089 0.0049 (pneumatic)<sup>d</sup> (3-05-011-17) Weigh hopper loading <sup>e</sup> 0.0048 D 0.0028 D ND ND (3-05-011-08) 0.0055 0.572 0.156 0.0184 Mixer loading (central mix)<sup>f</sup> or Eqn. or Eqn. or Eqn. or Eqn. В В В В (3-05-011-09) 11.12-1 11.12-1 11.12-1 11.12-1 0.098 0.0263 Truck loading (truck mix)<sup>g</sup> 1.118 0.310 В В or Eqn. В or Eqn. В (3-05-011-10) 11.12-1 11.12-1 See AP-42 Section 13.2.1, Paved Roads Vehicle traffic (paved roads) See AP-42 Section 13.2.2, Unpaved Roads Vehicle traffic (unpaved roads) Wind erosion from aggregate See AP-42 Section 13.2.5, Industrial Wind Erosion and sand storage piles

TABLE 11.12-2 (ENGLISH UNITS) EMISSION FACTORS FOR CONCRETE BATCHING <sup>a</sup>

# Table 27. CALCULATED EMISSION FACTORS (Aggregate Storage Piles)

				Emission F	actor		
Storage Pile Activ	<u>ity</u>	(1b/acre of	storage/day	<b>Σ</b> .	(1b/tor	placed in	storage
Active <sup>a/</sup>		13	3.2			0.42	
ς.							
Inactive (wind ero	sion)		3.5			0.11	
Normal mix <sup>D</sup>		10	).4			0.33	

88

- F

 $\underline{a}$ / Eight to twelve hours of activity pdr 24-hr period. <u>b</u>/ Five active days per week.

## Map(s)

<u>A map</u> such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

An area map is on the following page.



### **Proof of Public Notice**

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC) (This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

**I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"** This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and Significant Permit Revision public notices must include all items in this list.

**Technical Revision** public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

- 1. X A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
- 2. X A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
- 3. X A copy of the property tax record (20.2.72.203.B NMAC).
- 4. X A sample of the letters sent to the owners of record.
- 5. X A sample of the letters sent to counties, municipalities, and Indian tribes.
- 6. X A sample of the public notice posted and a verification of the local postings.
- 7. X A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
- 8. X A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
- 9. X A copy of the <u>classified or legal</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 10. X A copy of the <u>display</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 11. X A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.

### Written Description of the Routine Operations of the Facility

<u>A written description of the routine operations of the facility</u>. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

This description of routine operation of the facility is included in Section 3.

#### **Source Determination**

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, <u>Single Source Determination Guidance</u>, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

#### A. Identify the emission sources evaluated in this section (list and describe):

Asphalt plant (SIC 2951), a concrete batch plant(3273), and a rock crusher (1422).

#### **B.** Apply the 3 criteria for determining a single source:

<u>SIC</u> <u>Code</u>: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, <u>OR</u> surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

Yes X No

<u>Common</u> <u>Ownership</u> or <u>Control</u>: Surrounding or associated sources are under common ownership or control as this source.

X Yes No

<u>Contiguous or Adjacent</u>: Surrounding or associated sources are contiguous or adjacent with this source.

X Yes No

#### C. Make a determination:

X The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check AT LEAST ONE of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

The source, as described in this application, <u>does not</u> constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

### Section 12.A PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

**A PSD applicability determination for all sources.** For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the <u>EPA New Source Review Workshop Manual</u> to determine if the revision is subject to PSD review.

- A. This facility is:
  - X a minor PSD source before and after this modification (if so, delete C and D below).

a major PSD source before this modification. This modification will make this a PSD minor source.

an existing PSD Major Source that has never had a major modification requiring a BACT analysis.

an existing PSD Major Source that has had a major modification requiring a BACT analysis

a new PSD Major Source after this modification.

- B. This facility I not one of the listed 20.2.74.501 Table I PSD Source Categories. The "project" emissions for this modification are not significant. The "project" emissions listed below only result from changes described in this permit application. Also, specifically discuss whether this project results in "de-bottlenecking", or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:
  - a. NOx: 10.1 TPY
  - b. CO: 40.3 TPY
  - c. VOC: 15.1 TPY
  - d. SOx: 4.3 TPY
  - e. PM: 11.7 TPY
  - f. PM10: 7.7 TPY
  - g. PM2.5: 3.6 TPY
  - h. Fluorides: 0.0 TPY
  - i. Lead: 0.0 TPY
  - j. Sulfur compounds (listed in Table 2): 0.0 TPY
  - k. GHG: 11719 TPY
- C. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

### **Determination of State & Federal Air Quality Regulations**

## This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

#### **Required Information for Specific Equipment:**

For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply**. For example, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

#### **Required Information for Regulations that Apply to the Entire Facility:**

See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

#### **Regulatory Citations for Regulations That Do Not, but Could Apply:**

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example, if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

#### **Regulatory Citations for Emission Standards:**

For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. Here are examples: a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

#### Federally Enforceable Conditions:

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

## INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVENT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

#### EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: http://cfpub.epa.gov/adi/

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

#### **Example of a Table for STATE REGULATIONS:**

STATE RECU-	Title	Applies? Enter	Unit(s) or	JUSTIFICATION:
LATIONS CITATION	The	Yes or No	Facility	(You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	If subject, this would normally apply to the entire facility. 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC The TSP NM ambient air quality standard was repealed by the EIB effective November 30, 2018.
20.2.7 NMAC	Excess Emissions	Yes	Facility	If subject, this would normally apply to the entire facility. If your entire facility or individual pieces of equipment are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, this applies. This would not apply to Notices of Intent since these are not permits.
20.2.23 NMAC	Fugitive Dust Control	No	Facility	<ul> <li>This regulation may apply if,</li> <li>this is an application for a notice of intent (NOI) per 20.2.73 NMAC,</li> <li>if the activity or facility is a fugitive dust source listed at 20.2.23.108.A NMAC,</li> <li>and if the activity or facility is located in an area subject to a mitigation plan</li> <li>pursuant to 40 CFR 51.930.</li> <li>http://164.64.110.134/parts/title20/20.002.0023.html</li> <li>As of January 2019, the only areas of the State subject to a mitigation plan per 40</li> <li>CFR 51.930 are in Doña Ana and Luna Counties.</li> <li>Sources exempt from 20.2.23 NMAC are activities and facilities subject to a permit issued pursuant to the NM Air Quality Control Act, the Mining Act, or the Surface Mining Act (20.2.23.108.B NMAC.</li> <li>20.2.23.108 APPLICABILITY:</li> <li>A. This part shall apply to persons owning or operating the following fugitive dust sources in areas requiring a mitigation plan in accordance with 40 CFR Part 51.930:</li> <li>(1) disturbed surface areas or inactive disturbed surface areas, or a combination thereof, encompassing an area equal to or greater than one acre;</li> <li>(2) any commercial or industrial bulk material processing, handling, transport or storage operations.</li> <li>B. The following fugitive dust sources are exempt from this part:</li> <li>(1) agricultural facilities, as defined in this part;</li> <li>(2) roadways, as defined in this part;</li> <li>(3) operations issued permits pursuant to the state of New Mexico Air Quality Control Act, Mining Act or Surface Mining Act; and</li> <li>(4) lands used for state or federal military activities.</li> <li>[20.2.23.108 NMAC - N, 01/01/2019]</li> </ul>
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	Yes	HTR and DRUM 1/2	This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers. This facility has new gas burning equipment (external combustion emission sources, such as gas fired boilers and heaters) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	Yes	DRUM 1/2	This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers. This facility has oil burning equipment (external combustion emission sources, such as oil fired boilers and heaters) having a heat input of greater than 1,000,000

STATE REGU-	Title	Applies? Enter	Unit(s) or	JUSTIFICATION:
LATIONS CITATION		Yes or No	Facility	(You may delete instructions or statements that do not apply in the justification column to shorten the document.)
				million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No		This regulation could apply to existing (prior to July 1, 1974) or new (on or after July 1, 1974) natural gas processing plants that use a Sulfur Recovery Unit to reduce sulfur emissions. See 'Guidance and Clarification Regarding Applicability of 20.2.35 NMAC' located with the Air Quality Bureau's Permit Section website guidance documents.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.
20.2.38 NMAC	Hydrocarbon Storage Facility	No		This regulation could apply to storage tanks at petroleum production facilities, processing facilities, tanks batteries, or hydrocarbon storage facilities.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No		This regulation could apply to sulfur recovery plants that are not part of petroleum or natural gas processing facilities.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	HTR, DRUM 1/2	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC). If equipment at your facility was subject to the repealed regulation 20.2.37 NMAC it is now subject to 20.2.61 NMAC.
20.2.70 NMAC	Operating Permits	No	Facility	If subject, this would normally apply to the entire facility. Applies if your facility's potential to emit (PTE) is 100 tpy or more of any regulated air pollutant other than HAPs; and/or a HAPs PTE of 10 tpy or more for a single HAP or 25 or more tpy for combined HAPs; is subject to a 20.2.79 NMAC nonattainment permit; or is a facility subject to a federal regulation that requires you to obtain a Title V permit such as landfills or air curtain incinerators. Include both stack and fugitive emissions to determine the HAP's PTE regardless of the facility type. If your facility is one of those listed at 20.2.70.7(2)(a) through (aa) state which
				source type your facility is and count both fugitive and stack emissions to determine your PTE. If your facility is not in this (a) through (aa) list, count only stack emissions to determine your PTE. Landfills and Air Curtain Incinerators are not Title V Major Sources, but it would apply pursuant to 20.2.70.200.B NMAC.
20.2.71 NMAC	Operating Permit Fees	No	Facility	If subject to 20.2.70 NMAC and your permit includes numerical ton per year emission limits, you are subject to 20.2.71 NMAC and normally applies to the entire facility.
20.2.72 NMAC	Construction Permits	Yes	Facility	If subject, this would normally apply to the entire facility. Could apply if your facility's potential emission rate (PER) is greater than 10 pph or greater than 25 tpy for any pollutant subject to a state or federal ambient air quality standard (does not include VOCs or HAPs); if the PER of lead is 5 tpy or more; if your facility is subject to 20.2.72.400 NMAC; or if you have equipment subject to 40 CFR 60 Subparts I and OOO, 40 CFR 61 Subparts C and D. Include both stack and fugitive emissions to determine PER.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	If subject, this would normally apply to the entire facility. A Notice of Intent application 20.2.73.200 NMAC could apply if your facility's PER of <u>any</u> regulated air pollutant, including VOCs and HAPs, is 10 tpy or more or if you have lead emissions of 1 tpy or more. Include both fugitive and stack emissions to determine your PER. You could be required to submit Emissions Inventory Reporting per 20.2.73.300 NMAC if your facility is subject to 20.2.73.200, 20.2.72, or emits more than 1 ton of lead or 10 tons of PM10, PM2.5, SOx, NOx CO, or VOCs in any calendar year.

STATE RECU-	Title	Applies? Enter	Unit(s) or	JUSTIFICATION:
LATIONS CITATION	The	Yes or No	Facility	(You may delete instructions or statements that do not apply in the justification column to shorten the document.)
				All facilities that are a Title V Major Source as defined at 20.2.70.7.R NMAC, are subject to Emissions Inventory Reporting.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	If subject, this would normally apply to the entire facility. If you are an existing PSD major source you are subject to the applicability determination requirements at 20.2.74.200 NMAC to determine if you are subject to a PSD permit, <u>before</u> commencing actual construction of any modifications at your facility. Complete the applicability determination in Section 12 of the application. If you are constructing a new PSD major source, you must obtain a PSD permit. Minor NSR Exemptions at 20.2.72.200 NMAC nor Title V Insignificant Activities do not apply to the PSD permit regulation. <b>Choose which applies and delete the rest</b> . See NMACS 20.2.74.7.AE and AG Major Modification and Major Stationary Source, 20.2.74.200 Applicability, and 20.2.74.201 Exemptions. <b>20.2.74.7.AG(1)</b> A stationary source listed in Table 1 of this Part (20.2.74.501 NMAC) which emits, or has the potential to emit, emissions equal to or greater than one hundred (100) tons per year of any stack and fugitive emissions (as defined) of any regulated air pollutant; or <b>20.2.74.7.AG(2)</b> A stationary source not listed in Table 1 of this Part (20.2.74.501 NMAC) and which emits or has the potential to emit stack emissions of two hundred fifty (250) tons per year or more of any regulated pollutant; or <b>20.2.74.7.AG(2)</b> A physical change that would occur at a stationary source not otherwise qualifying under paragraphs (1) or (2) of subsection if the change would constitute a major stationary source by itself (e.g. an increase of 250 tpy or more); or <b>20.2.74.300.D</b> a source or modification that becomes a major stationary source or major modification solely due to a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then this part shall apply to the source or modification as through construction had not yet commenced. <b>20.2.74.200.7.AG(5)</b> The fugitive emissions of a stationary source
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	If subject, this would apply to the entire facility. It is not necessary to include each low level regulatory citation for this regulation. This regulation applies if you are submitting an application pursuant to 20.2.72, 20.2.73, 20.2.74, and/or 20.2.79 NMAC. If this is a 20.2.73 NMAC application it is subject to the filing fee at 20.2.75.10 NMAC. If this is a 20.2.72, 20.2.74, and/or 20.2.79 NMAC application it is subject to 20.2.75.10, 11 permit fee, and 11.E annual fees. You are not subject to the 75.11.E annual fees if you are subject to 20.2.71 NMAC.
20.2.77 NMAC	New Source Performance	Yes	Units subject to 40 CFR 60	This is a stationary source which is subject to the requirements of 40 CFR Part 60.
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40	This facility emits hazardous air pollutants which are subject to the requirements of 40 CFR Part 61.

<u>STATE</u> <u>REGU-</u>	Title	Applies? Enter	Unit(s) or	JUSTIFICATION:
LATIONS CITATION		Yes or No	Facility	(You may delete instructions or statements that do not apply in the justification column to shorten the document.)
			CFR 61	
20.2.79 NMAC	Permits – Nonattainment Areas	No	Facility	If subject, this would normally apply to the entire facility. If you are an existing nonattainment major source pursuant to 20.2.79.7.V NMAC you are subject to the applicability determination requirements at 20.2.79.109 NMAC to determine if you are subject to a nonattainment permit, <u>before</u> commencing actual construction of any modifications at your facility. If you are constructing a new nonattainment major source or are proposing a major modification to an existing nonattainment major source, you must obtain a nonattainment permit. Minor NSR Exemptions at 20.2.72.200 NMAC nor Title V Insignificant Activities do not apply to the nonattainment permit regulation. Choose which applies and delete the rest. See NMACS 20.2.79.7.U Major Modification and 7.V Major Stationary Source. 20.2.79.109.A(1) A major stationary source or major modification that will be located within a nonattainment area so designated pursuant to Section 107 of the Federal Act and will emit a pollutant subject to a National Ambient Air Quality Standard for which it is major and which the area is designated nonattainment; or 20.2.79.109.A(2) A major stationary source or major modification that will be located within an area designated attainment or unclassifiable pursuant to Section 107 of the Federal Act and will emit a regulated pollutant subject to a National Ambient Air Quality Standard for which it is major and the ambient impact of such pollutant would exceed any of the significance levels in 20.2.79.119.A NMAC at any location that does not meet any national ambient air quality standard for the same pollutant.
20.2.80 NMAC	Stack Heights	No		Usually not applicable for TV If applies: Cited as applicable in NSR Permit XXX.
20.2.82 NMAC	MACT Standards for source categories of HAPS	No	Units 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.

#### **Example of a Table for Applicable FEDERAL REGULATIONS (Note: This is not an exhaustive list):**

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	If subject, this would normally apply to the entire facility. This applies if you are subject to 20.2.70, 20.2.72, 20.2.74, and/or 20.2.79 NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units subject to 40 CFR 60	Applies if any other Subpart in 40 CFR 60 applies.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No		Establishes PM, SO <sub>2</sub> and NOx emission limits/standards of performance for Unit <b>XXX</b> . The duct burner (unit #XXX) has a XXXX MMBtu/hr heat input, which exceeds the 250 MMBtu/hr threshold. Construction commenced XXXX, after the 9/18/1978 applicability date.

<u>FEDERAL</u> <u>REGU-</u> <u>LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No		<ul> <li>(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).</li> <li>Establishes NOx emission limit for Unit XXX. The boiler (unit XXX) has a XXX MMBtu/hr heat input, which exceeds the 100 MMBtu/hr threshold. Construction commenced 1980 and the boiler was modified in XXXX, after the 6/19/1984 applicability date.</li> </ul>
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial- Commercial- Institutional Steam Generating Units	No		Applicability: facility has steam generating units for which construction, modification or reconstruction is commenced after June 9, 1989 and that have a maximum design heat input capacity of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). This regulation applies to units XXX, X, XX, and XXX.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No		Tanks XXX have a storage capacity greater than 151,416 liters (40,000 gallons) that are used to store petroleum liquids for which construction is commenced after May 18, 1978. Note: Exception below Each petroleum liquid storage vessel with a capacity of less than 1,589,873 liters (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer is not an affected facility and, therefore, is exempt from the requirements of this subpart
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No		This facility has storage vessels, emission units XXX with a capacity greater than or equal to 75 cubic meters (m <sup>3</sup> ) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. Note: This regulation has several exceptions. See link <u>40 CFR 60</u> Subpart Kb
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No		Units x,y,z have a heat input = x Btu/hour which is greater than the 10 MMBtu/hour threshold. These units were installed on x which is before/after the October 3, 1977 applicability date. (For information on equipment manufactured before but installed at facility after see EPA Guidance document # 0300006)
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from <b>Onshore</b> <b>Gas Plants</b>	No		Affected Facility with Leaks of VOC from Onshore Gas Plants. Any affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after January 20, 1984, is subject to the requirements of this subpart. The group of all equipment (each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by this subpart) except compressors (defined in § 60.631) within a process unit is an affected facility. A compressor station, dehydration unit,

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				sweetening unit, underground storage tank, field gas gathering system, or liquefied natural gas unit is covered by this subpart if it is located at an onshore natural gas processing plant. If the unit is not located at the plant site, then it is exempt from the provisions of this subpart.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for <b>Onshore Natural</b> <b>Gas Processing</b> : SO <sub>2</sub> Emissions	No		The facility is a natural gas processing plant, including a sweetening unit followed by a sulfur recovery unit, constructed after January XX, XXXX, and meets the applicability criteria of 40 CFR 60.640
				EPA Guidance Page: <u>https://www3.epa.gov/airquality/oilandgas/</u>
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No		The rule applies to "affected" facilities that are constructed, modified, or reconstructed after Aug 23, 2011 (40 CFR 60.5365): gas wells, including fractured and hydraulically refractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, certain equipment at natural gas processing plants, sweetening units at natural gas processing plants, and storage vessels.
				If there is a standard or other requirement, then the facility is an "affected facility." Currently there are standards for: gas wells (60.5375); centrifugal compressors (60.5380); reciprocating compressors (60.5385): controllers (60.5390); storage vessels (60.5395); equipment leaks (60.5400); sweetening units (60.5405).
				If standards apply, list the unit number(s) and regulatory citation of the standard that applies to that unit (e.g. Centrifugal Compressors 1a-3a are subject to the standards at 60.5380(a)(1) and (2) since we use a control device to reduce emissions)
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No		See 60.536 EPA Guidance Page: <u>https://www3.epa.gov/airquality/oilandgas/0a</u>
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No		See 60.4200 and EPA Region 1's Reciprocating Internal Combustion Guidance website.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No		See 40 CFR 60.4230 and EPA Region 1's Reciprocating Internal Combustion Guidance website.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric	No		See 60.5508

FEDERAL REGU- LATIONS	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
CITATION	Generating Units	01 110	Tuenny	
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No		See 60.5700
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No		See 60.30c, 60.30f, 60.750, and/or 60.760
NESHAP 40 CFR 61 Subpart A	General Provisions	No	Units Subject to 40 CFR 61	Applies if any other Subpart in 40 CFR 61 applies.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for <b>Mercury</b>	No		The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge
NESHAP 40 CFR 61 Subpart V	National Emission Standards for <b>Equipment Leaks</b> (Fugitive Emission Sources)	No		The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J). Link to 40 CFR 61 Subpart V Note: If 40 CFR 60 also applies source only needs to comply with this part.
MACT 40 CFR 63, Subpart A	General Provisions	No	Units Subject to 40 CFR 63	Applies if any other Subpart in 40 CFR 63 applies.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No		Choose all that apply: This facility is Subject to the requirements of 40 CFR 63 Subpart HH Dehydrators X, X have no control requirements because { } however, they are subject to HH recordkeeping and reporting. Facility was major for HAPS in Permit PXXX issued June X, 200X. Once in always in.
MACT 40 CFR 63 Subpart HHH		No		This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. See link below 40 CFR 63 Subpart HHH
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional	No		See 63.7480 EPA Guidance Page: <u>https://www.epa.gov/boilers</u>

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Boilers & Process Heaters			
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No		See 63.9980 (known as the MATs rule) EPA Guidance Page: <u>https://www.epa.gov/boilers</u>
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	No		See 63.6580 and EPA Region 1's Reciprocating Internal Combustion Guidance website.
40 CFR 64	Compliance Assurance Monitoring	No		Applies only to Title V Major Sources Emissions for Unit XX are major in and of itself (XXXX TPY SO2). OR SRU is actually exempt because of 40 CFR64.2 (b) (vI) (b) Exemptions—(1) Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards: (vi) Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1. The exemption provided in this paragraph (b)(1)(vi) shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).
40 CFR 68	Chemical Accident Prevention	No		If subject, this would normally apply to the entire facility. An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115, See <u>40 CFR 68</u>
Title IV – Acid Rain 40 CFR 72	Acid Rain	No		See 40 CFR 72.6. This may apply if your facility generates commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No		See 40 CFR 73.2. This may apply if your facility generates commercial electric power or electric power for sale.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No		See 40 CFR 75.2. This may apply if your facility generates commercial electric power or electric power for sale.
Title IV – Acid Rain	Acid Rain Nitrogen Oxides	No		See 40 CFR 76.1. This may apply if your facility generates commercial electric power or electric power for sale.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 76	Emission Reduction Program			
Title VI – 40 CFR 82	Protection of <b>Stratospheric</b> <b>Ozone</b>	No	N/A	<ul> <li>EPA Guidance Page for 40 CFR 82: <u>https://www.epa.gov/section608</u></li> <li>40 CFR 82 may apply if you:</li> <li>(40 CFR 82.1 and 82.100) produce, transform, destroy, import or export a controlled substance or import or export a controlled product;</li> <li>(40 CFR 82.30) if you perform service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner;</li> <li>(40 CFR 82.80) if you are a department, agency, and instrumentality of the United States subject to Federal procurement requirements;</li> <li>(82.150) if you service, maintain, or repair appliances, dispose of appliances, if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants.</li> <li>Note: Owners and operators of appliances subject to 40 CFR 82.150 Recycling and Emissions Reduction have recordkeeping and reporting requirements even if the owner/operator is not performing the actual work.</li> <li>Note: Disposal definition in 82.152: Disposal means the process leading to and including: (1) The discharge, deposit, dumping or placing of any appliance for discharge, deposit, dumping or placing of any appliance for edischarge, deposit, dumping or placing of its discarded component parts. "Major maintenance, service, or repair means" any maintenance, service, or repair that involves the removal of any or all of the following appliance components: compressor, condenser, evaporator, or auxiliary heat exchange coil; or any maintenance, service, or repair that involves uncovering an opening of more than 15 minutes.</li> </ul>

### **Operational Plan to Mitigate Emissions**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

**Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an <u>Operational Plan to Mitigate Emissions During Startups</u>, <u>Shutdowns</u>, <u>and Emergencies</u> defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

X NSR (20.2.72 NMAC), PSD (20.2.74 NMAC) & Nonattainment (20.2.79 NMAC) Sources: By checking this box and certifying this application the permittee certifies that it has developed an <u>Operational Plan to Mitigate Source Emissions</u> <u>During Malfunction, Startup, or Shutdown</u> defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

**Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

### **Alternative Operating Scenarios**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

**Construction Scenarios**: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: <a href="https://www.env.nm.gov/aqb/permit/aqb\_pol.html">https://www.env.nm.gov/aqb/permit/aqb\_pol.html</a>. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title "Construction Scenarios", specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

The facility is proposing to operate up to 20% of the time on reclaimed oil, with the remaining 80% of the operation being natural gas. Short-term emissions assume reclaimed oil emissions factors, while annual emissions are based on a 20/80 split of the two fuels.

# Section 16 Air Dispersion Modeling

- Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (<u>http://www.env.nm.gov/aqb/permit/app\_form.html</u>) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC).	Х
See #1 above. Note: Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3	
above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application	
(20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling	
Guidelines.	

#### Check each box that applies:

- □ See attached, approved modeling **waiver for all** pollutants from the facility.
- □ See attached, approved modeling **waiver for some** pollutants from the facility.
- **X** Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
- □ Attached in UA4 is a **modeling report for some** pollutants from the facility.
- $\Box$  No modeling is required.

### **Compliance Test History**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

To save paper and to standardize the application format, delete this sentence and the samples in the Compliance Test History Table, and begin your submittal for this attachment on this page.

#### **Compliance Test History Table**

Unit No.	Test Description	Test Date
Dryer Stack	Tested in accordance NSPS I requirements	August 2012

### **Other Relevant Information**

<u>Other relevant information</u>. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

# **Section 22: Certification**

Company Name: Jobe Materials, L.P.	<u>.</u>
I, _Ralph Wm Richards, hereb this application are true and as accurate as possible, to the best of my know	by certify that the information and data submitted in wledge and professional expertise and experience.
Signed this <u>27</u> day of <u>March</u> , <u>2020</u> , upo of <u>Texas</u>	on my oath or affirmation, before a notary of the State
Jobe Materials, L.P Malph Min Michards *Signature	March 27,2020 Date
Ralph Wm Richards, Printed Name	VicePresident &General Counsel Title
Scribed and sworn before me on this <u>27</u> day of <u>March</u>	, 2020
My authorization as a notary of the State of <u>Texas</u>	expires on the
day ofA021 	3-27-20 Date NO MUNOZ te of Texas 24-1 Expires 021

\*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.

# **Universal Application 4**

### **Air Dispersion Modeling Report**

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

16-	16-A: Identification				
1	Name of facility:	Vado Asphalt Plant			
2	Name of company:	Jobe Materials, L.P.			
3	Current Permit number:	GCP-3665			
4	Name of applicant's modeler:	Kevin Ellis			
5	Phone number of modeler:	512-879-6647			
6	E-mail of modeler:	Kevin.Ellis@POWEREng.com			

16	16-B: Brief							
1	Was a modeling protocol submitted and approved?	Yes□	No⊠					
2	Why is the modeling being done? Demonstrate compliance as part of new permit review	liance as part of new permit review Other (describe below)						
3	Describe the permit changes relevant to the modeling.							
	Converting a GCP to a minor NSR permit							
4	What geodetic datum was used in the modeling?	NAD83						
5	How long will the facility be at this location? Permanent							
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes□	No⊠					
7	Identify the Air Quality Control Region (AQCR) in which the facility is located	153						

	List the PSD baseline dates for this region (minor or major, as appropriate).					
0	NO2	8/2/1995 (minor)				
8	SO2	Not established				
	PM10	6/16/2000 (minor)				
	PM2.5	Not established				
	Provide the name and distance to Class I areas within 50 km of	f the facility (300 km for PSD pern	nits).			
9	None					
10	) Is the facility located in a non-attainment area? If so describe below $Yes \square$ No $\boxtimes$					
11	Describe any special modeling requirements, such as streamline permit requirements.					
	None					

#### **16-C: Modeling History of Facility** Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQS), and PSD increments modeled. (Do not include modeling waivers). Latest permit and modification Pollutant number that modeled the Date of Permit Comments pollutant facility-wide. CO None NO<sub>2</sub> None SO<sub>2</sub> None 1 $H_2S$ N/A PM2.5 None PM10 None TSP None Lead N/A Ozone (PSD only) N/A NM Toxic Air Pollutants N/A (20.2.72.402 NMAC)

16-	16-D: Modeling performed for this application							
	For each pollutant, indicate the modeling performed and submitted with this application. Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.							
1	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.		
	СО		$\boxtimes$					
	NO <sub>2</sub>		$\boxtimes$					
	SO <sub>2</sub>		$\boxtimes$					

$H_2S$			
PM2.5		$\boxtimes$	
PM10		$\boxtimes$	
TSP			
Lead			
Ozone			
State air toxic(s) (20.2.72.402 NMAC)			

16-	16-E: New Mexico toxic air pollutants modeling							
1	List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application. None							
	List any NM below, if re	MTAPs that are emequired.	itted but not modeled becaus	se stack height cor	rection factor. Add additi	onal rows to the table		
2	Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor		

16-	-F: Modeling options		
1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes⊠	No□

16-	16-G: Surrounding source modeling					
1	Date of surroundi	ng source retrieval	July 2020			
	If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the tabelow to describe them. Add rows as needed.					
	AQB Source ID	Description of Corrections	Description of Corrections			
2	30315, 30358, 29445, 26637, 28056	EPN 7, 19, 49, 52, and 53 GCP emissions were adjusted as per modeling guidance.				
	30659	Jobe's on-site batch plant operating under GCP, removed as per guidance.				
	30135@1	Placed this emission source on the facility location (EPN 1007)				
	e groups at the major emission sources (screens and crusher). EPNs Four were assigned 14 hours per day (daylight).					

16-H: Building and structure downwash							
1	How many buildings are present at the facility?	One					
2	How many above ground storage tanks are present at the facility?	Two					
3	Was building downwash modeled for all buildings and tanks? If not explain why below.       Yes       No						
	The building is 450+ feet from facility, and the tanks are horizontal cyclinders with air gaps below.						
4	Building comments						

16-	16-I: Receptors and modeled property boundary							
<ul> <li>"Restricted Area" is an area to which public entry is effectively precluded. Effective barriers in continuous walls, or other continuous barriers approved by the Department, such as rugged phy grade that would require special equipment to traverse. If a large property is completely enclos within the property may be identified with signage only. Public roads cannot be part of a Restri is required in order to exclude receptors from the facility property. If the facility does not have receptors shall be placed within the property boundaries of the facility.</li> <li>Describe the fence or other physical barrier at the facility that defines the restricted area.</li> </ul>							lude continuous ical terrain with l by fencing, a r ted Area. A Res Restricted Area	fencing, a steep restricted area stricted Area a, then
	Wire fencing							
2	Receptors must be placed along publicly accessible roads in the restricted area.Yes⊠Are there public roads passing through the restricted area?Yes⊠							
3	Are restricted	area boundary	coordinates in	cluded in the modeling	files?		Yes⊠	No□
	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.							
4	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments		
	Tight	Distance	25 meters	0	100 m			
	Medium	Distance	100 meters	100 m	1000 m			
	Describe recep	otor spacing al	ong the fence l	ine.				
5	25 meters							
	Describe the F	SD Class I are	ea receptors.					
6	none							

16-J: Sensitive areas							
1	Are there schools or hospitals or other sensitive areas near the facility? If so describe below. This information is optional (and purposely undefined) but may help determine issues related to public notice.	Yes□	No⊠				
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes□	No⊠				

16	16-K: Modeling Scenarios										
1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).										
	Base Scena	Base Scenario – normal operations at maximum hourly rates and maximum permitted annual rates.									
2	Which scen	nario produ	uces the hi	ghest conc	entrations	? Why?					
Z	Base Scena	urio									
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.) *Surrounding sources used HROFDY as received from NMED										
4	If so, descr (Modify or Sources:	ibe factors duplicate	for each g table as ne	group of sc ecessary. It	ources. List s ok to pu	the source t the table	s in each g below sect	roup befo ion 16-K	re the factor if it makes fo	table for that gr prmatting easier	roup. .)
	Hour of Day	Factor	Hour of Day	Factor							
	1	0.5	13	0.5	Group of	f PM sourc	es				
	2	0.5	14	0.5	(excludin	ng stockpil	es) is				
	3	0.5	15	0.5	named '(	OPS' and t	he daily				
	4	0.5	16	0.5	average	emission ra	te for				
	5	0.5	17	0.5	each emi	ssion poin	t will not				
5	<u>6</u> 7	0.5	18	0.5	exceed 5	0% of the	one-nour				
5	0	0.5	19	0.5	max.						
	<u>8</u>	0.5	20	0.5	This will	be include	ed in the				
	9	0.5	21	0.5	permit as	s a daily m	aximum				
	10	0.5	22	0.5	productio	on rate.					
	12	0.5	23	0.5							
	12	· 1.1	,	0.5	1.1.	· 1		1 '1			
	If hourly, v	ariable en	nission rate	es were use	ed that wer	e not descr	ibed above	e, describe	them below		
	All particul hourly proc	late matter duction du	sources u ring the co	sed a scala ourse of the	r of 0.5 to: e day.	reflect an a	werage dai	ly produc	tion that will	not exceed $\frac{1}{2}$ the	he maximum
6	Were diffe	rent emiss	ion rates u	sed for sho	ort-term and	d annual m	odeling? I	f so descri	be below.	Yes⊠	No□
	Annual emissions were based on maximum annual emissions, not on maximum hourly emissions x 8,760.										

16-L: NO <sub>2</sub> Modeling						
D PVMRM						
□ OLM						
Describe the NO <sub>2</sub> modeling.						
Two sources emit NOX – the heaters and the asphalt stack. Modeled the 1-hr and annual impacts						
No□						
Describe the design value used for each averaging period modeled.						
_ _ _						

16-	16-M: Particulate Matter Modeling							
	Select the pollutants for which plume depletion modeling was used.							
1		PM2.5						
-		PM10						
	$\boxtimes$	None						
	Describe the	particle size distri	butions used. Include the source	ce of information.				
2	AP-42 partic application).	le size distribution for asphalt plants and particle size distribution for aggregate handling (included in the permit						
3	Does the facility emit at least 40 tons per year of $NO_X$ or at least 40 tons per year of $SO_2$ ? Sources that emit at least 40 tons per year of $NO_X$ or at least 40 tons per year of $SO_2$ are considered to emit significant amounts of precursors and must account for secondary					No⊠		
4	Was secondary PM modeled for PM2.5?     Yes□     No⊠					No⊠		
	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.							
5	NO <sub>X</sub> (ton/yr)	)	SO <sub>2</sub> (ton/yr)	[PM2.5] <sub>annual</sub>	[PM2.5] <sub>annual</sub> [PM2.5] <sub>24-hour</sub>			

16-	16-N: Setback Distances						
1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.						
	Not applicable						
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.						

16-O: PSD Increment and Source IDs								
1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit number if they do not match below.				ch the ones in the veen unit numbers	Yes□		No⊠
	Unit Number in UA-2			Unit Numb	er in Modeling Files	5		
	See table ACP (2-E1), a	ttached, for a cross re	eference					
2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below. No $\boxtimes$					No⊠		
	The PM sources (except a condition to limit prod	stockpiles) use a fac uction to 50% of the	tor of 0.5 to limit	the 24-hour . All PM so	emissions. This will urces except piles ar	l be re e line	eflected in ar with pro	the permit via oduction.
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?			able 2-B) sources	Yes□		No⊠	
	Which units consume in	crement for which po	ollutants?					
4	Unit ID	NO <sub>2</sub>	$SO_2$		PM10		PM2.5	
	Facility	Х			Х			
5	PSD increment descripti (for unusual cases, i.e., l after baseline date). Are all the actual install This is necessary to veri how increment consump	on for sources. baseline unit expande ation dates included i fy the accuracy of PS bion status is determine	ed emissions in Table 2A of the SD increment mod ined for the missin	application eling. If not g installation	form, as required? please explain n dates below.	Yes		No□

16-P: Flare Modeling						
1	For each flare or flaring scenario, complete the following					
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)		

16-Q: Volume and Related Sources							
1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines? If not please explain how increment consumption status is determined for the missing installation dates below.	Yes□	No⊠				
	Describe the determination of sigma-Y and sigma-Z for fugitive sources.						
2	As per NMED Modeling Guidance for aggregate sources (Table 27, adjusted as appropriate for site)						
3	Describe how the volume sources are related to unit numbers. Or say they are the same.						
	See attached table of volume sources for the haul roads						
4	Describe any open pits.						
4	None						
5	Describe emission units included in each open pit.						
5	None						

16-	16-R: Background Concentrations						
	Were NMED below. If non was used.	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used. No□					
	CO: Del Nort	re High School (350010023)					
	NO <sub>2</sub> : US-Me	xico Border Crossing (350130021)					
1	PM2.5: Anthony (350130016)						
	PM10: Anthony (350130016)						
	SO <sub>2</sub> : Bloomfield( 350450009)						
	Other:						
	Comments:	NO2 (US-Mexico Border Crossing) should be 350130022					
2	Were background concentrations refined to monthly or hourly values? If so describe below. Yes No						

16-S: Meteorological Data				
1	Was NMED provided meteorological data used? If so select the station used.	Yes⊠	No□	
	Las Cruces			

2	If NMED provided meteorological data was not used describe the data set(s) used below. Discu handled, how stability class was determined, and how the data were processed.	ss how missing	data were

16-T: Terrain						
1	Was complex terrain used in the modeling? If not, describe why below.	Yes⊠	No□			
2	What was the source of the terrain data?					
2	USGS Earth Explorer					

16-U: Modeling Files							
	Describe the modeling files:						
	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)				
	1 – CO/Vado ACP-Proj-crit_2017_CO	CO, 1- and 8-hour	Cumulative (project + background)				
	2 – NOx/Vado ACP-Proj-crit_2017_NO2	NO2, 1-hr	Cumulative (project + background)				
	2 – NOx/Vado ACP-Proj-crit_2017_NO2A	NO2, annual	Project				
	3 - SO2/Vado ACP-Proj-crit_2017_SO2	SO2, 1-hr	Cumulative (project + background)				
1	3 – SO2/Vado ACP-Proj-crit_2017_SO2A	SO2, annual	Cumulative (project + background)				
	4 – PM10/Vado ACP-Proj_2017_PM10	PM10, 24-hr	ROI				
	4 - PM10/Vado ACP-PM10_SS_2017_PM10	PM10, 24-hr,	Cumulative/culpability				
	4 – PM10/Vado ACP-PM10_INC_2017_PM10	PM10, 24-hr	Increment				
	4 – PM10/Vado ACP-PM10_INCA_2017_PM10A	PM10, annual	Increment				
	5 – PM25/Vado ACP-Proj_2017_PM25	PM2.5, 24-hr	ROI				
	5 – PM25/Vado ACP-PM10_SS_2017_PM25	PM2.5, 24-hr	Cumulative/culpability				
	5 – PM25/Vado ACP-Proj_2017_PM25A	PM2.5, annual	ROI				

16-V: PSD New or Major Modification Applications					
1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes□	No□		
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes□	No		

3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.							
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.							
4								
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes□	No□					

16-W: Modeling Results										
1	If ambie required significa describe	If ambient standards are exceeded because required for the source to show that the con significance levels for the specific pollutar describe below.		se of surrounding sources, a culpability analysis ontribution from this source is less than the ant. Was culpability analysis performed? If so		ysis is o	Yes□	No⊠		
Pollutant, Time Period	ModeledModeledFacilitywith	Secondary PM	Background Conc.	Cumulative Conc.	Value of	Percent	Location			
and Standard	Conc. (µg/m3)	Surrounding Sources (µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	Standard (µg/m3)	of Standard	UTM E (m)	UTM N (m)	Elevation (ft)
NO2, 1-hr, NAAQS	52	NA	NA	77.5	129.5	188.03	69	346015	3556021	1202
NO2, ann., Incr./ NMAAQS	0.6	NA	NA	NA	0.6	1*	60	345744	3555796	1199
CO, 1-hr, NMAAQS	255	NA	NA	2203	2458	14998	16	345765	3555800	1199
CO, 8-hr, NMAAQS	106.5	NA	NA	1524	1630	9960	16	345931	3555879	1199
SO2, 1-hr, NAAQS	81	NA	NA	5.31	86.3	196.4	44	345952	3555891	1200
SO2, ann, NMAAQS	0.12	NA	NA	.219	.349	52.4	1	346015	3556021	1203
PM10, 24-hr, NAAQS	14.5	31.3	NA	44.7	76	150	51	345723	3555792	1199
PM10, 24-hr, Increment	14.5	28.1	NA	NA	28.1	30	94	345723	3555792	1199
PM10, ann, Increment	1.1	4.1	NA	NA	4.1	17	24	345765	3555800	1199
PM2.5, 24-hr, NAAQS	7.7	10.9	NA	17.0	27.9	35	80	345610	3556347	1201
PM2.5, ann, NAAQS	0.18	NA	NA	NA	NA	0.2*	90	345765	3555800	1199
• SI	L.									

16-X: Summary/conclusions				
	A statement that modeling requirements have been satisfied and that the permit can be issued.			
1	All modeling requirements have been met following the NMED modeling guidelines. PM10 and PM2.5 (both hourly and annual) only modeled a receptor grid for background modeling and increment where the H1H was above the significance level. PM2.5 (annual) NO2 (annual) were both below the SIL and did not model with background sources. The project could not be significant at any receptor that was above the NAAQS.			