### SALT RIVERS MATERIALS GROUP NEW MINOR SOURCE NSR AIR QUALITY PERMIT APPLICATION



# ESCALANTE TRANSLOAD FACILITY Prewitt, New Mexico

Dated February 19, 2021

Prepared by

Montrose Air Quality Services, LLC



### **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



AIRS No.:

For Department use only:

# **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).

 Construction Status:
 □ Not Constructed
 X Existing Permitted (or NOI) Facility
 □ Existing Non-permitted (or NOI) Facility

 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

 PSD Major Source:
 □ PSD major source (new)
 □ minor modification to a PSD source
 □ a PSD major modification

### Acknowledgements:

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

**X** \$500 NSR application Filing Fee enclosed OR  $\Box$  The full permit fee associated with 10 fee points (required w/ streamline applications). **X** Check No.: <u>064469</u> in the amount of <u>\$500.00</u>

**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.  $\Box$  This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies 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.1 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 1 <sup>st</sup> 3 to 5 #s of permit IDEA ID No.):	<mark>Updating</mark> Permit/NOI #:					
1	Facility Name: Salt River Materials Group – Escalante Transload Facility	Plant primary SIC Code (4 digits): 4213						
1	Sat River Materials Group - Escalance Hansload Facility	Plant NAIC code (6 digits): 48423						
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 295 County Road 19, Prewitt, NM							
2	Plant Operator Company Name: Salt River Materials Group	57/480-850-5758						
а	Plant Operator Address:8800 E. Chaparral Road, Suite 155, Scottsdale, AZ 85250-2606							
b	Plant Operator's New Mexico Corporate ID or Tax ID: 02-280649-00-0 (Phoenix Cement Company)							

3	Plant Owner(s) name(s): Salt River Materials Group	Phone/Fax: 480-850-5757/480-850-5758						
а	Plant Owner(s) Mailing Address(s):8800 E. Chaparral Road, Suite 155, Scottsdale, AZ 85250-2606							
4	Bill To (Company): Salt River Materials Group	Phone/Fax: 480-850-5757/480-850-5758						
а	Mailing Address: 8800 E. Chaparral Road, Suite 155 Scottsdale, AZ 85250-2606	E-mail: cvines@srmaterials.com						
5	□ Preparer: X Consultant: Paul Wade, Montrose Air Quality Services, LLC	Phone/Fax: (505) 830-9680 x6 / (505) 830-9678						
а	Mailing Address: 3500G Comanche Rd NE, Albuquerque, NM 87110	E-mail: pwade@montrose-env.com						
6	Plant Operator Contact: Karl Witt	Phone/Fax:505-972-4590/505-972-4667						
а	Address: P.O. Box 620, Prewitt, NM 87045	E-mail: kwitt@srmaterials.com						
7	Air Permit Contact: Brett Lindsay	Title: Sr Director, Cement Operations & Environmental						
a	E-mail: <u>blindsay@srmaterials.com</u>	Phone/Fax:928-634-2261/928-634-3543						
b	Mailing Address: P.O. Box 428, Clarkdale, AZ 86324							
с	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? $\Box$ Yes X 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						
3	Is the facility currently shut down? <b>X</b> Yes $\Box$ No	If yes, give month and year of shut down (MM/YY): September 2020						
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? □ Yes X No							
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since $8/31/1972$ ?							
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)? $\Box$ 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)? $\Box$ Yes X No	If yes, the permit No. is:						
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? $\Box$ Yes X No	If yes, the register No. is:						

### 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)								
a	Current	Annually:							
b	b Proposed Hourly: 75 tons Daily:			Annually: 250,000 tons					
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)								
a	Current	Hourly:	Daily:	Annually:					
b	Proposed	Hourly: 100 tons	Daily:	Annually: 250,000 tons					

Sect	tion 1-D: Facil	ity Location	<u>n Information</u>	-							
1	Section: 26	Range: 12W	Township: 14N	County	: McKinley		Elevation (ft): 6,880				
2	UTM Zone: <b>X</b> 12 or □ 13				□ NAD 27	X NAD	83 🗆 WGS 84				
a	UTM E (in meters, to n	earest 10 meters): 7	64,950	UTM N (i	n meters, to neares	t 10 meters):	3,923,110				
b	AND Latitude (deg.	, min., sec.): 35°,	24', 58.27" N	Longitude	e (deg., min., se	ec.): 108°, (	04', 55.40" W				
3	Name and zip code	of nearest New M	lexico town: Prewitt, 8	7045							
4		Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Prewitt travel north on County Road 19 for 3 miles. Turn west at the entrance to McKinley Paper Company and Prewitt Escalante Generating Station then travel to the site.									
5	The facility is 4 mile	The facility is 4 miles Northwest of Prewitt, NM.									
6	Status of land at faci	ility (check one):	X Private 🗆 Indian/Pu	ieblo 🗆 Fee	deral BLM	Federal For	rest Service   Other (specify)				
7			, and counties within be constructed or op				.B.2 NMAC) of the property ndian Reservation				
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 <u>www.env.nm.gov/aqb/modeling/class1areas.html</u> )? □ Yes <b>X</b> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers:										
9	Name nearest Class	I area: San Pedro	Parks Wilderness Are	a							
10	Shortest distance (in	ı km) from facilit	y boundary to the bour	dary of the	nearest Class	area (to the	e nearest 10 meters): 129.04 km				
11							nclusive of all disturbed cture: east-northeast, 2 miles				
12	" <b>Restricted Area</b> " i continuous walls, or that would require s within the property i	lands, including mining overburden removal areas) to nearest residence, school or occupied structure: east-northeast, 2 miles         Method(s) used to delineate the Restricted Area: Area is fenced.         "Restricted Area" 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	$\Box$ Yes <b>X</b> No A portable stationary	y source is not a	nobile source, such as	an automol	oile, but a sour	ce that can	n 20.2.72.7.X NMAC? be installed permanently at s moved to different job sites.				
14			on with other air regul umber (if known) of th				No Yes				

### Section 1-D: Facility Location Information

### 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 $(\frac{\text{hours}}{\text{day}})$ : 24	(days/week): 7	$(\frac{\text{weeks}}{\text{year}}): 52$	$(\frac{\text{hours}}{\text{year}})$ : 8760				
2	Facility's maximum daily operating schedule (if less than $24 \frac{\text{hours}}{\text{day}}$ )?Start: $\square AM$ $\square PM$ End: $\square AM$ $\square PM$							
3	Month and year of anticipated start of construction: Existing facility owned by Tri-State PEGS							
4	Month and year of anticipated construction completion: Existing facility owned by Tri-State PEGS							
5	Month and year of anticipated startup of new or modified facility: Upon issue of permit							
6	Will this facility operate at this site for more than or	ne year? X 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? $\Box$ Yes X 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 o	or 1a above? 🛛 Yes	<b>X</b> No If Y	Yes, provide the 1c & 1d info below:					
c	Document Title:	Date:	-	ment # (or nd 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 $\Box$ No								
3	Does this facility require an "Air Toxics" permit under 20.2	2.72.400 NMAC & 2	0.2.72.502	2, Tables A and/or B? $\Box$ Yes <b>X</b> No					
4	Will this facility be a source of federal Hazardous Air Pollu	utants (HAP)? 🗆 Yes	X No						
a	If Yes, what type of source? $\Box$ Major ( $\Box \ge 10$ tpy of an $\Box$ Minor ( $\Box < 10$ tpy of any $\Box$			tpy of any combination of HAPS) 5 tpy of any combination of HAPS)					
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? □ Yes	<b>X</b> No							
	If yes, include the name of company providing commercial	electric power to the	e facility: _						
a	Commercial power is purchased from a commercial utility site for the sole purpose of the user.	company, which spe	ecifically d	loes not include power generated on					

### Section 1-G: Streamline Application

(This section applies to 20.2.72.300 NMAC Streamline applications only)

□ I have filled out Section 18, "Addendum for Streamline Applications." 1 **X** N/A (This is not a Streamline application.)

# **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 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):		Phone:				
а	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 contac	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:
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### **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 <u>copy</u> should be printed in book form, 3-hole punched, and <u>must be double sided</u>. 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 Brett Lindsey\_

Email\_blindsay@srmaterials.com

### Phone number (928) 634-2261

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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#### Escalante Transload Facility

### 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.

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup> Date of Construction/ Reconstruction <sup>2</sup>	Controlled by Unit # Emissions vented to Stack #		For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.		
1	Vehicle Travel on Paved Roads	NA	NA	NA	NA	7 Trucks/ Hour	NA NA	NA NA	305102 99	Existing (unchanged)       To be Removed         X New/Additional       Replacement Unit         To Be Modified       To be Replaced				
2	Material Storage	Allen-	NA	NA	77,900 ft3	250,000 tpy	1984	C1	305102	Existing (unchanged)     To be Removed     X New/Additional     Replacement Unit				
2	Silo (loading from trucks/railcars)	Sherman- Hoff (silo)	NA	NA	(silo volume)	(thorughpu t)	1984	1	99	X New/Additional     □     Replacement Unit       □     To Be Modified     □     To be Replaced				
3	Material Loadout (loading to	Midwest International		NA			2001	C2	305102 <sub>X</sub>	505102 X Ne	303102	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>X New/Additional</li> <li>Replacement Unit</li> </ul>		
	trucks/railcars)	Standards Product	/388		100	250,000 tpy	2002	2	99	□ To Be Modified □ To be Replaced				
4	Material Loadout (loading to	DCL System	HPS6- 251*B8-	NA	tons/hr	(thorughpu t)	2016	C3	305102	Existing (unchanged)				
	trucks/railcars)	-	M1P1				2016	3	99	□ To Be Modified □ To be Replaced				
										<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>				
										Existing (unchanged)     To be Removed     New/Additional     To Be Modified     To be Replaced				
										<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>				
										To Be Modified     To be Replaced       Existing (unchanged)     To be Removed       New/Additional     Replacement Unit				
										To Be Modified       To be Replaced         Existing (unchanged)       To be Removed         New/Additional       Replacement Unit         To Be Modified       To be Replaced				

<sup>1</sup> Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

<sup>2</sup> Specify dates required to determine regulatory applicability.

<sup>3</sup> To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

<sup>4</sup> "4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

### Table 2-B: Insignificant Activities<sup>1</sup> (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb\_pol.html ), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number N/A	Source Description	Source Description Manufactu		Model No. Serial No.	Max Capacity Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction <sup>2</sup> Date of Installation /Construction <sup>2</sup>	For Each Piece of Equipment, Check Onc
					<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>			
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	
							<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>	

<sup>1</sup> Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

<sup>2</sup> Specify date(s) required to determine regulatory applicability.

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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
C1	Silo Baghouse Dust Control	1984	PM, PM <sub>10</sub> , PM <sub>2.5</sub>	2	> 99.5	EPA AP-42 Table B.2-3
C2	Loadout Baghouse Dust Control	2002	PM, PM <sub>10</sub> , PM <sub>2.5</sub>	3	> 99.9	Baghouse Specification Sheet
C3	Loadout Baghouse Dust Control	2016	PM, PM <sub>10</sub> , PM <sub>2.5</sub>	4	> 99.9	Baghouse Specification Sheet
1 - •	ntrol device on a separate line. For each control device, list all er					

#### 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	C	S	Ox	PI	M1	PM	<b>[10<sup>1</sup></b>	PM	[2.5 <sup>1</sup>	Н	$_{2}S$	L	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr										
1	-	-	-	-	-	-	-	-	3.49	14.6	0.70	2.93	0.17	0.72	-	-	-	-
2	-	-	-	-	-	-	-	-	236	1031	82.5	361	16.3	71.5	-	-	-	-
3,4	-	-	-	-	-	-	-	-	429	1877	429	1877	429	1877	-	-	-	-
								1										
								1										
								1										
								1										
Totals									668	2923	512	2241	445	1949				

<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	C	<b>'0</b>	VO	DC	S	Ox	PI	$M^1$	PM	[ <b>10</b> <sup>1</sup>	PM	2.5 <sup>1</sup>	Н	$_{2}S$	Le	ead
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
1	-	-	-	-	-	-	-	-	3.49	4.78	0.70	0.96	0.17	0.23	-	-	-	-
2	-	-	-	-	-	-	-	-	1.18	1.96	0.41	0.69	0.095	0.16	-	-	-	-
3,4	-	-	-	-	-	-	-	-	0.43	0.54	0.43	0.54	0.43	0.54	-	-	-	-
Totals									5.00	7.27	1.54	2.19	0.69	0.02				
Totals								if the course i	5.09		1.54	2.18		0.93				

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-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

X This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scenduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanations of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine our predictable startup, shutdown or scheduled maintenance (SSM)<sup>1</sup>, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications

(https://www.env.nm.gov/aqb/permit/aqb\_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	N			0	VC	DC		Ox	PI	$M^2$	PM	[10 <sup>2</sup>	PM	$2.5^2$	Н	$_{2}S$	Le	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr										
Totals																		

<sup>1</sup> For instance, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

<sup>2</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 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

X 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	VO	C	S	Ox	P	М	PN	110	PM	12.5	$\Box$ H <sub>2</sub> S or	r 🗆 Lead
Stack No.	Number(s) from Table 2-A	lb/hr	ton/yr	lb/hr	ton/yr												
																-	-
																-	-
																-	-
	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)	( <b>F</b> )	(acfs)	(dscfs)	Volume (%)	(ft/sec)	Diameter (ft)
1	2	Н	Ν	70	ambient	28.33	NA	NA	28	1x1
2	3	V	Ν	50	ambient	16.67	NA	NA	66	0.5x0.5
3	4	V	Ν	50	ambient	66.67	NA	NA	66	1x1

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### Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

	Unit No.(s)	Total		Provide Name	Pollutant e Here )r 🛛 TAP	Provide Name	Pollutant e Here	Provide Name	Pollutant e Here	Provide   Name    HAP o	Here	Provide   Name    HAP o	Here	Name	Pollutant e Here or 🛛 TAP	Name	Pollutant Here or 🗆 TAP	Name Her	Pollutant e 🛛 r 🗆 TAP
		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
Tot	als:			1.61	2.50														

### 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, pipeline quality natural gas, residue		Speci	fy Units		
Unit No.	ultra low sulfur diesel, Natural Gas, Coal,)	gas, raw/field natural gas, resolute (e.g. SRU tail gas) or other	Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
N/A							

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### Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

					Vapor	Average Stor	age Conditions	Max Storag	ge Conditions
Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Molecular Weight (lb/lb*mol)	Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
N/A									

### Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-	Roof Type (refer to Table 2-	Cap	acity	Diameter (M)	Vapor Space	Co (from Ta	blor ble VI-C)	Paint Condition (from Table	Annual Throughput (gal/yr)	Turn- overs
			LR below)	LR below)	(bbl)	(M <sup>3</sup> )	× ź	(M)	Roof	Shell	VI-C)	(gal/yr)	(per year)
N/A						(							

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Roof Type	Seal Type, W	elded Tank Seal Type	Seal Type, Rive	ted Tank Seal Type	Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
					MG: Medium Gray	
Note: $1.00 \text{ bbl} = 0.159 \text{ M}$	$I^3 = 42.0 \text{ gal}$				BL: Black	
					OT: Other (specify)	

	Materi	al Processed		Μ	laterial Produced		
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)
Fly Ash	Fly Ash	Solid		Fly Ash	Fly Ash	Solid	
Natural Pozzolan	Natural Pozzolan	Solid	250,000 tons per year	Natural Pozzolan	Natural Pozzolan	Solid	250,000 tons per
Pumice	Pumice	Solid	250,000 tons per year	Pumice	Pumice	Solid	year
Portland Cement	Portland Cement	Solid		Portland Cement	Portland Cement	Solid	

### Table 2-M: Materials Processed and Produced (Use additional sheets as necessary.)

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### Table 2-N: CEM Equipment

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
N/A									

### Table 2-O: Parametric Emissions Measurement Equipment

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
N/A								

### 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	<b>PFC/HFC</b> ton/yr <sup>2</sup>						<b>Total</b> <b>GHG</b> 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							
N/A	mass GHG												
10/1	CO <sub>2</sub> e		-							-	-		
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e												
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	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG												
	CO2e												
Total	mass GHG												
Totar	CO <sub>2</sub> e												

<sup>1</sup> 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.

<sup>5</sup> CO<sub>2</sub>e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by 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, debottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** 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.

### **Application** Summary

Salt River Materials Group (SRMG) is requesting a new minor source permit, under 20.2.72.200.A.1, for a construction materials transload facility that will be identified as "Escalante Transload Facility". SRMG purchased fly ash material from Tri-State's Prewitt Escalante Generating Station (PEGS) for resale to their construction materials clients until the coal-fired boiler shutdown in mid-September 2020. With this permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, natural pozzolan, pumice, Portland cement, etc. The operation will transfer construction materials by truck or railcar to the terminal for storage and load out and transport to final destinations at a maximum throughput of 250,000 tons per year. SRMG's physical location will be latitude 35°, 24', 58.27" N and longitude 108°, 04', 55.40" W, which is approximately 3.9 miles northwest of Prewitt, NM in McKinley County (see Figures 8-1 and 8-2).

### Process Summary

The facility will consist of an existing storage silo with baghouse dust collector, and two (2) existing silo loadout systems each with their own baghouse dust collector. The facility will only be a source of particulate matter emissions. Truck traffic, involving delivery of material and transporting material to clients, is a part of the permitting process. The maximum hourly truck traffic will occur at rates of a maximum three (3) round-trip truck delivery construction materials to be loaded in the storage silo and a maximum four (4) round-trip truck transport of materials to clients two (2) for each material loadout system.

### Startup, Shutdown, and Maintenance (SSM)

No SSM emissions are proposed for this application. All dust collectors will be operational prior to loading or unloading construction materials. No controls are proposed for truck traffic sources.

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### **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.



Figure 4-1: SRMG Escalante Transload Facility Process Flow

### **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.



Figure 5-1: Aerial Showing Location of Escalante Transload Facility

### **All Calculations**

**Show all calculations** 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.

SRMG's Escalante Transload Facility is a proposed construction materials transloading facility physically located north of Prewitt, New Mexico. SRMG's physical location will be latitude 35°, 24', 58.37" N and longitude 108°, 04', 59.36" W, which is approximately 4 miles northwest of Prewitt, NM in McKinley County. SRMG purchased fly ash material from Tri-State's Prewitt Escalante Generating Station (PEGS) for resale to their construction materials clients until the coal-fired boiler shutdown in mid-September 2020. With this permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, natural pozzolan, pumice, Portland cement, etc. The operation will transfer construction materials by truck or railcar to the terminal for storage and load out and transport to final destinations at a maximum throughput of 250,000 tons per year. The facility will consist of a storage silo with baghouse dust collector, and two (2) silo loadout systems each with their own baghouse dust collectors. The facility will only be a source of particulate matter emissions. With these sources, the projected facility emissions will exceed the emission limits requiring a minor source 20.2.72 NMAC air quality permit. Montrose Air Quality Services has been contracted to prepare this 20.2.72.200.A.(1) NMAC permit application.

Potential emission sources for SRMG will exceed 10 pounds per hour and 25 tons per year. The facility will consist of the following emission sources:

- 1. Paved Road construction materials storage and delivery (transferred PEGS source)
- 2. Construction Materials Storage Silo Loading (transferred PEGS source)
- 3. Construction Materials Storage Silo Offloading Station 1 (transferred PEGS source)
- 4. Construction Materials Storage Silo Offloading Station 2 (transferred PEGS source)

Salt River Materials Group

### Unit 1: Paved Road

Haul truck travel emissions were estimated using AP-42, Section 13.2.1 (ver.01/11) "Paved Roads" emission equation. The transload facility receives construction material by either delivery trucks on paved roads or railroad siding. The transload facility delivers construction material to SRMG clients by either delivery trucks on paved roads or railroad siding. To determine worst-case emission rate calculations, all material transport will be by haul truck on paved roads. Potential emission rate (PER) are based on the maximum hourly throughput (7 truck trips per hour) capacity of the facility and the hours of operation of 8760 hours per year. Potential to emit (PTE) are based on the maximum hourly throughput capacity of the facility of 7 trucks per hour and an annual throughput limit of 250,000 tons per year (10,000 truck round-trips per year each for material in and material out). The round-trip distance traveled for each haul truck is 2.32 miles.

AP-42, Section 13.2.1 (ver.01/11) "Paved Roads"

 $E = k(sL)^{0.91*}(W)^{1.02*}[1-P/4N]$ 

k PM	0.011	
k PM10	0.0022	
k PM25	0.00054	
sL	0.6	Ubiquitous Baseline g/m <sup>2</sup> <500
P = days with precipitation over 0.01 inches	60	
N = number of days in averaging period	365	

Truck Routes	Haul Trucks per Hour	Haul Truck Load Capacity (tons)	Average Weight (W) (tons)	VMT/Hour	VMT/Year
Construction Material Delivery to Plant	3	25.0	29.0	7.0	23,237
Construction Material Delivery from Plant	4	25.0	29.0	9.3	23,237
Total				16.3	46,473

Reduction in emissions due to precipitation was only accounted for in the annual emission rate. Particulate emission rate per vehicle mile traveled for each particle size category is:

#### **Hourly Emission Rate Factor**

PM = 0.21437 lbs/VMT PM10 = 0.04287 lbs/VMT PM2.5 = 0.01052 lbs/VMT

### **Annual Emission Rate Factor**

PM = 0.20556 lbs/VMT PM10 = 0.04111 lbs/VMT PM2.5 = 0.01009 lbs/VMT

### Table 6-1: PER and PTE Paved Road Fugitive Dust Emission Rates

Process Unit Description	Process Rate	PM Emission Rate (lbs/hr)	PM Emission Rate (tons/yr)	PM10 Emission Rate (lbs/hr)	PM10 Emission Rate (tons/yr)	PM2.5 Emission Rate (lbs/hr)	PM2.5 Emission Rate (tons/yr)
PER Paved Road	16.3 miles/hr; 8760 hours/yr	3.49	14.6	0.70	2.93	0.17	0.72
PTE Paved Road	16.3 miles/hr; 46,473 miles/yr	3.49	4.78	0.70	0.96	0.17	0.23

### **Unit 2: Storage Silo Loading**

Construction material is delivered to the Escalante Transload Facility. The annual throughput of construction materials is 250,000 tons per year. Materials delivery truck silo loading rate is 25 tons per hour per truck. For the storage silo loading it is estimated that 3 trucks per hour could load within the hour. To assume the most conservative emission rate, one of the options for construction materials is fly ash or a cement supplement. PER particulate emissions for silo loading are based on AP-42 Section 11.12 "Concrete Batching" Table 11.12-2 "Cement supplement unloading to elevated storage silo (pneumatic)" (ver 06/06)". PTE particulate emission rates are based on a control efficiency of the silo dust collector of 99.5%.

### PER emissions based on AP-42 Section 11.12 "Concrete Batching" Table 11.12-2 "Cement supplement unloading to elevated storage silo (pneumatic)"

E(PM) = E(PM10) =	3.14 1.1	lbs/ton lbs/ton	PER Storage Silo Loading PM PER Storage Silo Loading PM10					
E(PM2.5) =	0.218	lbs/ton	PER Storage Silo Loading PM2.5 (PM2.5/PM10; 0.38/1.92; Tab 11.12-4 Uncontrolled)					
Max tph Storage Silo (3 trucks/hour)		75	tph Max	250,000 tons/yr				
		lb/hr	tons/yr					
E(PM) uncontrolled		236	1031					
E(pm10) uncontrolled		82.5	361					
E(pm2.5) uncontrolled		16.3	71.5					

Dust Collector Control Efficiency

99.5 % EPA AP-42 Table B.2-3

### PTE emissions based on AP-42 Section 11.12 "Concrete Batching" Table 11.12-2 "Cement supplement unloading to elevated storage silo (pneumatic)" and %CE

E(PM) =	0.0157	lbs/ton	PTE Storage Silo Loading PM
E(PM10) =	0.0055	lbs/ton	PTE Storage Silo Loading PM10
E(PM2.5) =	0.00127	lbs/ton	PTE Storage Silo Loading PM2.5 (PM2.5/PM10; 0.03/0.13; Table 11.12-4 Controlled)
		lb/hr	tons/yr
E(PM) controlled		1.18	1.96
E(pm10) controlled		0.41	0.69
E(pm2.5) controlled		0.095	0.16

### Units 3 and 4: Storage Silo Unloading

There are two separate storage silo loadout systems for Unit 2, Units 3 and 4. The two loadout systems are capable of four (4) truck loadings per hour or 100 tons per hour combined. The annual combined throughput of construction materials is 250,000 tons per year. Particulate matter emissions are based on the baghouse manufacturer's specification. Grain loading to the baghouse is rated at 10 grains per cubic foot. Grain loading exiting the baghouse is limited to 0.01 grains per cubic foot or 99.9% control efficiency. The baghouse rated flowrate for Unit 3 is 1000 cubic feet per minute (ACFM). The baghouse rated flowrate for Unit 4 is 4000 ACFM. The combined flowrate is 5000 ACFM. The hourly output is 100 tons per hour and the annual output is 250,000 tons per year or an operating time of 2500 hours per year. The 2500 hours per year is not a requested permit condition and was used only for calculation of annual PTE emission rate.

#### Units 3 and 4: Unloading Material Storage Silo

Baghouse Manufacturers Data Specification - Grain Loading PM = Grain Loading \* Flowrate (ACFM) \* 60 minute/hour / 7000 grains/pound

Material Stored Silo Unloading	100 2500	tons/hr hour/yr at maximur	250000 tons/yr m hourly throughput and 250000 tons/year limit
Grain Loading Input	10	grains/cf	
Grain Loading Input	0.01	grains/cf	
Unit 3 Baghouse ACFM	1000	ACFM	
Unit 4 Baghouse ACFM	4000	ACFM	
Combined Baghouse ACFM	5000	ACFM	
		11 4	
		lbs/hr	tons/yr
Uncontrolled $PM = PM10 = PM2.5$		429	1877
% Control Efficiency	99.9	%	Outlet grains/Inlet grains
		lbs/hr	tons/yr
Controlled $PM = PM10 = PM2.5$		0.43	0.54

### **Uncontrolled Facility Emission Rates**

		PM		PN	M10	PM2.5				
Unit ID	Unit Description	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr			
1	Material Truck Hauling to and from Plant	3.49	14.6	0.70	2.93	0.17	0.72			
2	Material Storage Silo	236	1031	82.5	361	16.3	71.5			
3,4	Material Storage Silo to Truck Loading	429	1877	429	1877	429	1877			
	Uncontrolled Plant Totals	668	2923	512	2241	445	1949			

#### Allowable Facility Emission Rates

			PM		<b>/110</b>	PM2.5	
Unit ID	Unit Description	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
1	Material Truck Hauling to and from Plant	3.49	4.78	0.70	0.96	0.17	0.23
2	Material Storage Silo	1.18	1.96	0.41	0.69	0.095	0.16
3,4	Material Storage Silo to Truck Loading	0.43	0.54	0.43	0.54	0.43	0.54
	Allowable Plant Totals	5.09	7.27	1.54	2.18	0.69	0.93

### **Estimates for State Toxic Air Pollutants**

No state toxic air pollutants will be emitted from this facility.

# 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<sub>2</sub>e 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 X 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:

- **X** 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.
- **X** 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.
- $\Box$  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.

A-XXXX-7-AP42S11-12 A-XXXX-7-AP42S13-2-1 A-XXXX-7-AP42B2-1 A-XXXX-7-Baghouse A-XXXX-7-SRMGEI Construction Materials Silo Emission Factors Paved Road Emission Factors EPA AP-42 Table B.2-3 (Unit 2 Baghouse Information) Unit 3 and 4 Baghouse Specification Data SRMG Emissions Spreadsheet (Electronic File)
# **11.12 CONCRETE BATCHING**

# 11.12-1 Process Description <sup>1-5</sup>

Concrete is composed essentially of water, cement, sand (fine aggregate) and coarse aggregate. Coarse aggregate may consist of gravel, crushed stone or iron blast furnace slag. Some specialty aggregate products could be either heavyweight aggregate (of barite, magnetite, limonite, ilmenite, iron or steel) or lightweight aggregate (with sintered clay, shale, slate, diatomaceous shale, perlite, vermiculite, slag pumice, cinders, or sintered fly ash). Supplementary cementitious materials, also called mineral admixtures or pozzolan minerals may be added to make the concrete mixtures more economical, reduce permeability, increase strength, or influence other concrete properties. Typical examples are natural pozzolans, fly ash, ground granulated blast-furnace slag, and silica fume, which can be used individually with portland or blended cement or in different combinations. Chemical admixtures are usually liquid ingredients that are added to concrete to entrain air, reduce the water required to reach a required slump, retard or accelerate the setting rate, to make the concrete more flowable or other more specialized functions.

Approximately 75 percent of the U.S. concrete manufactured is produced at plants that store, convey, measure and discharge these constituents into trucks for transport to a job site. At most of these plants, sand, aggregate, cement and water are all gravity fed from the weight hopper into the mixer trucks. The concrete is mixed on the way to the site where the concrete is to be poured. At some of these plants, the concrete may also be manufactured in a central mix drum and transferred to a transport truck. Most of the remaining concrete manufactured are products cast in a factory setting. Precast products range from concrete bricks and paving stones to bridge girders, structural components, and panels for cladding. Concrete masonry, another type of manufactured concrete, may be best known for its conventional 8 x 8 x 16-inch block. In a few cases concrete is dry batched or prepared at a building construction site. Figure 11.12-1 is a generalized process diagram for concrete batching.

The raw materials can be delivered to a plant by rail, truck or barge. The cement is transferred to elevated storage silos pneumatically or by bucket elevator. The sand and coarse aggregate are transferred to elevated bins by front end loader, clam shell crane, belt conveyor, or bucket elevator. From these elevated bins, the constituents are fed by gravity or screw conveyor to weigh hoppers, which combine the proper amounts of each material.

# 11.12-2 Emissions and Controls 6-8

Particulate matter, consisting primarily of cement and pozzolan dust but including some aggregate and sand dust emissions, is the primary pollutant of concern. In addition, there are emissions of metals that are associated with this particulate matter. All but one of the emission points are fugitive in nature. The only point sources are the transfer of cement and pozzolan material to silos, and these are usually vented to a fabric filter or "sock". Fugitive sources include the transfer of sand and aggregate, truck loading, mixer loading, vehicle traffic, and wind erosion from sand and aggregate storage piles. The amount of fugitive emissions generated during the transfer of sand and aggregate depends primarily on the surface moisture content of these materials. The extent of fugitive emission control varies widely from plant to plant. Particulate emission factors for concrete batching are give in Tables 11.12-1 and 11.12-2.

Types of controls used may include water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central duct collection systems, and the like. A major source of potential emissions, the movement of heavy trucks over unpaved or dusty surfaces in and around the plant, can be controlled by good maintenance and wetting of the road surface.

Predictive equations that allow for emission factor adjustment based on plant specific conditions are given in the Background Document for Chapter 11.12 and Chapter 13. Whenever plant specific data are available, they should be used with these predictive equations (e.g. Equations 11.12-1 through 11.12-3) in lieu of the general fugitive emission factors presented in Table 11.12-1 through 11.12-5 in order to adjust to site specific conditions, such as moisture levels and localized wind speeds.

11.12-3 Updates since the 5<sup>th</sup> Edition.

October 2001 – This major revision of the section replaced emissions factors based upon engineering judgment and poorly documented and performed source test reports with emissions tests conducted at modern operating truck mix and central mix facilities. Emissions factors for both total PM and total  $PM_{10}$  were developed from this test data.

June 2006 – This revision of the section supplemented the two source tests with several additional source tests of central mix and truck mix facilities. The measurement of the capture efficiency, local wind speed and fines material moisture level was improved over the previous two source tests. In addition to quantifying total PM and  $PM_{10}$ ,  $PM_{2.5}$  emissions were quantified at all of the facilities. Single value emissions factors for truck mix and central mix operations were revised using all of the data. Additionally, parameterized emissions factor equations using local wind speed and fines material moisture content were developed from the newer data.





BARGE

# TABLE 11.12-1 (METRIC UNITS) EMISSION FACTORS FOR CONCRETE BATCHING <sup>a</sup>

Source (SCC)		Uncontr	olled			Cor	ntrolled	
	Total PM	Emission Factor Rating	Total PM <sub>10</sub>	Emission Factor Rating	Total PM	Emission Factor Rating	Total PM <sub>10</sub>	Emission Factor Rating
Aggregate transfer <sup>b</sup> (3-05-011-04,-21,23)	0.0035	D	0.0017	D	ND		ND	
Sand transfer <sup>b</sup> (3-05-011-05,22,24)	0.0011	D	0.00051	D	ND		ND	
Cement unloading to elevated storage silo (pneumatic) <sup>c</sup> (3-05-011-07)	0.36	Е	0.23	Е	0.00050	D	0.00017	D
Cement supplement unloading to elevated storage silo (pneumatic) <sup>d</sup> (3-05-011-17)	1.57	E	0.65	Е	0.0045	D	0.0024	Е
Weigh hopper loading <sup>e</sup> (3-05-011-08)	0.0026	D	0.0013	D	ND		ND	
Mixer loading (central mix) <sup>f</sup> (3-05-011-09)	0.272 or Eqn. 11.12-1	В	0.067 or Eqn. 11.12-1	В	0.0087 or Eqn. 11.12-1	В	0.0024 or Eqn. 11.12-1	В
Truck loading (truck mix) <sup>g</sup> (3-05-011-10)	0.498	В	0.139	В	0.0280 or Eqn. 11.12-1	В	0.0080 or Eqn. 11.12-1	В
Vehicle traffic (paved roads)	See AP-42 Section 13.2.1							
Vehicle traffic (unpaved roads)			Se	e AP-42 Sec	tion 13.2.2			
Wind erosion from aggregate and sand storage piles			Se	e AP-42 Sec	tion 13.2.5			

ND = No data

<sup>a</sup> All emission factors are in kg of pollutant per Mg of material loaded unless noted otherwise. Loaded material includes course aggregate, sand, cement, cement supplement and the surface moisture associated with these materials. The average material composition of concrete batches presented in references 9 and 10 was 846 kg course aggregate, 648 kg sand, 223 kg cement and 33kg cement supplement. Approximately 75 liters of water was added to this solid material to produce 1826 kg of concrete.

<sup>b</sup> Reference 9 and 10. Emission factors are based upon an equation from AP-42, Section 13.2.2, with  $k_{PM-10}$  =.35,  $k_{PM}$  = .74, U = 10mph,  $M_{aggregate}$  =1.77%, and  $M_{sand}$  = 4.17%. These moisture contents of the materials ( $M_{aggregate}$  and  $M_{sand}$ ) are the averages of the values obtained from Reference 9 and Reference 10.

<sup>c</sup> The uncontrolled PM & PM-10 emission factors were developed from Reference 9. The controlled emission factor for PM was developed from References 9, 10, 11, and 12. The controlled emission factor for PM-10 was developed from References 9 and 10.

<sup>d</sup> The controlled PM emission factor was developed from Reference 10 and Reference 12, whereas the controlled PM-10 emission factor was developed from only Reference 10.

<sup>e</sup> Emission factors were developed by using the Aggregate and Sand Transfer Emission Factors in conjunction with the ratio of aggregate and sand used in an average yard<sup>3</sup> of concrete. The unit for these emission factors is kg of pollutant per Mg of aggregate and sand.

<sup>f</sup> References 9, 10, and 14. The emission factor units are kg of pollutant per Mg of cement and cement supplement. The general factor is the arithmetic mean of all test data.

<sup>g</sup> Reference 9, 10, and 14. The emission factor units are kg of pollutant per Mg of cement and cement supplement. The general factor is the arithmetic mean of all test data.

#### Source (SCC) Controlled Uncontrolled Emission Emission Total PM<sub>10</sub> Emission Emission Total PM Total PM Total Factor Factor $PM_{10}$ Factor Factor Rating Rating Rating Rating Aggregate transfer <sup>b</sup> ND 0.0069 D 0.0033 D 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 0.72 Ε 0.46 Ε D D (3-05-011-07) Cement supplement unloading to elevated storage silo 3.14 1.10 Е Е 0.0089 D 0.0049 Е $(\text{pneumatic})^{d}$ (3-05-011-17) Weigh hopper loading <sup>e</sup> 0.0051 D 0.0024 D ND ND (3-05-011-08) 0.544 0.0048 0.134 0.0173 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 0.0568 0.0160 Truck loading (truck mix)<sup>g</sup> 0.995 В 0.278 В or Eqn. В or Eqn. В (3-05-011-10) 11.12-1 11.12-1 See AP-42 Section 13.2.1 Vehicle traffic (paved roads) See AP-42 Section 13.2.2 Vehicle traffic (unpaved roads)

See AP-42 Section 13.2.5

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

Wind erosion from aggregate

and sand storage piles

ND = No data

<sup>a</sup> All emission factors are in lb of pollutant per ton of material loaded unless noted otherwise. Loaded material includes course aggregate, sand, cement, cement supplement and the surface moisture associated with these materials. The average material composition of concrete batches presented in references 9 and 10 was 1865 lbs course aggregate, 1428 lbs sand, 491 lbs cement and 73 lbs cement supplement. Approximately 20 gallons of water was added to this solid material to produce 4024 lbs (one cubic yard) of concrete.

<sup>b</sup> Reference 9 and 10. Emission factors are based upon an equation from AP-42, Section 13.2.2, with  $k_{PM-10}$  =.35,  $k_{PM}$  = .74, U = 10mph,  $M_{aggregate}$  =1.77%, and  $M_{sand}$  = 4.17%. These moisture contents of the materials ( $M_{aggregate}$  and  $M_{sand}$ ) are the averages of the values obtained from Reference 9 and Reference 10.

<sup>c</sup> The uncontrolled PM & PM-10 emission factors were developed from Reference 9. The controlled emission factor for PM was developed from References 9, 10, 11, and 12. The controlled emission factor for PM-10 was developed from References 9 and 10.

<sup>d</sup> The controlled PM emission factor was developed from Reference 10 and Reference 12, whereas the controlled PM-10 emission factor was developed from only Reference 10.

<sup>e</sup> Emission factors were developed by using the Aggregate and Sand Transfer Emission Factors in conjunction with the ratio of aggregate and sand used in an average yard<sup>3</sup> of concrete. The unit for these emission factors is lb of pollutant per ton of aggregate and sand.

<sup>f</sup> References 9, 10, and 14. The emission factor units are lb of pollutant per ton of cement and cement supplement. The general factor is the arithmetic mean of all test data.

<sup>g</sup> Reference 9, 10, and 14. The emission factor units are lb of pollutant per ton of cement and cement supplement. The general factor is the arithmetic mean of all test data.

The particulate matter emissions from truck mix and central mix loading operations are calculated in accordance with the values in Tables 11.12-1 or 11.12-2 or by Equation 11.12-1<sup>14</sup> when site specific data are available.

$\mathbf{E} = \mathbf{k} (0.0032) \left[ \frac{U^a}{M^b} \right] +$	- c	Equation 11.12-1
E =	=	Emission factor in lbs./ton of cement and cement supplement
k =	=	Particle size multiplier (dimensionless)
U =	=	Wind speed, miles per hour (mph)
M =	=	Minimum moisture (% by weight) of cement and cement
		supplement
a, b =	=	Exponents
c =	=	Constant

The parameters for Equation 11.12-1 are summarized in Tables 11.12-3 and 11.12-4.

Condition	Parameter Category	k	a	b	с	
	Total PM	0.8	1.75	0.3	0.013	
Controlled <sup>1</sup>	$PM_{10}$	0.32	1.75	0.3	0.0052	
Controlled	PM <sub>10-2.5</sub>	0.288	1.75	0.3	0.00468	
	PM <sub>2.5</sub>	0.048	1.75	0.3	0.00078	
	Total PM	0.995				
Uncontrolled <sup>1</sup>	PM <sub>10</sub>	0.278				
	PM <sub>10-2.5</sub>	0.228				
	PM <sub>2.5</sub>	0.050				

Table 11.12-3. E	quation Parameters f	for Truck Mix C	<b>)</b> perations
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Table 11.12-4. Ed	quation Parameters	for Central Mix	Operations
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Condition	Parameter Category	k	a	b	с
	Total PM	0.19	0.95	0.9	0.0010
Controlled <sup>1</sup>	PM <sub>10</sub>	<mark>0.13</mark>	0.45	0.9	0.0010
	PM <sub>10-2.5</sub>	0.12	0.45	0.9	0.0009
	PM <sub>2.5</sub>	0.03	0.45	0.9	0.0002
Uncontrolled <sup>1</sup>	Total PM	5.90	0.6	1.3	0.120
	PM <sub>10</sub>	<mark>1.92</mark>	0.4	1.3	0.040
	PM <sub>10-2.5</sub>	1.71	0.4	1.3	0.036
	PM <sub>2.5</sub>	<mark>0.38</mark>	0.4	1.3	0

1. Emission factors expressed in lbs/tons of cement and cement supplement

To convert from units of lbs/ton to units of kilograms per mega gram, the emissions calculated by Equation 11.12-1 should be divided by 2.0.

Particulate emission factors per yard of concrete for an average batch formulation at a typical facility are given in Tables 11.12-4 and 11.12-5. For truck mix loading and central mix loading, the

#### 13.2.1 Paved Roads

#### 13.2.1.1 General

Particulate emissions occur whenever vehicles travel over a paved surface such as a road or parking lot. Particulate emissions from paved roads are due to direct emissions from vehicles in the form of exhaust, brake wear and tire wear emissions and resuspension of loose material on the road surface. In general terms, resuspended particulate emissions from paved roads originate from, and result in the depletion of, the loose material present on the surface (i.e., the surface loading). In turn, that surface loading is continuously replenished by other sources. At industrial sites, surface loading is replenished by spillage of material and trackout from unpaved roads and staging areas. Figure 13.2.1-1 illustrates several transfer processes occurring on public streets.

Various field studies have found that public streets and highways, as well as roadways at industrial facilities, can be major sources of the atmospheric particulate matter within an area.<sup>1-9</sup> Of particular interest in many parts of the United States are the increased levels of emissions from public paved roads when the equilibrium between deposition and removal processes is upset. This situation can occur for various reasons, including application of granular materials for snow and ice control, mud/dirt carryout from construction activities in the area, and deposition from wind and/or water erosion of surrounding unstabilized areas. In the absence of continuous addition of fresh material (through localized track out or application of antiskid material), paved road surface loading should reach an equilibrium value in which the amount of material resuspended matches the amount replenished. The equilibrium surface loading value depends upon numerous factors. It is believed that the most important factors are: mean speed of vehicles traveling the road; the average daily traffic (ADT); the number of lanes and ADT per lane; the fraction of heavy vehicles (buses and trucks); and the presence/absence of curbs, storm sewers and parking lanes.<sup>10</sup>

The particulate emission factors presented in a previous version of this section of AP-42, dated October 2002, implicitly included the emissions from vehicles in the form of exhaust, brake wear, and tire wear as well as resuspended road surface material. EPA included these sources in the emission factor equation for paved roads since the field testing data used to develop the equation included both the direct emissions from vehicles and emissions from resuspension of road dust.

This version of the paved road emission factor equation only estimates particulate emissions from resuspended road surface material<sup>28</sup>. The particulate emissions from vehicle exhaust, brake wear, and tire wear are now estimated separately using EPA's MOVES <sup>29</sup> model. This approach eliminates the possibility of double counting emissions. Double counting results when employing the previous version of the emission factor equation in this section and MOVES to estimate particulate emissions from vehicle traffic on paved roads. It also incorporates the decrease in exhaust emissions that has occurred since the paved road emission factor equation was developed. Earlier versions of the paved road emission factor equation includes estimates of emissions from exhaust, brake wear, and tire wear based on emission rates for vehicles in the 1980 calendar year fleet. The amount of PM released from vehicle exhaust has decreased since 1980 due to lower new vehicle emission standards and changes in fuel characteristics.

#### 13.2.1.3 Predictive Emission Factor Equations<sup>10,29</sup>

The quantity of particulate emissions from resuspension of loose material on the road surface due to vehicle travel on a dry paved road may be estimated using the following empirical expression:

$$E = k (sL)^{0.91} \times (W)^{1.02}$$
(1)

where: E = particulate emission factor (having units matching the units of k),

k = particle size multiplier for particle size range and units of interest (see below),

sL = road surface silt loading (grams per square meter) (g/m<sup>2</sup>), and

W = average weight (tons) of the vehicles traveling the road.

It is important to note that Equation 1 calls for the average weight of all vehicles traveling the road. For example, if 99 percent of traffic on the road are 2 ton cars/trucks while the remaining 1 percent consists of 20 ton trucks, then the mean weight "W" is 2.2 tons. More specifically, Equation 1 is *not* intended to be used to calculate a separate emission factor for each vehicle weight class. Instead, only one emission factor should be calculated to represent the "fleet" average weight of all vehicles traveling the road.

The particle size multiplier (k) above varies with aerodynamic size range as shown in Table 13.2.1-1. To determine particulate emissions for a specific particle size range, use the appropriate value of k shown in Table 13.2.1-1.

To obtain the total emissions factor, the emission factors for the exhaust, brake wear and tire wear obtained from either EPA's MOBILE6.2<sup>27</sup> or MOVES2010<sup>29</sup> model should be added to the emissions factor calculated from the empirical equation.

Size range <sup>a</sup>	Particle Size Multiplier k <sup>b</sup>			
	g/VKT g/VMT lb/VMT			
PM-2.5 <sup>c</sup>	0.15	0.25	0.00054	
PM-10	0.62	1.00	0.0022	
PM-15	0.77	1.23	0.0027	
PM-30 <sup>d</sup>	3.23	5.24	0.011	

Table 13.2.1-1. PARTICLE SIZE MULTIPLIERS FOR PAVED ROAD EQUATION

<sup>a</sup> Refers to airborne particulate matter (PM-x) with an aerodynamic diameter equal to or less than x micrometers

<sup>b</sup> Units shown are grams per vehicle kilometer traveled (g/VKT), grams per vehicle mile traveled (g/VMT), and pounds per vehicle mile traveled (lb/VMT). The multiplier k includes unit conversions to produce emission factors in the units shown for the indicated size range from the mixed units required in Equation 1.

<sup>c</sup> The k-factors for  $PM_{2.5}$  were based on the average  $PM_{2.5}$ :  $PM_{10}$  ratio of test runs in Reference 30.

<sup>d</sup> PM-30 is sometimes termed "suspendable particulate" (SP) and is often used as a surrogate for TSP.

Equation 1 is based on a regression analysis of 83 tests for PM-10.<sup>3, 5-6, 8, 27-29, 31-36</sup> Sources tested include public paved roads, as well as controlled and uncontrolled industrial paved roads. The majority of tests involved freely flowing vehicles traveling at constant speed on relatively level roads. However, 22 tests of slow moving or "stop-and-go" traffic or vehicles under load were available for inclusion in the data base.<sup>32-36</sup> Engine exhaust, tire wear and break wear were subtracted from the emissions measured in the test programs prior to stepwise regression to determine Equation 1.<sup>37, 39</sup> The equations retain the quality rating of A (D for PM-2.5), if applied within the range of source conditions that were tested in developing the equation as follows:

Silt loading:	0.03 - 400 g/m <sup>2</sup> 0.04 - 570 grains/square foot (ft <sup>2</sup> )
Mean vehicle weight:	1.8 - 38 megagrams (Mg) 2.0 - 42 tons
Mean vehicle speed:	1 - 88 kilometers per hour (kph) 1 - 55 miles per hour (mph)

The upper and lower 95% confidence levels of equation 1 for  $PM_{10}$  is best described with equations using an exponents of 1.14 and 0.677 for silt loading and an exponents of 1.19 and 0.85 for weight. Users are cautioned that application of equation 1 outside of the range of variables and operating conditions specified above, e.g., application to roadways or road networks with speeds above 55 mph and average vehicle weights of 42 tons, will result in emission estimates with a higher level of uncertainty. In these situations, users are encouraged to consider an assessment of the impacts of the influence of extrapolation to the overall emissions and alternative methods that are equally or more plausible in light of local emissions data and/or ambient concentration or compositional data.

To retain the quality rating for the emission factor equation when it is applied to a specific paved road, it is necessary that reliable correction parameter values for the specific road in question be determined. With the exception of limited access roadways, which are difficult to sample, the collection and use of site-specific silt loading (sL) data for public paved road emission inventories are strongly recommended. The field and laboratory procedures for determining surface material silt content and surface dust loading are summarized in Appendices C.1 and C.2. In the event that site-specific values cannot be obtained, an appropriate value for a paved public road may be selected from the values in Table 13.2.1-2, but the quality rating of the equation should be reduced by 2 levels.

Equation 1 may be extrapolated to average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual (or other long-term) average emissions are inversely proportional to the frequency of measurable (> 0.254 mm [ 0.01 inch]) precipitation by application of a precipitation correction term. The precipitation correction term can be applied on a daily or an hourly basis  $^{26, 38}$ .

For the daily basis, Equation 1 becomes:

$$E_{ext} = [k (sL)^{0.91} \times (W)^{1.02}] (1 - P/4N)$$
<sup>(2)</sup>

where k, sL, W, and S are as defined in Equation 1 and

 $E_{ext}$  = annual or other long-term average emission factor in the same units as k,

P = number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and

N = number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly).

Note that the assumption leading to Equation 2 is based on analogy with the approach used to develop long-term average unpaved road emission factors in Section 13.2.2. However, Equation 2 above incorporates an additional factor of "4" in the denominator to account for the fact that paved roads dry more quickly than unpaved roads and that the precipitation may not occur over the complete 24-hour day.

For the hourly basis, equation 1 becomes:

$$E_{ext} = [k (sL)^{0.91} \times (W)^{1.02}] (1 - 1.2P/N)$$
(3)

where k, sL, W, and S are as defined in Equation 1 and

- $E_{ext}$  = annual or other long-term average emission factor in the same units as k,
- P = number of hours with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and

$$N$$
 = number of hours in the averaging period (e.g., 8760 for annual, 2124 for season 720 for monthly)

Note: In the hourly moisture correction term (1-1.2P/N) for equation 3, the 1.2 multiplier is applied to account for the residual mitigative effect of moisture. For most applications, this equation will produce satisfactory results. Users should select a time interval to include sufficient "dry" hours such that a reasonable emissions averaging period is evaluated. For the special case where this equation is used to calculate emissions on an hour by hour basis, such as would be done in some emissions modeling situations, the moisture correction term should be modified so that the moisture correction "credit" is applied to the first hours following cessation of precipitation. In this special case, it is suggested that this 20% "credit" be applied on a basis of one hour credit for each hour of precipitation up to a maximum of 12 hours.

Note that the assumption leading to Equation 3 is based on analogy with the approach used to develop long-term average unpaved road emission factors in Section 13.2.2.

Figure 13.2.1-2 presents the geographical distribution of "wet" days on an annual basis for the United States. Maps showing this information on a monthly basis are available in the *Climatic Atlas of the United States*<sup>23</sup>. Alternative sources include other Department of Commerce publications (such as local climatological data summaries). The National Climatic Data Center (NCDC) offers several products that provide hourly precipitation data. In particular, NCDC offers *Solar and Meteorological Surface Observation Network 1961-1990* (SAMSON) CD-ROM, which contains 30 years worth of hourly meteorological data for first-order National Weather Service locations. Whatever meteorological data are used, the source of that data and the averaging period should be clearly specified.

It is emphasized that the simple assumption underlying Equations 2 and 3 has not been verified in any rigorous manner. For that reason, the quality ratings for Equations 2 and 3 should be downgraded one letter from the rating that would be applied to Equation 1.



Figure 13.2.1-2. Mean number of days with 0.01 inch or more of precipitation in the United States.

1/11

Miscellaneous Sources

Table 13.2.1-2 presents recommended default silt loadings for normal baseline conditions and for wintertime baseline conditions in areas that experience frozen precipitation with periodic application of antiskid material<sup>24</sup>. The winter baseline is represented as a multiple of the non-winter baseline, depending on the ADT value for the road in question. As shown, a multiplier of 4 is applied for low volume roads (< 500 ADT) to obtain a wintertime baseline silt loading of 4 X  $0.6 = 2.4 \text{ g/m}^2$ .

ADT Category	< 500	500-5,000	5,000-10,000	> 10,000
Ubiquitous Baseline g/m <sup>2</sup>	0.6	0.2	0.06	0.03 0.015 limited access
Ubiquitous Winter Baseline Multiplier during months with frozen precipitation	X4	X3	X2	X1
Initial peak additive contribution from application of antiskid abrasive $(g/m^2)$	2	2	2	2
Days to return to baseline conditions (assume linear decay)	7	3	1	0.5

Table 13.2.1-2. Ubiquitous Silt Loading Default Values with Hot Spot Contributions from Anti-Skid Abrasives (g/m<sup>2</sup>)

It is suggested that an additional (but temporary) silt loading contribution of 2 g/m<sup>2</sup> occurs with each application of antiskid abrasive for snow/ice control. This was determined based on a typical application rate of 500 lb per lane mile and an initial silt content of 1 % silt content. Ordinary rock salt and other chemical deicers add little to the silt loading, because most of the chemical dissolves during the snow/ice melting process.

To adjust the baseline silt loadings for mud/dirt trackout, the number of trackout points is required. It is recommended that in calculating  $PM_{10}$  emissions, six additional miles of road be added for each active trackout point from an active construction site, to the paved road mileage of the specified category within the county. In calculating  $PM_{2.5}$  emissions, it is recommended that three additional miles of road be added for each trackout point from an active construction site.

It is suggested the number of trackout points for activities other than road and building construction areas be related to land use. For example, in rural farming areas, each mile of paved road would have a specified number of trackout points at intersections with unpaved roads. This value could be estimated from the unpaved road density (mi/sq. mi.).

The use of a default value from Table 13.2.1-2 should be expected to yield only an orderof-magnitude estimate of the emission factor. Public paved road silt loadings are dependent

# Figure B.2-1. Example calculation for determining uncontrolled and controlled particle size-specific emissions.

#### SOURCE IDENTIFICATION

Source name and address:	ABC Brick Manufacturing
	24 Dusty Way
	Anywhere, USA

Process description:	Dryers/Grinders	
AP-42 Section:	8.3, Bricks And Related Clay Products	
Uncontrolled AP-42		
emission factor:	96 lbs/ton	(units)
Activity parameter:	63,700 tons/year	(units)
Uncontrolled emissions	: <u>3057.6 tons/year</u>	(units)

#### UNCONTROLLED SIZE EMISSIONS

Category name:	Mechanically Generated/Aggregated, Unprocessed Ores
Category number: _	3

	Pa	article size (µ	ım)
	≤ 2.5	≤ 6	≤ 10
Generic distribution, Cumulative percent equal to or less than the size:	15	34	51
Cumulative mass ≤ particle size emissions (tons/year):	458.6	1039.6	1559.4

#### CONTROLLED SIZE EMISSIONS\*

Type of control device: Fabric Filter

	Particle size (µm)		
	0 - 2.5	2.5 - 6	6 - 10
Collection efficiency (Table B.2-3):	99.0	99.5	<mark>99.5</mark>
Mass in size range** before control (tons/year):	458.6	581.0	519.8
Mass in size range after control (tons/year):	4.59	2.91	2.60
Cumulative mass (tons/year):	4.59	7.50	10.10

\* These data do not include results for the greater than 10 µm particle size range.

\*\* Uncontrolled size data are cumulative percent equal to or less than the size. Control efficiency data apply only to size range and are not cumulative.

# **Ontiveros**, Jose

From:	Luis Castano <lcastano@iac-intl.com></lcastano@iac-intl.com>
Sent:	Wednesday, November 25, 2015 10:07 AM
To:	Ontiveros, Jose
Cc:	Kae Huff
Subject:	Re: Baghouse Quote and Owning & Operating Costs

Joe,

We're missing several colleagues this week due to the holiday. I'm actually on vacation, but figured some numbers. Based on 4000 cfm baghouse, 15 hp fan motor, 3/4 hp airlock motor, 20 hr days, 350 day year, \$0.06 / kw-hr, pulsing every 15 seconds at 80 psi.

My estimate is about \$35k to \$37k every 5 years.

Kae is working on baghouse proposal, which you should get today.

The above is conservative, meaning that actual will probably be lower. Let me know if I should adjust some of my assumptions, but this should be reasonable for your purpose.

-Luis

On Nov 24, 2015, at 4:23 PM, Ontiveros, Jose <<u>imontiveros@srmaterials.com</u>> wrote:

Hi Luis,

I got an email from Kae today, she is working on the quotation for the baghouse for Escalante, Thank you. Will you be able to get me some owning and operating costs for this baghouse like we talked about. Do you need operating parameters for this loadout?

Joe Ontiveros Project Engineer Salt River Materials Group/ Phoenix Cement Plant 601 N. Cement Plant Road POB 428 Clarkdale, Az 86324 (928) 634-2261, X8076 (928) 592-3991, Cell

Date:	11/25/2015		
To: Phone: Fax: Email:	Joe Ontiveros Salt River Materials Group 601 North Central Plant Road Clarkdale, AZ 86324 (928)634-2261 ext 8076 (928)639-8097 jmontiveros@srmaterials.com	4800 LAMAR AVE MISSION, KS 662 Office 913-384-5 Sales 800-334-7 Fax 913-384-6 Email: faccorp@ Web Site: www.i	02 511 431 577 iac-in11.com
From: CC:	Kae Huff Tony Pray, Luis Castano	IAC Proposal Number: Client Reference Number:	IACQ52371 Prewit, NM Terminal

## RE: Baghouse Filter with Hopper for Salt River Materials Group

Dear Joe,

IAC is pleased to provide our proposal for a Model Number 120TB-BHT-49:S6 Style 3 Baghouse Filter with Hopper, per Luis Castano's recommendations.

IAC offers the following warranties:

- Equipment manufactured by IAC to be free of defects in materials and workmanship for a period of three (3) years from date of shipment.
- Filter/Bag Warranty Twelve (12) months warranty after shipment, to be free of defects in materials and workmanship
- Any guaranties or warranties relating to equipment or system sub-components which are included with the proposed system, but not manufactured by IAC, will be limited to those offered by the respective manufacturer(s). IAC Systems does not offer any supplementary coverage for such components.

### **APPLICATION**

Material: Finished CementInlet Rate: 10 grains/dscfBulk Density: unknown pcfMoisture: 0 % by weightNormal Operating Temperature: 70°FMax Operating Temperature: 100°FFlowability: Free Flowing;Abrasiveness: ModeratelyInlet Airflow: 4,000 ACFM at 70°FElectrical Classification: Nema 4; CS enclosure;Control Voltage: 120VEmission: Filtration efficiency shall not exceed 0.01 grs / dscfElevation: 6,827 ft ASLLocation: Outside

#### Assumptions

# Hours of Operation Uncontrolled Controlled

Material Stored

8760 hrs/year 8760 hrs/year

250000 tpy annually 75 tph input 100 tph output

Traffic Paved

Vehicle Travel Category	Vehicle Weight	Load	trips	trips	roundtrip route	Miles Traveled	Miles Traveled
	W (tons)	(tons)	hour	year	miles	(VMT/hr)	(VMT/yr)
Construction Material to Plant (delivered) (1)	29	25	3.0	10000.0	2.32	7.0	23237
Construction Material from Plant (sold) (1)	29	25	4.0	10000.0	2.32	9.3	23237
						16.3	46473.2

#### **Material Storage**

Material Stored Silo Loading Material Stored Silo Unloading Material Stored Silo Loading Material Stored Silo Unloading Hours per Year 75 tons per hour 100 tons per hour 250000 tons per year 250000 tons per year 8760 hours

#### Unit 2: Loading Material Storage Silo

AP-42 11.12 "Concrete Batching" Table 11.12-2 "Cement supplement unloading to elevated storage silo (pneumatic)" (ver 06/06)

Material Stored Silo Loading	75 tons/hr	250000 tons/yr
Uncontrolled Emission Factor (PM) Uncontrolled Emission Factor (PM10) Uncontrolled Emission Factor (PM2.5)	3.1 1 0.21	
Cheomeoned Emission Factor (FM2.5)	0.21	0 (1W2.5/1W10, 0.50/1.72, 1able 11.12 4 Oncontrolled
Uncontrolled PM Uncontrolled PM10 Uncontrolled PM2.5	lbs/hr 236 82.5 16.3	tons/yr 1031 361 71.5
% Control Efficiency	99.5 %	EPA AP-42 Table B.2-3
Controlled Emission Factor (PM)	0.015	
Controlled Emission Factor (PM10) Controlled Emission Factor (PM2.5)	0.005 0.0012	5 7 (PM2.5/PM10; 0.03/0.13; Table 11.12-4 Controlled)
Controlled PM Controlled PM10 Controlled PM2.5	lbs/hr 1.18 0.41 0.095	tons/yr 1.96 0.69 0.16
<u>Units 3 and 4: Unloading Material Storage Silo</u> Baghouse Manufacturers Data Specification - Grain Loading		
Material Stored Silo Unloading	100 tons/hr 2500 hour/yr at maximur	250000 tons/yr n hourly throughput and 250000 tons/year limit
Grain Loading Input Grain Loading Input	10 grains/cf 0.01 grains/cf	
Unit 3 Baghouse ACFM Unit 4 Baghouse ACFM	1000 ACFM 4000 ACFM	
Combined Baghouse ACFM	5000 ACFM	_
Uncontrolled $PM = PM10 = PM2.5$	lbs/hr 429	tons/yr 1877
% Control Efficiency	99.9 %	Outlet grains/Inlet grains
Controlled $PM = PM10 = PM2.5$	lbs/hr 0.43	tons/yr 0.54
Controlled FWI = FWI10 = FWI2.5	0.45	0.34

#### **Paved Road Emissions**

**Emission Point 1 Paved Roads** 

Equation Reference: AP-42 13.2.1 (1/11)

Uncontrolled Hourly Uncontrolled Annual

Controlled Annual

lbs/hr = k(sL)^0.91 x (w)^1.02 \* Hourly VMT tons/yr = k(sL)^0.91 x (w)^1.02 \* (1-P/4N) \* Hourly VMT \* 8760 hr/yr /2000 lbs/ton ton/yr = k(sL)^0.91 x (w)^1.02 \* (1-P/4N) \* Annual VMT/2000 lbs/ton

Truck Routes	Load Capacity (tons)	Average Haul Truck Weight (tons)	VMT/Hour	VMT/Year	
Haul Truck Traffic	25	29	16.3	46473.2	
	PM	PM10	PM2.5		
sL	0.6	0.6	0.6	Ubiquitous Baseline	e g/m2 <500
k	0.011	0.0022	0.00054		
W	29.0	29.0	29.0		
Р	60	60	60		
N	365	365	365		
VMT/Hour	16.3	16.3	16.3		
VMT/Yr	46473.2	46473.2	46473.2		
Uncontrolled Hourly	3.49	0.70	0.17	lbs/hr	
Uncontrolled Annual	14.64	2.93	0.72	tons/yr	includes reduction due to prec
Controlled Annual	4.78	0.96	0.23	tons/yr	includes reduction due to prec

#### Allowable Facility Emission Rates

		PM		PM10		PM2.5	
Unit ID	Unit Description		tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
1	Material Truck Hauling to and from Plant		4.78	0.70	0.96	0.17	0.23
2	Material Storage Silo		1.96	0.41	0.69	0.095	0.16
3,4	3,4 Material Storage Silo to Truck Loading		0.54	0.43	0.54	0.43	0.54
	Allowable Plant Totals	5.09	7.27	1.54	2.18	0.69	0.93

# **Section 8**

# 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	





Figure 8-1: Topographical Map of SRMG Escalante Transload Facility Showing Plant Location at Site



Figure 8-2: Topographical Map of SRMG Showing Surrounding Terrain



# **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")

**X** 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.

Salt River Materials Group



Figure 9-1: Aerial View of Half Mile Radius Around PEGS

## List of Landowners within 1/2 mile of SRMG Restricted Boundary

Account No.	Owner Name	Address	City	State	Zip
	STATE OF NEW MEXICO	310 OLD SANTA FE TRAIL	SANTA FE	NM	87501-0000
	BUREAU OF LAND MANAGEMENT NEW MEXICO STATE OFFICE	1474 RODEO RD, PO BOX 27155	SANTA FE	NM	87502-0115
	NEW MEXICO STATE LAND OFFICE	PO BOX 1148	SANTA FE	NM	87504-1148
R173835	ANDREWS, BRENT D.	P.O. BOX 451 PREWITT		NM	87045-0451
R173878	ANDREWS, GARRETT ELLIS	1528 14TH STREET SE	RIO RANCHO	NM	87124-0000
R173614	ANDREWS, MARK, ETAL	1528 14TH ST. SE	RIO RANCHO	NM	87124-0000
R173797	ANDREWS, MARK, ETAL	1528 14TH ST. SE	RIO RANCHO	NM	87124-0000
R135194	DELANEY, WELDON V., JR.	2305 E. 14TH ST.	FARMINGTON	NM	87401-7514
R180726	ELKINS REAL ESTATE	P.O. BOX 1377	GRANTS	NM	87020-1377
R180726	ELKINS REAL ESTATE	P.O. BOX 1377	GRANTS	NM	87020-1377
R182923	ELKINS, DAVID P. REVOCABLE TRUST	P.O. BOX 100	GAMERCO	NM	87317-0100
R176737	ELKINS, DONNY J. & ELKINS, JONATHAN	1103 MIMOSA DR.	ROSWELL	NM	88201-0000
R180572	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R186092	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R208842	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R204774	HODGES, JAMES R. &/OR CLAUDELI, ATTN: HODGES, RAY G	P.O. BOX 1089	GALLUP	NM	87305-1089
R173819	JOHNSON, LABERTA & JOHNSON, MELISSA & SMITH, NADINE	P.O. BOX 218	PREWITT	NM	87045-0218
R161632	KHALAF, NASHAT	1603 W. HISTORIC HWY. 66	GALLUP	NM	87301-0000
R135208	LARGO, JULIA & LARGO, GILBERT	7710 N. 12TH ST.	PHOENIX	AZ	85020-0000
R135216	LYTLE, VERLEE M. TRUSTEE	P.O. BOX 311	THOREAU	NM	87323-0311
R214369	NORTHWEST NEW MEXICO REGIONAL SOLID WASTE AUTHORITY	P.O.BOX 1330	THOREAU	NM	87323-0000
R211145	SAN ANTONE FLAGSTONE INC.	P.O. BOX 100	GAMERCO	NM	87317-0100
R211147	SAN ANTONE FLAGSTONE INC.	P.O. BOX 100	GAMERCO	NM	87317-0100
R205104	SMITH, DELMA SHERILYN & JONNIE LYNDELL & RICKERSON, JUDY LADEANE & ROBERT OWEN	419 PALOMINO LN	BLOOMFIELD	NM	87413-0000
R173703	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173738	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173886	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173908	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816

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R187364	WALLACE, IRL & GEORGE ATHENS	P.O. BOX 1206	GALLUP	NM	87305-1206
R206650	WESTERN FUELS ASSOC. INC	12050 N. PECOS ST., STE. 310	WESTMINSTER	СО	80234-0000

#### Lists of Government and Tribal Entities Sent a Public Notice

Government Entity	Official	Mail Address	City	State	Zip Code
McKinley County	Harriett K. Becenti, County Clerk	207 West Hill St. #100	Gallup	NM	87301
Cibola County	Michelle Dominguez, County Clerk	PO Box 190	Grants	NM	87020
Navajo Nation	Office of the President	PO Box 7440	Window Rock	AZ	86515
Baca-Prewitt Chapter		PO Box 563	Prewitt	NM	87045
Casamero Lake Chapter		PO Box 549	Prewitt	NM	87045
Crownpoint Chapter		PO Box 336	Crownpoint	NM	87313
Littlewater Chapter		PO Box 1898	Crownpoint	NM	87313
Mariano Lake Chapter		PO Box 164	Smith Lake	NM	87365
Smith Lake Chapter		PO Box 60	Smith Lake	NM	87365
Thoreau Chapter		PO Box 899	Thoreau	NM	87323

# NOTICE

Salt River Materials Group (SRMG) announces its intent to apply to the New Mexico Environment Department (NMED) for a new 20.2.72 NMAC air quality permit for a construction materials storage and transload facility in Prewitt, New Mexico that will be identified as "Escalante Transload Facility". The date the notarized SRMG permit application will be submitted to the NMED Air Quality Bureau is estimated to be February 25, 2021.

SRMG's physical location will be latitude 35°, 24', 56.30" N and longitude 108°, 04', 54.66" W, which is approximately 4 miles northwest of Prewitt, NM in McKinley County. SRMG purchased fly ash material from Tri-State's Prewitt Escalante Generating Station (PEGS) for resale to their construction materials clients until the coal-fired boiler shutdown in mid-September 2020. With this permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, cement, lime, etc. The operation will transfer construction materials by truck or railcar to the terminal for storage and load out and transport to final destinations at a maximum throughput of 250,000 tons per year. The facility will consist of a storage silo with baghouse dust collector, and two (2) silo loadout systems each with their own baghouse dust collectors. The facility will only be a source of particulate matter and potentially state toxic air emissions.

The estimated maximum quantities of any regulated air contaminants will be as follows in pound per hour (pph) and tons per year (tpy). These reported emissions could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM 10 (Total Facility)	9.62 pph	13.2 tpy
PM 2.5 (Total Facility)	2.35 pph	3.23 tpy
Sulfur Dioxide (SO <sub>2</sub> )	pph	tpy
Nitrogen Oxides (NO <sub>x</sub> )	pph	tpy
Carbon Monoxide (CO)	pph	tpy
Volatile Organic Compounds (VOC)	pph	tpy
Total sum of all Hazardous Air Pollutants (HAPs)	pph	tpy
Toxic Air Pollutant (TAP)	2.75 pph	3.92 tpy
Green House Gas Emissions as Total CO2e	n/a	tpy

The maximum and standard operating schedule (or "potential to emit") of the SRMG - Escalante Transload Facility is 24 hours per day, 7 days a week, and a maximum of 52 weeks per year for annual operating hours of 8760 hours per year.

The operator of the Escalante Transload Facility is:

Salt River Materials Group/Phoenix Cement Company 8800 E Chaparral Rd # 155 Scottsdale, AZ 85250

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; <u>https://www.env.nm.gov/aqb/permit/aqb\_draft\_permits.html</u>. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

#### Attención

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

#### **Notice of Non-Discrimination**

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non- discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, <u>nd.coordinator@state.nm.us</u>. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at <u>https://www.env.nm.gov/NMED/EJ/index.html</u> to learn how and where to file a complaint of discrimination.

# **General Posting of Notices – Certification**

I, \_\_Brett Lindsay\_\_\_\_\_\_, the undersigned, certify that on {DATE}, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the Prewitt, Thoreau, and Grants of McKinley County, State of New Mexico on the following dates:

- 1. <u>Salt River Materials Group's Facility entrance {February 11, 2021}</u>
- 2. US Post Office in Prewitt, NM at 1692 State Highway 122 {February 11, 2021}
- 3. US Post Office in Thoreau, NM at 3 Prewitt St {February 10, 2021}
- 4. City Hall in Grants, NM at 600 W Santa Fe Ave {February 12, 2021}

Signed this <u>15</u> day of <u>February</u>, <u>2021</u>,

Signature

 $\frac{2/15}{\text{Date}}$ 

Brett Lindsay Printed Name

Senior Director, Cement Operations and Environmental Title {APPLICANT OR RELATIONSHIP TO APPLICANT}



# Tri-State Administration



SRMG Facility



## **Prewitt Post Office**



Thoreau Post Office



Grants City Hall



February 10, 2021

Harriett K. Becenti McKinley County Clerk 207 West Hill St. #100 Gallup NM 87301

Ms. Becenti

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Total sum of all Hazardous Air Pollutants (HAPs)	pph	tpy
Toxic Air Pollutant (TAP)	2.75 pph	3.92 tpy
Green House Gas Emissions as Total CO2e	n/a	tpy



The maximum and standard operating schedule (or "potential to emit") of the SRMG - Escalante Transload Facility is 24 hours per day, 7 days a week, and a maximum of 52 weeks per year for annual operating hours of 8760 hours per year.

The operator of the Escalante Transload Facility is:

Salt River Materials Group/Phoenix Cement Company 8800 E Chaparral Rd # 155 Scottsdale, AZ 85250

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; <u>https://www.env.nm.gov/aqb/permit/aqb\_draft\_permits.html</u>. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

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Sincerely,

Salt River Materials Group
## Salt River Materials Group Government Entities within 10 Miles

January 2021

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Cibola County	Michelle Dominguez, County Clerk	PO Box 190	Grants	NM	87020
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#### Salt River Materials Group - Certified Receipts (Government Public Notice)



Salt River Materials Group - Certified Receipts (Government Public Notice)



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R206650	WESTERN FUELS ASSOC. INC	12050 N. PECOS ST., STE. 310	WESTMINSTER	СО	80234-0000

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## NOTICE OF AIR QUALITY PERMIT APPLICATION

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Carbon Monoxide (CO)	pph	tpy
Volatile Organic Compounds (VOC)	pph	tpy
Total sum of all Hazardous Air Pollutants (HAPs)	pph	tpy
Toxic Air Pollutant (TAP)	2.75 pph	3.92 tpy
Green House Gas Emissions as Total CO2e	n/a	tpy

The maximum and standard operating schedule (or "potential to emit") of the SRMG - Escalante Transload Facility is 24 hours per day, 7 days a week, and a maximum of 52 weeks per year for annual operating hours of 8760 hours per year.

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Carbon Monoxide (CO)	— pph	— tpy
Volatile Organic Compounds (VOC)	pph	— tpy
Total sum of all Hazardous Air Pollutants (HAPs)	— pph	— tpy
Toxic Air Pollutant (TAP)	2.75 pph	3.92 tpy
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	— tpy

permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, cement, lime, etc. The operation will transfer construction materials by truck or railcar to the terminal for storage and load out and transport to final destinations at a maximum throughput of 250,000 tons per year. The facility will consist of a storage silo with baghouse dust collector, and two (2) silo loadout systems each with their own baghouse dust collectors. The facility will only be a source of particulate matter and potentially state toxic air

The maximum and standard operating schedule (or "potential to emit") of the SRMG - Escalante Transload Facility is 24 hours per day, 7 days a week, and a maximum of 52 weeks per year for annual operating hours of 8760 hours per year. The operator of the Escalante Transload Facility is:

Salt River Materials Group/ Phoenix Cement Company 8800 E Chaparral Rd # 155 Scottsdale, AZ 85250

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you

# review:

emissions.

The estimated maximum quantities of any regulated air contaminants will be as follows in pound per hour (pph) and tons per year (tpy). These reported emissions could change slightly during the course of the Department's must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env. nm.gov/aqb/permit/aqb\_draft\_ permits.html. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@ state.nm.us. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at https:// www.env.nm.gov/NMED/EJ/ index.html to learn how and where to file a complaint of discrimination.

# Attención

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

Notice of Non-Discrimination NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws Publish: Gallup Sun February 12, 2021

# **PROOF OF PUBLICATION AFFIDAVIT**

County of McKinley, <u>Mandy Marks</u> being duly sworn, testifies that she is the Circulation Manager of Gallup Sun Publishing, a weekly newspaper circulated in the above county and that he/she is familiar with the facts and that the notice, a copy of which is attached, was published in said newspaper one week for one consecutive week (one publication) prior to the time fixed for the hearing thereof, and that the publication was made on the:

12 day of February 2021 1 .

Dated Signature of Affiant

State of New Mexico SS mekinly County of \_\_\_\_ On the day of 2021 M

the foregoing instrument was acknowledged

before me by \_\_\_\_\_\_ Notary Public Day

# OFFICIAL SEAL REVAN KRILEY NOTARY PUBLIC STATE OF NEW MEXICO

My Commission Expires: 6/12/2024

My Commission expires



# NOTICE OF AIR QUALITY PERMIT APPLICATION

Salt River Materials Group (SRMG) announces its intent to apply to the New Mexico Environment Department (NMED) for a new 20.2.72 NMAC air quality permit for a construction materials storage and transload facility in Prewitt, New Mexico that will be identified as "Escalante Transload Facility". The date the notarized SRMG permit application will be submitted to the NMED Air Quality Bureau is estimated to be February 25, 2021. SRMG's physical location will be latitude 35°, 24', 56.30" N and longitude 108°, 04', 54.66" W, which is approximately 4 miles northwest of Prewitt, NM in McKinley County. SRMG purchased fly ash material from Tri-State's Prewitt Escalante Generating Station (PEGS) for resale to their construction materials clients until the coal-fired boiler shutdown in mid-September 2020. With this permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, cement, lime, etc. The operation will transfer construction materials by truck or railcar to the terminal for storage and load out and transport to final destinations at a maximum throughput of 250,000 tons per year. The facility will consist of a storage silo with baghouse dust collector, and two (2) silo loadout systems each with their own baghouse dust collectors. The facility will only be a source of particulate matter and potentially state toxic air emissions. The estimated maximum quantities of any regulated air contaminants will be as follows in pound per hour (pph) and tons per year (tpy). These reported emissions could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM 10 (Total Facility)	9.62 pph	13.2 tpy
PM 2.5 (Total Facility)	2.35 pph	3.23 tpy
Sulfur Dioxide (SO <sub>2</sub> )	pph	tpy
Nitrogen Oxides (NO <sub>x</sub> )	pph	tpy
Carbon Monoxide (CO)	pph	tpy
Volatile Organic Compounds (VOC)	pph	tpy
Total sum of all Hazardous Air Pollutants (HAPs)	pph	tpy
Toxic Air Pollutant (TAP)	2.75 pph	3.92 tpy
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	tpy

The maximum and standard operating schedule (or "potential to emit") of the SRMG - Escalante Transload Facility is 24 hours per day, 7 days a week, and a maximum of 52 weeks per year for annual operating hours of 8760 hours per year.

The operator of the Escalante Transload Facility is:

Salt River Materials Group/Phoenix Cement Company 8800 E Chaparral Rd # 155 Scottsdale, AZ 85250

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; <u>https://www.env.nm.gov/aqb/permit/aqb\_draft\_permits.html</u>. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

#### Attención

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

#### Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non- discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, <u>nd.coordinator@state.nm.us</u>. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at <u>https://www.env.nm.gov/NMED/EJ/index.html</u> to learn how and where to file a complaint of discrimination.

## **PUBLIC SERVICE ANNOUNCEMENT**

Salt River Materials Group (SRMG) announces its intent to apply to the New Mexico Environment Department (NMED) for a new 20.2.72 NMAC air quality permit for a construction materials storage and transload facility in Prewitt, New Mexico that will be identified as "Escalante Transload Facility". The date the notarized SRMG permit application will be submitted to the NMED Air Quality Bureau is estimated to be February 25, 2021.

The exact location of SRMG is at 35°, 24', 56.30" N and longitude 108°, 04', 54.66" W. The approximate location is 4 miles north of Prewitt, NM on the west side of County Road 19 in McKinley County.

Public notices have been posted in the following locations for review by the public:

- 1. At the Thoreau Post Office at 3 Prewitt St;
- 2. At the Prewitt Post Office at 1692 State Highway 122;
- 3. At the Grants City Administration in Grants at 600 W Santa Fe Ave; and
- 4. At the main entrance to Tri-State's Prewitt Escalante Generating Station

The owner and/or operator of the Facility is:

Salt River Materials Group/Phoenix Cement Company 8800 E Chaparral Rd # 155 Scottsdale, AZ 85250

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager New Mexico Environment Department Air Quality Bureau 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico; 87505-1816 Telephone Number (505) 476-4300 or 1 800 224-7009



February 9, 2021

KYVA Radio 300 W Aztec Ave. Suite 200 Gallup, NM 87301

CERTIFIED MAIL

Dear KYVA Radio:

SUBJECT: PSA Request - Air Quality Construction Permit Application for Salt River Materials Group's Escalante Transload Facility

Attached is a copy of a public service announcement regarding the application for a new air quality permit for Salt River Materials Group's Escalante Transload Facility. This announcement is being submitted by Montrose Air Quality Services, Albuquerque, NM on behalf of Salt River Materials Group.

The announcement request is being made to fulfill the requirements of the New Mexico Environmental Department air quality permitting regulations. Please consider reading the attached announcement as a public service message.

If you have any questions or need additional information, please contact me at (505) 830-9680 ext 6 (voice), (505) 830-9678 (fax) or email at <u>pwade@montrose-env.com</u>. You may also contact Mr. Brett Lindsey, Salt River Materials Group at (928) 634-2261 ext 8062. Thank you.

Sincerely,

Paul Wade

Paul Wade Principal

Montrose Air Quality Services, LLC 3500 Comanche Road NE Suite G Albuquerque, NM 87107-4546 T: 505.830.9680 ext. 6 F: 505.830.9678 Pwade@montrose-env.com www.montrose-env.com .



## 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.

The Escalante Transload Facility will store and then deliver to customers construction materials including; fly ash, natural pozzolan, pumice, Portland cement, etc. The facility will consist of an existing storage silo with baghouse dust collector, and two (2) existing silo loadout systems each with their own baghouse dust collector.

With this permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, natural pozzolan, pumice, Portland cement, etc. Each truck load is estimated to be 25 tons. The operation will transfer construction materials by truck or railcar (Unit 1) to the terminal for storage and load out and transport (Unit 1) to final destinations at a maximum throughput of 250,000 tons per year. Hourly truck traffic delivering or removing construction material is seven (7) trucks per hour, three (3) trucks delivering material and four (4) trucks removing material.

Material transfer into the storage silo (Unit 2) by either trucks or railcars is rated at 75 tons per hour or three (3) trucks at 25 tons per truck. During pneumatic material loading of the storage silo, the silo dust collector baghouse (C1) will operate and control the displaced air particulate emissions with an efficiency of 99.5%.

There are two (2) storage silo loadout systems which pneumatically unload the storage silo into either trucks or railcars (Units 3 and 4). Material transfer out of the storage silo is rated at 100 tons per hour or four (4) trucks at 25 tons per truck. During pneumatic material unloading of the storage silo, the silo dust collector baghouse on both systems (C2 and C3) will operate and control the displaced air particulate emissions with an efficiency of 99.9%.

Since the dust collector baghouses will be operating prior to any material transfer, no SSM emissions are expected for the facility.

## **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): McKinley Paper Company - Prewitt Mill, Tri-State Prewitt Escalante Generating Station, and Salt River Materials Group – Escalante Transload Facility

### **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.

□ Yes X No

<u>Contiguous</u> or <u>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)

<u>A PSD applicability determination for all sources</u>. 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:
  - ${\bf X}~$  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 is not one of the listed 20.2.74.501 Table I PSD Source Categories. The project emissions for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:
  - a. PM: 7.3 TPY
  - b. **PM10: 2.2 TPY**
  - c. PM2.5: 0.93 TPY

This stationary source is not a PSD source, but a minor NSR source.

## **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: <u>http://cfpub.epa.gov/adi/</u>

### **Table for STATE REGULATIONS:**

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (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	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
20.2.7 NMAC	Excess Emissions	Yes	Facility	SRMG Escalante Transload Facility will be subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, after issuance of this new air quality permit.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No		This facility has new gas fired boilers having a heat input of less 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>	No		This facility will not have oil burning equipment.
20.2.61.109 NMAC	Smoke & Visible Emissions	No		This facility will not have any stationary combustion equipment.
20.2.70 NMAC	Operating Permits	No		SRMG Escalante Transload Facility is not a Title V source.
20.2.72 NMAC	Construction Permits	Yes	Facility	SRMG Escalante Transload Facility is subject to 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	SRMG Escalante Transload Facility is a 20.2.72 NMAC permitted sources and is required under 20.2.73.300 NMAC to follow emission inventory reporting requirements.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No		SRMG Escalante Transload Facility is a minor NSR source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	SRMG Escalante Transload Facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC.
20.2.77 NMAC	New Source Performance	No		This facility is not subject to the requirements of 40 CFR Part 60.
20.2.78 NMAC	Emission Standards for HAPS	No		This facility is not subject to the requirements of 40 CFR Part 61.
20.2.82 NMAC	MACT Standards for source categories of HAPS	No		This facility is not subject to the requirements of 40 CFR Part 63.

## Table for Applicable FEDERAL REGULATIONS:

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				If subject, this would normally apply to the entire facility.
40 CFR 50	NAAQS	Yes	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	No	Units subject to 40 CFR 60	This facility is not subject to the requirements of 40 CFR Part 60.
40 CFR 68	Chemical Accident Prevention	No		SRMG stores no chemicals listed as section 112(r) substances.

## **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.
- X 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.

## **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.

No alternative operating scenarios are proposed for this facility.

# 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). See #1 above. <b>Note:</b> Neither modeling nor a modeling waiver is required for VOC emissions.	Х
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:

 $\Box$  See attached, approved modeling waiver for all pollutants from the facility.

□ See attached, approved modeling **waiver for some** pollutants from the facility.

- □ 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.

X No modeling is required.

A modeling waiver was submitted and is under review by the NMED Modeling Section.

## **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.

This is a new NSR permit with no compliance test history. All required compliance tests will be completed in a timely manner.

## **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.

N/A

## **Section 22: Certification**

Company Name: Salt River Materials Group

DALE DIULUS \_\_\_\_\_, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience. Signed this  $\frac{19^{74}}{19}$  day of <u>FEBRUARY</u>, <u>2021</u>, upon my oath or affirmation, before a notary of the State of ARIZONA 19 FEBRUARY 2021 Date \*Signature SENIOR VICE PRESIDENT POZZOLAN Title )ALE DIULUS Printed Name Scribed and sworn before me on this <u>19</u> day of <u>FCDNQrY</u> expires on the My authorization as a notary of the State of <u>HT2012</u> day of Fabruary, 2024 COLLEEN K. MCANLIS THE SPA TARY PUBLIC - STATE OF A MARICOPA COUNTY COMMISSION # 578797 My Comm. Expires February 3, 2024

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



February 25, 2021

New Mexico Environment Department Air Quality Bureau, Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87507-3313

**Subject:** Minor Source NSR Permit Application for Salt River Materials Group (SRMG)'s Prewitt Transload Facility

To Whom it May Concern:

Attached please find two (2) hardcopies and two (2) electronic (CD) copies of the 20.2.72 NMAC Permit Application for SRMG Escalante Transload Facility. This letter is attached to the application copy that has the original notarized signature page (Section 22), along with an application submittal fee of \$500.

Salt River Materials Group (SRMG) is requesting a new minor source permit, under 20.2.72.200.A.1, for a construction materials transload facility that will be identified as "Escalante Transload Facility". SRMG purchased fly ash material from Tri-State's Prewitt Escalante Generating Station (PEGS) for resale to their construction materials clients until the coal-fired boiler shutdown. With this permit application, SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials, such as fly ash, natural pozzolan, pumice, Portland cement, etc. The operation will transfer construction materials by truck or railcar to the terminal for storage and load out and transport to final destinations at a maximum throughput of 250,000 tons per year.

Please let me know if you have any questions or need additional information.

Sincerely,

Paul Wade Principal Montrose Air Quality Services, LLC

Cc: Brett Lindsay, SRMG

Montrose Air Quality Services, LLC 3500 Comanche Road NE Suite G Albuquerque, NM 87107-4546 T: 505.830.9680 ext. 6 F: 505.830.9678 Pwade@montrose-env.com www.montrose-env.com